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

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COVER LETTER

September 25, 2009

Report No.: 09G0180

Russ Becker
Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Landfill

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 07/13/2009 15:00.

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
- Case Narative
- Test Results
- QC Summary
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody
- Data

Melanie C. Duszynski

9/25/2009

Final report reviewed by: Melanie C. Duszynski For Michael D. Arbaugh/Customer Services Manager — Report issue date

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

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219	Project: Landfill Project Number: Landfill Project Manager: Russ Becker	Report: 09G0180 Reported: 09/25/2009 16:04

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
GL-15S	09G0180-01	Ground Water	Not Specified	07/06/2009 09:55	07/13/2009 15:00
GL-15D	09G0180-02	Ground Water	Not Specified	07/06/2009 11:04	07/13/2009 15:00
Trip Blank	09G0180-03	Water	Trip Blank	07/06/2009 07:15	07/13/2009 15:00
GL-05S	09G0180-04	Ground Water	Not Specified	07/07/2009 06:48	07/13/2009 15:00
GL-05D	09G0180-05	Ground Water	Not Specified	07/07/2009 07:41	07/13/2009 15:00
GL-02S	09G0180-06	Ground Water	Not Specified	07/07/2009 12:39	07/13/2009 15:00
GL-02D	09G0180-07	Ground Water	Not Specified	07/07/2009 11:37	07/13/2009 15:00
GL-16S	09G0180-08	Ground Water	Not Specified	07/07/2009 09:07	07/13/2009 15:00
GL-16D	09G0180-09	Ground Water	Not Specified	07/07/2009 10:25	07/13/2009 15:00
Trip Blank	09G0180-10	Water	Not Specified	07/07/2009 05:45	07/13/2009 15:00
GL-10S	09G0180-11	Ground Water	Not Specified	07/08/2009 12:00	07/13/2009 15:00
GL-10D	09G0180-12	Ground Water	Not Specified	07/08/2009 12:42	07/13/2009 15:00
GL-10D Dup	09G0180-13	Ground Water	Not Specified	07/08/2009 12:42	07/13/2009 15:00
GL-18S	09G0180-14	Ground Water	Not Specified	07/08/2009 09:37	07/13/2009 15:00
GL-18D	09G0180-15	Ground Water	Not Specified	07/08/2009 10:38	07/13/2009 15:00
GL-17S	09G0180-16	Ground Water	Not Specified	07/08/2009 06:54	07/13/2009 15:00
GL-17D	09G0180-17	Ground Water	Not Specified	07/08/2009 07:55	07/13/2009 15:00
GL-17D Dup	09G0180-18	Ground Water	Not Specified	07/08/2009 07:55	07/13/2009 15:00
Trip Blank	09G0180-19	Water	Not Specified	07/08/2009 05:40	07/13/2009 15:00
GL-12S	09G0180-20	Ground Water	Not Specified	07/09/2009 12:20	07/13/2009 15:00
GL-12D	09G0180-21	Ground Water	Not Specified	07/09/2009 13:19	07/13/2009 15:00
GL-13S	09G0180-22	Ground Water	Not Specified	07/09/2009 11:06	07/13/2009 15:00
GL-13D	09G0180-23	Ground Water	Not Specified	07/09/2009 10:02	07/13/2009 15:00
GL-14S	09G0180-24	Ground Water	Not Specified	07/09/2009 08:39	07/13/2009 15:00
GL-14D	09G0180-25	Ground Water	Not Specified	07/09/2009 07:30	07/13/2009 15:00
GL-11D	09G0180-26	Ground Water	Not Specified	07/09/2009 14:38	07/13/2009 15:00
Trip Blank	09G0180-27	Water	Not Specified	07/09/2009 06:30	07/13/2009 15:00
GL-08S	09G0180-28	Ground Water	Not Specified	07/09/2009 08:30	07/13/2009 15:00
GL-08D	09G0180-29	Ground Water	Not Specified	07/09/2009 07:34	07/13/2009 15:00

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219	Project: Landfill Project Number: Landfill Project Manager: Russ Becker	Report: 09G0180 Reported: 09/25/2009 16:04

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
GL-03S	09G0180-30	Ground Water	Not Specified	07/09/2009 10:42	07/13/2009 15:00
GL-03D	09G0180-31	Ground Water	Not Specified	07/09/2009 09:37	07/13/2009 15:00
GL-20	09G0180-32	Ground Water	Not Specified	07/09/2009 11:49	07/13/2009 15:00
GL-11S	09G0180-33	Ground Water	Not Specified	07/09/2009 13:15	07/13/2009 15:00
GL-11S Dup	09G0180-34	Ground Water	Not Specified	07/09/2009 13:15	07/13/2009 15:00
Trip Blank	09G0180-35	Water	Not Specified	07/10/2009 06:30	07/13/2009 15:00
GL-09 PZP001	09G0180-36	Ground Water	Not Specified	07/13/2009 13:22	07/13/2009 15:00
GL-09 PZP016	09G0180-37	Ground Water	Not Specified	07/13/2009 12:22	07/13/2009 15:00
GL-19 PZM003	09G0180-38	Ground Water	Not Specified	07/13/2009 09:59	07/13/2009 15:00
TS01 PDM007	09G0180-39	Ground Water	Not Specified	07/13/2009 11:12	07/13/2009 15:00
Trip Blank	09G0180-40	Water	Not Specified	07/13/2009 06:40	07/13/2009 15:00

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219	Project: Landfill Project Number: Landfill Project Manager: Russ Becker	Report: 09G0180 Reported: 09/25/2009 16:04

CASE NARRATIVE

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**720**	10	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**2.0**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0810	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.21**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.41**	0.0050	mg/L	070709 1024	070709 1024	VAS	EPA 353.2	
Nitrate as N	**0.64**	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Nitrate/Nitrite as N	**1.0**	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**270**	10	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**1500**	10	mg/L	071009 1744	071009 1952	LBG	SM (20) 2540 C	
Turbidity	**0.17**	0.10	NTU	070709 1345	070709 1345	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1858	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**910**	13	mg/L	072009 1400	072109 1650	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Arsenic	**0.0097**	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Barium	**1.1**	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Calcium	**250**	5.0	mg/L	072009 1400	072109 1650	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Chromium	**0.0066**	0.0025	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Copper	**0.015**	0.0020	mg/L	072009 1352	072109 0856	PRM	EPA 200.8/6020	
Iron	**7.7**	0.0050	mg/L	072009 1400	072109 1235	APS	EPA 200.7/6010B	
Potassium	**94**	1.0	mg/L	072009 1400	072109 1650	APS	EPA 200.7/6010B	B2
Magnesium	**70**	0.010	mg/L	072009 1400	072109 1235	APS	EPA 200.7/6010B	
Manganese	**0.15**	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Sodium	**910**	100	mg/L	072009 1400	072109 1650	APS	EPA 200.7/6010B	
Nickel	**0.011**	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Selenium	**0.024**	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Thallium	**0.0024**	0.0020	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0856	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U

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GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	070809 1955	070809 1955	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.8%*	*80-120*	*070809 1955*	*070809 1955*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.5%*	*80-120*	*070809 1955*	*070809 1955*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*070809 1955*	*070809 1955*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.4%*	*60-149*	*070809 1955*	*070809 1955*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Hexachloroethane	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09G0180-01 (Ground Water) Sampled: 07/06/2009 09:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Fluoranthene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**11**	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 0924	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*51.8%*	*10-83*	*071009 1745*	*072309 0924*		*EPA 8270C*	
Surrogate: Phenol-d5		*39.9%*	*13-62*	*071009 1745*	*072309 0924*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*95.2%*	*40-140*	*071009 1745*	*072309 0924*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*93.5%*	*35-138*	*071009 1745*	*072309 0924*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*95.3%*	*24-142*	*071009 1745*	*072309 0924*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*86.2%*	*24-129*	*071009 1745*	*072309 0924*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**2000**	0.0	umhos/cm	082109 1232	070609 0955	JWH	EPA 120.1	
pH	**8.17**	1.00	pH Units	082109 0908	070609 0955	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**970**	10	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**12**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**11**	10	mg/L	071509 0914	071609 0812	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.1**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.016**	0.0050	mg/L	070709 1024	070709 1024	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**91**	5.0	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**2700**	10	mg/L	071009 1744	071009 1954	LBG	SM (20) 2540 C	
Turbidity	**2.0**	0.10	NTU	070709 1345	070709 1345	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1900	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**1300**	0.33	mg/L	072009 1400	072109 1739	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Barium	**0.27**	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Calcium	**33**	0.050	mg/L	072009 1400	072109 1259	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Chromium	**0.0026**	0.0025	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Copper	**0.0052**	0.0020	mg/L	072009 1352	072109 0918	PRM	EPA 200.8/6020	
Iron	**0.18**	0.0050	mg/L	072009 1400	072109 1259	APS	EPA 200.7/6010B	
Potassium	**78**	0.010	mg/L	072009 1400	072109 1259	APS	EPA 200.7/6010B	B2
Magnesium	**300**	0.050	mg/L	072009 1400	072109 1739	APS	EPA 200.7/6010B	
Manganese	**0.039**	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Sodium	**29**	1.0	mg/L	072009 1400	072109 1259	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.0070**	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Thallium	**0.0023**	0.0020	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0918	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	V6, U
Acetone	**17**	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	
Iodomethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	070809 2031	070809 2031	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.1%*	*80-120*	*070809 2031*	*070809 2031*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.5%*	*80-120*	*070809 2031*	*070809 2031*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*070809 2031*	*070809 2031*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.6%*	*60-149*	*070809 2031*	*070809 2031*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09G0180-02 (Ground Water) Sampled: 07/06/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**26**	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1007	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*55.6%*	*10-83*	*071009 1745*	*072309 1007*		*EPA 8270C*	
Surrogate: Phenol-d5		*41.5%*	*13-62*	*071009 1745*	*072309 1007*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*98.0%*	*40-140*	*071009 1745*	*072309 1007*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*87.8%*	*35-138*	*071009 1745*	*072309 1007*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*98.6%*	*24-142*	*071009 1745*	*072309 1007*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*85.3%*	*24-129*	*071009 1745*	*072309 1007*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**6600**	0.0	umhos/cm	082109 1232	070609 1104	JWH	EPA 120.1	
pH	**12.0**	1.00	pH Units	082109 0908	070609 1104	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-03 (Water) Sampled: 07/06/2009 07:15; Type: Trip Blank

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methylene Chloride	ND	4.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-03 (Water) Sampled: 07/06/2009 07:15; Type: Trip Blank

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-03 (Water) Sampled: 07/06/2009 07:15; Type: Trip Blank

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	070809 1919	070809 1919	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.0%*	*80-120*	*070809 1919*	*070809 1919*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.6%*	*80-120*	*070809 1919*	*070809 1919*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*070809 1919*	*070809 1919*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.0%*	*60-149*	*070809 1919*	*070809 1919*		*EPA 8260B*	

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Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**810**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	ND	10	mg/L	071509 0914	071609 0814	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	H1
Nitrate as N	**0.094**	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	**0.094**	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**130**	10	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**1800**	10	mg/L	071009 1744	071009 1956	LBG	SM (20) 2540 C	
Turbidity	**34**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1908	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**260**	0.17	mg/L	072009 1400	072109 1303	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Barium	**0.025**	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Calcium	**27**	0.050	mg/L	072009 1400	072109 1303	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Cobalt	**0.13**	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Chromium	**0.0027**	0.0025	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Copper	**0.0051**	0.0020	mg/L	072009 1352	072109 0933	PRM	EPA 200.8/6020	
Iron	**31**	0.0050	mg/L	072009 1400	072109 1303	APS	EPA 200.7/6010B	
Potassium	**1.1**	0.010	mg/L	072009 1400	072109 1303	APS	EPA 200.7/6010B	B2
Magnesium	**46**	0.010	mg/L	072009 1400	072109 1303	APS	EPA 200.7/6010B	
Manganese	**1.1**	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Sodium	**89**	5.0	mg/L	072009 1400	072109 1744	APS	EPA 200.7/6010B	
Nickel	**0.17**	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.0070**	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	
Zinc	**0.16**	0.020	mg/L	072009 1352	072109 0933	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	070809 1241	070809 2107	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.7%*	*80-120*	*070809 1241*	*070809 2107*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.6%*	*80-120*	*070809 1241*	*070809 2107*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*070809 1241*	*070809 2107*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.4%*	*60-149*	*070809 1241*	*070809 2107*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09G0180-04 (Ground Water) Sampled: 07/07/2009 06:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**50**	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1050	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*53.1%*	*10-83*	*071009 1745*	*072309 1050*		*EPA 8270C*	
Surrogate: Phenol-d5		*39.8%*	*13-62*	*071009 1745*	*072309 1050*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*92.7%*	*40-140*	*071009 1745*	*072309 1050*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*83.4%*	*35-138*	*071009 1745*	*072309 1050*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*92.7%*	*24-142*	*071009 1745*	*072309 1050*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*81.7%*	*24-129*	*071009 1745*	*072309 1050*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1100**	0.0	umhos/cm	082109 1232	070709 0648	JWH	EPA 120.1	
pH	**5.41**	1.00	pH Units	082109 0908	070709 0648	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

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Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	**20**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**72**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**82**	10	mg/L	071509 0914	071609 0816	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.2**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**400**	25	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**810**	10	mg/L	071009 1744	071009 1958	LBG	SM (20) 2540 C	
Turbidity	**33**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Mercury	ND	0.00020	mg/L	072409 1021	072409 1911	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hardness (as CaCO3)	**260**	0.17	mg/L	072009 1400	072109 1310	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Arsenic	**0.0059**	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Barium	**0.091**	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Calcium	**31**	0.050	mg/L	072009 1400	072109 1310	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Copper	**0.0049**	0.0020	mg/L	072009 1352	072109 0937	PRM	EPA 200.8/6020	
Iron	**200**	0.50	mg/L	072009 1400	072109 1748	APS	EPA 200.7/6010B	
Potassium	**6.3**	0.010	mg/L	072009 1400	072109 1310	APS	EPA 200.7/6010B	B2
Magnesium	**45**	0.010	mg/L	072009 1400	072109 1310	APS	EPA 200.7/6010B	
Manganese	**4.5**	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Sodium	**400**	100	mg/L	072009 1400	072109 1748	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.015**	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0937	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	070809 1241	070809 2143	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.1%*	*80-120*	*070809 1241*	*070809 2143*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.8%*	*80-120*	*070809 1241*	*070809 2143*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*070809 1241*	*070809 2143*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.8%*	*60-149*	*070809 1241*	*070809 2143*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09G0180-05 (Ground Water) Sampled: 07/07/2009 07:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**50**	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1133	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*54.9%*	*10-83*	*071009 1745*	*072309 1133*		*EPA 8270C*	
Surrogate: Phenol-d5		*39.9%*	*13-62*	*071009 1745*	*072309 1133*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*92.2%*	*40-140*	*071009 1745*	*072309 1133*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*88.5%*	*35-138*	*071009 1745*	*072309 1133*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*94.3%*	*24-142*	*071009 1745*	*072309 1133*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*85.9%*	*24-129*	*071009 1745*	*072309 1133*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**3100**	0.0	umhos/cm	082109 1232	070709 0741	JWH	EPA 120.1	
pH	**5.99**	1.00	pH Units	082109 0908	070709 0741	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**240**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**14**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**120**	20	mg/L	071509 0914	071609 0818	LCR	EPA410.4/HACH8000	D
Ammonia as N	**3.3**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.024**	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**360**	25	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**1200**	10	mg/L	071009 1744	071009 2000	LBG	SM (20) 2540 C	
Turbidity	**31**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1913	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**550**	0.67	mg/L	072009 1400	072109 1751	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Arsenic	**0.0061**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Barium	**0.044**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Calcium	**120**	0.25	mg/L	072009 1400	072109 1751	APS	EPA 200.7/6010B	
Cadmium	**0.0025**	0.00050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Chromium	**0.012**	0.0025	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Copper	**0.014**	0.0020	mg/L	072009 1352	072109 0941	PRM	EPA 200.8/6020	
Iron	**12**	0.0050	mg/L	072009 1400	072109 1322	APS	EPA 200.7/6010B	
Potassium	**84**	0.010	mg/L	072009 1400	072109 1322	APS	EPA 200.7/6010B	B2
Magnesium	**57**	0.010	mg/L	072009 1400	072109 1322	APS	EPA 200.7/6010B	
Manganese	**0.67**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Sodium	**140**	1.0	mg/L	072009 1400	072109 1322	APS	EPA 200.7/6010B	
Nickel	**0.025**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Lead	**0.059**	0.0020	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Selenium	**0.014**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Vanadium	**0.013**	0.0050	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	
Zinc	**0.63**	0.020	mg/L	072009 1352	072109 0941	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	V6, U
Bromomethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1-Dichloroethane	**12**	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**1.9**	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Benzene	**2.0**	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071009 1933	071009 1933	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.4%*	*80-120*	*071009 1933*	*071009 1933*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.0%*	*80-120*	*071009 1933*	*071009 1933*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071009 1933*	*071009 1933*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*98.1%*	*60-149*	*071009 1933*	*071009 1933*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09G0180-06 (Ground Water) Sampled: 07/07/2009 12:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Fluoranthene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**17**	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1215	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*52.4%*	*10-83*	*071009 1745*	*072309 1215*		*EPA 8270C*	
Surrogate: Phenol-d5		*39.6%*	*13-62*	*071009 1745*	*072309 1215*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*92.8%*	*40-140*	*071009 1745*	*072309 1215*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*79.4%*	*35-138*	*071009 1745*	*072309 1215*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*94.7%*	*24-142*	*071009 1745*	*072309 1215*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*71.0%*	*24-129*	*071009 1745*	*072309 1215*		*EPA 8270C*	

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
Conductivity	**1700**	0.0	umhos/cm	082109 1232	070709 1239	JWH	EPA 120.1	
pH	**7.22**	1.00	pH Units	082109 0908	070709 1239	JWH	SM (20) 4500-H B	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09G0180-07 (Ground Water) Sampled: 07/07/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**920**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**19**	10	mg/L	071509 0914	071609 0820	LCR	EPA410.4/HACH8000	
Ammonia as N	**2.7**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**140**	10	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**2600**	10	mg/L	071009 1744	071009 2002	LBG	SM (20) 2540 C	
Turbidity	**4.2**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1915	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**480**	0.17	mg/L	072009 1400	072109 1326	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Arsenic	**0.0074**	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Barium	**0.095**	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Calcium	**50**	0.050	mg/L	072009 1400	072109 1326	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Copper	**0.0082**	0.0020	mg/L	072009 1352	072109 0944	PRM	EPA 200.8/6020	
Iron	**140**	0.50	mg/L	072009 1400	072109 1755	APS	EPA 200.7/6010B	
Potassium	**19**	0.010	mg/L	072009 1400	072109 1326	APS	EPA 200.7/6010B	B2
Magnesium	**86**	0.010	mg/L	072009 1400	072109 1326	APS	EPA 200.7/6010B	
Manganese	**5.9**	0.020	mg/L	072009 1352	072109 1335	PBK	EPA 200.8/6020	
Sodium	**670**	100	mg/L	072009 1400	072109 1755	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	

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09G0180-07 (Ground Water) Sampled: 07/07/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.024**	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0944	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	V6, U
Bromomethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U

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GL-02D

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Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U

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GL-02D

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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071009 2009	071009 2009	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.0%*	*80-120*	*071009 2009*	*071009 2009*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.3%*	*80-120*	*071009 2009*	*071009 2009*		*EPA 8260B*	
Surrogate: Toluene-d8		*104%*	*75-120*	*071009 2009*	*071009 2009*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.6%*	*60-149*	*071009 2009*	*071009 2009*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09G0180-07 (Ground Water) Sampled: 07/07/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09G0180-07 (Ground Water) Sampled: 07/07/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Fluoranthene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**54**	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1258	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*53.9%*	*10-83*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Surrogate: Phenol-d5		*40.8%*	*13-62*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*92.8%*	*40-140*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*78.8%*	*35-138*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*94.7%*	*24-142*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*82.5%*	*24-129*	*071009 1745*	*072309 1258*		*EPA 8270C*	
Field Sampling/Testing								
Conductivity	**4400**	0.0	umhos/cm	082109 1232	070709 1137	JWH	EPA 120.1	
pH	**3.08**	1.00	pH Units	082109 0908	070709 1137	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**14**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**27**	10	mg/L	071509 0914	071609 0822	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**410**	25	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**970**	10	mg/L	071009 1744	071009 2004	LBG	SM (20) 2540 C	
Turbidity	**13**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1922	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**360**	0.17	mg/L	072009 1400	072109 1330	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Arsenic	**0.0064**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Barium	**0.028**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Beryllium	**0.0053**	0.0025	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Calcium	**19**	0.050	mg/L	072009 1400	072109 1330	APS	EPA 200.7/6010B	
Cadmium	**0.0019**	0.00050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Cobalt	**0.27**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Chromium	**0.0061**	0.0025	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Copper	**0.0061**	0.0020	mg/L	072009 1352	072109 0948	PRM	EPA 200.8/6020	
Iron	**21**	0.0050	mg/L	072009 1400	072109 1330	APS	EPA 200.7/6010B	
Potassium	**1.4**	0.010	mg/L	072009 1400	072109 1330	APS	EPA 200.7/6010B	B2
Magnesium	**76**	0.010	mg/L	072009 1400	072109 1330	APS	EPA 200.7/6010B	
Manganese	**0.59**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Sodium	**120**	5.0	mg/L	072009 1400	072109 1759	APS	EPA 200.7/6010B	
Nickel	**0.38**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Lead	**0.0051**	0.0020	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Selenium	**0.012**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Vanadium	**0.0058**	0.0050	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	
Zinc	**0.70**	0.020	mg/L	072009 1352	072109 0948	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	V6, U
Bromomethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071009 2045	071009 2045	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.8%*	*80-120*	*071009 2045*	*071009 2045*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.2%*	*80-120*	*071009 2045*	*071009 2045*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071009 2045*	*071009 2045*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.6%*	*60-149*	*071009 2045*	*071009 2045*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16S

09G0180-08 (Ground Water) Sampled: 07/07/2009 09:07; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Fluoranthene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**23**	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1341	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*53.3%*	*10-83*	*071009 1745*	*072309 1341*		*EPA 8270C*	
Surrogate: Phenol-d5		*38.9%*	*13-62*	*071009 1745*	*072309 1341*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*95.7%*	*40-140*	*071009 1745*	*072309 1341*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*85.9%*	*35-138*	*071009 1745*	*072309 1341*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*98.2%*	*24-142*	*071009 1745*	*072309 1341*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*78.5%*	*24-129*	*071009 1745*	*072309 1341*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1200**	0.0	umhos/cm	082109 1232	070709 0907	JWH	EPA 120.1	
pH	**4.23**	1.00	pH Units	082109 0908	070709 0907	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**980**	10	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**12**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**14**	10	mg/L	071509 0914	071609 0824	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.4**	0.10	mg/L	070809 0700	070909 1000	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0057**	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	070809 1130	070809 1130	VAS	EPA 353.2	
Sulfate as SO4	**38**	2.0	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**3100**	10	mg/L	071009 1744	071009 2006	LBG	SM (20) 2540 C	
Turbidity	**1.2**	0.10	NTU	070809 1000	070809 1000	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1924	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**880**	17	mg/L	072009 1400	072109 1803	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Arsenic	**0.014**	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Barium	**0.53**	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Calcium	**160**	5.0	mg/L	072009 1400	072109 1803	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Chromium	**0.0032**	0.0025	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Copper	**0.020**	0.0020	mg/L	072009 1352	072109 0952	PRM	EPA 200.8/6020	
Iron	**0.68**	0.0050	mg/L	072009 1400	072109 1334	APS	EPA 200.7/6010B	
Potassium	**120**	1.0	mg/L	072009 1400	072109 1803	APS	EPA 200.7/6010B	B2
Magnesium	**120**	1.0	mg/L	072009 1400	072109 1803	APS	EPA 200.7/6010B	
Manganese	**0.050**	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Sodium	**1600**	100	mg/L	072009 1400	072109 1803	APS	EPA 200.7/6010B	
Nickel	**0.010**	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Selenium	**0.040**	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0952	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	V6, U
Bromomethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**4.8**	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
Phone: 410-633-1800
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071009 2120	071009 2120	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.8%*	*80-120*	*071009 2120*	*071009 2120*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.0%*	*80-120*	*071009 2120*	*071009 2120*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071009 2120*	*071009 2120*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.8%*	*60-149*	*071009 2120*	*071009 2120*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Pyridine	ND	20	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Aniline	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Phenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2-Chlorophenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Pentachloroethane	ND	1.0	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Hexachloroethane	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Nitrobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Isophorone	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2-Nitrophenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Naphthalene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	20	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	V6, U
2,4,6-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Acenaphthylene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Dimethylphthalate	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Acenaphthene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	50	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Dibenzofuran	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4-Nitrophenol	ND	50	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Fluorene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Diethylphthalate	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	50	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Hexachlorobenzene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Pentachlorophenol	ND	50	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Phenanthrene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Anthracene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16D

09G0180-09 (Ground Water) Sampled: 07/07/2009 10:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Fluoranthene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Pyrene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	20	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Benz(a)anthracene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Chrysene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**11**	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	
Di-n-octylphthalate	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	10	ug/L	071009 1745	072309 1424	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*52.5%*	*10-83*	*071009 1745*	*072309 1424*		*EPA 8270C*	
Surrogate: Phenol-d5		*39.4%*	*13-62*	*071009 1745*	*072309 1424*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*96.0%*	*40-140*	*071009 1745*	*072309 1424*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*78.7%*	*35-138*	*071009 1745*	*072309 1424*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*94.7%*	*24-142*	*071009 1745*	*072309 1424*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*71.0%*	*24-129*	*071009 1745*	*072309 1424*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**11000**	0.0	umhos/cm	082109 1232	070709 1025	JWH	EPA 120.1	
pH	**12.4**	1.00	pH Units	082109 0908	070709 1025	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-10 (Water) Sampled: 07/07/2009 05:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methylene Chloride	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U

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Baltimore Division
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Phone: 410-633-1800
Fax: 410-633-6553
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-10 (Water) Sampled: 07/07/2009 05:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-10 (Water) Sampled: 07/07/2009 05:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Volatile Organic Compounds by EPA Method 8260B								
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Hexachlorobutadiene	**1.0**	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	
Naphthalene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071109 1422	071109 1422	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.5%*	*80-120*	*071109 1422*	*071109 1422*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.0%*	*80-120*	*071109 1422*	*071109 1422*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071109 1422*	*071109 1422*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.7%*	*60-149*	*071109 1422*	*071109 1422*		*EPA 8260B*	
Field Sampling/Testing								
pH	**10.7**	1.00	pH Units	082109 0908	070809 0937	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**60**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**14**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**10**	10	mg/L	071509 0914	071609 0826	LCR	EPA410.4/HACH8000	
Ammonia as N	**2.4**	0.10	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**120**	5.0	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**310**	10	mg/L	071009 1744	071009 2008	LBG	SM (20) 2540 C	
Turbidity	**67**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1926	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**88**	0.17	mg/L	072009 1400	072109 1339	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Arsenic	**0.018**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Barium	**0.32**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Beryllium	**0.0027**	0.0025	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Calcium	**14**	0.050	mg/L	072009 1400	072109 1339	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Cobalt	**0.023**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Chromium	**0.093**	0.0025	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Copper	**0.050**	0.0020	mg/L	072009 1352	072109 0956	PRM	EPA 200.8/6020	
Iron	**100**	0.0050	mg/L	072009 1400	072109 1339	APS	EPA 200.7/6010B	
Potassium	**2.9**	0.010	mg/L	072009 1400	072109 1339	APS	EPA 200.7/6010B	B2
Magnesium	**13**	0.010	mg/L	072009 1400	072109 1339	APS	EPA 200.7/6010B	
Manganese	**1.9**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Sodium	**23**	1.0	mg/L	072009 1400	072109 1339	APS	EPA 200.7/6010B	
Nickel	**0.049**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Lead	**0.058**	0.0020	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Thallium	**0.0024**	0.0020	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Vanadium	**0.11**	0.0050	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	
Zinc	**0.19**	0.020	mg/L	072009 1352	072109 0956	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071109 1458	071109 1458	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.4%*	*80-120*	*071109 1458*	*071109 1458*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.3%*	*80-120*	*071109 1458*	*071109 1458*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071109 1458*	*071109 1458*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*98.3%*	*60-149*	*071109 1458*	*071109 1458*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09G0180-11 (Ground Water) Sampled: 07/08/2009 12:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**19**	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1102	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.4%*	*10-83*	*071409 1700*	*072509 1102*		*EPA 8270C*	
Surrogate: Phenol-d5		*32.5%*	*13-62*	*071409 1700*	*072509 1102*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*76.9%*	*40-140*	*071409 1700*	*072509 1102*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*66.5%*	*35-138*	*071409 1700*	*072509 1102*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*72.4%*	*24-142*	*071409 1700*	*072509 1102*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*55.5%*	*24-129*	*071409 1700*	*072509 1102*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**440**	0.0	umhos/cm	082109 1232	070809 1200	JWH	EPA 120.1	
pH	**6.00**	1.00	pH Units	082109 0908	070809 1200	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**60**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**11**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0828	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.4**	0.10	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**42**	5.0	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**180**	10	mg/L	071009 1744	071009 2010	LBG	SM (20) 2540 C	
Turbidity	**180**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1928	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**31**	0.17	mg/L	072009 1400	072109 1343	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Barium	**0.081**	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Calcium	**6.9**	0.050	mg/L	072009 1400	072109 1343	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 0959	PRM	EPA 200.8/6020	
Iron	**49**	0.0050	mg/L	072009 1400	072109 1343	APS	EPA 200.7/6010B	
Potassium	**6.7**	0.010	mg/L	072009 1400	072109 1343	APS	EPA 200.7/6010B	B2
Magnesium	**3.3**	0.010	mg/L	072009 1400	072109 1343	APS	EPA 200.7/6010B	
Manganese	**0.94**	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Sodium	**14**	1.0	mg/L	072009 1400	072109 1343	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 0959	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Benzene	**7.5**	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071109 1535	071109 1535	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*87.5%*	*80-120*	*071109 1535*	*071109 1535*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*84.8%*	*80-120*	*071109 1535*	*071109 1535*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071109 1535*	*071109 1535*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.5%*	*60-149*	*071109 1535*	*071109 1535*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Aniline	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Phenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.1	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2-Methylphenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Nitrobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Isophorone	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Naphthalene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Acenaphthylene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Acenaphthene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	53	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Dibenzofuran	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	53	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Fluorene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Diethylphthalate	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	53	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	53	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Phenanthrene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Anthracene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09G0180-12 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Pyrene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Chrysene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**14**	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	11	ug/L	071409 1700	072509 1145	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*41.6%*	*10-83*	*071409 1700*	*072509 1145*		*EPA 8270C*	
Surrogate: Phenol-d5		*30.6%*	*13-62*	*071409 1700*	*072509 1145*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*71.5%*	*40-140*	*071409 1700*	*072509 1145*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*63.1%*	*35-138*	*071409 1700*	*072509 1145*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.1%*	*24-142*	*071409 1700*	*072509 1145*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*52.8%*	*24-129*	*071409 1700*	*072509 1145*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**290**	0.0	umhos/cm	082109 1232	070809 1242	JWH	EPA 120.1	
pH	**6.41**	1.00	pH Units	082109 1222	070809 1242	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	**64**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**14**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0830	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.5**	0.10	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**41**	5.0	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**150**	10	mg/L	071009 1744	071009 2012	LBG	SM (20) 2540 C	
Turbidity	**160**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Mercury	ND	0.00020	mg/L	072409 1021	072409 1931	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hardness (as CaCO3)	**32**	0.17	mg/L	072009 1400	072109 1347	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Barium	**0.082**	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Calcium	**7.4**	0.050	mg/L	072009 1400	072109 1347	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Copper	**0.0021**	0.0020	mg/L	072009 1352	072109 1003	PRM	EPA 200.8/6020	
Iron	**49**	0.0050	mg/L	072009 1400	072109 1347	APS	EPA 200.7/6010B	
Potassium	**6.2**	0.010	mg/L	072009 1400	072109 1347	APS	EPA 200.7/6010B	B2
Magnesium	**3.2**	0.010	mg/L	072009 1400	072109 1347	APS	EPA 200.7/6010B	
Manganese	**0.93**	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Sodium	**13**	1.0	mg/L	072009 1400	072109 1347	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	
Zinc	**0.047**	0.020	mg/L	072009 1352	072109 1003	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Benzene	**7.5**	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071109 1723	071109 1723	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.1%*	*80-120*	*071109 1723*	*071109 1723*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*84.9%*	*80-120*	*071109 1723*	*071109 1723*		*EPA 8260B*	
Surrogate: Toluene-d8		*104%*	*75-120*	*071109 1723*	*071109 1723*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.9%*	*60-149*	*071109 1723*	*071109 1723*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Aniline	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Phenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.1	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2-Methylphenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Nitrobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Isophorone	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Naphthalene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Acenaphthylene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Acenaphthene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	53	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Dibenzofuran	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	53	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Fluorene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Diethylphthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	53	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	53	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Phenanthrene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Anthracene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D Dup

09G0180-13 (Ground Water) Sampled: 07/08/2009 12:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Pyrene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Chrysene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	11	ug/L	071409 1700	072509 1227	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.4%*	*10-83*	*071409 1700*	*072509 1227*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.3%*	*13-62*	*071409 1700*	*072509 1227*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*76.0%*	*40-140*	*071409 1700*	*072509 1227*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.4%*	*35-138*	*071409 1700*	*072509 1227*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*72.1%*	*24-142*	*071409 1700*	*072509 1227*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*56.7%*	*24-129*	*071409 1700*	*072509 1227*		*EPA 8270C*	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**100**	2.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**95**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**140**	10	mg/L	071509 0914	071609 0832	LCR	EPA410.4/HACH8000	
Ammonia as N	**22**	1.0	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**550**	25	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**1000**	10	mg/L	071009 1744	071009 2014	LBG	SM (20) 2540 C	
Turbidity	**0.22**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1933	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**590**	0.67	mg/L	072009 1400	072109 1807	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Arsenic	**0.0068**	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Barium	**0.023**	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Calcium	**230**	0.25	mg/L	072009 1400	072109 1807	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1007	PRM	EPA 200.8/6020	
Iron	**0.057**	0.0050	mg/L	072009 1400	072109 1351	APS	EPA 200.7/6010B	
Potassium	**83**	0.010	mg/L	072009 1400	072109 1351	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1351	APS	EPA 200.7/6010B	
Manganese	ND	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Sodium	**94**	5.0	mg/L	072009 1400	072109 1807	APS	EPA 200.7/6010B	
Nickel	**0.014**	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.0091**	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Vanadium	**0.015**	0.0050	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1007	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Vinyl chloride	**6.6**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Bromomethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,1-Dichloroethane	**34**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**3.4**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Benzene	**950**	50	ug/L	071409 1332	071409 1332	EMG	EPA 8260B	D
1,2-Dichloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Toluene	**340**	50	ug/L	071409 1332	071409 1332	EMG	EPA 8260B	D
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Ethylbenzene	**9.3**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
m,p-Xylenes	**96**	2.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
o-Xylene	**49**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Styrene	**7.6**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Bromoform	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	**1.7**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Propylbenzene	**3.1**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
2-Chlorotoluene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	**14**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
4-Chlorotoluene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**45**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
sec-Butylbenzene	**1.1**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
4-Isopropyltoluene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Butylbenzene	**1.4**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Hexachlorobutadiene	**1.2**	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Naphthalene	**3000**	50	ug/L	071409 1332	071409 1332	EMG	EPA 8260B	D
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	U
Total Xylenes	**140**	3.0	ug/L	071109 1759	071109 1759	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*81.7%*	*80-120*	*071109 1759*	*071109 1759*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*77.1%*	*80-120*	*071109 1759*	*071109 1759*		*EPA 8260B*	*S3*
Surrogate: Toluene-d8		*104%*	*75-120*	*071109 1759*	*071109 1759*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.0%*	*60-149*	*071109 1759*	*071109 1759*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Pyridine	**45**	21	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, D
Aniline	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Bis(2-Chloroethyl)ether	**21**	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, D
Phenol	**100**	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, D
Acetophenone	0.0		ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2-Methylphenol	**160**	100	ug/L	071409 1700	072809 2159	RIS	EPA 8270C	E3, D
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4-Methylphenol, 3-Methylphenol	**320**	100	ug/L	071409 1700	072809 2159	RIS	EPA 8270C	E3, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4-Dimethylphenol	**380**	100	ug/L	071409 1700	072809 2159	RIS	EPA 8270C	E3, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Naphthalene	**1000**	100	ug/L	071409 1700	072809 2159	RIS	EPA 8270C	E, E3, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2-Methylnaphthalene	**20**	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Phenanthrene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Fluoranthene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1310	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*42.0%*	*10-83*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*
Surrogate: Phenol-d5		*30.1%*	*13-62*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*
Surrogate: Nitrobenzene-d5		*73.8%*	*40-140*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*
Surrogate: 2-Fluorobiphenyl		*67.0%*	*35-138*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*
Surrogate: 2,4,6-Tribromophenol		*71.8%*	*24-142*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*
Surrogate: Terphenyl-d14		*62.7%*	*24-129*	*071409 1700*	*072509 1310*		*EPA 8270C*	*E3*

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09G0180-14 (Ground Water) Sampled: 07/08/2009 09:37; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
Conductivity	**2300**	0.0	umhos/cm	082109 1232	070809 0937	JWH	EPA 120.1	
pH	**10.7**	1.00	pH Units	082109 0908	070809 0937	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**16**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**2600**	50	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**19**	10	mg/L	071509 0914	071609 0834	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.9**	0.10	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**170**	10	mg/L	071309 1000	071409 0829	LCR	ASTM D516-02	D
Total Dissolved Solids	**3700**	10	mg/L	071009 1744	071009 2016	LBG	SM (20) 2540 C	
Turbidity	**12**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1935	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**830**	17	mg/L	072009 1400	072109 1811	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Arsenic	**0.0080**	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Barium	**0.68**	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Calcium	**110**	5.0	mg/L	072009 1400	072109 1811	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Cobalt	**0.039**	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Copper	**0.0080**	0.0020	mg/L	072009 1352	072109 1022	PRM	EPA 200.8/6020	
Iron	**230**	0.50	mg/L	072009 1400	072109 1811	APS	EPA 200.7/6010B	
Potassium	**26**	0.010	mg/L	072009 1400	072109 1355	APS	EPA 200.7/6010B	B2
Magnesium	**130**	1.0	mg/L	072009 1400	072109 1811	APS	EPA 200.7/6010B	
Manganese	**18**	0.050	mg/L	072009 1352	072109 1339	PBK	EPA 200.8/6020	
Sodium	**620**	100	mg/L	072009 1400	072109 1811	APS	EPA 200.7/6010B	
Nickel	**0.025**	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.026**	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	
Zinc	**0.072**	0.020	mg/L	072009 1352	072109 1022	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Benzene	**12**	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Toluene	**4.7**	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Naphthalene	**77**	10	ug/L	071409 1408	071409 1408	EMG	EPA 8260B	D
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071109 1835	071109 1835	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.0%*	*80-120*	*071109 1835*	*071109 1835*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*83.1%*	*80-120*	*071109 1835*	*071109 1835*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071109 1835*	*071109 1835*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.8%*	*60-149*	*071109 1835*	*071109 1835*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Aniline	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Phenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.1	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2-Methylphenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Nitrobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Isophorone	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Naphthalene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Acenaphthylene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Acenaphthene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	53	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Dibenzofuran	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	53	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Fluorene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Diethylphthalate	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	53	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	53	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Phenanthrene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Anthracene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
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GL-18D

09G0180-15 (Ground Water) Sampled: 07/08/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Pyrene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Chrysene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**79**	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	11	ug/L	071409 1700	072509 1352	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.4%*	*10-83*	*071409 1700*	*072509 1352*		*EPA 8270C*	
Surrogate: Phenol-d5		*34.3%*	*13-62*	*071409 1700*	*072509 1352*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*73.4%*	*40-140*	*071409 1700*	*072509 1352*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*62.0%*	*35-138*	*071409 1700*	*072509 1352*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*70.2%*	*24-142*	*071409 1700*	*072509 1352*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*57.2%*	*24-129*	*071409 1700*	*072509 1352*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**5400**	0.0	umhos/cm	082109 1232	070809 1038	JWH	EPA 120.1	
pH	**4.75**	1.00	pH Units	082109 0908	070809 1038	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**340**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**10**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**85**	10	mg/L	071509 0914	071609 0836	LCR	EPA410.4/HACH8000	
Ammonia as N	**12**	1.0	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**220**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**3400**	10	mg/L	071009 1744	071009 2018	LBG	SM (20) 2540 C	
Turbidity	**11**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1937	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**590**	0.17	mg/L	072009 1400	072109 1359	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Arsenic	**0.016**	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Barium	**0.11**	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Calcium	**88**	0.050	mg/L	072009 1400	072109 1359	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Chromium	**0.0026**	0.0025	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Copper	**0.012**	0.0020	mg/L	072009 1352	072109 1026	PRM	EPA 200.8/6020	
Iron	**1.9**	0.0050	mg/L	072009 1400	072109 1359	APS	EPA 200.7/6010B	
Potassium	**66**	0.010	mg/L	072009 1400	072109 1359	APS	EPA 200.7/6010B	B2
Magnesium	**89**	0.010	mg/L	072009 1400	072109 1359	APS	EPA 200.7/6010B	
Manganese	**0.42**	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Sodium	**1000**	100	mg/L	072009 1400	072109 1815	APS	EPA 200.7/6010B	
Nickel	**0.0062**	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.029**	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1026	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Carbon disulfide	**2.6**	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Chloroform	**1.1**	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
Bromochloromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Benzene	**18**	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
m,p-Xylenes	**11**	2.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
o-Xylene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Naphthalene	**29**	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	U
Total Xylenes	**11**	3.0	ug/L	071109 1911	071109 1911	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*85.4%*	*80-120*	*071109 1911*	*071109 1911*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*82.5%*	*80-120*	*071109 1911*	*071109 1911*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*071109 1911*	*071109 1911*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.6%*	*60-149*	*071109 1911*	*071109 1911*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09G0180-16 (Ground Water) Sampled: 07/08/2009 06:54; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**24**	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1434	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*38.4%*	*10-83*	*071409 1700*	*072509 1434*		*EPA 8270C*	
Surrogate: Phenol-d5		*27.1%*	*13-62*	*071409 1700*	*072509 1434*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*69.4%*	*40-140*	*071409 1700*	*072509 1434*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*68.2%*	*35-138*	*071409 1700*	*072509 1434*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*69.0%*	*24-142*	*071409 1700*	*072509 1434*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*50.3%*	*24-129*	*071409 1700*	*072509 1434*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**6000**	0.0	umhos/cm	082109 1232	070809 0654	JWH	EPA 120.1	
pH	**7.70**	1.00	pH Units	082109 0908	070809 0654	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**280**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**4.5**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**270**	50	mg/L	071509 0914	071609 0838	LCR	EPA410.4/HACH8000	D
Ammonia as N	**50**	5.0	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**1100**	50	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**2600**	10	mg/L	071009 1744	071009 2020	LBG	SM (20) 2540 C	
Turbidity	**8.6**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1939	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**810**	13	mg/L	072009 1400	072109 1830	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Arsenic	**0.018**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Barium	**0.014**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Calcium	**320**	5.0	mg/L	072009 1400	072109 1830	APS	EPA 200.7/6010B	
Cadmium	**0.0010**	0.00050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Copper	**0.0049**	0.0020	mg/L	072009 1352	072109 1029	PRM	EPA 200.8/6020	
Iron	**0.23**	0.0050	mg/L	072009 1400	072109 1413	APS	EPA 200.7/6010B	
Potassium	**220**	1.0	mg/L	072009 1400	072109 1830	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1413	APS	EPA 200.7/6010B	
Manganese	**0.0089**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Sodium	**280**	100	mg/L	072009 1400	072109 1830	APS	EPA 200.7/6010B	
Nickel	**0.043**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Lead	**0.0025**	0.0020	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.015**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Thallium	**0.0023**	0.0020	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Vanadium	**0.074**	0.0050	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1029	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1-Dichloroethane	**5.8**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Benzene	**7100**	50	ug/L	071409 1445	071409 1445	EMG	EPA 8260B	D
1,2-Dichloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	**53**	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Toluene	**5.1**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Ethylbenzene	**1.7**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
m,p-Xylenes	**2.7**	2.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
o-Xylene	**2.9**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.3**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Naphthalene	**57**	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	U
Total Xylenes	**5.6**	3.0	ug/L	071109 1947	071109 1947	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*75.9%*	*80-120*	*071109 1947*	*071109 1947*		*EPA 8260B*	*S3*
Surrogate: 1,2-Dichloroethane-d4		*66.0%*	*80-120*	*071109 1947*	*071109 1947*		*EPA 8260B*	*S3*
Surrogate: Toluene-d8		*105%*	*75-120*	*071109 1947*	*071109 1947*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.5%*	*60-149*	*071109 1947*	*071109 1947*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Phenol	**71**	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	**15**	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	D
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**170**	100	ug/L	071409 1700	072809 2241	RIS	EPA 8270C	D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**320**	100	ug/L	071409 1700	072809 2241	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Naphthalene	**25**	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09G0180-17 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**19**	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1517	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.5%*	*10-83*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.7%*	*13-62*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*80.4%*	*40-140*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*73.1%*	*35-138*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*81.8%*	*24-142*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*72.9%*	*24-129*	*071409 1700*	*072509 1517*		*EPA 8270C*	
Field Sampling/Testing								
Conductivity	**3300**	0.0	umhos/cm	082109 1232	070809 0755	JWH	EPA 120.1	
pH	**10.7**	1.00	pH Units	082109 0908	070809 0755	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	**270**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**4.0**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	**260**	50	mg/L	071509 0914	071609 0840	LCR	EPA410.4/HACH8000	D
Ammonia as N	**8.8**	1.0	mg/L	070909 1400	071209 0602	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	070909 0733	070909 0733	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**1100**	50	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**2500**	10	mg/L	071009 1744	071009 2022	LBG	SM (20) 2540 C	
Turbidity	**3.7**	0.10	NTU	070909 1450	070909 1450	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Mercury	ND	0.00020	mg/L	072409 1021	072409 1941	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hardness (as CaCO3)	**800**	13	mg/L	072009 1400	072109 1834	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Arsenic	**0.018**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Barium	**0.014**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Calcium	**320**	5.0	mg/L	072009 1400	072109 1834	APS	EPA 200.7/6010B	
Cadmium	**0.00098**	0.00050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Chromium	**0.0026**	0.0025	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Copper	**0.0049**	0.0020	mg/L	072009 1352	072109 1033	PRM	EPA 200.8/6020	
Iron	**0.21**	0.0050	mg/L	072009 1400	072109 1421	APS	EPA 200.7/6010B	
Potassium	**220**	1.0	mg/L	072009 1400	072109 1834	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1421	APS	EPA 200.7/6010B	
Manganese	**0.0082**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Sodium	**290**	100	mg/L	072009 1400	072109 1834	APS	EPA 200.7/6010B	
Nickel	**0.043**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Lead	**0.0025**	0.0020	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Selenium	**0.014**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Thallium	**0.0023**	0.0020	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Vanadium	**0.074**	0.0050	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1033	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	V6, U
Acetone	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1-Dichloroethane	**6.2**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Benzene	**7000**	50	ug/L	071409 1521	071409 1521	EMG	EPA 8260B	D
1,2-Dichloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	**54**	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Toluene	**5.2**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Ethylbenzene	**1.6**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
m,p-Xylenes	**2.5**	2.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
o-Xylene	**2.8**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U

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Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.3**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Naphthalene	**62**	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	U
Total Xylenes	**5.3**	3.0	ug/L	071109 2023	071109 2023	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*75.9%*	*80-120*	*071109 2023*	*071109 2023*		*EPA 8260B*	*S3*
Surrogate: 1,2-Dichloroethane-d4		*63.4%*	*80-120*	*071109 2023*	*071109 2023*		*EPA 8260B*	*S3*
Surrogate: Toluene-d8		*103%*	*75-120*	*071109 2023*	*071109 2023*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*92.9%*	*60-149*	*071109 2023*	*071109 2023*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Phenol	**69**	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2-Methylphenol	**14**	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	D
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**170**	100	ug/L	071409 1700	072809 2324	RIS	EPA 8270C	D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**310**	100	ug/L	071409 1700	072809 2324	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Naphthalene	**24**	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D Dup

09G0180-18 (Ground Water) Sampled: 07/08/2009 07:55; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**15**	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1559	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.1%*	*10-83*	*071409 1700*	*072509 1559*		*EPA 8270C*	
Surrogate: Phenol-d5		*32.5%*	*13-62*	*071409 1700*	*072509 1559*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*76.6%*	*40-140*	*071409 1700*	*072509 1559*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*71.1%*	*35-138*	*071409 1700*	*072509 1559*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*78.4%*	*24-142*	*071409 1700*	*072509 1559*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*70.3%*	*24-129*	*071409 1700*	*072509 1559*		*EPA 8270C*	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-19 (Water) Sampled: 07/08/2009 05:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Methylene Chloride	**19**	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	B
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-19 (Water) Sampled: 07/08/2009 05:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-19 (Water) Sampled: 07/08/2009 05:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 1557	071409 1557	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.2%*	*80-120*	*071409 1557*	*071409 1557*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.8%*	*80-120*	*071409 1557*	*071409 1557*		*EPA 8260B*	
Surrogate: Toluene-d8		*99.1%*	*75-120*	*071409 1557*	*071409 1557*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*98.3%*	*60-149*	*071409 1557*	*071409 1557*		*EPA 8260B*	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**58**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0842	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.24**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	**0.31**	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Nitrate/Nitrite as N	**0.31**	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Sulfate as SO4	**210**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**450**	10	mg/L	071009 1744	071009 2024	LBG	SM (20) 2540 C	
Turbidity	**2.2**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Mercury	ND	0.00020	mg/L	072409 1021	072409 1948	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Hardness (as CaCO3)	**150**	0.17	mg/L	072009 1400	072109 1433	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Barium	**0.019**	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Beryllium	**0.0052**	0.0025	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Calcium	**24**	0.050	mg/L	072009 1400	072109 1433	APS	EPA 200.7/6010B	
Cadmium	**0.00086**	0.00050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Cobalt	**0.11**	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Copper	**0.0042**	0.0020	mg/L	072009 1352	072109 1048	PRM	EPA 200.8/6020	
Iron	**7.4**	0.0050	mg/L	072009 1400	072109 1433	APS	EPA 200.7/6010B	
Potassium	**2.7**	0.010	mg/L	072009 1400	072109 1433	APS	EPA 200.7/6010B	B2
Magnesium	**21**	0.010	mg/L	072009 1400	072109 1433	APS	EPA 200.7/6010B	
Manganese	**0.52**	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Sodium	**50**	1.0	mg/L	072009 1400	072109 1433	APS	EPA 200.7/6010B	
Nickel	**0.15**	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Thallium	**0.0023**	0.0020	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	
Zinc	**0.30**	0.020	mg/L	072009 1352	072109 1048	ZZZ	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	E7, U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 1634	071409 1634	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.2%*	*80-120*	*071409 1634*	*071409 1634*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*84.7%*	*80-120*	*071409 1634*	*071409 1634*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*071409 1634*	*071409 1634*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*98.7%*	*60-149*	*071409 1634*	*071409 1634*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance with the chain of

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Baltimore Division

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09G0180-20 (Ground Water) Sampled: 07/09/2009 12:20; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**63**	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0115	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*40.4%*	*10-83*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Surrogate: Phenol-d5		*28.8%*	*13-62*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*69.7%*	*40-140*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.7%*	*35-138*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*67.7%*	*24-142*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*60.1%*	*24-129*	*071609 0900*	*072609 0115*		*EPA 8270C*	
Field Sampling/Testing								
Conductivity	**520**	0.0	umhos/cm	082109 1232	070909 1220	JWH	EPA 120.1	
pH	**4.42**	1.00	pH Units	082109 0908	070909 1220	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**60**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**22**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0844	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.2**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**190**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**990**	10	mg/L	071009 1744	071009 2026	LBG	SM (20) 2540 C	
Turbidity	**45**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1950	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**150**	0.17	mg/L	072009 1400	072109 1513	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Barium	**0.033**	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Calcium	**22**	0.050	mg/L	072009 1400	072109 1513	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1122	PRM	EPA 200.8/6020	
Iron	**130**	0.025	mg/L	072009 1400	072109 1838	APS	EPA 200.7/6010B	
Potassium	**3.6**	0.010	mg/L	072009 1400	072109 1513	APS	EPA 200.7/6010B	B2
Magnesium	**23**	0.010	mg/L	072009 1400	072109 1513	APS	EPA 200.7/6010B	
Manganese	**3.4**	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Sodium	**120**	5.0	mg/L	072009 1400	072109 1838	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.0055**	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1122	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 1823	071409 1823	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*94.5%*	*80-120*	*071409 1823*	*071409 1823*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*93.7%*	*80-120*	*071409 1823*	*071409 1823*		*EPA 8260B*	
Surrogate: Toluene-d8		*104%*	*75-120*	*071409 1823*	*071409 1823*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.2%*	*60-149*	*071409 1823*	*071409 1823*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09G0180-21 (Ground Water) Sampled: 07/09/2009 13:19; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0324	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*40.3%*	*10-83*	*071609 0900*	*072609 0324*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.3%*	*13-62*	*071609 0900*	*072609 0324*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*68.3%*	*40-140*	*071609 0900*	*072609 0324*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.0%*	*35-138*	*071609 0900*	*072609 0324*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*66.9%*	*24-142*	*071609 0900*	*072609 0324*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*56.1%*	*24-129*	*071609 0900*	*072609 0324*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1200**	0.0	umhos/cm	082109 1232	070909 1319	JWH	EPA 120.1	
pH	**6.08**	1.00	pH Units	082109 0908	070909 1319	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**170**	2.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**2.5**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0846	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.14**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**330**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**750**	10	mg/L	071009 1744	071009 2028	LBG	SM (20) 2540 C	
Turbidity	**4.2**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1952	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**400**	0.67	mg/L	072009 1400	072109 1842	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Barium	**0.040**	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Calcium	**110**	0.25	mg/L	072009 1400	072109 1842	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Cobalt	**0.031**	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1126	PRM	EPA 200.8/6020	
Iron	**25**	0.0050	mg/L	072009 1400	072109 1517	APS	EPA 200.7/6010B	
Potassium	**25**	0.010	mg/L	072009 1400	072109 1517	APS	EPA 200.7/6010B	B2
Magnesium	**30**	0.010	mg/L	072009 1400	072109 1517	APS	EPA 200.7/6010B	
Manganese	**1.5**	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Sodium	**47**	1.0	mg/L	072009 1400	072109 1517	APS	EPA 200.7/6010B	
Nickel	**0.035**	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	
Zinc	**0.047**	0.020	mg/L	072009 1352	072109 1126	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 1859	071409 1859	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*96.0%*	*80-120*	*071409 1859*	*071409 1859*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*95.0%*	*80-120*	*071409 1859*	*071409 1859*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*071409 1859*	*071409 1859*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*88.8%*	*60-149*	*071409 1859*	*071409 1859*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09G0180-22 (Ground Water) Sampled: 07/09/2009 11:06; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0407	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*42.4%*	*10-83*	*071609 0900*	*072609 0407*		*EPA 8270C*	
Surrogate: Phenol-d5		*32.0%*	*13-62*	*071609 0900*	*072609 0407*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*70.4%*	*40-140*	*071609 0900*	*072609 0407*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*66.3%*	*35-138*	*071609 0900*	*072609 0407*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.3%*	*24-142*	*071609 0900*	*072609 0407*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*58.5%*	*24-129*	*071609 0900*	*072609 0407*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**930**	0.0	umhos/cm	082109 1232	070909 1106	JWH	EPA 120.1	
pH	**5.93**	1.00	pH Units	082109 0908	070909 1106	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**20**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**160**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**120**	10	mg/L	071509 0914	071609 0848	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.6**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Sulfate as SO4	**1400**	50	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**2600**	10	mg/L	071009 1744	071009 2030	LBG	SM (20) 2540 C	
Turbidity	**180**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1954	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**310**	0.17	mg/L	072009 1400	072109 1521	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Barium	**0.13**	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Calcium	**85**	0.050	mg/L	072009 1400	072109 1521	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1130	PRM	EPA 200.8/6020	
Iron	**230**	0.50	mg/L	072009 1400	072109 1849	APS	EPA 200.7/6010B	
Potassium	**26**	0.010	mg/L	072009 1400	072109 1521	APS	EPA 200.7/6010B	B2
Magnesium	**24**	0.010	mg/L	072009 1400	072109 1521	APS	EPA 200.7/6010B	
Manganese	**11**	0.050	mg/L	072009 1352	072109 1343	PBK	EPA 200.8/6020	
Sodium	**53**	1.0	mg/L	072009 1400	072109 1521	APS	EPA 200.7/6010B	
Nickel	**0.0074**	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1130	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 1935	071409 1935	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*96.2%*	*80-120*	*071409 1935*	*071409 1935*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*94.6%*	*80-120*	*071409 1935*	*071409 1935*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*071409 1935*	*071409 1935*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.1%*	*60-149*	*071409 1935*	*071409 1935*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09G0180-23 (Ground Water) Sampled: 07/09/2009 10:02; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1641	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.9%*	*10-83*	*071409 1700*	*072509 1641*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.8%*	*13-62*	*071409 1700*	*072509 1641*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*75.4%*	*40-140*	*071409 1700*	*072509 1641*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*68.8%*	*35-138*	*071409 1700*	*072509 1641*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*75.2%*	*24-142*	*071409 1700*	*072509 1641*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*59.1%*	*24-129*	*071409 1700*	*072509 1641*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1300**	0.0	umhos/cm	082109 1232	070909 1002	JWH	EPA 120.1	
pH	**6.77**	1.00	pH Units	082109 0908	070909 1002	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**40**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**10**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0850	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.16**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**43**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**100**	10	mg/L	071009 1744	071009 2032	LBG	SM (20) 2540 C	
Turbidity	**4.5**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 1957	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**46**	0.17	mg/L	072009 1400	072109 1525	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Barium	**0.022**	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Calcium	**15**	0.050	mg/L	072009 1400	072109 1525	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1133	PRM	EPA 200.8/6020	
Iron	**5.2**	0.0050	mg/L	072009 1400	072109 1525	APS	EPA 200.7/6010B	
Potassium	**1.3**	0.010	mg/L	072009 1400	072109 1525	APS	EPA 200.7/6010B	B2
Magnesium	**2.3**	0.010	mg/L	072009 1400	072109 1525	APS	EPA 200.7/6010B	
Manganese	**0.16**	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Sodium	**4.2**	1.0	mg/L	072009 1400	072109 1525	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1133	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 2011	071409 2011	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*93.7%*	*80-120*	*071409 2011*	*071409 2011*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*93.4%*	*80-120*	*071409 2011*	*071409 2011*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071409 2011*	*071409 2011*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*91.4%*	*60-149*	*071409 2011*	*071409 2011*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09G0180-24 (Ground Water) Sampled: 07/09/2009 08:39; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1724	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.9%*	*10-83*	*071409 1700*	*072509 1724*		*EPA 8270C*	
Surrogate: Phenol-d5		*34.1%*	*13-62*	*071409 1700*	*072509 1724*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*76.6%*	*40-140*	*071409 1700*	*072509 1724*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*69.9%*	*35-138*	*071409 1700*	*072509 1724*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*74.3%*	*24-142*	*071409 1700*	*072509 1724*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*64.6%*	*24-129*	*071409 1700*	*072509 1724*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**140**	0.0	umhos/cm	082109 1232	070909 0839	JWH	EPA 120.1	
pH	**5.28**	1.00	pH Units	082109 0908	070909 0839	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**50**	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**50**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	ND	10	mg/L	071509 0914	071609 0852	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.0**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**32**	2.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**160**	10	mg/L	071009 1744	071009 2034	LBG	SM (20) 2540 C	
Turbidity	**94**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2006	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**48**	0.17	mg/L	072009 1400	072109 1529	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Barium	**0.088**	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Calcium	**13**	0.050	mg/L	072009 1400	072109 1529	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1137	PRM	EPA 200.8/6020	
Iron	**22**	0.0050	mg/L	072009 1400	072109 1529	APS	EPA 200.7/6010B	
Potassium	**2.1**	0.010	mg/L	072009 1400	072109 1529	APS	EPA 200.7/6010B	B2
Magnesium	**3.7**	0.010	mg/L	072009 1400	072109 1529	APS	EPA 200.7/6010B	
Manganese	**1.8**	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Sodium	**9.3**	1.0	mg/L	072009 1400	072109 1529	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1137	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

Microbac Laboratories, Inc.
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Benzene	**5.7**	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Naphthalene	**1.0**	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 2048	071409 2048	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*95.1%*	*80-120*	*071409 2048*	*071409 2048*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*93.8%*	*80-120*	*071409 2048*	*071409 2048*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071409 2048*	*071409 2048*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*88.3%*	*60-149*	*071409 2048*	*071409 2048*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09G0180-25 (Ground Water) Sampled: 07/09/2009 07:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**50**	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1807	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*43.2%*	*10-83*	*071409 1700*	*072509 1807*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.6%*	*13-62*	*071409 1700*	*072509 1807*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*71.1%*	*40-140*	*071409 1700*	*072509 1807*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.4%*	*35-138*	*071409 1700*	*072509 1807*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*70.2%*	*24-142*	*071409 1700*	*072509 1807*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*58.8%*	*24-129*	*071409 1700*	*072509 1807*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**210**	0.0	umhos/cm	082109 1232	070909 0730	JWH	EPA 120.1	
pH	**6.26**	1.00	pH Units	082109 0908	070909 0730	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**170**	2.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**60**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	ND	10	mg/L	071509 0914	071609 0854	LCR	EPA410.4/HACH8000	
Ammonia as N	**2.0**	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1054	071009 1054	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071209 0403	071209 0403	VAS	EPA 353.2	
Sulfate as SO4	**4.8**	1.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	
Total Dissolved Solids	**240**	10	mg/L	071009 1744	071009 2036	LBG	SM (20) 2540 C	
Turbidity	**64**	0.10	NTU	071009 1140	071009 1140	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2008	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**170**	0.17	mg/L	072009 1400	072109 1533	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Barium	**0.088**	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Calcium	**57**	0.050	mg/L	072009 1400	072109 1533	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1141	PRM	EPA 200.8/6020	
Iron	**14**	0.0050	mg/L	072009 1400	072109 1533	APS	EPA 200.7/6010B	
Potassium	**1.6**	0.010	mg/L	072009 1400	072109 1533	APS	EPA 200.7/6010B	B2
Magnesium	**7.2**	0.010	mg/L	072009 1400	072109 1533	APS	EPA 200.7/6010B	
Manganese	**0.85**	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Sodium	**16**	1.0	mg/L	072009 1400	072109 1533	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1141	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071409 2124	071409 2124	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*96.4%*	*80-120*	*071409 2124*	*071409 2124*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*95.3%*	*80-120*	*071409 2124*	*071409 2124*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*071409 2124*	*071409 2124*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*91.5%*	*60-149*	*071409 2124*	*071409 2124*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09G0180-26 (Ground Water) Sampled: 07/09/2009 14:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0449	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*38.3%*	*10-83*	*071609 0900*	*072609 0449*		*EPA 8270C*	
Surrogate: Phenol-d5		*28.0%*	*13-62*	*071609 0900*	*072609 0449*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*68.6%*	*40-140*	*071609 0900*	*072609 0449*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*66.8%*	*35-138*	*071609 0900*	*072609 0449*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*66.8%*	*24-142*	*071609 0900*	*072609 0449*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*57.2%*	*24-129*	*071609 0900*	*072609 0449*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**330**	0.0	umhos/cm	082109 1232	070909 1438	JWH	EPA 120.1	
pH	**9.21**	1.00	pH Units	082109 0908	070909 1438	JWH	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-27 (Water) Sampled: 07/09/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methylene Chloride	ND	4.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-27 (Water) Sampled: 07/09/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-27 (Water) Sampled: 07/09/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1327	071609 1327	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.7%*	*80-120*	*071609 1327*	*071609 1327*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.6%*	*80-120*	*071609 1327*	*071609 1327*		*EPA 8260B*	
Surrogate: Toluene-d8		*107%*	*75-120*	*071609 1327*	*071609 1327*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*103%*	*60-149*	*071609 1327*	*071609 1327*		*EPA 8260B*	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**210**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**560**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**190**	20	mg/L	071509 0914	071609 0856	LCR	EPA410.4/HACH8000	D
Ammonia as N	**26**	1.0	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**360**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**1700**	10	mg/L	071009 1744	071009 2038	LBG	SM (20) 2540 C	
Turbidity	**2.7**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2014	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**520**	13	mg/L	072009 1400	072109 1852	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Arsenic	**0.014**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Barium	**0.050**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Calcium	**210**	5.0	mg/L	072009 1400	072109 1852	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Chromium	**0.0036**	0.0025	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Copper	**0.0072**	0.0020	mg/L	072009 1352	072109 1145	PRM	EPA 200.8/6020	
Iron	**1.2**	0.0050	mg/L	072009 1400	072109 1537	APS	EPA 200.7/6010B	
Potassium	**81**	0.010	mg/L	072009 1400	072109 1537	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1537	APS	EPA 200.7/6010B	
Manganese	**0.039**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Sodium	**310**	100	mg/L	072009 1400	072109 1852	APS	EPA 200.7/6010B	
Nickel	**0.016**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Lead	**0.0044**	0.0020	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.015**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Vanadium	**0.028**	0.0050	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1145	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1-Dichloroethane	**1.6**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	**9.3**	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Benzene	**160**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Toluene	**280**	20	ug/L	071709 1132	071709 1132	EMG	EPA 8260B	D
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Ethylbenzene	**4.6**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
m,p-Xylenes	**61**	2.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
o-Xylene	**30**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Propylbenzene	**1.2**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
2-Chlorotoluene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	**11**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**26**	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Naphthalene	**1800**	20	ug/L	071709 1132	071709 1132	EMG	EPA 8260B	D
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	U
Total Xylenes	**91**	3.0	ug/L	071609 1403	071609 1403	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*87.3%*	*80-120*	*071609 1403*	*071609 1403*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*81.7%*	*80-120*	*071609 1403*	*071609 1403*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071609 1403*	*071609 1403*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.7%*	*60-149*	*071609 1403*	*071609 1403*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	**14**	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	D
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**15**	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**57**	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Naphthalene	**880**	100	ug/L	071409 1700	072909 0006	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2-Methylnaphthalene	**22**	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Phenanthrene	**11**	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1850	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*1.69%*	*10-83*	*071409 1700*	*072509 1850*		*EPA 8270C*	*S3*
Surrogate: Phenol-d5		*3.67%*	*13-62*	*071409 1700*	*072509 1850*		*EPA 8270C*	*S3*
Surrogate: Nitrobenzene-d5		*61.6%*	*40-140*	*071409 1700*	*072509 1850*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*55.4%*	*35-138*	*071409 1700*	*072509 1850*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*6.11%*	*24-142*	*071409 1700*	*072509 1850*		*EPA 8270C*	*S3*
Surrogate: Terphenyl-d14		*53.0%*	*24-129*	*071409 1700*	*072509 1850*		*EPA 8270C*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09G0180-28 (Ground Water) Sampled: 07/09/2009 08:30; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
Conductivity	**2500**	0.0	umhos/cm	082109 1232	071009 0830	JWH	EPA 120.1	
pH	**10.7**	1.00	pH Units	082109 0908	071009 0830	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**95**	2.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**2300**	50	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**17**	10	mg/L	071509 0914	071609 0858	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	071209 0130	071209 0602	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**210**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**2600**	10	mg/L	071009 1744	071009 2040	LBG	SM (20) 2540 C	
Turbidity	**140**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2016	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**510**	0.17	mg/L	072009 1400	072109 1541	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Arsenic	**0.0088**	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Barium	**0.58**	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Calcium	**63**	0.050	mg/L	072009 1400	072109 1541	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Copper	**0.0059**	0.0020	mg/L	072009 1352	072109 1200	PRM	EPA 200.8/6020	
Iron	**170**	0.50	mg/L	072009 1400	072109 1856	APS	EPA 200.7/6010B	
Potassium	**5.4**	0.010	mg/L	072009 1400	072109 1541	APS	EPA 200.7/6010B	B2
Magnesium	**85**	0.010	mg/L	072009 1400	072109 1541	APS	EPA 200.7/6010B	
Manganese	**10**	0.050	mg/L	072009 1352	072109 1346	PBK	EPA 200.8/6020	
Sodium	**480**	100	mg/L	072009 1400	072109 1856	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.019**	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1200	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

Microbac Laboratories, Inc.
Baltimore Division
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U

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GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Naphthalene	**14**	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071709 1208	071709 1208	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*93.2%*	*80-120*	*071709 1208*	*071709 1208*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*90.7%*	*80-120*	*071709 1208*	*071709 1208*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071709 1208*	*071709 1208*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.0%*	*60-149*	*071709 1208*	*071709 1208*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Pyridine	ND	21	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Aniline	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Phenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Acetophenone	0.0		ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Isophorone	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Naphthalene	**14**	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Fluorene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Anthracene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D

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GL-08D

09G0180-29 (Ground Water) Sampled: 07/09/2009 07:34; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Pyrene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Chrysene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 1933	RIS	EPA 8270C	Z10, U, D
Surrogate: 2-Fluorophenol		*46.0%*	*10-83*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*
Surrogate: Phenol-d5		*34.2%*	*13-62*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*
Surrogate: Nitrobenzene-d5		*78.6%*	*40-140*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*
Surrogate: 2-Fluorobiphenyl		*70.9%*	*35-138*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*
Surrogate: 2,4,6-Tribromophenol		*75.8%*	*24-142*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*
Surrogate: Terphenyl-d14		*61.1%*	*24-129*	*071409 1700*	*072509 1933*		*EPA 8270C*	*Z10*

Field Sampling/Testing

Conductivity	**3200**	0.0	umhos/cm	082109 1232	071009 0734	JWH	EPA 120.1	
pH	**5.87**	1.00	pH Units	082109 0908	071009 0734	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**240**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**7.5**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0900	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	071209 0130	071309 1101	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.094**	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**91**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**490**	10	mg/L	071009 1744	071009 2042	LBG	SM (20) 2540 C	
Turbidity	**1.8**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2019	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**390**	0.67	mg/L	072009 1400	072109 1900	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Barium	**0.067**	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Calcium	**150**	0.25	mg/L	072009 1400	072109 1900	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Chromium	**0.0028**	0.0025	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Copper	**0.016**	0.0020	mg/L	072009 1352	072109 1203	PRM	EPA 200.8/6020	
Iron	ND	0.0050	mg/L	072009 1400	072109 1546	APS	EPA 200.7/6010B	
Potassium	**14**	0.010	mg/L	072009 1400	072109 1546	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1546	APS	EPA 200.7/6010B	
Manganese	**0.0056**	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Sodium	**13**	1.0	mg/L	072009 1400	072109 1546	APS	EPA 200.7/6010B	
Nickel	**0.0059**	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Lead	**0.0085**	0.0020	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Vanadium	**0.040**	0.0050	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1203	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Benzene	**2.2**	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Toluene	**1.1**	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Hexachlorobutadiene	**1.7**	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	
Naphthalene	**28**	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1627	071609 1627	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.8%*	*80-120*	*071609 1627*	*071609 1627*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.9%*	*80-120*	*071609 1627*	*071609 1627*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*071609 1627*	*071609 1627*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*91.0%*	*60-149*	*071609 1627*	*071609 1627*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Aniline	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Phenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.1	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2-Methylphenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Nitrobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Isophorone	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Naphthalene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Acenaphthylene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Acenaphthene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	53	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Dibenzofuran	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	53	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Fluorene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Diethylphthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	53	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	53	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Anthracene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09G0180-30 (Ground Water) Sampled: 07/09/2009 10:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Pyrene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Chrysene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	11	ug/L	071409 1700	072509 2141	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.7%*	*10-83*	*071409 1700*	*072509 2141*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.9%*	*13-62*	*071409 1700*	*072509 2141*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*76.8%*	*40-140*	*071409 1700*	*072509 2141*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*67.9%*	*35-138*	*071409 1700*	*072509 2141*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*74.2%*	*24-142*	*071409 1700*	*072509 2141*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*63.7%*	*24-129*	*071409 1700*	*072509 2141*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1400**	0.0	umhos/cm	082109 1232	071009 1042	JWH	EPA 120.1	
pH	**11.6**	1.00	pH Units	082109 0908	071009 1042	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**400**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**450**	10	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	D
COD, Total	**180**	20	mg/L	071509 0914	071609 0902	LCR	EPA410.4/HACH8000	D
Ammonia as N	**7.2**	0.50	mg/L	071209 0130	071309 1101	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.014**	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**90**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**1500**	10	mg/L	071009 1744	071009 2044	LBG	SM (20) 2540 C	
Turbidity	**160**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2021	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**560**	0.67	mg/L	072009 1400	072109 1904	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Arsenic	**0.0080**	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Barium	**0.075**	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Calcium	**100**	0.25	mg/L	072009 1400	072109 1904	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Copper	**0.0030**	0.0020	mg/L	072009 1352	072109 1207	PRM	EPA 200.8/6020	
Iron	**0.18**	0.0050	mg/L	072009 1400	072109 1550	APS	EPA 200.7/6010B	
Potassium	**15**	0.010	mg/L	072009 1400	072109 1550	APS	EPA 200.7/6010B	B2
Magnesium	**74**	0.010	mg/L	072009 1400	072109 1550	APS	EPA 200.7/6010B	
Manganese	**0.16**	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Sodium	**150**	5.0	mg/L	072009 1400	072109 1904	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.010**	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1207	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Benzene	**70**	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Toluene	**8.2**	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Naphthalene	**37**	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1703	071609 1703	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.3%*	*80-120*	*071609 1703*	*071609 1703*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.5%*	*80-120*	*071609 1703*	*071609 1703*		*EPA 8260B*	
Surrogate: Toluene-d8		*104%*	*75-120*	*071609 1703*	*071609 1703*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*85.1%*	*60-149*	*071609 1703*	*071609 1703*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Naphthalene	**19**	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09G0180-31 (Ground Water) Sampled: 07/09/2009 09:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071409 1700	072509 2224	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.9%*	*10-83*	*071409 1700*	*072509 2224*		*EPA 8270C*	
Surrogate: Phenol-d5		*32.2%*	*13-62*	*071409 1700*	*072509 2224*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*75.8%*	*40-140*	*071409 1700*	*072509 2224*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*79.0%*	*35-138*	*071409 1700*	*072509 2224*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*76.6%*	*24-142*	*071409 1700*	*072509 2224*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*57.9%*	*24-129*	*071409 1700*	*072509 2224*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**1500**	0.0	umhos/cm	082109 1232	071009 0937	JWH	EPA 120.1	
pH	**7.95**	1.00	pH Units	082109 0908	071009 0937	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**84**	4.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**59**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0904	LCR	EPA410.4/HACH8000	
Ammonia as N	**5.6**	0.20	mg/L	071209 0130	071309 1101	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**140**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**530**	10	mg/L	071009 1744	071009 2046	LBG	SM (20) 2540 C	
Turbidity	**1.1**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2023	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**33**	0.17	mg/L	072009 1400	072109 1608	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Barium	**0.034**	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Calcium	**13**	0.050	mg/L	072009 1400	072109 1608	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Copper	**0.0029**	0.0020	mg/L	072009 1352	072109 1211	PRM	EPA 200.8/6020	
Iron	**0.050**	0.0050	mg/L	072009 1400	072109 1608	APS	EPA 200.7/6010B	
Potassium	**53**	0.010	mg/L	072009 1400	072109 1608	APS	EPA 200.7/6010B	B2
Magnesium	**0.31**	0.010	mg/L	072009 1400	072109 1608	APS	EPA 200.7/6010B	
Manganese	**0.0081**	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Sodium	**92**	5.0	mg/L	072009 1400	072109 1908	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Lead	**0.0043**	0.0020	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Vanadium	**0.0099**	0.0050	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1211	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1-Dichloroethane	**3.6**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Benzene	**32**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Toluene	**1.1**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
o-Xylene	**1.2**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.9**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Naphthalene	**21**	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1739	071609 1739	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*88.1%*	*80-120*	*071609 1739*	*071609 1739*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.1%*	*80-120*	*071609 1739*	*071609 1739*		*EPA 8260B*	
Surrogate: Toluene-d8		*107%*	*75-120*	*071609 1739*	*071609 1739*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*86.5%*	*60-149*	*071609 1739*	*071609 1739*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**68**	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09G0180-32 (Ground Water) Sampled: 07/09/2009 11:49; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0532	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*35.8%*	*10-83*	*071609 0900*	*072609 0532*		*EPA 8270C*	
Surrogate: Phenol-d5		*25.5%*	*13-62*	*071609 0900*	*072609 0532*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*67.6%*	*40-140*	*071609 0900*	*072609 0532*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*61.9%*	*35-138*	*071609 0900*	*072609 0532*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*65.9%*	*24-142*	*071609 0900*	*072609 0532*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*58.2%*	*24-129*	*071609 0900*	*072609 0532*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**690**	0.0	umhos/cm	082109 1232	071009 1149	JWH	EPA 120.1	
pH	**10.4**	1.00	pH Units	082109 0908	071009 1149	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**78**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0906	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	071209 0130	071309 1101	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**180**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**560**	10	mg/L	071009 1744	071009 2048	LBG	SM (20) 2540 C	
Turbidity	**3.2**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2025	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**160**	0.17	mg/L	072009 1400	072109 1612	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Barium	**0.028**	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Beryllium	**0.0044**	0.0025	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Calcium	**12**	0.050	mg/L	072009 1400	072109 1612	APS	EPA 200.7/6010B	
Cadmium	**0.0013**	0.00050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Cobalt	**0.13**	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Copper	**0.0039**	0.0020	mg/L	072009 1352	072109 1215	PRM	EPA 200.8/6020	
Iron	**3.1**	0.0050	mg/L	072009 1400	072109 1612	APS	EPA 200.7/6010B	
Potassium	**0.77**	0.010	mg/L	072009 1400	072109 1612	APS	EPA 200.7/6010B	B2
Magnesium	**32**	0.010	mg/L	072009 1400	072109 1612	APS	EPA 200.7/6010B	
Manganese	**0.37**	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Sodium	**71**	1.0	mg/L	072009 1400	072109 1612	APS	EPA 200.7/6010B	
Nickel	**0.21**	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	
Zinc	**0.32**	0.020	mg/L	072009 1352	072109 1215	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Naphthalene	**5.6**	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1815	071609 1815	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.2%*	*80-120*	*071609 1815*	*071609 1815*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.9%*	*80-120*	*071609 1815*	*071609 1815*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*071609 1815*	*071609 1815*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.4%*	*60-149*	*071609 1815*	*071609 1815*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09G0180-33 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**57**	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0615	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*49.0%*	*10-83*	*071609 0900*	*072609 0615*		*EPA 8270C*	
Surrogate: Phenol-d5		*35.5%*	*13-62*	*071609 0900*	*072609 0615*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*88.5%*	*40-140*	*071609 0900*	*072609 0615*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*84.7%*	*35-138*	*071609 0900*	*072609 0615*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*90.0%*	*24-142*	*071609 0900*	*072609 0615*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*71.9%*	*24-129*	*071609 0900*	*072609 0615*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**640**	0.0	umhos/cm	082109 1232	071009 1315	JWH	EPA 120.1	
pH	**4.59**	1.00	pH Units	082109 0908	071009 1315	JWH	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	ND	1.0	mg CaCO3/L	071209 1330	071209 1330	VAS	Sm (20) 2320B	
Chloride	**79**	1.0	mg/L	071209 0500	071209 0500	VAS	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0908	LCR	EPA410.4/HACH8000	
Ammonia as N	ND	0.10	mg/L	071209 0130	071309 1101	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071009 1624	071009 1624	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071109 2343	071109 2343	VAS	EPA 353.2	
Sulfate as SO4	**190**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**540**	10	mg/L	071009 1744	071009 2050	LBG	SM (20) 2540 C	
Turbidity	**1.5**	0.10	NTU	071009 1615	071009 1615	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Mercury	ND	0.00020	mg/L	072409 1021	072409 2027	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hardness (as CaCO3)	**160**	0.17	mg/L	072009 1400	072109 1616	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Barium	**0.025**	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Beryllium	**0.0044**	0.0025	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Calcium	**11**	0.050	mg/L	072009 1400	072109 1616	APS	EPA 200.7/6010B	
Cadmium	**0.0012**	0.00050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Cobalt	**0.12**	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Copper	**0.0032**	0.0020	mg/L	072009 1352	072109 1219	PRM	EPA 200.8/6020	
Iron	**3.0**	0.0050	mg/L	072009 1400	072109 1616	APS	EPA 200.7/6010B	
Potassium	**0.67**	0.010	mg/L	072009 1400	072109 1616	APS	EPA 200.7/6010B	B2
Magnesium	**31**	0.010	mg/L	072009 1400	072109 1616	APS	EPA 200.7/6010B	
Manganese	**0.37**	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Sodium	**68**	1.0	mg/L	072009 1400	072109 1616	APS	EPA 200.7/6010B	
Nickel	**0.21**	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
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GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	ND	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	
Zinc	**0.32**	0.020	mg/L	072009 1352	072109 1219	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Naphthalene	**3.0**	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1850	071609 1850	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.8%*	*80-120*	*071609 1850*	*071609 1850*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*89.0%*	*80-120*	*071609 1850*	*071609 1850*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*071609 1850*	*071609 1850*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.0%*	*60-149*	*071609 1850*	*071609 1850*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Phenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S Dup

09G0180-34 (Ground Water) Sampled: 07/09/2009 13:15; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**53**	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0657	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*49.7%*	*10-83*	*071609 0900*	*072609 0657*		*EPA 8270C*	
Surrogate: Phenol-d5		*35.2%*	*13-62*	*071609 0900*	*072609 0657*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*91.3%*	*40-140*	*071609 0900*	*072609 0657*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*89.7%*	*35-138*	*071609 0900*	*072609 0657*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*88.8%*	*24-142*	*071609 0900*	*072609 0657*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*74.3%*	*24-129*	*071609 0900*	*072609 0657*		*EPA 8270C*	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-35 (Water) Sampled: 07/10/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methylene Chloride	ND	4.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-35 (Water) Sampled: 07/10/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-35 (Water) Sampled: 07/10/2009 06:30; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 1926	071609 1926	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*91.3%*	*80-120*	*071609 1926*	*071609 1926*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.6%*	*80-120*	*071609 1926*	*071609 1926*		*EPA 8260B*	
Surrogate: Toluene-d8		*108%*	*75-120*	*071609 1926*	*071609 1926*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.7%*	*60-149*	*071609 1926*	*071609 1926*		*EPA 8260B*	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

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09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**240**	4.0	mg CaCO3/L	071709 0900	071709 0900	VAS	Sm (20) 2320B	
Chloride	**370**	5.0	mg/L	072109 1310	072109 1540	LCR	SM (20) 4500Cl-C	D
COD, Total	**140**	10	mg/L	071509 0914	071609 0910	LCR	EPA410.4/HACH8000	
Ammonia as N	**52**	5.0	mg/L	071509 1330	071609 1200	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.014**	0.0050	mg/L	071409 0719	071409 0719	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Sulfate as SO4	**230**	10	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**2000**	20	mg/L	072009 0800	072109 0800	LCR	SM (20) 2540 C	
Turbidity	**24**	0.10	NTU	071409 0700	071409 0700	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2029	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**850**	13	mg/L	072009 1400	072109 1920	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Arsenic	**0.031**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Barium	**0.082**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Calcium	**340**	5.0	mg/L	072009 1400	072109 1920	APS	EPA 200.7/6010B	
Cadmium	**0.0012**	0.00050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Cobalt	**0.0068**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Chromium	**0.037**	0.0025	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Copper	**0.068**	0.0020	mg/L	072009 1352	072109 1222	PRM	EPA 200.8/6020	
Iron	**19**	0.0050	mg/L	072009 1400	072109 1620	APS	EPA 200.7/6010B	
Potassium	**81**	0.010	mg/L	072009 1400	072109 1620	APS	EPA 200.7/6010B	B2
Magnesium	**0.70**	0.010	mg/L	072009 1400	072109 1620	APS	EPA 200.7/6010B	
Manganese	**0.54**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Sodium	**250**	100	mg/L	072009 1400	072109 1920	APS	EPA 200.7/6010B	
Nickel	**0.036**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Lead	**0.042**	0.0020	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

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Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Selenium	**0.016**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Vanadium	**0.053**	0.0050	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	
Zinc	**0.17**	0.020	mg/L	072009 1352	072109 1222	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Acetone	**110**	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
Iodomethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	**17**	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Benzene	**1.2**	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Toluene	**2.7**	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.2**	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Naphthalene	**24**	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 2002	071609 2002	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.0%*	*80-120*	*071609 2002*	*071609 2002*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.6%*	*80-120*	*071609 2002*	*071609 2002*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*071609 2002*	*071609 2002*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*98.4%*	*60-149*	*071609 2002*	*071609 2002*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Aniline	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Phenol	**88**	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2-Methylphenol	**17**	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	D
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**240**	100	ug/L	071609 0900	072909 0048	RIS	EPA 8270C	D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**38**	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Naphthalene	**11**	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Fluoranthene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**42**	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0740	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*43.5%*	*10-83*	*071609 0900*	*072609 0740*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.7%*	*13-62*	*071609 0900*	*072609 0740*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*92.9%*	*40-140*	*071609 0900*	*072609 0740*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*73.2%*	*35-138*	*071609 0900*	*072609 0740*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*86.5%*	*24-142*	*071609 0900*	*072609 0740*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*71.3%*	*24-129*	*071609 0900*	*072609 0740*		*EPA 8270C*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09G0180-36 (Ground Water) Sampled: 07/13/2009 13:22; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
Conductivity	**2400**	0.0	umhos/cm	082109 1232	071309 1322	JWH	EPA 120.1	
pH	**9.83**	1.00	pH Units	082109 0908	071309 1322	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**360**	4.0	mg CaCO3/L	071709 0900	071709 0900	VAS	Sm (20) 2320B	
Chloride	**600**	10	mg/L	072109 1310	072109 1540	LCR	SM (20) 4500Cl-C	D
COD, Total	ND	10	mg/L	071509 0914	071609 0912	LCR	EPA410.4/HACH8000	
Ammonia as N	**2.5**	0.10	mg/L	071509 1330	071609 1200	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	071409 0719	071409 0719	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Sulfate as SO4	**140**	5.0	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**1600**	20	mg/L	072009 0800	072109 0800	LCR	SM (20) 2540 C	
Turbidity	**140**	0.10	NTU	071409 0700	071409 0700	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2032	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**480**	0.17	mg/L	072009 1400	072109 1625	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Arsenic	**0.017**	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Barium	**0.24**	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Calcium	**44**	0.050	mg/L	072009 1400	072109 1625	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Cobalt	**0.0079**	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Copper	**0.0050**	0.0020	mg/L	072009 1352	072109 1226	PRM	EPA 200.8/6020	
Iron	**78**	0.0050	mg/L	072009 1400	072109 1625	APS	EPA 200.7/6010B	
Potassium	**14**	0.010	mg/L	072009 1400	072109 1625	APS	EPA 200.7/6010B	B2
Magnesium	**90**	0.010	mg/L	072009 1400	072109 1625	APS	EPA 200.7/6010B	
Manganese	**3.8**	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Sodium	**340**	100	mg/L	072009 1400	072109 1924	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.026**	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1226	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U

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Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Naphthalene	**4.3**	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 2038	071609 2038	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.0%*	*80-120*	*071609 2038*	*071609 2038*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.4%*	*80-120*	*071609 2038*	*071609 2038*		*EPA 8260B*	
Surrogate: Toluene-d8		*106%*	*75-120*	*071609 2038*	*071609 2038*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.8%*	*60-149*	*071609 2038*	*071609 2038*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Aniline	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Phenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D

The results in this report apply to the samples analyzed in accordance with the chain of

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	V6, Z10, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP016

09G0180-37 (Ground Water) Sampled: 07/13/2009 12:22; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0822	RIS	EPA 8270C	Z10, U, D
Surrogate: 2-Fluorophenol		*47.8%*	*10-83*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*
Surrogate: Phenol-d5		*36.4%*	*13-62*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*
Surrogate: Nitrobenzene-d5		*91.0%*	*40-140*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*
Surrogate: 2-Fluorobiphenyl		*78.2%*	*35-138*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*
Surrogate: 2,4,6-Tribromophenol		*88.7%*	*24-142*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*
Surrogate: Terphenyl-d14		*66.9%*	*24-129*	*071609 0900*	*072609 0822*		*EPA 8270C*	*Z10*

Field Sampling/Testing

Conductivity	**2400**	0.0	umhos/cm	082109 1232	071309 1322	JWH	EPA 120.1	
pH	**6.30**	1.00	pH Units	082109 0908	071309 1222	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**70**	1.0	mg CaCO3/L	071709 0900	071709 0900	VAS	Sm (20) 2320B	
Chloride	**56**	1.0	mg/L	072109 1310	072109 1540	LCR	SM (20) 4500Cl-C	
COD, Total	ND	10	mg/L	071509 0914	071609 0914	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.26**	0.10	mg/L	071509 1330	071609 1200	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.17**	0.0050	mg/L	071409 0719	071409 0719	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Sulfate as SO4	**1600**	50	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**1600**	10	mg/L	072009 0800	072109 0800	LCR	SM (20) 2540 C	
Turbidity	**0.29**	0.10	NTU	071409 0700	071409 0700	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072409 2034	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**940**	0.67	mg/L	072009 1400	072109 1927	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Barium	**0.022**	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Calcium	**380**	0.25	mg/L	072009 1400	072109 1927	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	072009 1352	072109 1230	PRM	EPA 200.8/6020	
Iron	ND	0.0050	mg/L	072009 1400	072109 1629	APS	EPA 200.7/6010B	
Potassium	**42**	0.010	mg/L	072009 1400	072109 1629	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1629	APS	EPA 200.7/6010B	
Manganese	ND	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Sodium	**50**	1.0	mg/L	072009 1400	072109 1629	APS	EPA 200.7/6010B	
Nickel	**0.012**	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Selenium	**0.0077**	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Vanadium	**0.042**	0.0050	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1230	PBK	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Benzene	**2.2**	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Tetrachloroethene	**4.5**	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	
1,3-Dichloropropane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Naphthalene	**2.5**	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 2114	071609 2114	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*93.5%*	*80-120*	*071609 2114*	*071609 2114*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*91.3%*	*80-120*	*071609 2114*	*071609 2114*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071609 2114*	*071609 2114*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*99.0%*	*60-149*	*071609 2114*	*071609 2114*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Pyridine	ND	21	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Aniline	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Phenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4-Chloro-3-methylphenol	ND	21	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrophenol	ND	52	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4-Nitrophenol	ND	52	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4,6-Dinitro-2-methylphenol	ND	52	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Pentachlorophenol	ND	52	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	V6, Z10, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09G0180-38 (Ground Water) Sampled: 07/13/2009 09:59; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
3,3´-Dichlorobenzidine	ND	21	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0905	RIS	EPA 8270C	Z10, U, D
Surrogate: 2-Fluorophenol		*50.3%*	*10-83*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*
Surrogate: Phenol-d5		*37.5%*	*13-62*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*
Surrogate: Nitrobenzene-d5		*90.7%*	*40-140*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*
Surrogate: 2-Fluorobiphenyl		*82.1%*	*35-138*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*
Surrogate: 2,4,6-Tribromophenol		*90.7%*	*24-142*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*
Surrogate: Terphenyl-d14		*75.9%*	*24-129*	*071609 0900*	*072609 0905*		*EPA 8270C*	*Z10*

Field Sampling/Testing

Conductivity	**1800**	0.0	umhos/cm	082109 1232	071309 0959	JWH	EPA 120.1	
pH	**10.8**	1.00	pH Units	082109 0908	071309 0959	JWH	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**320**	4.0	mg CaCO3/L	071709 0900	071709 0900	VAS	Sm (20) 2320B	
Chloride	**51**	1.0	mg/L	072109 1310	072109 1540	LCR	SM (20) 4500Cl-C	
COD, Total	**97**	10	mg/L	071509 0914	071609 0916	LCR	EPA410.4/HACH8000	
Ammonia as N	**19**	1.0	mg/L	071509 1330	071609 1200	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	071409 0719	071409 0719	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	071509 1228	071509 1228	VAS	EPA 353.2	
Sulfate as SO4	**2100**	100	mg/L	072709 0700	072709 1445	LCR	ASTM D516-02	D
Total Dissolved Solids	**6600**	20	mg/L	072009 0800	072109 0800	LCR	SM (20) 2540 C	
Turbidity	**0.32**	0.10	NTU	071409 0700	071409 0700	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	072409 1021	072709 1054	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**1600**	13	mg/L	072009 1400	072209 1858	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Arsenic	**0.022**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Barium	**0.033**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Beryllium	ND	0.0025	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Calcium	**660**	5.0	mg/L	072009 1400	072209 1858	APS	EPA 200.7/6010B	
Cadmium	**0.00068**	0.00050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Copper	**0.019**	0.0020	mg/L	072009 1352	072109 1234	PRM	EPA 200.8/6020	
Iron	ND	0.0050	mg/L	072009 1400	072109 1633	APS	EPA 200.7/6010B	
Potassium	**410**	0.050	mg/L	072009 1400	072109 1931	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.010	mg/L	072009 1400	072109 1633	APS	EPA 200.7/6010B	
Manganese	**0.010**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Sodium	**1500**	100	mg/L	072009 1400	072209 1858	APS	EPA 200.7/6010B	
Nickel	**0.020**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Lead	**0.0022**	0.0020	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	**0.051**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Vanadium	**0.055**	0.0050	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	072009 1352	072109 1234	PBK	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1-Dichloroethane	**1.4**	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance with the chain of

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Baltimore Division
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Benzene	**5.9**	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Naphthalene	**1.5**	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071609 2149	071609 2149	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.3%*	*80-120*	*071609 2149*	*071609 2149*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*91.2%*	*80-120*	*071609 2149*	*071609 2149*		*EPA 8260B*	
Surrogate: Toluene-d8		*107%*	*75-120*	*071609 2149*	*071609 2149*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.0%*	*60-149*	*071609 2149*	*071609 2149*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Pyridine	ND	20	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Aniline	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Bis(2-Chloroethyl)ether	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Phenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Acetophenone	0.0		ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2-Chlorophenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
1,3-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
1,4-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
1,2-Dichlorobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Pentachloroethane	ND	1.0	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Bis(2-chloroisopropyl)ether	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2-Methylphenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4-Methylphenol, 3-Methylphenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Nitrobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Isophorone	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2-Nitrophenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4-Dimethylphenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
bis(2-Chloroethoxy)methane	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4-Dichlorophenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
1,2,4-Trichlorobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Naphthalene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Hexachlorobutadiene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4-Chloro-3-methylphenol	ND	20	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2-Methylnaphthalene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Hexachlorocyclopentadiene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4,6-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4,5-Trichlorophenol	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2-Chloronaphthalene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Acenaphthylene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Dimethylphthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,6-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Acenaphthene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrophenol	ND	51	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Dibenzofuran	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
2,4-Dinitrotoluene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4-Nitrophenol	ND	51	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Fluorene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4-Chlorophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Diethylphthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4,6-Dinitro-2-methylphenol	ND	51	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
4-Bromophenyl-phenylether	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Hexachlorobenzene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Pentachlorophenol	ND	51	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, V6, U, D
Phenanthrene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Anthracene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Di-n-butylphthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09G0180-39 (Ground Water) Sampled: 07/13/2009 11:12; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Pyrene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Butylbenzylphthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
3,3´-Dichlorobenzidine	ND	20	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Benz(a)anthracene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Chrysene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Bis(2-Ethylhexyl)phthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Di-n-octylphthalate	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Benzo[b]fluoranthene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Benzo[k]fluoranthene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Benzo[a]pyrene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Indeno[1,2,3-cd]pyrene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Dibenz[a,h]anthracene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Benzo[g,h,i]perylene	ND	10	ug/L	071609 0900	072609 0947	RIS	EPA 8270C	Z10, U, D
Surrogate: 2-Fluorophenol		*45.5%*	*10-83*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*
Surrogate: Phenol-d5		*32.4%*	*13-62*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*
Surrogate: Nitrobenzene-d5		*93.5%*	*40-140*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*
Surrogate: 2-Fluorobiphenyl		*81.3%*	*35-138*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*
Surrogate: 2,4,6-Tribromophenol		*85.4%*	*24-142*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*
Surrogate: Terphenyl-d14		*70.1%*	*24-129*	*071609 0900*	*072609 0947*		*EPA 8270C*	*Z10*

Field Sampling/Testing

Conductivity	**3300**	0.0	umhos/cm	082109 1232	071309 1112	JWH	EPA 120.1	
pH	**10.6**	1.00	pH Units	082109 0908	071309 1112	JWH	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-40 (Water) Sampled: 07/13/2009 06:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Methylene Chloride	**6.2**	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	B
Methyl-tert-Butyl Ether	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-40 (Water) Sampled: 07/13/2009 06:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Methyl Methacrylate	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Trip Blank

09G0180-40 (Water) Sampled: 07/13/2009 06:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	071709 1244	071709 1244	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.9%*	*80-120*	*071709 1244*	*071709 1244*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*90.8%*	*80-120*	*071709 1244*	*071709 1244*		*EPA 8260B*	
Surrogate: Toluene-d8		*105%*	*75-120*	*071709 1244*	*071709 1244*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.1%*	*60-149*	*071709 1244*	*071709 1244*		*EPA 8260B*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928043 - WetChem_Prep										
LCS (0928043-BS1)				Prepared & Analyzed: 07/07/2009						
Nitrite as N	0.518	0.0050	mg/L	0.5000		104	90-110			
Batch 0928048 - WetChem_Prep										
Blank (0928048-BLK1)				Prepared & Analyzed: 07/07/2009						
Turbidity	ND	0.10	NTU							
LCS (0928048-BS1)				Prepared & Analyzed: 07/07/2009						
Turbidity	10.6		NTU	10.00		106	80-120			
Duplicate (0928048-DUP1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/07/2009						
Turbidity	0.530	0.10	NTU		0.520			1.90	5	
Batch 0928063 - WetChem_Prep										
Blank (0928063-BLK1)				Prepared & Analyzed: 07/08/2009						
Turbidity	ND	0.10	NTU							
LCS (0928063-BS1)				Prepared & Analyzed: 07/08/2009						
Turbidity	10.6		NTU	10.00		106	80-120			
Duplicate (0928063-DUP1)		**Source: 09G0156-08**		Prepared & Analyzed: 07/08/2009						
Turbidity	2.00	0.10	NTU		2.03			1.49	5	
Duplicate (0928063-DUP2)		**Source: 09G0180-09**		Prepared & Analyzed: 07/08/2009						
Turbidity	1.20	0.10	NTU		1.19			0.837	5	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928068 - NO3_Prep										
LCS (0928068-BS1)				Prepared & Analyzed: 07/08/2009						
Nitrate/Nitrite as N	2.26	0.050	mg/L	2.500		90.4	90-110			
Duplicate (0928068-DUP1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/08/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND				200	
Duplicate (0928068-DUP2)		**Source: 09G0156-10**		Prepared & Analyzed: 07/08/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND				200	
Matrix Spike (0928068-MS1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/08/2009						
Nitrate/Nitrite as N	2.05	0.050	mg/L	2.500	ND	81.8	80-120			
Matrix Spike (0928068-MS2)		**Source: 09G0156-10**		Prepared & Analyzed: 07/08/2009						
Nitrate/Nitrite as N	2.25	0.050	mg/L	2.500	ND	89.9	80-120			
Batch 0928107 - WetChem_Prep										
LCS (0928107-BS1)				Prepared & Analyzed: 07/09/2009						
Nitrite as N	0.505	0.0050	mg/L	0.5000		101	90-110			
Duplicate (0928107-DUP1)		**Source: 09G0270-01**		Prepared & Analyzed: 07/09/2009						
Nitrite as N	0.0798	0.0050	mg/L		0.0819			2.60	20	
Duplicate (0928107-DUP2)		**Source: 09G0156-08**		Prepared & Analyzed: 07/09/2009						
Nitrite as N	ND	0.0050	mg/L		ND				20	
Matrix Spike (0928107-MS1)		**Source: 09G0270-01**		Prepared & Analyzed: 07/09/2009						
Nitrite as N	0.335	0.0050	mg/L	0.2500	0.0819	101	80-120			

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928107 - WetChem_Prep										
Matrix Spike (0928107-MS2)		**Source: 09G0156-08**		Prepared & Analyzed: 07/09/2009						
Nitrite as N	0.247	0.0050	mg/L	0.2500	ND	98.7	80-120			
Batch 0928109 - WetChem_Prep										
Blank (0928109-BLK1)				Prepared & Analyzed: 07/09/2009						
Turbidity	ND	0.10	NTU							
LCS (0928109-BS1)				Prepared & Analyzed: 07/09/2009						
Turbidity	10.5		NTU	10.00		105	80-120			
Duplicate (0928109-DUP1)		**Source: 09G0180-12**		Prepared & Analyzed: 07/09/2009						
Turbidity	183	0.10	NTU		183			0.0546	5	
Duplicate (0928109-DUP2)		**Source: 09G0271-03**		Prepared & Analyzed: 07/09/2009						
Turbidity	0.300	0.10	NTU		0.290			3.39	5	
Batch 0928110 - NH3_Prep										
Blank (0928110-BLK1)				Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0928110-BS1)				Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	2.08	0.10	mg/L	2.000		104	85-115			
Duplicate (0928110-DUP1)		**Source: 09G0156-01**		Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	ND	0.10	mg/L		ND				20	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928110 - NH3_Prep										
Duplicate (0928110-DUP2)		**Source: 09G0156-12**		Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	ND	0.10	mg/L		ND				20	
Matrix Spike (0928110-MS1)		**Source: 09G0156-01**		Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	1.62	0.10	mg/L	2.000	ND	80.9	80-120			
Matrix Spike (0928110-MS2)		**Source: 09G0156-12**		Prepared: 07/08/2009 Analyzed: 07/09/2009						
Ammonia as N	1.97	0.10	mg/L	2.000	ND	98.3	80-120			
Batch 0928132 - WetChem_Prep										
LCS (0928132-BS1)				Prepared & Analyzed: 07/10/2009						
Nitrite as N	0.508	0.0050	mg/L	0.5000		102	90-110			
Duplicate (0928132-DUP1)		**Source: 09G0352-03**		Prepared & Analyzed: 07/10/2009						
Nitrite as N	ND	0.0050	mg/L		ND				20	
Duplicate (0928132-DUP2)		**Source: 09G0352-08**		Prepared & Analyzed: 07/10/2009						
Nitrite as N	ND	0.0050	mg/L		ND				20	
Matrix Spike (0928132-MS1)		**Source: 09G0352-03**		Prepared & Analyzed: 07/10/2009						
Nitrite as N	0.258	0.0050	mg/L	0.2500	ND	103	80-120			
Matrix Spike (0928132-MS2)		**Source: 09G0352-08**		Prepared & Analyzed: 07/10/2009						
Nitrite as N	0.256	0.0050	mg/L	0.2500	ND	102	80-120			
Batch 0928133 - WetChem_Prep										
Blank (0928133-BLK1)				Prepared & Analyzed: 07/10/2009						
Turbidity	ND	0.10	NTU							

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928133 - WetChem_Prep										
Blank (0928133-BLK2)				Prepared & Analyzed: 07/10/2009						
Turbidity	ND	0.10	NTU							
LCS (0928133-BS1)				Prepared & Analyzed: 07/10/2009						
Turbidity	10.5		NTU	10.00		105	80-120			
LCS (0928133-BS2)				Prepared & Analyzed: 07/10/2009						
Turbidity	10.5		NTU	10.00		105	80-120			
Duplicate (0928133-DUP1)		**Source: 09G0180-20**		Prepared & Analyzed: 07/10/2009						
Turbidity	2.16	0.10	NTU		2.15			0.464	5	
Duplicate (0928133-DUP2)		**Source: 09G0356-04**		Prepared & Analyzed: 07/10/2009						
Turbidity	0.150	0.10	NTU		0.140			6.90	5	R3
Batch 0928143 - WetChem_TDS_Prep										
Blank (0928143-BLK1)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0928143-BLK2)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0928143-BLK3)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0928143-BLK4)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	ND	10	mg/L							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928143 - WetChem_TDS_Prep										
Blank (0928143-BLK5)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	ND	10	mg/L							
LCS (0928143-BS1)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	19000	100	mg/L	20000		94.7	90-111			
LCS (0928143-BS2)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	20000	100	mg/L	20000		97.8	90-111			
LCS (0928143-BS3)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	20000	100	mg/L	20000		99.2	90-111			
LCS (0928143-BS4)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	20000	100	mg/L	20000		99.9	90-111			
LCS (0928143-BS5)				Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	20000	100	mg/L	20000		100	90-111			
Duplicate (0928143-DUP1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	36	10	mg/L		34			5.66	10	
Duplicate (0928143-DUP2)		**Source: 09G0180-01**		Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	1500	10	mg/L		1500			2.38	10	
Duplicate (0928143-DUP3)		**Source: 09G0180-11**		Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	310	10	mg/L		310			0.320	10	
Duplicate (0928143-DUP4)		**Source: 09G0180-20**		Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	440	10	mg/L		450			3.35	10	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928143 - WetChem_TDS_Prep										
Duplicate (0928143-DUP5)		**Source: 09G0180-33**		Prepared & Analyzed: 07/10/2009						
Total Dissolved Solids	570	10	mg/L		560			0.717	10	
Batch 0929008 - Cl_Titration_Prep										
Blank (0929008-BLK1)				Prepared & Analyzed: 07/12/2009						
Chloride	ND	1.0	mg/L							
LCS (0929008-BS1)				Prepared & Analyzed: 07/12/2009						
Chloride	52.5	1.0	mg/L	50.00		105	94-108			
Duplicate (0929008-DUP1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/12/2009						
Chloride	5.00	1.0	mg/L		4.50			10.5	11	
Duplicate (0929008-DUP2)		**Source: 09G0156-12**		Prepared & Analyzed: 07/12/2009						
Chloride	3.50	1.0	mg/L		3.50			0.00	11	
Duplicate (0929008-DUP3)		**Source: 09G0180-09**		Prepared & Analyzed: 07/12/2009						
Chloride	12.5	1.0	mg/L		12.5			0.00	11	
Duplicate (0929008-DUP4)		**Source: 09G0180-21**		Prepared & Analyzed: 07/12/2009						
Chloride	22.5	1.0	mg/L		22.5			0.00	11	
Matrix Spike (0929008-MS1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/12/2009						
Chloride	30.0	1.0	mg/L	25.00	4.50	102	89-112			
Matrix Spike (0929008-MS2)		**Source: 09G0156-12**		Prepared & Analyzed: 07/12/2009						
Chloride	28.0	1.0	mg/L	25.00	3.50	98.0	89-112			

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929008 - Cl_Titration_Prep										
Matrix Spike (0929008-MS3)		**Source: 09G0180-09**		Prepared & Analyzed: 07/12/2009						
Chloride	37.5	1.0	mg/L	25.00	12.5	100	89-112			
Matrix Spike (0929008-MS4)		**Source: 09G0180-21**		Prepared & Analyzed: 07/12/2009						
Chloride	47.5	1.0	mg/L	25.00	22.5	100	89-112			
Batch 0929017 - WetChem_Prep										
LCS (0929017-BS1)				Prepared & Analyzed: 07/10/2009						
Nitrite as N	0.480	0.0050	mg/L	0.5000		96.0	90-110			
Batch 0929018 - NO3_Prep										
LCS (0929018-BS1)				Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	2.72	0.050	mg/L	2.500		109	90-110			
Duplicate (0929018-DUP1)		**Source: 09G0352-03**		Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND				200	
Duplicate (0929018-DUP2)		**Source: 09G0392-04**		Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND				200	
Duplicate (0929018-DUP3)		**Source: 09G0392-08**		Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	0.0370	0.050	mg/L		0.0569			42.4	200	
Matrix Spike (0929018-MS1)		**Source: 09G0352-03**		Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	2.10	0.050	mg/L	2.500	ND	84.0	80-120			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929018 - NO3_Prep										
Matrix Spike (0929018-MS2)	**Source: 09G0392-04**			Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	2.28	0.050	mg/L	2.500	ND	91.4	80-120			
Matrix Spike (0929018-MS3)	**Source: 09G0392-08**			Prepared & Analyzed: 07/11/2009						
Nitrate/Nitrite as N	2.27	0.050	mg/L	2.500	0.0569	88.4	80-120			
Batch 0929019 - NO3_Prep										
LCS (0929019-BS1)				Prepared & Analyzed: 07/12/2009						
Nitrate/Nitrite as N	2.71	0.050	mg/L	2.500		108	90-110			
Duplicate (0929019-DUP1)	**Source: 09G0392-11**			Prepared & Analyzed: 07/12/2009						
Nitrate/Nitrite as N	0.00710	0.050	mg/L		0.0157			75.4	200	
Matrix Spike (0929019-MS1)	**Source: 09G0392-11**			Prepared & Analyzed: 07/12/2009						
Nitrate/Nitrite as N	2.32	0.050	mg/L	2.500	0.0157	92.3	80-120			
Batch 0929022 - Alkalinity_Prep										
Blank (0929022-BLK1)				Prepared & Analyzed: 07/12/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
Blank (0929022-BLK2)				Prepared & Analyzed: 07/12/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0929022-BS1)				Prepared & Analyzed: 07/12/2009						
Alkalinity	48.0	1.0	mg CaCO3/L	50.00		96.0	91-108			

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Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929022 - Alkalinity_Prep										
LCS (0929022-BS2)				Prepared & Analyzed: 07/12/2009						
Alkalinity	48.5	1.0	mg CaCO3/L	50.00		97.0	91-108			
Duplicate (0929022-DUP1)		**Source: 09G0243-01**		Prepared & Analyzed: 07/12/2009						
Alkalinity	200	4.0	mg CaCO3/L		200			0.00	18	
Duplicate (0929022-DUP2)		**Source: 09G0307-09**		Prepared & Analyzed: 07/12/2009						
Alkalinity	ND	1.0	mg CaCO3/L		1.50				18	
Duplicate (0929022-DUP3)		**Source: 09G0156-10**		Prepared & Analyzed: 07/12/2009						
Alkalinity	ND	1.0	mg CaCO3/L		ND				18	
Duplicate (0929022-DUP4)		**Source: 09G0180-21**		Prepared & Analyzed: 07/12/2009						
Alkalinity	60.5	1.0	mg CaCO3/L		60.0			0.830	18	
Matrix Spike (0929022-MS1)		**Source: 09G0243-01**		Prepared & Analyzed: 07/12/2009						
Alkalinity	284	4.0	mg CaCO3/L	80.00	200	105	83-114			
Matrix Spike (0929022-MS2)		**Source: 09G0307-09**		Prepared & Analyzed: 07/12/2009						
Alkalinity	20.0	1.0	mg CaCO3/L	20.00	1.50	92.5	83-114			
Matrix Spike (0929022-MS3)		**Source: 09G0156-10**		Prepared & Analyzed: 07/12/2009						
Alkalinity	21.0	1.0	mg CaCO3/L	20.00	ND	105	83-114			
Matrix Spike (0929022-MS4)		**Source: 09G0180-21**		Prepared & Analyzed: 07/12/2009						
Alkalinity	81.0	1.0	mg CaCO3/L	20.00	60.0	105	83-114			
Batch 0929041 - WetChem_Prep										
Blank (0929041-BLK1)				Prepared & Analyzed: 07/14/2009						
Turbidity	ND	0.10	NTU							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929041 - WetChem_Prep										
LCS (0929041-BS1)				Prepared & Analyzed: 07/14/2009						
Turbidity	10.6		NTU	10.00		106	80-120			
Duplicate (0929041-DUP1)		**Source: 09G0180-36**		Prepared & Analyzed: 07/14/2009						
Turbidity	24.3	0.10	NTU		24.0			1.24	5	
Batch 0929043 - NH3_Prep										
Blank (0929043-BLK1)				Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0929043-BS1)				Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	2.16	0.10	mg/L	2.000		108	85-115			
Duplicate (0929043-DUP1)		**Source: 09G0345-01**		Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	0.806	0.10	mg/L		0.806			0.00	20	
Duplicate (0929043-DUP2)		**Source: 09G0180-15**		Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	3.88	0.10	mg/L		3.87			0.284	20	
Duplicate (0929043-DUP3)		**Source: 09G0180-13**		Prepared & Analyzed: 07/12/2009						
Ammonia as N	4.53	0.10	mg/L		4.53			0.0243	20	
Duplicate (0929043-DUP4)		**Source: 09G0389-01**		Prepared & Analyzed: 07/12/2009						
Ammonia as N	0.470	0.10	mg/L		0.469			0.170	20	
Matrix Spike (0929043-MS1)		**Source: 09G0345-01**		Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	1.69	0.10	mg/L	1.000	0.806	88.2	80-120			

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929043 - NH3_Prep										
Matrix Spike (0929043-MS2)		**Source: 09G0180-15**		Prepared: 07/09/2009 Analyzed: 07/12/2009						
Ammonia as N	4.18	1.0	mg/L	2.000	3.87	15.8	80-120			M6, D
Matrix Spike (0929043-MS3)		**Source: 09G0180-13**		Prepared & Analyzed: 07/12/2009						
Ammonia as N	0.0939	0.10	mg/L	2.000	4.53	NR	80-120			M6
Matrix Spike (0929043-MS4)		**Source: 09G0389-01**		Prepared & Analyzed: 07/12/2009						
Ammonia as N	2.79	0.10	mg/L	2.000	0.469	116	80-120			
Batch 0929044 - WetCem_SO4_Prep										
Blank (0929044-BLK1)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0929044-BLK2)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0929044-BLK3)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
LCS (0929044-BS1)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	20.4	1.0	mg/L	20.00		102	80-120			
LCS (0929044-BS2)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	19.8	1.0	mg/L	20.00		99.2	80-120			
LCS (0929044-BS3)				Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	18.7	1.0	mg/L	20.00		93.7	80-120			

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929044 - WetCem_SO4_Prep										
Duplicate (0929044-DUP1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	20.1	2.0	mg/L		20.0			0.369	20	D
Duplicate (0929044-DUP2)		**Source: 09G0156-05**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	6.32	1.0	mg/L		6.32			0.00	20	
Duplicate (0929044-DUP3)		**Source: 09G0180-05**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	409	25	mg/L		401			2.04	20	D
Matrix Spike (0929044-MS1)		**Source: 09G0156-01**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	59.4	2.0	mg/L	40.00	20.0	98.4	80-120			D
Matrix Spike (0929044-MS2)		**Source: 09G0156-05**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	25.4	1.0	mg/L	20.00	6.32	95.6	80-120			
Matrix Spike (0929044-MS3)		**Source: 09G0180-05**		Prepared & Analyzed: 07/14/2009						
Sulfate as SO4	925	25	mg/L	500.0	401	105	80-120			D
Batch 0929045 - WetChem_Prep										
LCS (0929045-BS1)				Prepared & Analyzed: 07/14/2009						
Nitrite as N	0.476	0.0050	mg/L	0.5000		95.1	90-110			
Duplicate (0929045-DUP1)		**Source: 09G0180-38**		Prepared & Analyzed: 07/14/2009						
Nitrite as N	0.170	0.0050	mg/L		0.171			1.06	20	R1
Matrix Spike (0929045-MS1)		**Source: 09G0180-38**		Prepared & Analyzed: 07/14/2009						
Nitrite as N	0.455	0.0050	mg/L	0.5000	0.171	56.7	80-120			M5

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929078 - COD_Prep										
Blank (0929078-BLK1)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
Blank (0929078-BLK2)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
Blank (0929078-BLK3)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
Blank (0929078-BLK4)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
Blank (0929078-BLK5)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
Blank (0929078-BLK6)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L							
LCS (0929078-BS1)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	41.1		mg/L	40.04		103	82-119			
LCS (0929078-BS2)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	40.3		mg/L	40.04		101	82-119			
LCS (0929078-BS3)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	41.1		mg/L	40.04		103	82-119			
LCS (0929078-BS4)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	40.3		mg/L	40.04		101	82-119			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929078 - COD_Prep										
LCS (0929078-BS5)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	40.3		mg/L	40.04		101	82-119			
LCS (0929078-BS6)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	40.3		mg/L	40.04		101	82-119			
Duplicate (0929078-DUP1)		**Source: 09G0156-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L		ND				15	
Duplicate (0929078-DUP2)		**Source: 09G0156-11**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	ND	10	mg/L		ND				15	
Duplicate (0929078-DUP3)		**Source: 09G0458-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	12.5	10	mg/L		12.5			0.00	15	
Duplicate (0929078-DUP4)		**Source: 09G0180-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	10.2	10	mg/L		9.40			7.89	15	
Duplicate (0929078-DUP5)		**Source: 09G0180-17**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	265	50	mg/L		267			0.725	15	D
Duplicate (0929078-DUP6)		**Source: 09G0180-06**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	122	20	mg/L		122			0.00	15	D
Matrix Spike (0929078-MS1)		**Source: 09G0156-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	51.5	10	mg/L	50.05	ND	103	82-116			
Matrix Spike (0929078-MS2)		**Source: 09G0156-11**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	48.8	10	mg/L	50.05	ND	97.5	82-116			

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1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929078 - COD_Prep										
Matrix Spike (0929078-MS3)	**Source: 09G0458-01**			Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	57.7	10	mg/L	50.05	12.5	90.3	82-116			
Matrix Spike (0929078-MS4)	**Source: 09G0180-01**			Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	58.8	10	mg/L	50.05	9.40	98.7	82-116			
Matrix Spike (0929078-MS5)	**Source: 09G0180-17**			Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	503	50	mg/L	250.2	267	94.1	82-116			D
Matrix Spike (0929078-MS6)	**Source: 09G0180-06**			Prepared: 07/15/2009 Analyzed: 07/16/2009						
COD, Total	222	20	mg/L	100.1	122	99.5	82-116			D
Batch 0929094 - NO3_Prep										
LCS (0929094-BS1)				Prepared & Analyzed: 07/15/2009						
Nitrate/Nitrite as N	2.58	0.050	mg/L	2.500		103	90-110			
Duplicate (0929094-DUP1)	**Source: 09G0458-01**			Prepared & Analyzed: 07/15/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND				200	
Matrix Spike (0929094-MS1)	**Source: 09G0458-01**			Prepared & Analyzed: 07/15/2009						
Nitrate/Nitrite as N	2.35	0.050	mg/L	2.500	ND	94.0	80-120			
Batch 0929101 - NH3_Prep										
Blank (0929101-BLK1)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
Ammonia as N	ND	0.10	mg/L							

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929101 - NH3_Prep										
LCS (0929101-BS1)				Prepared: 07/15/2009 Analyzed: 07/16/2009						
Ammonia as N	2.28	0.10	mg/L	2.000		114	85-115			
Duplicate (0929101-DUP1)		**Source: 09G0458-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
Ammonia as N	ND	0.10	mg/L		0.0590				20	
Matrix Spike (0929101-MS1)		**Source: 09G0458-01**		Prepared: 07/15/2009 Analyzed: 07/16/2009						
Ammonia as N	0.0867	0.10	mg/L	0.1000	0.0590	27.7	80-120			M5
Batch 0929150 - Alkalinity_Prep										
Blank (0929150-BLK1)				Prepared & Analyzed: 07/17/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0929150-BS1)				Prepared & Analyzed: 07/17/2009						
Alkalinity	48.5	1.0	mg CaCO3/L	50.00		97.0	91-108			
Duplicate (0929150-DUP1)		**Source: 09G0541-01**		Prepared & Analyzed: 07/17/2009						
Alkalinity	65.0	1.0	mg CaCO3/L		65.0			0.00	18	
Duplicate (0929150-DUP2)		**Source: 09G0588-01**		Prepared & Analyzed: 07/17/2009						
Alkalinity	192	4.0	mg CaCO3/L		190			1.05	18	
Matrix Spike (0929150-MS1)		**Source: 09G0541-01**		Prepared & Analyzed: 07/17/2009						
Alkalinity	84.0	1.0	mg CaCO3/L	20.00	65.0	95.0	83-114			
Matrix Spike (0929150-MS2)		**Source: 09G0588-01**		Prepared & Analyzed: 07/17/2009						
Alkalinity	268	4.0	mg CaCO3/L	80.00	190	97.5	83-114			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930005 - WetChem_TDS_Prep										
Blank (0930005-BLK1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0930005-BLK2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0930005-BLK3)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	ND	10	mg/L							
LCS (0930005-BS1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	20000	100	mg/L	20000		101	90-111			
LCS (0930005-BS2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	19000	100	mg/L	20000		94.1	90-111			
LCS (0930005-BS3)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	18000	100	mg/L	20000		90.6	90-111			
Duplicate (0930005-DUP1)		**Source: 09G0632-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	690	20	mg/L		630			9.14	10	
Duplicate (0930005-DUP2)		**Source: 09G0458-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	170	10	mg/L		160			9.04	10	
Duplicate (0930005-DUP3)		**Source: 09G0595-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Total Dissolved Solids	240	10	mg/L		250			2.48	10	
Batch 0930055 - Cl_Titration_Prep										
Blank (0930055-BLK1)				Prepared & Analyzed: 07/21/2009						
Chloride	ND	1.0	mg/L							

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930055 - Cl_Titration_Prep										
Blank (0930055-BLK2)				Prepared & Analyzed: 07/21/2009						
Chloride	ND	1.0	mg/L							
Blank (0930055-BLK3)				Prepared & Analyzed: 07/21/2009						
Chloride	ND	1.0	mg/L							
LCS (0930055-BS1)				Prepared & Analyzed: 07/21/2009						
Chloride	49.0	1.0	mg/L	50.00		98.0	94-108			
LCS (0930055-BS2)				Prepared & Analyzed: 07/21/2009						
Chloride	51.0	1.0	mg/L	50.00		102	94-108			
LCS (0930055-BS3)				Prepared & Analyzed: 07/21/2009						
Chloride	49.0	1.0	mg/L	50.00		98.0	94-108			
Duplicate (0930055-DUP1)		**Source: 09G0458-01**		Prepared & Analyzed: 07/21/2009						
Chloride	9.00	1.0	mg/L		9.00			0.00	11	
Duplicate (0930055-DUP2)		**Source: 09G0624-01**		Prepared & Analyzed: 07/21/2009						
Chloride	90.0	2.0	mg/L		90.0			0.00	11	D
Duplicate (0930055-DUP3)		**Source: 09G0459-07**		Prepared & Analyzed: 07/21/2009						
Chloride	ND	1.0	mg/L		ND				11	
Matrix Spike (0930055-MS1)		**Source: 09G0458-01**		Prepared & Analyzed: 07/21/2009						
Chloride	33.0	1.0	mg/L	25.00	9.00	96.0	89-112			
Matrix Spike (0930055-MS2)		**Source: 09G0624-01**		Prepared & Analyzed: 07/21/2009						
Chloride	138	2.0	mg/L	50.00	90.0	96.0	89-112			D

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930055 - Cl_Titration_Prep										
Matrix Spike (0930055-MS3)		**Source: 09G0459-07**		Prepared & Analyzed: 07/21/2009						
Chloride	23.0	1.0	mg/L	25.00	ND	92.0	89-112			
Batch 0931019 - WetCem_SO4_Prep										
Blank (0931019-BLK1)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0931019-BLK2)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0931019-BLK3)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0931019-BLK4)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0931019-BLK5)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0931019-BLK6)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	ND	1.0	mg/L							
LCS (0931019-BS1)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.1	1.0	mg/L	20.00		95.7	80-120			
LCS (0931019-BS2)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.8	1.0	mg/L	20.00		98.8	80-120			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0931019 - WetCem_SO4_Prep										
LCS (0931019-BS3)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.5	1.0	mg/L	20.00		97.4	80-120			
LCS (0931019-BS4)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.6	1.0	mg/L	20.00		97.9	80-120			
LCS (0931019-BS5)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.4	1.0	mg/L	20.00		97.0	80-120			
LCS (0931019-BS6)				Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	19.1	1.0	mg/L	20.00		95.3	80-120			
Duplicate (0931019-DUP1)		**Source: 09G0584-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	85.3	5.0	mg/L		84.6			0.865	20	D
Duplicate (0931019-DUP2)		**Source: 09G0836-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	903	50	mg/L		889			1.54	20	D
Duplicate (0931019-DUP3)		**Source: 09G0624-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	586	50	mg/L		586			0.145	20	D
Duplicate (0931019-DUP4)		**Source: 09G0624-08**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	96.3	10	mg/L		93.6			2.91	20	D
Duplicate (0931019-DUP5)		**Source: 09G0867-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	41.1	5.0	mg/L		42.2			2.65	20	D
Duplicate (0931019-DUP6)		**Source: 09G0872-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	57.5	5.0	mg/L		57.1			0.646	20	D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0931019 - WetCem_SO4_Prep										
Matrix Spike (0931019-MS1)		**Source: 09G0584-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	181	5.0	mg/L	100.0	84.6	96.7	80-120			D
Matrix Spike (0931019-MS2)		**Source: 09G0836-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	1840	50	mg/L	1000	889	95.5	80-120			D
Matrix Spike (0931019-MS3)		**Source: 09G0624-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	1560	50	mg/L	1000	586	97.1	80-120			D
Matrix Spike (0931019-MS4)		**Source: 09G0624-08**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	283	10	mg/L	200.0	93.6	94.6	80-120			D
Matrix Spike (0931019-MS5)		**Source: 09G0867-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	136	5.0	mg/L	100.0	42.2	94.0	80-120			D
Matrix Spike (0931019-MS6)		**Source: 09G0872-01**		Prepared & Analyzed: 07/27/2009						
Sulfate as SO4	151	5.0	mg/L	100.0	57.1	94.2	80-120			D

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930133 - Metals_Hg_Prep										
Blank (0930133-BLK1)				Prepared & Analyzed: 07/24/2009						
Mercury	ND	0.00020	mg/L							
Blank (0930133-BLK2)				Prepared & Analyzed: 07/24/2009						
Mercury	ND	0.00020	mg/L							
Blank (0930133-BLK3)				Prepared & Analyzed: 07/24/2009						
Mercury	ND	0.00020	mg/L							
LCS (0930133-BS1)				Prepared & Analyzed: 07/24/2009						
Mercury	0.00199	0.00020	mg/L	0.002022		98.3	85-115			
LCS (0930133-BS2)				Prepared & Analyzed: 07/24/2009						
Mercury	0.00191	0.00020	mg/L	0.002022		94.3	85-115			
Duplicate (0930133-DUP1)		**Source: 09G0180-02**		Prepared & Analyzed: 07/24/2009						
Mercury	0.0000397	0.00020	mg/L		0.0000351			12.4	20	
Duplicate (0930133-DUP2)		**Source: 09G0180-24**		Prepared & Analyzed: 07/24/2009						
Mercury	ND	0.00020	mg/L		ND				20	
Matrix Spike (0930133-MS1)		**Source: 09G0180-02**		Prepared & Analyzed: 07/24/2009						
Mercury	0.00188	0.00020	mg/L	0.002022	0.0000351	91.3	70-130			
Matrix Spike (0930133-MS2)		**Source: 09G0180-24**		Prepared & Analyzed: 07/24/2009						
Mercury	0.00191	0.00020	mg/L	0.002022	ND	94.6	70-130			
Matrix Spike Dup (0930133-MSD1)		**Source: 09G0180-02**		Prepared & Analyzed: 07/24/2009						
Mercury	0.00185	0.00020	mg/L	0.002022	0.0000351	90.0	70-130	1.41	20	

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Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930133 - Metals_Hg_Prep										
Matrix Spike Dup (0930133-MSD2)		**Source: 09G0180-24**		Prepared & Analyzed: 07/24/2009						
Mercury	0.00185	0.00020	mg/L	0.002022	ND	91.6	70-130	3.18	20	
Batch M9G2701 - 0930133										
Instrument Blank (M9G2701-IBL1)				Prepared & Analyzed: 07/24/2009						
Mercury	ND	0.00020	ug/L							
Batch M9G2702 - 0930133										
Instrument Blank (M9G2702-IBL1)				Prepared & Analyzed: 07/27/2009						
Mercury	ND	0.00020	ug/L							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
Blank (0930023-BLK1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Beryllium	ND	0.0025	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
Blank (0930023-BLK2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Beryllium	ND	0.0025	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
LCS (0930023-BS1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.05	0.0050	mg/L	1.000		105	85-115			
Arsenic	1.04	0.0050	"	1.000		104	85-115			
Barium	1.13	0.0050	"	1.000		113	85-115			
Beryllium	1.10	0.0025	"	1.000		110	85-115			
Cadmium	1.05	0.00050	"	1.000		105	85-115			
Chromium	1.05	0.0025	"	1.000		105	85-115			
Cobalt	1.05	0.0050	"	1.000		105	85-115			
Copper	1.01	0.0020	"	1.000		101	85-115			
Lead	1.12	0.0080	"	1.000		112	85-115			
Manganese	1.10	0.0050	"	1.000		110	85-115			
Nickel	1.03	0.0050	"	1.000		103	85-115			
Selenium	1.04	0.0050	"	1.000		104	85-115			
Silver	0.519	0.0020	"	0.5000		104	85-115			
Thallium	1.12	0.0020	"	1.000		112	85-115			
Vanadium	1.04	0.0050	"	1.000		104	85-115			
Zinc	1.01	0.020	"	1.000		101	85-115			
LCS (0930023-BS2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.03	0.0050	mg/L	1.000		103	85-115			
Arsenic	1.01	0.0050	"	1.000		101	85-115			
Barium	1.08	0.0050	"	1.000		108	85-115			
Beryllium	1.10	0.0025	"	1.000		110	85-115			
Cadmium	1.02	0.00050	"	1.000		102	85-115			
Chromium	1.04	0.0025	"	1.000		104	85-115			
Cobalt	1.03	0.0050	"	1.000		103	85-115			
Copper	0.988	0.0020	"	1.000		98.8	85-115			
Lead	1.14	0.0020	"	1.000		114	85-115			
Manganese	1.07	0.0050	"	1.000		107	85-115			
Nickel	1.00	0.0050	"	1.000		100	85-115			
Selenium	0.996	0.0050	"	1.000		99.6	85-115			
Silver	0.493	0.0020	"	0.5000		98.7	85-115			
Thallium	1.09	0.0020	"	1.000		109	85-115			
Vanadium	1.03	0.0050	"	1.000		103	85-115			
Zinc	0.981	0.020	"	1.000		98.1	85-115			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
Duplicate (0930023-DUP1)		**Source: 09G0180-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	0.00977	0.0050	"		0.00972			0.513	20	
Barium	1.08	0.0050	"		1.05			2.22	20	
Beryllium	ND	0.0025	"		ND				20	
Cadmium	ND	0.00050	"		ND				20	
Chromium	0.00623	0.0025	"		0.00656			5.10	20	
Cobalt	0.00501	0.0050	"		0.00489			2.38	20	
Copper	0.0142	0.0020	"		0.0148			4.09	20	
Lead	0.000596	0.0020	"		0.000709			17.3	20	
Manganese	0.151	0.0050	"		0.151			0.353	20	
Nickel	0.0107	0.0050	"		0.0108			0.419	20	
Selenium	0.0262	0.0050	"		0.0245			6.79	20	
Silver	ND	0.0020	"		ND				20	
Thallium	0.00193	0.0020	"		0.00244			23.4	20	R3
Vanadium	ND	0.0050	"		ND				20	
Zinc	ND	0.020	"		ND				20	
Duplicate (0930023-DUP2)		**Source: 09G0180-20**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	ND	0.0050	"		ND				20	
Barium	0.0188	0.0050	"		0.0194			2.75	20	
Beryllium	0.00490	0.0025	"		0.00524			6.59	20	
Cadmium	0.000787	0.00050	"		0.000860			8.86	20	
Chromium	ND	0.0025	"		ND				20	
Cobalt	0.117	0.0050	"		0.113			3.51	20	
Copper	0.00414	0.0020	"		0.00418			1.08	20	
Lead	0.00130	0.0020	"		0.00145			10.8	20	
Manganese	0.527	0.0050	"		0.517			2.04	20	
Nickel	0.159	0.0050	"		0.155			2.79	20	
Selenium	0.00156	0.0050	"		0.00164			5.38	20	
Silver	ND	0.0020	"		ND				20	
Thallium	0.00189	0.0020	"		0.00227			18.1	20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	0.306	0.020	"		0.298			2.44	20	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
Matrix Spike (0930023-MS1)	**Source: 09G0180-01**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.04	0.0050	mg/L	1.000	ND	104	70-130			
Arsenic	1.03	0.0050	"	1.000	0.00972	102	70-130			
Barium	2.09	0.0050	"	1.000	1.05	104	70-130			
Beryllium	0.995	0.0025	"	1.000	ND	99.5	70-130			
Cadmium	0.962	0.00050	"	1.000	ND	96.2	70-130			
Chromium	1.04	0.0025	"	1.000	0.00656	103	70-130			
Cobalt	1.02	0.0050	"	1.000	0.00489	101	70-130			
Copper	0.947	0.0020	"	1.000	0.0148	93.2	70-130			
Lead	1.06	0.0020	"	1.000	0.000709	105	70-130			
Manganese	1.21	0.0050	"	1.000	0.151	105	70-130			
Nickel	0.976	0.0050	"	1.000	0.0108	96.5	70-130			
Selenium	0.977	0.0050	"	1.000	0.0245	95.2	70-130			
Silver	0.467	0.0020	"	0.5000	ND	93.3	70-130			
Thallium	1.01	0.0020	"	1.000	0.00244	100	70-130			
Vanadium	1.07	0.0050	"	1.000	ND	107	70-130			
Zinc	0.876	0.020	"	1.000	ND	87.6	70-130			
Matrix Spike (0930023-MS2)	**Source: 09G0180-20**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.02	0.0050	mg/L	1.000	ND	102	70-130			
Arsenic	1.01	0.0050	"	1.000	ND	101	70-130			
Barium	1.09	0.0050	"	1.000	0.0194	107	70-130			
Beryllium	1.08	0.0025	"	1.000	0.00524	108	70-130			
Cadmium	1.01	0.00050	"	1.000	0.000860	101	70-130			
Chromium	1.02	0.0025	"	1.000	ND	102	70-130			
Cobalt	1.12	0.0050	"	1.000	0.113	101	70-130			
Copper	0.976	0.0020	"	1.000	0.00418	97.2	70-130			
Lead	1.11	0.0020	"	1.000	0.00145	111	70-130			
Manganese	1.61	0.0050	"	1.000	0.517	109	70-130			
Nickel	1.13	0.0050	"	1.000	0.155	98.0	70-130			
Selenium	0.999	0.0050	"	1.000	0.00164	99.7	70-130			
Silver	0.483	0.0020	"	0.5000	ND	96.6	70-130			
Thallium	1.06	0.0020	"	1.000	0.00227	105	70-130			
Vanadium	1.03	0.0050	"	1.000	ND	103	70-130			
Zinc	1.25	0.020	"	1.000	0.298	94.9	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
Matrix Spike Dup (0930023-MSD1)		**Source: 09G0180-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.05	0.0050	mg/L	1.000	ND	105	70-130	1.52	20	
Arsenic	1.04	0.0050	"	1.000	0.00972	103	70-130	1.37	20	
Barium	2.13	0.0050	"	1.000	1.05	108	70-130	1.84	20	
Beryllium	1.00	0.0025	"	1.000	ND	100	70-130	0.495	20	
Cadmium	0.970	0.00050	"	1.000	ND	97.0	70-130	0.817	20	
Chromium	1.04	0.0025	"	1.000	0.00656	104	70-130	0.753	20	
Cobalt	1.03	0.0050	"	1.000	0.00489	103	70-130	1.32	20	
Copper	0.961	0.0020	"	1.000	0.0148	94.6	70-130	1.48	20	
Lead	1.07	0.0020	"	1.000	0.000709	107	70-130	1.45	20	
Manganese	1.23	0.0050	"	1.000	0.151	108	70-130	2.31	20	
Nickel	0.990	0.0050	"	1.000	0.0108	98.0	70-130	1.50	20	
Selenium	0.989	0.0050	"	1.000	0.0245	96.5	70-130	1.24	20	
Silver	0.477	0.0020	"	0.5000	ND	95.5	70-130	2.30	20	
Thallium	1.03	0.0020	"	1.000	0.00244	102	70-130	1.91	20	
Vanadium	1.09	0.0050	"	1.000	ND	109	70-130	1.71	20	
Zinc	0.892	0.020	"	1.000	ND	89.2	70-130	1.80	20	
Matrix Spike Dup (0930023-MSD2)		**Source: 09G0180-20**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	1.03	0.0050	mg/L	1.000	ND	103	70-130	0.867	20	
Arsenic	1.01	0.0050	"	1.000	ND	101	70-130	0.0857	20	
Barium	1.11	0.0050	"	1.000	0.0194	109	70-130	2.08	20	
Beryllium	1.08	0.0025	"	1.000	0.00524	108	70-130	0.314	20	
Cadmium	1.01	0.00050	"	1.000	0.000860	101	70-130	0.411	20	
Chromium	1.03	0.0025	"	1.000	ND	103	70-130	0.871	20	
Cobalt	1.13	0.0050	"	1.000	0.113	102	70-130	0.791	20	
Copper	0.980	0.0020	"	1.000	0.00418	97.6	70-130	0.480	20	
Lead	1.10	0.0020	"	1.000	0.00145	110	70-130	0.239	20	
Manganese	1.61	0.0050	"	1.000	0.517	109	70-130	0.0469	20	
Nickel	1.14	0.0050	"	1.000	0.155	99.0	70-130	0.860	20	
Selenium	0.992	0.0050	"	1.000	0.00164	99.0	70-130	0.698	20	
Silver	0.498	0.0020	"	0.5000	ND	99.5	70-130	2.94	20	
Thallium	1.05	0.0020	"	1.000	0.00227	105	70-130	0.149	20	
Vanadium	1.04	0.0050	"	1.000	ND	104	70-130	1.05	20	
Zinc	1.27	0.020	"	1.000	0.298	96.7	70-130	1.41	20	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930023 - EPA_200.2 ICPMS										
Post Spike (0930023-PS1)	**Source: 09G0180-01**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	508		ug/L	500.0	1.24	101	75-125			
Arsenic	526		"	500.0	9.72	103	75-125			
Barium	1600		"	500.0	1050	111	75-125			
Beryllium	497		"	500.0	0.547	99.3	75-125			
Cadmium	488		"	500.0	-0.0420	97.6	75-125			
Chromium	528		"	500.0	6.56	104	75-125			
Cobalt	525		"	500.0	4.89	104	75-125			
Copper	493		"	500.0	14.8	95.7	75-125			
Lead	520		"	500.0	0.709	104	75-125			
Manganese	674		"	500.0	151	105	75-125			
Nickel	502		"	500.0	10.8	98.2	75-125			
Selenium	522		"	500.0	24.5	99.4	75-125			
Silver	238		"	250.0	-0.0610	95.3	75-125			
Thallium	485		"	500.0	2.44	96.4	75-125			
Vanadium	553		"	500.0	0.784	110	75-125			
Zinc	452		"	500.0	4.20	89.5	75-125			
Post Spike (0930023-PS2)	**Source: 09G0180-20**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Antimony	505		ug/L	500.0	2.01	101	75-125			
Arsenic	496		"	500.0	0.430	99.2	75-125			
Barium	563		"	500.0	19.4	109	75-125			
Beryllium	553		"	500.0	5.24	110	75-125			
Cadmium	513		"	500.0	0.860	102	75-125			
Chromium	517		"	500.0	1.68	103	75-125			
Cobalt	631		"	500.0	113	104	75-125			
Copper	500		"	500.0	4.18	99.2	75-125			
Lead	541		"	500.0	1.45	108	75-125			
Manganese	1080		"	500.0	517	112	75-125			
Nickel	655		"	500.0	155	100	75-125			
Selenium	498		"	500.0	1.64	99.2	75-125			
Silver	251		"	250.0	-0.0820	100	75-125			
Thallium	497		"	500.0	2.27	99.0	75-125			
Vanadium	520		"	500.0	-0.791	104	75-125			
Zinc	786		"	500.0	298	97.6	75-125			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930024 - EPA 200.2 ICP										
Blank (0930024-BLK1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	ND	0.050	mg/L							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	0.0152	0.010	"							B2
Sodium	ND	1.0	"							
Blank (0930024-BLK2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	ND	0.050	mg/L							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	0.0148	0.010	"							B2
Sodium	ND	1.0	"							
LCS (0930024-BS1)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	10.9	0.050	mg/L	10.00		109	85-115			
Iron	5.13	0.0050	"	5.000		103	85-115			
Magnesium	10.9	0.010	"	10.00		109	85-115			
Potassium	11.1	0.010	"	10.00		111	85-115			
Sodium	10.0	1.0	"	10.00		100	85-115			
LCS (0930024-BS2)				Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	10.8	0.050	mg/L	10.00		108	85-115			
Iron	5.11	0.0050	"	5.000		102	85-115			
Magnesium	10.9	0.010	"	10.00		109	85-115			
Potassium	11.0	0.010	"	10.00		110	85-115			
Sodium	9.94	1.0	"	10.00		99.4	85-115			
Duplicate (0930024-DUP1)		**Source: 09G0180-01**		Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	252	5.0	mg/L		248			1.60	20	
Iron	7.77	0.0050	"		7.66			1.37	20	
Magnesium	71.2	0.010	"		70.3			1.21	20	
Potassium	96.0	1.0	"		94.1			2.08	20	
Sodium	934	100	"		910			2.66	20	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930024 - EPA 200.2 ICP										
Duplicate (0930024-DUP2)	**Source: 09G0180-20**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	24.0	0.050	mg/L		24.0			0.231	20	
Iron	7.48	0.0050	"		7.45			0.502	20	
Magnesium	21.0	0.010	"		20.9			0.111	20	
Potassium	2.71	0.010	"		2.70			0.415	20	
Sodium	50.4	1.0	"		50.3			0.154	20	
Matrix Spike (0930024-MS1)	**Source: 09G0180-01**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Iron	12.6	0.0050	mg/L	5.000	7.66	99.0	80-120			
Magnesium	79.8	0.010	"	10.00	70.3	95.1	80-120			
Matrix Spike (0930024-MS2)	**Source: 09G0180-20**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	34.8	0.050	mg/L	10.00	24.0	108	80-120			
Iron	12.4	0.0050	"	5.000	7.45	99.0	80-120			
Magnesium	31.6	0.010	"	10.00	20.9	107	80-120			
Potassium	13.7	0.010	"	10.00	2.70	110	80-120			
Sodium	61.0	1.0	"	10.00	50.3	107	80-120			
Matrix Spike Dup (0930024-MSD1)	**Source: 09G0180-01**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Iron	12.9	0.0050	mg/L	5.000	7.66	105	80-120	2.52	20	
Magnesium	82.1	0.010	"	10.00	70.3	118	80-120	2.83	20	
Matrix Spike Dup (0930024-MSD2)	**Source: 09G0180-20**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	34.8	0.050	mg/L	10.00	24.0	108	80-120	0.0106	20	
Iron	12.5	0.0050	"	5.000	7.45	101	80-120	0.781	20	
Magnesium	31.7	0.010	"	10.00	20.9	108	80-120	0.270	20	
Potassium	13.8	0.010	"	10.00	2.70	111	80-120	0.484	20	
Sodium	61.0	1.0	"	10.00	50.3	107	80-120	0.0702	20	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0930024 - EPA 200.2 ICP										
Post Spike (0930024-PS1)	**Source: 09G0180-01**			Prepared & Analyzed: 07/21/2009						
Iron	12.6		mg/L	5.000	7.66	99.3	90-110			
Magnesium	79.5		"	10.00	70.3	92.3	90-110			
Post Spike (0930024-PS2)	**Source: 09G0180-20**			Prepared & Analyzed: 07/21/2009						
Calcium	33.9		mg/L	10.00	24.0	99.6	90-110			
Iron	12.2		"	5.000	7.45	94.6	90-110			
Magnesium	30.8		"	10.00	20.9	98.7	90-110			
Potassium	13.5		"	10.00	2.70	108	90-110			
Sodium	59.4		"	10.00	50.3	91.4	90-110			
Post Spike (0930024-PS3)	**Source: 09G0180-01**			Prepared: 07/20/2009 Analyzed: 07/21/2009						
Calcium	12.7		mg/L	10.00	2.48	102	90-110			
Potassium	11.2		"	10.00	0.941	103	90-110			
Sodium	18.7		"	10.00	9.10	96.3	90-110			
Batch M9G2204 - 0930024										
Instrument Blank (M9G2204-IBL1)				Prepared & Analyzed: 07/20/2009						
Calcium	ND	0.050	mg/L							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Blank (0928020-BLK1)				Prepared & Analyzed: 07/08/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							V6, U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	3.67	1.0	"							B3
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Blank (0928020-BLK1)			Prepared & Analyzed: 07/08/2009							
trans-1,3-Dichloropropene	ND	1.0	ug/L							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	1.55	1.0	"							B3
1,2,4-Trichlorobenzene	1.22	1.0	"							B3
Hexachlorobutadiene	3.30	1.0	"							B3
Naphthalene	2.47	1.0	"							B3
1,2,3-Trichlorobenzene	2.15	1.0	"							B3
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.7*		*"*	*25.00*		*86.8*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.4*		*"*	*25.00*		*85.5*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*"*	*25.00*		*105*	*75-120*			

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Blank (0928020-BLK1)				Prepared & Analyzed: 07/08/2009						
Surrogate: 4-Bromofluorobenzene	*23.3*		*ug/L*	*25.00*		*93.2*	*60-149*			
LCS (0928020-BS1)				Prepared & Analyzed: 07/08/2009						
Dichlorodifluoromethane	15.7	1.0	ug/L	20.00		78.4	27-127			
Chloromethane	16.7	1.0	"	20.00		83.3	62.5-141			
Vinyl chloride	18.2	1.0	"	20.00		90.9	65.3-143			
Bromomethane	16.1	1.0	"	20.00		80.7	56-180			
Chloroethane	18.4	1.0	"	20.00		92.0	62.3-161			
Trichlorofluoromethane	16.8	1.0	"	20.00		83.8	35-157			
Acrolein	29.3	5.0	"	100.0		29.3	26.6-169			
1,1-Dichloroethene	15.3	1.0	"	20.00		76.7	64.6-138			V6
Acetone	101	5.0	"	100.0		101	35-159			
Iodomethane	15.0	1.0	"	20.00		75.1	70-130			
Carbon disulfide	15.3	1.0	"	20.00		76.5	48-142			
Allyl Chloride (3-Chloropropylene)	16.4	1.0	"	20.00		82.2	70-130			
Acetonitrile	22.5	5.0	"	20.00		112	70-130			
Methylene Chloride	17.4	1.0	"	20.00		87.2	64.7-139			B
Methyl-tert-Butyl Ether	23.3	1.0	"	20.00		117	34-133			
trans-1,2-Dichloroethene	16.3	1.0	"	20.00		81.6	75.1-127			
Acrylonitrile	19.3	5.0	"	20.00		96.6	67.2-148			
1,1-Dichloroethane	17.2	1.0	"	20.00		86.1	72.2-135			
Chloroprene	18.7	1.0	"	20.00		93.6	70-130			
Vinyl acetate	22.2	1.0	"	20.00		111	70-154			
2,2-Dichloropropane	18.2	1.0	"	20.00		90.8	37-129			
cis-1,2-Dichloroethene	18.2	1.0	"	20.00		90.8	72-126			
Methyl Ethyl Ketone (2-Butanone)	110	5.0	"	100.0		110	45-128			
Propionitrile (Ethyl Cyanide)	20.4	5.0	"	20.00		102	70-130			
Methacrylonitrile	20.5	5.0	"	20.00		102	70-130			
Chloroform	16.8	1.0	"	20.00		84.2	76.1-135			
Bromochloromethane	16.8	1.0	"	20.00		84.0	73-126			
1,1,1-Trichloroethane	17.8	1.0	"	20.00		88.8	67.1-139			
1,1-Dichloropropene	20.0	1.0	"	20.00		99.8	70-130			
Carbon Tetrachloride	25.1	1.0	"	20.00		126	63.3-142			
Benzene	20.0	1.0	"	20.00		100	72-132			
1,2-Dichloroethane	17.2	1.0	"	20.00		86.0	72.9-139			
Trichloroethene	19.3	1.0	"	20.00		96.6	73.7-130			
1,2-Dichloropropane	20.7	1.0	"	20.00		103	71.3-137			
Bromodichloromethane	20.2	1.0	"	20.00		101	74.5-136			
Methyl Methacrylate	19.6	1.0	"	20.00		98.2	70-130			
Dibromomethane	18.0	1.0	"	20.00		90.2	66-125			
2-Chloroethyl Vinyl Ether	20.3	1.0	"	20.00		101	42.5-161			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
LCS (0928020-BS1)				Prepared & Analyzed: 07/08/2009						
Methyl Isobutyl Ketone	102	5.0	ug/L	100.0		102	41-143			
cis-1,3-Dichloropropene	19.8	1.0	"	20.00		99.2	74.6-124			
Toluene	18.4	1.0	"	20.00		92.2	72.4-132			
trans-1,3-Dichloropropene	18.8	1.0	"	20.00		94.0	72.1-124			
Ethyl Methacrylate	20.3	1.0	"	20.00		102	70-130			
1,1,2-Trichloroethane	20.5	1.0	"	20.00		102	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	109	5.0	"	100.0		109	43-147			
1,2-Dibromoethane	18.6	1.0	"	20.00		92.8	70-130			
Tetrachloroethene	18.9	1.0	"	20.00		94.6	69.9-125			
1,3-Dichloropropane	21.6	1.0	"	20.00		108	70-130			
Dibromochloromethane	23.0	1.0	"	20.00		115	69.9-134			
Chlorobenzene	20.0	1.0	"	20.00		99.8	67.3-133			
1,1,1,2-Tetrachloroethane	22.3	1.0	"	20.00		111	76-123			
Ethylbenzene	20.5	1.0	"	20.00		102	70.6-131			
m,p-Xylenes	39.8	2.0	"	40.00		99.4	71-123			
o-Xylene	20.4	1.0	"	20.00		102	80-119			
Styrene	20.6	1.0	"	20.00		103	79-117			
Bromoform	21.6	1.0	"	20.00		108	68.8-130			
Isopropylbenzene (Cumene)	20.3	1.0	"	20.00		102	70-130			
1,1,2,2-Tetrachloroethane	22.6	1.0	"	20.00		113	69.1-143			
1,2,3-Trichloropropane	22.2	1.0	"	20.00		111	70-130			
Bromobenzene	20.2	1.0	"	20.00		101	70-130			
Propylbenzene	20.5	1.0	"	20.00		103	70-130			
2-Chlorotoluene	20.2	1.0	"	20.00		101	70-130			
1,3,5-Trimethylbenzene	20.0	1.0	"	20.00		100	70-130			
4-Chlorotoluene	19.7	1.0	"	20.00		98.4	70-130			
tert-Butylbenzene	19.8	1.0	"	20.00		98.8	70-130			
1,2,4-Trimethylbenzene	20.1	1.0	"	20.00		100	70-130			
sec-Butylbenzene	19.5	1.0	"	20.00		97.6	70-130			
4-Isopropyltoluene	19.9	1.0	"	20.00		99.5	70-130			
1,3-Dichlorobenzene	20.0	1.0	"	20.00		100	74-125			
1,4-Dichlorobenzene	19.5	1.0	"	20.00		97.4	75-122			
trans-1,4-Dichloro-2-butene	21.0	1.0	"	20.00		105	70-130			
Butylbenzene	20.0	1.0	"	20.00		100	70-130			
1,2-Dichlorobenzene	20.2	1.0	"	20.00		101	74-124			
1,2-Dibromo-3-chloropropane	22.7	1.0	"	20.00		113	70-130			B
1,2,4-Trichlorobenzene	19.4	1.0	"	20.00		96.9	45-134			B
Hexachlorobutadiene	16.6	1.0	"	20.00		83.0	33-154			B
Naphthalene	22.8	1.0	"	20.00		114	22-148			B
1,2,3-Trichlorobenzene	18.6	1.0	"	20.00		92.8	70-130			B
Surrogate: Dibromofluoromethane	*21.3*		*"*	*25.00*		*85.3*	*80-120*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
LCS (0928020-BS1)				Prepared & Analyzed: 07/08/2009						
Surrogate: 1,2-Dichloroethane-d4	*20.6*		*ug/L*	*25.00*		*82.5*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*"*	*25.00*		*106*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.7*		*"*	*25.00*		*94.7*	*60-149*			
LCS Dup (0928020-BSD1)				Prepared & Analyzed: 07/09/2009						
Dichlorodifluoromethane	13.4	1.0	ug/L	20.00		67.0	27-127	15.7	200	
Chloromethane	15.5	1.0	"	20.00		77.6	62.5-141	7.02	200	
Vinyl chloride	16.1	1.0	"	20.00		80.3	65.3-143	12.4	200	
Bromomethane	15.6	1.0	"	20.00		77.8	56-180	3.60	200	
Chloroethane	16.9	1.0	"	20.00		84.4	62.3-161	8.56	200	
Trichlorofluoromethane	15.2	1.0	"	20.00		76.2	35-157	9.63	200	
Acrolein	25.4	5.0	"	100.0		25.4	26.6-169	14.0	200	#
1,1-Dichloroethene	14.1	1.0	"	20.00		70.4	64.6-138	8.57	200	V6
Acetone	98.4	5.0	"	100.0		98.4	35-159	3.04	200	
Iodomethane	13.5	1.0	"	20.00		67.6	70-130	10.5	200	#
Carbon disulfide	14.4	1.0	"	20.00		72.0	48-142	6.06	200	
Allyl Chloride (3-Chloropropylene)	14.6	1.0	"	20.00		72.9	70-130	12.1	200	
Acetonitrile	20.6	5.0	"	20.00		103	70-130	8.58	200	
Methylene Chloride	17.2	1.0	"	20.00		85.9	64.7-139	1.50	200	B
Methyl-tert-Butyl Ether	21.1	1.0	"	20.00		106	34-133	9.95	200	
trans-1,2-Dichloroethene	15.4	1.0	"	20.00		76.8	75.1-127	6.06	200	
Acrylonitrile	19.0	5.0	"	20.00		94.8	67.2-148	1.93	200	
1,1-Dichloroethane	16.2	1.0	"	20.00		81.0	72.2-135	6.17	200	
Chloroprene	17.1	1.0	"	20.00		85.3	70-130	9.28	200	
Vinyl acetate	11.7	1.0	"	20.00		58.4	70-154	62.1	200	#
2,2-Dichloropropane	11.1	1.0	"	20.00		55.4	37-129	48.3	200	
cis-1,2-Dichloroethene	16.3	1.0	"	20.00		81.6	72-126	10.7	200	
Methyl Ethyl Ketone (2-Butanone)	105	5.0	"	100.0		105	45-128	4.60	200	
Propionitrile (Ethyl Cyanide)	20.5	5.0	"	20.00		103	70-130	0.586	200	
Methacrylonitrile	19.4	5.0	"	20.00		97.0	70-130	5.47	200	
Chloroform	16.2	1.0	"	20.00		80.8	76.1-135	4.06	200	
Bromochloromethane	16.6	1.0	"	20.00		83.0	73-126	1.20	200	
1,1,1-Trichloroethane	15.8	1.0	"	20.00		79.1	67.1-139	11.5	200	
1,1-Dichloropropene	18.4	1.0	"	20.00		91.8	70-130	8.25	200	
Carbon Tetrachloride	23.0	1.0	"	20.00		115	63.3-142	8.72	200	
Benzene	19.0	1.0	"	20.00		95.2	72-132	5.02	200	
1,2-Dichloroethane	17.1	1.0	"	20.00		85.3	72.9-139	0.759	200	
Trichloroethene	19.3	1.0	"	20.00		96.3	73.7-130	0.363	200	
1,2-Dichloropropane	19.9	1.0	"	20.00		99.5	71.3-137	3.80	200	
Bromodichloromethane	19.9	1.0	"	20.00		99.3	74.5-136	1.85	200	
Methyl Methacrylate	18.6	1.0	"	20.00		93.2	70-130	5.33	200	
Dibromomethane	18.0	1.0	"	20.00		89.9	66-125	0.333	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
LCS Dup (0928020-BSD1)				Prepared & Analyzed: 07/09/2009						
2-Chloroethyl Vinyl Ether	19.4	1.0	ug/L	20.00		97.2	42.5-161	4.13	200	
Methyl Isobutyl Ketone	100	5.0	"	100.0		100	41-143	1.51	200	
cis-1,3-Dichloropropene	17.9	1.0	"	20.00		89.4	74.6-124	10.3	200	
Toluene	17.6	1.0	"	20.00		88.1	72.4-132	4.55	200	
trans-1,3-Dichloropropene	16.5	1.0	"	20.00		82.3	72.1-124	13.3	200	
Ethyl Methacrylate	20.0	1.0	"	20.00		100	70-130	1.49	200	
1,1,2-Trichloroethane	20.3	1.0	"	20.00		102	75.6-140	0.833	200	
Methyl Butyl Ketone (2-Hexanone)	106	5.0	"	100.0		106	43-147	2.95	200	
1,2-Dibromoethane	18.3	1.0	"	20.00		91.6	70-130	1.36	200	
Tetrachloroethene	30.9	1.0	"	20.00		155	69.9-125	48.1	200	L2
1,3-Dichloropropane	21.2	1.0	"	20.00		106	70-130	1.64	200	
Dibromochloromethane	22.2	1.0	"	20.00		111	69.9-134	3.85	200	
Chlorobenzene	19.4	1.0	"	20.00		96.8	67.3-133	3.15	200	
1,1,1,2-Tetrachloroethane	21.8	1.0	"	20.00		109	76-123	2.31	200	
Ethylbenzene	19.4	1.0	"	20.00		97.0	70.6-131	5.32	200	
m,p-Xylenes	38.0	2.0	"	40.00		95.0	71-123	4.53	200	
o-Xylene	19.2	1.0	"	20.00		96.2	80-119	5.71	200	
Styrene	19.6	1.0	"	20.00		98.2	79-117	4.72	200	
Bromoform	20.8	1.0	"	20.00		104	68.8-130	3.83	200	
Isopropylbenzene (Cumene)	18.2	1.0	"	20.00		90.8	70-130	11.1	200	
1,1,2,2-Tetrachloroethane	20.9	1.0	"	20.00		104	69.1-143	8.13	200	
1,2,3-Trichloropropane	21.8	1.0	"	20.00		109	70-130	1.95	200	
Bromobenzene	19.4	1.0	"	20.00		97.2	70-130	3.98	200	
Propylbenzene	18.8	1.0	"	20.00		93.8	70-130	8.96	200	
2-Chlorotoluene	18.9	1.0	"	20.00		94.5	70-130	6.90	200	
1,3,5-Trimethylbenzene	18.2	1.0	"	20.00		90.8	70-130	9.59	200	
4-Chlorotoluene	18.9	1.0	"	20.00		94.6	70-130	4.04	200	
tert-Butylbenzene	17.5	1.0	"	20.00		87.5	70-130	12.1	200	
1,2,4-Trimethylbenzene	18.5	1.0	"	20.00		92.7	70-130	7.93	200	
sec-Butylbenzene	17.2	1.0	"	20.00		86.2	70-130	12.3	200	
4-Isopropyltoluene	17.3	1.0	"	20.00		86.7	70-130	13.7	200	
1,3-Dichlorobenzene	18.6	1.0	"	20.00		92.8	74-125	7.51	200	
1,4-Dichlorobenzene	18.3	1.0	"	20.00		91.7	75-122	5.98	200	
trans-1,4-Dichloro-2-butene	17.4	1.0	"	20.00		86.8	70-130	18.9	200	
Butylbenzene	17.4	1.0	"	20.00		87.2	70-130	13.7	200	
1,2-Dichlorobenzene	19.0	1.0	"	20.00		95.0	74-124	6.13	200	
1,2-Dibromo-3-chloropropane	20.0	1.0	"	20.00		100	70-130	12.2	200	B
1,2,4-Trichlorobenzene	16.8	1.0	"	20.00		84.1	45-134	14.1	200	B
Hexachlorobutadiene	12.7	1.0	"	20.00		63.7	33-154	26.3	200	B
Naphthalene	20.4	1.0	"	20.00		102	22-148	11.4	200	B
1,2,3-Trichlorobenzene	16.5	1.0	"	20.00		82.6	70-130	11.7	200	B

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
LCS Dup (0928020-BSD1)				Prepared & Analyzed: 07/09/2009						
Surrogate: Dibromofluoromethane	*21.8*		*ug/L*	*25.00*		*87.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*84.8*	*80-120*			
Surrogate: Toluene-d8	*26.8*		*"*	*25.00*		*107*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		*"*	*25.00*		*95.5*	*60-149*			
Matrix Spike (0928020-MS1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
Dichlorodifluoromethane	391	20	ug/L	400.0	ND	97.8	0-200			D
Chloromethane	372	20	"	400.0	ND	93.0	0-200			D
Vinyl chloride	438	20	"	400.0	ND	110	0-200			D
Bromomethane	364	20	"	400.0	ND	91.1	0-200			D
Chloroethane	418	20	"	400.0	ND	104	0-200			D
Trichlorofluoromethane	374	20	"	400.0	ND	93.5	0-200			D
Acrolein	527	100	"	2000	ND	26.4	0-200			D
1,1-Dichloroethene	368	20	"	400.0	ND	92.0	18.7-178			V6, D
Acetone	2050	100	"	2000	ND	103	0-200			D
Iodomethane	337	20	"	400.0	ND	84.4	0-200			D
Carbon disulfide	363	20	"	400.0	ND	90.8	0-200			D
Allyl Chloride (3-Chloropropylene)	368	20	"	400.0	ND	92.0	0-200			D
Acetonitrile	462	100	"	400.0	ND	116	0-200			D
Methylene Chloride	373	20	"	400.0	62.6	77.6	0-200			D, B
Methyl-tert-Butyl Ether	478	20	"	400.0	ND	120	0-200			D
trans-1,2-Dichloroethene	376	20	"	400.0	ND	94.0	0-200			D
Acrylonitrile	403	100	"	400.0	ND	101	0-200			D
1,1-Dichloroethane	391	20	"	400.0	ND	97.8	0-200			D
Chloroprene	447	20	"	400.0	ND	112	0-200			D
Vinyl acetate	464	20	"	400.0	ND	116	0-200			D
2,2-Dichloropropane	422	20	"	400.0	ND	105	0-200			D
cis-1,2-Dichloroethene	359	20	"	400.0	ND	89.6	0-200			D
Methyl Ethyl Ketone (2-Butanone)	2280	100	"	2000	ND	114	0-200			D
Propionitrile (Ethyl Cyanide)	438	100	"	400.0	ND	109	0-200			D
Methacrylonitrile	432	100	"	400.0	ND	108	0-200			D
Chloroform	388	20	"	400.0	13.4	93.6	0-200			D
Bromochloromethane	365	20	"	400.0	ND	91.2	0-200			D
1,1,1-Trichloroethane	417	20	"	400.0	ND	104	0-200			D
1,1-Dichloropropene	482	20	"	400.0	ND	120	0-200			D
Carbon Tetrachloride	600	20	"	400.0	ND	150	0-200			D
Benzene	449	20	"	400.0	ND	112	65.6-159			D
1,2-Dichloroethane	373	20	"	400.0	ND	93.2	0-200			D
Trichloroethene	445	20	"	400.0	ND	111	71-158			D
1,2-Dichloropropane	451	20	"	400.0	ND	113	0-200			D
Bromodichloromethane	452	20	"	400.0	ND	113	0-200			D
Methyl Methacrylate	403	20	"	400.0	ND	101	0-200			D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Matrix Spike (0928020-MS1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
Dibromomethane	405	20	ug/L	400.0	ND	101	0-200			D
2-Chloroethyl Vinyl Ether	325	20	"	400.0	ND	81.2	0-200			D
Methyl Isobutyl Ketone	2030	100	"	2000	ND	102	0-200			D
cis-1,3-Dichloropropene	434	20	"	400.0	ND	109	0-200			D
Toluene	399	20	"	400.0	ND	99.7	60.8-171			D
trans-1,3-Dichloropropene	401	20	"	400.0	ND	100	0-200			D
Ethyl Methacrylate	443	20	"	400.0	ND	111	0-200			D
1,1,2-Trichloroethane	436	20	"	400.0	ND	109	0-200			D
Methyl Butyl Ketone (2-Hexanone)	2240	100	"	2000	ND	112	0-200			D
1,2-Dibromoethane	404	20	"	400.0	ND	101	0-200			D
Tetrachloroethene	408	20	"	400.0	ND	102	0-200			D
1,3-Dichloropropane	455	20	"	400.0	ND	114	0-200			D
Dibromochloromethane	487	20	"	400.0	ND	122	0-200			D
Chlorobenzene	438	20	"	400.0	ND	109	76.5-147			D
1,1,1,2-Tetrachloroethane	479	20	"	400.0	ND	120	0-200			D
Ethylbenzene	465	20	"	400.0	ND	116	0-200			D
m,p-Xylenes	924	40	"	800.0	ND	115	0-200			D
o-Xylene	463	20	"	400.0	ND	116	0-200			D
Styrene	449	20	"	400.0	ND	112	0-200			D
Bromoform	465	20	"	400.0	ND	116	0-200			D
Isopropylbenzene (Cumene)	462	20	"	400.0	ND	116	0-200			D
1,1,2,2-Tetrachloroethane	473	20	"	400.0	ND	118	0-200			D
1,2,3-Trichloropropane	458	20	"	400.0	ND	114	0-200			D
Bromobenzene	430	20	"	400.0	ND	107	0-200			D
Propylbenzene	467	20	"	400.0	ND	117	0-200			D
2-Chlorotoluene	450	20	"	400.0	ND	113	0-200			D
1,3,5-Trimethylbenzene	444	20	"	400.0	ND	111	0-200			D
4-Chlorotoluene	438	20	"	400.0	ND	109	0-200			D
tert-Butylbenzene	454	20	"	400.0	ND	114	0-200			D
1,2,4-Trimethylbenzene	445	20	"	400.0	ND	111	0-200			D
sec-Butylbenzene	461	20	"	400.0	ND	115	0-200			D
4-Isopropyltoluene	454	20	"	400.0	ND	114	0-200			D
1,3-Dichlorobenzene	432	20	"	400.0	ND	108	0-200			D
1,4-Dichlorobenzene	421	20	"	400.0	ND	105	0-200			D
trans-1,4-Dichloro-2-butene	435	20	"	400.0	ND	109	0-200			D
Butylbenzene	461	20	"	400.0	ND	115	0-200			D
1,2-Dichlorobenzene	433	20	"	400.0	ND	108	0-200			D
1,2-Dibromo-3-chloropropane	455	20	"	400.0	ND	114	0-200			D, B
1,2,4-Trichlorobenzene	399	20	"	400.0	ND	99.6	0-200			D, B
Hexachlorobutadiene	402	20	"	400.0	ND	101	0-200			D, B
Naphthalene	435	20	"	400.0	ND	109	0-200			D, B

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Matrix Spike (0928020-MS1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
1,2,3-Trichlorobenzene	377	20	ug/L	400.0	ND	94.2	0-200			D, B
Surrogate: Dibromofluoromethane	*21.9*		"	*25.00*		*87.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.1*		"	*25.00*		*84.3*	*80-120*			
Surrogate: Toluene-d8	*26.0*		"	*25.00*		*104*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		"	*25.00*		*95.7*	*60-149*			
Matrix Spike Dup (0928020-MSD1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
Dichlorodifluoromethane	362	20	ug/L	400.0	ND	90.4	0-200	7.76	200	D
Chloromethane	352	20	"	400.0	ND	88.0	0-200	5.53	200	D
Vinyl chloride	408	20	"	400.0	ND	102	0-200	7.09	200	D
Bromomethane	354	20	"	400.0	ND	88.6	0-200	2.84	200	D
Chloroethane	393	20	"	400.0	ND	98.2	0-200	6.22	200	D
Trichlorofluoromethane	347	20	"	400.0	ND	86.7	0-200	7.55	200	D
Acrolein	555	100	"	2000	ND	27.8	0-200	5.17	200	D
1,1-Dichloroethene	350	20	"	400.0	ND	87.4	18.7-178	5.02	22.3	V6, D
Acetone	2110	100	"	2000	ND	106	0-200	2.71	200	D
Iodomethane	340	20	"	400.0	ND	85.0	0-200	0.768	200	D
Carbon disulfide	346	20	"	400.0	ND	86.6	0-200	4.79	200	D
Allyl Chloride (3-Chloropropylene)	365	20	"	400.0	ND	91.3	0-200	0.709	200	D
Acetonitrile	460	100	"	400.0	ND	115	0-200	0.434	200	D
Methylene Chloride	368	20	"	400.0	62.6	76.3	0-200	1.35	200	D, B
Methyl-tert-Butyl Ether	469	20	"	400.0	ND	117	0-200	1.99	200	D
trans-1,2-Dichloroethene	358	20	"	400.0	ND	89.4	0-200	5.02	200	D
Acrylonitrile	421	100	"	400.0	ND	105	0-200	4.37	200	D
1,1-Dichloroethane	369	20	"	400.0	ND	92.2	0-200	5.79	200	D
Chloroprene	417	20	"	400.0	ND	104	0-200	6.95	200	D
Vinyl acetate	457	20	"	400.0	ND	114	0-200	1.52	200	D
2,2-Dichloropropane	402	20	"	400.0	ND	100	0-200	4.81	200	D
cis-1,2-Dichloroethene	387	20	"	400.0	ND	96.8	0-200	7.72	200	D
Methyl Ethyl Ketone (2-Butanone)	2290	100	"	2000	ND	114	0-200	0.272	200	D
Propionitrile (Ethyl Cyanide)	434	100	"	400.0	ND	109	0-200	0.734	200	D
Methacrylonitrile	424	100	"	400.0	ND	106	0-200	1.73	200	D
Chloroform	368	20	"	400.0	13.4	88.6	0-200	5.35	200	D
Bromochloromethane	353	20	"	400.0	ND	88.2	0-200	3.29	200	D
1,1,1-Trichloroethane	390	20	"	400.0	ND	97.6	0-200	6.64	200	D
1,1-Dichloropropene	444	20	"	400.0	ND	111	0-200	8.21	200	D
Carbon Tetrachloride	554	20	"	400.0	ND	138	0-200	8.07	200	D
Benzene	431	20	"	400.0	ND	108	65.6-159	4.00	15.1	D
1,2-Dichloroethane	368	20	"	400.0	ND	92.1	0-200	1.24	200	D
Trichloroethene	418	20	"	400.0	ND	104	71-158	6.30	15.2	D
1,2-Dichloropropane	431	20	"	400.0	ND	108	0-200	4.49	200	D
Bromodichloromethane	429	20	"	400.0	ND	107	0-200	5.17	200	D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Matrix Spike Dup (0928020-MSD1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
Methyl Methacrylate	411	20	ug/L	400.0	ND	103	0-200	1.87	200	D
Dibromomethane	385	20	"	400.0	ND	96.4	0-200	4.91	200	D
2-Chloroethyl Vinyl Ether	105	20	"	400.0	ND	26.2	0-200	102	200	D
Methyl Isobutyl Ketone	2100	100	"	2000	ND	105	0-200	3.24	200	D
cis-1,3-Dichloropropene	418	20	"	400.0	ND	105	0-200	3.71	200	D
Toluene	388	20	"	400.0	ND	97.1	60.8-171	2.64	17.1	D
trans-1,3-Dichloropropene	390	20	"	400.0	ND	97.6	0-200	2.63	200	D
Ethyl Methacrylate	426	20	"	400.0	ND	106	0-200	3.96	200	D
1,1,2-Trichloroethane	429	20	"	400.0	ND	107	0-200	1.67	200	D
Methyl Butyl Ketone (2-Hexanone)	2210	100	"	2000	ND	111	0-200	1.09	200	D
1,2-Dibromoethane	393	20	"	400.0	ND	98.3	0-200	2.76	200	D
Tetrachloroethene	402	20	"	400.0	ND	101	0-200	1.43	200	D
1,3-Dichloropropane	450	20	"	400.0	ND	113	0-200	1.06	200	D
Dibromochloromethane	475	20	"	400.0	ND	119	0-200	2.58	200	D
Chlorobenzene	420	20	"	400.0	ND	105	76.5-147	4.20	13.6	D
1,1,1,2-Tetrachloroethane	469	20	"	400.0	ND	117	0-200	1.98	200	D
Ethylbenzene	437	20	"	400.0	ND	109	0-200	6.34	200	D
m,p-Xylenes	846	40	"	800.0	ND	106	0-200	8.79	200	D
o-Xylene	426	20	"	400.0	ND	107	0-200	8.23	200	D
Styrene	425	20	"	400.0	ND	106	0-200	5.44	200	D
Bromoform	455	20	"	400.0	ND	114	0-200	2.09	200	D
Isopropylbenzene (Cumene)	448	20	"	400.0	ND	112	0-200	3.17	200	D
1,1,2,2-Tetrachloroethane	484	20	"	400.0	ND	121	0-200	2.26	200	D
1,2,3-Trichloropropane	470	20	"	400.0	ND	118	0-200	2.63	200	D
Bromobenzene	426	20	"	400.0	ND	107	0-200	0.794	200	D
Propylbenzene	451	20	"	400.0	ND	113	0-200	3.48	200	D
2-Chlorotoluene	436	20	"	400.0	ND	109	0-200	3.25	200	D
1,3,5-Trimethylbenzene	435	20	"	400.0	ND	109	0-200	2.14	200	D
4-Chlorotoluene	428	20	"	400.0	ND	107	0-200	2.31	200	D
tert-Butylbenzene	437	20	"	400.0	ND	109	0-200	3.81	200	D
1,2,4-Trimethylbenzene	432	20	"	400.0	ND	108	0-200	3.10	200	D
sec-Butylbenzene	446	20	"	400.0	ND	112	0-200	3.39	200	D
4-Isopropyltoluene	439	20	"	400.0	ND	110	0-200	3.45	200	D
1,3-Dichlorobenzene	426	20	"	400.0	ND	107	0-200	1.26	200	D
1,4-Dichlorobenzene	414	20	"	400.0	ND	104	0-200	1.58	200	D
trans-1,4-Dichloro-2-butene	436	20	"	400.0	ND	109	0-200	0.321	200	D
Butylbenzene	454	20	"	400.0	ND	114	0-200	1.62	200	D
1,2-Dichlorobenzene	427	20	"	400.0	ND	107	0-200	1.40	200	D
1,2-Dibromo-3-chloropropane	487	20	"	400.0	ND	122	0-200	6.79	200	D, B
1,2,4-Trichlorobenzene	428	20	"	400.0	ND	107	0-200	7.21	200	D, B
Hexachlorobutadiene	414	20	"	400.0	ND	104	0-200	2.94	200	D, B

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CERTIFICATE OF ANALYSIS

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928020 - EPA 5030B										
Matrix Spike Dup (0928020-MSD1)	**Source: 09G0130-05**			Prepared & Analyzed: 07/08/2009						
Naphthalene	517	20	ug/L	400.0	ND	129	0-200	17.3	200	D, B
1,2,3-Trichlorobenzene	422	20	"	400.0	ND	106	0-200	11.4	200	D, B
Surrogate: Dibromofluoromethane	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.0*		*"*	*25.00*		*84.1*	*80-120*			
Surrogate: Toluene-d8	*26.9*		*"*	*25.00*		*108*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		*"*	*25.00*		*95.5*	*60-149*			
Batch 0928041 - EPA 5030B										
Blank (0928041-BLK1)				Prepared & Analyzed: 07/10/2009						
Chloromethane	ND	1.0	ug/L							U
Vinyl chloride	ND	1.0	"							V6, U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
1,1-Dichloroethene	ND	1.0	"							V6, U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Methylene Chloride	3.30	1.0	"							B1
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
Blank (0928041-BLK1)				Prepared & Analyzed: 07/10/2009						
Tetrachloroethene	ND	1.0	ug/L							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.8*		*"*	*25.00*		*87.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*84.7*	*80-120*			
Surrogate: Toluene-d8	*25.9*		*"*	*25.00*		*104*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.5*		*"*	*25.00*		*93.9*	*60-149*			
LCS (0928041-BS1)				Prepared & Analyzed: 07/10/2009						
Chloromethane	16.5	1.0	ug/L	20.00		82.4	62.5-141			
Vinyl chloride	15.9	1.0	"	20.00		79.4	65.3-143			V6
Bromomethane	15.0	1.0	"	20.00		74.8	56-180			
Chloroethane	16.2	1.0	"	20.00		81.2	62.3-161			
Trichlorofluoromethane	15.4	1.0	"	20.00		76.9	35-157			
1,1-Dichloroethene	14.6	1.0	"	20.00		73.2	64.6-138			V6
Acetone	102	5.0	"	100.0		102	35-159			
Iodomethane	14.7	1.0	"	20.00		73.4	70-130			
Carbon disulfide	14.8	1.0	"	20.00		73.8	48-142			
Methylene Chloride	17.9	1.0	"	20.00		89.6	64.7-139			B
trans-1,2-Dichloroethene	16.2	1.0	"	20.00		80.9	75.1-127			
Acrylonitrile	20.8	5.0	"	20.00		104	67.2-148			
1,1-Dichloroethane	17.5	1.0	"	20.00		87.6	72.2-135			
Vinyl acetate	22.7	1.0	"	20.00		114	70-154			
cis-1,2-Dichloroethene	16.2	1.0	"	20.00		81.0	72-126			
Methyl Ethyl Ketone (2-Butanone)	112	5.0	"	100.0		112	45-128			
Chloroform	17.0	1.0	"	20.00		85.2	76.1-135			
Bromochloromethane	17.6	1.0	"	20.00		88.2	73-126			
1,1,1-Trichloroethane	17.0	1.0	"	20.00		85.1	67.1-139			
Carbon Tetrachloride	23.2	1.0	"	20.00		116	63.3-142			
Benzene	20.7	1.0	"	20.00		104	72-132			
1,2-Dichloroethane	17.9	1.0	"	20.00		89.4	72.9-139			
Trichloroethene	19.0	1.0	"	20.00		95.1	73.7-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
LCS (0928041-BS1)				Prepared & Analyzed: 07/10/2009						
1,2-Dichloropropane	21.5	1.0	ug/L	20.00		108	71.3-137			
Bromodichloromethane	20.6	1.0	"	20.00		103	74.5-136			
Dibromomethane	19.2	1.0	"	20.00		96.1	66-125			
Methyl Isobutyl Ketone	100	5.0	"	100.0		100	41-143			
cis-1,3-Dichloropropene	20.0	1.0	"	20.00		99.9	74.6-124			
Toluene	18.1	1.0	"	20.00		90.5	72.4-132			
trans-1,3-Dichloropropene	18.8	1.0	"	20.00		93.8	72.1-124			
1,1,2-Trichloroethane	21.1	1.0	"	20.00		105	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	107	5.0	"	100.0		107	43-147			
Tetrachloroethene	17.6	1.0	"	20.00		88.0	69.9-125			
Dibromochloromethane	22.6	1.0	"	20.00		113	69.9-134			
Chlorobenzene	20.2	1.0	"	20.00		101	67.3-133			
1,1,1,2-Tetrachloroethane	22.3	1.0	"	20.00		112	76-123			
Ethylbenzene	20.2	1.0	"	20.00		101	70.6-131			
Styrene	20.9	1.0	"	20.00		104	79-117			
Bromoform	21.2	1.0	"	20.00		106	68.8-130			
1,1,2,2-Tetrachloroethane	23.7	1.0	"	20.00		118	69.1-143			
1,2,3-Trichloropropane	22.2	1.0	"	20.00		111	70-130			
1,4-Dichlorobenzene	19.7	1.0	"	20.00		98.6	75-122			
trans-1,4-Dichloro-2-butene	20.8	1.0	"	20.00		104	70-130			
1,2-Dichlorobenzene	20.6	1.0	"	20.00		103	74-124			
Surrogate: Dibromofluoromethane	*21.2*		*"*	*25.00*		*84.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.7*		*"*	*25.00*		*82.7*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*"*	*25.00*		*105*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		*"*	*25.00*		*95.8*	*60-149*			
LCS Dup (0928041-BSD1)				Prepared & Analyzed: 07/10/2009						
Chloromethane	17.9	1.0	ug/L	20.00		89.6	62.5-141	8.37	200	
Vinyl chloride	18.9	1.0	"	20.00		94.4	65.3-143	17.4	200	V6
Bromomethane	15.9	1.0	"	20.00		79.5	56-180	6.03	200	
Chloroethane	19.4	1.0	"	20.00		97.0	62.3-161	17.7	200	
Trichlorofluoromethane	16.7	1.0	"	20.00		83.4	35-157	8.05	200	
1,1-Dichloroethene	16.6	1.0	"	20.00		82.8	64.6-138	12.2	200	V6
Acetone	110	5.0	"	100.0		110	35-159	7.34	200	
Iodomethane	15.2	1.0	"	20.00		76.0	70-130	3.41	200	
Carbon disulfide	17.3	1.0	"	20.00		86.6	48-142	15.9	200	
Methylene Chloride	19.6	1.0	"	20.00		97.8	64.7-139	8.86	200	B
trans-1,2-Dichloroethene	17.9	1.0	"	20.00		89.5	75.1-127	10.1	200	
Acrylonitrile	21.7	5.0	"	20.00		108	67.2-148	3.95	200	
1,1-Dichloroethane	19.0	1.0	"	20.00		95.2	72.2-135	8.26	200	
Vinyl acetate	11.4	1.0	"	20.00		57.0	70-154	66.2	200	#
cis-1,2-Dichloroethene	19.0	1.0	"	20.00		94.8	72-126	15.8	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
LCS Dup (0928041-BSD1)				Prepared & Analyzed: 07/10/2009						
Methyl Ethyl Ketone (2-Butanone)	116	5.0	ug/L	100.0		116	45-128	3.71	200	
Chloroform	18.7	1.0	"	20.00		93.4	76.1-135	9.24	200	
Bromochloromethane	18.9	1.0	"	20.00		94.7	73-126	7.11	200	
1,1,1-Trichloroethane	18.2	1.0	"	20.00		91.1	67.1-139	6.81	200	
Carbon Tetrachloride	26.1	1.0	"	20.00		130	63.3-142	11.7	200	
Benzene	22.1	1.0	"	20.00		111	72-132	6.67	200	
1,2-Dichloroethane	18.8	1.0	"	20.00		93.9	72.9-139	4.91	200	
Trichloroethene	22.6	1.0	"	20.00		113	73.7-130	17.2	200	
1,2-Dichloropropane	22.6	1.0	"	20.00		113	71.3-137	4.90	200	
Bromodichloromethane	22.3	1.0	"	20.00		112	74.5-136	7.96	200	
Dibromomethane	19.5	1.0	"	20.00		97.4	66-125	1.34	200	
Methyl Isobutyl Ketone	109	5.0	"	100.0		109	41-143	8.68	200	
cis-1,3-Dichloropropene	19.9	1.0	"	20.00		99.6	74.6-124	0.251	200	
Toluene	19.7	1.0	"	20.00		98.7	72.4-132	8.67	200	
trans-1,3-Dichloropropene	18.2	1.0	"	20.00		91.0	72.1-124	3.09	200	
1,1,2-Trichloroethane	22.4	1.0	"	20.00		112	75.6-140	6.03	200	
Methyl Butyl Ketone (2-Hexanone)	117	5.0	"	100.0		117	43-147	8.95	200	
Tetrachloroethene	35.2	1.0	"	20.00		176	69.9-125	66.6	200	L2
Dibromochloromethane	24.1	1.0	"	20.00		121	69.9-134	6.46	200	
Chlorobenzene	21.8	1.0	"	20.00		109	67.3-133	7.49	200	
1,1,1,2-Tetrachloroethane	23.6	1.0	"	20.00		118	76-123	5.49	200	
Ethylbenzene	22.2	1.0	"	20.00		111	70.6-131	9.54	200	
Styrene	22.5	1.0	"	20.00		113	79-117	7.42	200	
Bromoform	22.6	1.0	"	20.00		113	68.8-130	6.48	200	
1,1,2,2-Tetrachloroethane	22.8	1.0	"	20.00		114	69.1-143	4.09	200	
1,2,3-Trichloropropane	23.7	1.0	"	20.00		118	70-130	6.36	200	
1,4-Dichlorobenzene	20.3	1.0	"	20.00		102	75-122	3.10	200	
trans-1,4-Dichloro-2-butene	18.9	1.0	"	20.00		94.6	70-130	9.66	200	
1,2-Dichlorobenzene	21.6	1.0	"	20.00		108	74-124	4.70	200	
Surrogate: Dibromofluoromethane	*21.7*		*"*	*25.00*		*86.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.9*		*"*	*25.00*		*83.7*	*80-120*			
Surrogate: Toluene-d8	*26.6*		*"*	*25.00*		*106*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*"*	*25.00*		*97.0*	*60-149*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
Matrix Spike (0928041-MS1)	**Source: 09G0142-02**			Prepared & Analyzed: 07/10/2009						
Dichlorodifluoromethane	19.2	1.0	ug/L	20.00	ND	96.2	0-200			
Chloromethane	19.5	1.0	"	20.00	ND	97.6	0-200			
Vinyl chloride	20.3	1.0	"	20.00	ND	102	0-200			V6
Bromomethane	18.1	1.0	"	20.00	ND	90.5	0-200			
Chloroethane	23.3	1.0	"	20.00	ND	116	0-200			
Trichlorofluoromethane	21.3	1.0	"	20.00	ND	107	0-200			
Acrolein	23.0	5.0	"	100.0	ND	23.0	0-200			
1,1-Dichloroethene	16.8	1.0	"	20.00	ND	84.0	18.7-178			V6
Acetone	98.1	5.0	"	100.0	ND	98.1	0-200			
Iodomethane	15.3	1.0	"	20.00	ND	76.7	0-200			
Carbon disulfide	16.8	1.0	"	20.00	ND	84.2	0-200			
Allyl Chloride (3-Chloropropylene)	17.2	1.0	"	20.00	ND	86.0	0-200			
Acetonitrile	21.8	5.0	"	20.00	ND	109	0-200			
Methylene Chloride	14.8	1.0	"	20.00	ND	74.0	0-200			B
Methyl-tert-Butyl Ether	21.2	1.0	"	20.00	ND	106	0-200			
trans-1,2-Dichloroethene	17.3	1.0	"	20.00	ND	86.4	0-200			
Acrylonitrile	19.2	5.0	"	20.00	ND	96.2	0-200			
1,1-Dichloroethane	17.8	1.0	"	20.00	ND	89.0	0-200			
Chloroprene	19.7	1.0	"	20.00	ND	98.7	0-200			
Vinyl acetate	20.6	1.0	"	20.00	ND	103	0-200			
2,2-Dichloropropane	17.9	1.0	"	20.00	ND	89.6	0-200			
cis-1,2-Dichloroethene	18.6	1.0	"	20.00	ND	92.9	0-200			
Methyl Ethyl Ketone (2-Butanone)	105	5.0	"	100.0	ND	105	0-200			
Propionitrile (Ethyl Cyanide)	20.2	5.0	"	20.00	ND	101	0-200			
Methacrylonitrile	20.2	5.0	"	20.00	ND	101	0-200			
Chloroform	17.1	1.0	"	20.00	ND	85.4	0-200			
Bromochloromethane	16.9	1.0	"	20.00	ND	84.4	0-200			
1,1,1-Trichloroethane	18.4	1.0	"	20.00	ND	92.0	0-200			
1,1-Dichloropropene	21.4	1.0	"	20.00	ND	107	0-200			
Carbon Tetrachloride	26.0	1.0	"	20.00	ND	130	0-200			
Benzene	20.8	1.0	"	20.00	ND	104	65.6-159			
1,2-Dichloroethane	17.0	1.0	"	20.00	ND	85.2	0-200			
Trichloroethene	19.8	1.0	"	20.00	ND	99.2	71-158			
1,2-Dichloropropane	20.9	1.0	"	20.00	ND	104	0-200			
Bromodichloromethane	20.3	1.0	"	20.00	ND	101	0-200			
Methyl Methacrylate	18.7	1.0	"	20.00	ND	93.4	0-200			
Dibromomethane	18.0	1.0	"	20.00	ND	89.8	0-200			
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200			U
Methyl Isobutyl Ketone	98.3	5.0	"	100.0	ND	98.3	0-200			
cis-1,3-Dichloropropene	18.9	1.0	"	20.00	ND	94.6	0-200			
Toluene	18.7	1.0	"	20.00	ND	93.4	60.8-171			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
Matrix Spike (0928041-MS1)	**Source: 09G0142-02**			Prepared & Analyzed: 07/10/2009						
trans-1,3-Dichloropropene	17.3	1.0	ug/L	20.00	ND	86.5	0-200			
Ethyl Methacrylate	19.9	1.0	"	20.00	ND	99.5	0-200			
1,1,2-Trichloroethane	20.1	1.0	"	20.00	ND	100	0-200			
Methyl Butyl Ketone (2-Hexanone)	102	5.0	"	100.0	ND	102	0-200			
1,2-Dibromoethane	18.3	1.0	"	20.00	ND	91.4	0-200			
Tetrachloroethene	18.8	1.0	"	20.00	ND	93.8	0-200			
1,3-Dichloropropane	20.8	1.0	"	20.00	ND	104	0-200			
Dibromochloromethane	21.5	1.0	"	20.00	ND	107	0-200			
Chlorobenzene	19.9	1.0	"	20.00	ND	99.4	76.5-147			
1,1,1,2-Tetrachloroethane	21.6	1.0	"	20.00	ND	108	0-200			
Ethylbenzene	20.6	1.0	"	20.00	ND	103	0-200			
m,p-Xylenes	40.1	2.0	"	40.00	ND	100	0-200			
o-Xylene	19.9	1.0	"	20.00	ND	99.6	0-200			
Styrene	20.3	1.0	"	20.00	ND	101	0-200			
Bromoform	20.0	1.0	"	20.00	ND	100	0-200			
Isopropylbenzene (Cumene)	20.4	1.0	"	20.00	ND	102	0-200			
1,1,2,2-Tetrachloroethane	21.7	1.0	"	20.00	ND	109	0-200			
1,2,3-Trichloropropane	21.0	1.0	"	20.00	ND	105	0-200			
Bromobenzene	19.6	1.0	"	20.00	ND	97.8	0-200			
Propylbenzene	21.1	1.0	"	20.00	ND	105	0-200			
2-Chlorotoluene	20.1	1.0	"	20.00	ND	100	0-200			
1,3,5-Trimethylbenzene	19.6	1.0	"	20.00	ND	98.0	0-200			
4-Chlorotoluene	19.5	1.0	"	20.00	ND	97.6	0-200			
tert-Butylbenzene	19.8	1.0	"	20.00	ND	99.0	0-200			
1,2,4-Trimethylbenzene	19.8	1.0	"	20.00	ND	98.8	0-200			
sec-Butylbenzene	20.3	1.0	"	20.00	ND	101	0-200			
4-Isopropyltoluene	19.9	1.0	"	20.00	ND	99.3	0-200			
1,3-Dichlorobenzene	19.5	1.0	"	20.00	ND	97.4	0-200			
1,4-Dichlorobenzene	19.2	1.0	"	20.00	ND	95.8	0-200			
trans-1,4-Dichloro-2-butene	18.8	1.0	"	20.00	ND	94.2	0-200			
Butylbenzene	20.6	1.0	"	20.00	ND	103	0-200			
1,2-Dichlorobenzene	19.4	1.0	"	20.00	ND	97.2	0-200			
1,2-Dibromo-3-chloropropane	19.5	1.0	"	20.00	ND	97.4	0-200			
1,2,4-Trichlorobenzene	17.8	1.0	"	20.00	ND	88.8	0-200			
Hexachlorobutadiene	15.8	1.0	"	20.00	ND	78.8	0-200			
Naphthalene	20.2	1.0	"	20.00	ND	101	0-200			
1,2,3-Trichlorobenzene	16.8	1.0	"	20.00	ND	83.8	0-200			
Surrogate: Dibromofluoromethane	*22.0*		"	*25.00*		*88.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		"	*25.00*		*84.6*	*80-120*			
Surrogate: Toluene-d8	*26.8*		"	*25.00*		*107*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		"	*25.00*		*96.6*	*60-149*			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
Matrix Spike Dup (0928041-MSD1)	**Source: 09G0142-02**			Prepared & Analyzed: 07/10/2009						
Dichlorodifluoromethane	18.8	1.0	ug/L	20.00	ND	94.0	0-200	2.31	200	
Chloromethane	19.0	1.0	"	20.00	ND	95.2	0-200	2.44	200	
Vinyl chloride	20.3	1.0	"	20.00	ND	102	0-200	0.0985	200	V6
Bromomethane	18.0	1.0	"	20.00	ND	89.8	0-200	0.776	200	
Chloroethane	23.6	1.0	"	20.00	ND	118	0-200	1.15	200	
Trichlorofluoromethane	20.5	1.0	"	20.00	ND	103	0-200	3.92	200	
Acrolein	24.0	5.0	"	100.0	ND	24.0	0-200	4.51	200	
1,1-Dichloroethene	16.7	1.0	"	20.00	ND	83.3	18.7-178	0.777	22.3	V6
Acetone	100	5.0	"	100.0	ND	100	0-200	2.15	200	
Iodomethane	15.5	1.0	"	20.00	ND	77.6	0-200	1.10	200	
Carbon disulfide	16.9	1.0	"	20.00	ND	84.3	0-200	0.178	200	
Allyl Chloride (3-Chloropropylene)	16.9	1.0	"	20.00	ND	84.5	0-200	1.76	200	
Acetonitrile	21.6	5.0	"	20.00	ND	108	0-200	0.645	200	
Methylene Chloride	14.9	1.0	"	20.00	ND	74.6	0-200	0.673	200	B
Methyl-tert-Butyl Ether	21.4	1.0	"	20.00	ND	107	0-200	0.563	200	
trans-1,2-Dichloroethene	17.1	1.0	"	20.00	ND	85.7	0-200	0.871	200	
Acrylonitrile	19.6	5.0	"	20.00	ND	98.0	0-200	1.85	200	
1,1-Dichloroethane	17.4	1.0	"	20.00	ND	87.0	0-200	2.27	200	
Chloroprene	19.4	1.0	"	20.00	ND	97.1	0-200	1.63	200	
Vinyl acetate	20.1	1.0	"	20.00	ND	101	0-200	2.11	200	
2,2-Dichloropropane	17.4	1.0	"	20.00	ND	86.8	0-200	3.18	200	
cis-1,2-Dichloroethene	18.1	1.0	"	20.00	ND	90.5	0-200	2.62	200	
Methyl Ethyl Ketone (2-Butanone)	108	5.0	"	100.0	ND	108	0-200	2.77	200	
Propionitrile (Ethyl Cyanide)	20.1	5.0	"	20.00	ND	100	0-200	0.695	200	
Methacrylonitrile	19.9	5.0	"	20.00	ND	99.4	0-200	1.79	200	
Chloroform	16.7	1.0	"	20.00	ND	83.4	0-200	2.31	200	
Bromochloromethane	17.1	1.0	"	20.00	ND	85.6	0-200	1.53	200	
1,1,1-Trichloroethane	18.2	1.0	"	20.00	ND	90.8	0-200	1.31	200	
1,1-Dichloropropene	20.9	1.0	"	20.00	ND	104	0-200	2.46	200	
Carbon Tetrachloride	25.8	1.0	"	20.00	ND	129	0-200	0.579	200	
Benzene	20.4	1.0	"	20.00	ND	102	65.6-159	1.99	15.1	
1,2-Dichloroethane	16.8	1.0	"	20.00	ND	84.2	0-200	1.12	200	
Trichloroethene	19.5	1.0	"	20.00	ND	97.7	71-158	1.52	15.2	
1,2-Dichloropropane	20.6	1.0	"	20.00	ND	103	0-200	1.11	200	
Bromodichloromethane	19.8	1.0	"	20.00	ND	99.2	0-200	2.14	200	
Methyl Methacrylate	18.8	1.0	"	20.00	ND	93.8	0-200	0.428	200	
Dibromomethane	17.8	1.0	"	20.00	ND	89.0	0-200	0.895	200	
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200		200	U
Methyl Isobutyl Ketone	97.1	5.0	"	100.0	ND	97.1	0-200	1.17	200	
cis-1,3-Dichloropropene	18.6	1.0	"	20.00	ND	92.9	0-200	1.87	200	
Toluene	18.3	1.0	"	20.00	ND	91.4	60.8-171	2.22	17.1	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928041 - EPA 5030B										
Matrix Spike Dup (0928041-MSD1)	**Source: 09G0142-02**			Prepared & Analyzed: 07/10/2009						
trans-1,3-Dichloropropene	17.3	1.0	ug/L	20.00	ND	86.6	0-200	0.116	200	
Ethyl Methacrylate	19.8	1.0	"	20.00	ND	98.8	0-200	0.655	200	
1,1,2-Trichloroethane	20.0	1.0	"	20.00	ND	100	0-200	0.150	200	
Methyl Butyl Ketone (2-Hexanone)	104	5.0	"	100.0	ND	104	0-200	2.10	200	
1,2-Dibromoethane	18.2	1.0	"	20.00	ND	91.0	0-200	0.439	200	
Tetrachloroethene	18.6	1.0	"	20.00	ND	92.8	0-200	1.07	200	
1,3-Dichloropropane	20.9	1.0	"	20.00	ND	104	0-200	0.192	200	
Dibromochloromethane	21.9	1.0	"	20.00	ND	110	0-200	1.98	200	
Chlorobenzene	19.4	1.0	"	20.00	ND	97.0	76.5-147	2.39	13.6	
1,1,1,2-Tetrachloroethane	21.7	1.0	"	20.00	ND	109	0-200	0.600	200	
Ethylbenzene	20.6	1.0	"	20.00	ND	103	0-200	0.243	200	
m,p-Xylenes	39.3	2.0	"	40.00	ND	98.3	0-200	1.99	200	
o-Xylene	19.6	1.0	"	20.00	ND	98.0	0-200	1.57	200	
Styrene	20.0	1.0	"	20.00	ND	100	0-200	1.14	200	
Bromoform	20.0	1.0	"	20.00	ND	99.8	0-200	0.100	200	
Isopropylbenzene (Cumene)	20.2	1.0	"	20.00	ND	101	0-200	1.18	200	
1,1,2,2-Tetrachloroethane	22.4	1.0	"	20.00	ND	112	0-200	2.81	200	
1,2,3-Trichloropropane	20.8	1.0	"	20.00	ND	104	0-200	1.24	200	
Bromobenzene	19.4	1.0	"	20.00	ND	97.2	0-200	0.564	200	
Propylbenzene	20.7	1.0	"	20.00	ND	104	0-200	1.63	200	
2-Chlorotoluene	19.9	1.0	"	20.00	ND	99.3	0-200	1.15	200	
1,3,5-Trimethylbenzene	19.6	1.0	"	20.00	ND	97.9	0-200	0.102	200	
4-Chlorotoluene	19.2	1.0	"	20.00	ND	95.8	0-200	1.81	200	
tert-Butylbenzene	19.8	1.0	"	20.00	ND	99.0	0-200	0.101	200	
1,2,4-Trimethylbenzene	19.4	1.0	"	20.00	ND	97.0	0-200	1.94	200	
sec-Butylbenzene	20.2	1.0	"	20.00	ND	101	0-200	0.148	200	
4-Isopropyltoluene	19.8	1.0	"	20.00	ND	99.0	0-200	0.252	200	
1,3-Dichlorobenzene	19.2	1.0	"	20.00	ND	95.8	0-200	1.76	200	
1,4-Dichlorobenzene	18.6	1.0	"	20.00	ND	92.8	0-200	3.08	200	
trans-1,4-Dichloro-2-butene	19.5	1.0	"	20.00	ND	97.4	0-200	3.34	200	
Butylbenzene	21.1	1.0	"	20.00	ND	106	0-200	2.64	200	
1,2-Dichlorobenzene	19.4	1.0	"	20.00	ND	97.2	0-200	0.00	200	
1,2-Dibromo-3-chloropropane	21.8	1.0	"	20.00	ND	109	0-200	11.2	200	
1,2,4-Trichlorobenzene	18.8	1.0	"	20.00	ND	93.8	0-200	5.48	200	
Hexachlorobutadiene	18.4	1.0	"	20.00	ND	92.2	0-200	15.7	200	
Naphthalene	23.0	1.0	"	20.00	ND	115	0-200	12.5	200	
1,2,3-Trichlorobenzene	18.9	1.0	"	20.00	ND	94.6	0-200	12.0	200	
Surrogate: Dibromofluoromethane	*22.0*		"	*25.00*		*88.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.0*		"	*25.00*		*83.8*	*80-120*			
Surrogate: Toluene-d8	*26.8*		"	*25.00*		*107*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.0*		"	*25.00*		*96.0*	*60-149*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Blank (0928058-BLK1)				Prepared & Analyzed: 07/11/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							V6, U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	3.92	1.0	"							B1
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Blank (0928058-BLK1)				Prepared & Analyzed: 07/11/2009						
trans-1,3-Dichloropropene	ND	1.0	ug/L							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.5*		*"*	*25.00*		*86.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*84.8*	*80-120*			
Surrogate: Toluene-d8	*26.1*		*"*	*25.00*		*104*	*75-120*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Blank (0928058-BLK1)				Prepared & Analyzed: 07/11/2009						
Surrogate: 4-Bromofluorobenzene	*23.9*		*ug/L*	*25.00*		*95.6*	*60-149*			
LCS (0928058-BS1)				Prepared & Analyzed: 07/11/2009						
Dichlorodifluoromethane	13.8	1.0	ug/L	20.00		68.8	27-127			
Chloromethane	15.8	1.0	"	20.00		79.0	62.5-141			
Vinyl chloride	16.5	1.0	"	20.00		82.4	65.3-143			
Bromomethane	14.4	1.0	"	20.00		72.2	56-180			
Chloroethane	16.9	1.0	"	20.00		84.4	62.3-161			
Trichlorofluoromethane	15.1	1.0	"	20.00		75.4	35-157			
Acrolein	30.5	5.0	"	100.0		30.5	26.6-169			
1,1-Dichloroethene	15.3	1.0	"	20.00		76.6	64.6-138			V6
Acetone	111	5.0	"	100.0		111	35-159			
Iodomethane	14.0	1.0	"	20.00		70.1	70-130			
Carbon disulfide	15.6	1.0	"	20.00		78.2	48-142			
Allyl Chloride (3-Chloropropylene)	16.7	1.0	"	20.00		83.6	70-130			
Acetonitrile	17.4	5.0	"	20.00		87.2	70-130			
Methylene Chloride	19.2	1.0	"	20.00		95.8	64.7-139			B
Methyl-tert-Butyl Ether	23.5	1.0	"	20.00		118	34-133			
trans-1,2-Dichloroethene	16.7	1.0	"	20.00		83.4	75.1-127			
Acrylonitrile	21.2	5.0	"	20.00		106	67.2-148			
1,1-Dichloroethane	17.9	1.0	"	20.00		89.4	72.2-135			
Chloroprene	18.7	1.0	"	20.00		93.7	70-130			
Vinyl acetate	24.0	1.0	"	20.00		120	70-154			
2,2-Dichloropropane	17.9	1.0	"	20.00		89.4	37-129			
cis-1,2-Dichloroethene	16.7	1.0	"	20.00		83.6	72-126			
Methyl Ethyl Ketone (2-Butanone)	120	5.0	"	100.0		120	45-128			
Propionitrile (Ethyl Cyanide)	21.3	5.0	"	20.00		107	70-130			
Methacrylonitrile	22.3	5.0	"	20.00		112	70-130			
Chloroform	17.5	1.0	"	20.00		87.4	76.1-135			
Bromochloromethane	18.5	1.0	"	20.00		92.6	73-126			
1,1,1-Trichloroethane	17.6	1.0	"	20.00		87.8	67.1-139			
1,1-Dichloropropene	20.0	1.0	"	20.00		100	70-130			
Carbon Tetrachloride	24.8	1.0	"	20.00		124	63.3-142			
Benzene	21.2	1.0	"	20.00		106	72-132			
1,2-Dichloroethane	18.6	1.0	"	20.00		93.2	72.9-139			
Trichloroethene	19.4	1.0	"	20.00		97.0	73.7-130			
1,2-Dichloropropane	22.2	1.0	"	20.00		111	71.3-137			
Bromodichloromethane	21.6	1.0	"	20.00		108	74.5-136			
Methyl Methacrylate	20.9	1.0	"	20.00		104	70-130			
Dibromomethane	18.8	1.0	"	20.00		94.0	66-125			
2-Chloroethyl Vinyl Ether	21.6	1.0	"	20.00		108	42.5-161			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
LCS (0928058-BS1)				Prepared & Analyzed: 07/11/2009						
Methyl Isobutyl Ketone	111	5.0	ug/L	100.0		111	41-143			
cis-1,3-Dichloropropene	21.0	1.0	"	20.00		105	74.6-124			
Toluene	18.7	1.0	"	20.00		93.6	72.4-132			
trans-1,3-Dichloropropene	19.5	1.0	"	20.00		97.6	72.1-124			
Ethyl Methacrylate	21.8	1.0	"	20.00		109	70-130			
1,1,2-Trichloroethane	22.1	1.0	"	20.00		110	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	116	5.0	"	100.0		116	43-147			
1,2-Dibromoethane	19.7	1.0	"	20.00		98.6	70-130			
Tetrachloroethene	18.4	1.0	"	20.00		91.8	69.9-125			
1,3-Dichloropropane	23.0	1.0	"	20.00		115	70-130			
Dibromochloromethane	23.6	1.0	"	20.00		118	69.9-134			
Chlorobenzene	21.0	1.0	"	20.00		105	67.3-133			
1,1,1,2-Tetrachloroethane	22.9	1.0	"	20.00		114	76-123			
Ethylbenzene	21.2	1.0	"	20.00		106	70.6-131			
m,p-Xylenes	40.9	2.0	"	40.00		102	71-123			
o-Xylene	20.6	1.0	"	20.00		103	80-119			
Styrene	21.2	1.0	"	20.00		106	79-117			
Bromoform	22.3	1.0	"	20.00		112	68.8-130			
Isopropylbenzene (Cumene)	20.6	1.0	"	20.00		103	70-130			
1,1,2,2-Tetrachloroethane	25.7	1.0	"	20.00		129	69.1-143			
1,2,3-Trichloropropane	24.0	1.0	"	20.00		120	70-130			
Bromobenzene	21.4	1.0	"	20.00		107	70-130			
Propylbenzene	21.2	1.0	"	20.00		106	70-130			
2-Chlorotoluene	21.0	1.0	"	20.00		105	70-130			
1,3,5-Trimethylbenzene	20.3	1.0	"	20.00		101	70-130			
4-Chlorotoluene	20.6	1.0	"	20.00		103	70-130			
tert-Butylbenzene	19.7	1.0	"	20.00		98.4	70-130			
1,2,4-Trimethylbenzene	20.5	1.0	"	20.00		102	70-130			
sec-Butylbenzene	19.8	1.0	"	20.00		99.1	70-130			
4-Isopropyltoluene	19.6	1.0	"	20.00		97.8	70-130			
1,3-Dichlorobenzene	20.7	1.0	"	20.00		104	74-125			
1,4-Dichlorobenzene	20.1	1.0	"	20.00		101	75-122			
trans-1,4-Dichloro-2-butene	22.3	1.0	"	20.00		111	70-130			
Butylbenzene	20.5	1.0	"	20.00		103	70-130			
1,2-Dichlorobenzene	20.9	1.0	"	20.00		104	74-124			
1,2-Dibromo-3-chloropropane	22.6	1.0	"	20.00		113	70-130			
1,2,4-Trichlorobenzene	19.3	1.0	"	20.00		96.5	45-134			
Hexachlorobutadiene	15.4	1.0	"	20.00		77.0	33-154			
Naphthalene	23.0	1.0	"	20.00		115	22-148			
1,2,3-Trichlorobenzene	18.2	1.0	"	20.00		90.8	70-130			
Surrogate: Dibromofluoromethane	*21.0*		*"*	*25.00*		*84.1*	*80-120*			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
LCS (0928058-BS1)				Prepared & Analyzed: 07/11/2009						
Surrogate: 1,2-Dichloroethane-d4	*20.6*		*ug/L*	*25.00*		*82.5*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*"*	*25.00*		*106*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*"*	*25.00*		*97.7*	*60-149*			
LCS Dup (0928058-BSD1)				Prepared & Analyzed: 07/12/2009						
Dichlorodifluoromethane	15.6	1.0	ug/L	20.00		77.8	27-127	12.2	200	
Chloromethane	17.4	1.0	"	20.00		87.0	62.5-141	9.64	200	
Vinyl chloride	18.9	1.0	"	20.00		94.6	65.3-143	13.7	200	
Bromomethane	12.9	1.0	"	20.00		64.4	56-180	11.5	200	
Chloroethane	19.1	1.0	"	20.00		95.7	62.3-161	12.5	200	
Trichlorofluoromethane	17.1	1.0	"	20.00		85.6	35-157	12.7	200	
Acrolein	26.8	5.0	"	100.0		26.8	26.6-169	13.1	200	
1,1-Dichloroethene	17.4	1.0	"	20.00		86.8	64.6-138	12.4	200	V6
Acetone	111	5.0	"	100.0		111	35-159	0.181	200	
Iodomethane	14.1	1.0	"	20.00		70.4	70-130	0.498	200	
Carbon disulfide	17.7	1.0	"	20.00		88.6	48-142	12.5	200	
Allyl Chloride (3-Chloropropylene)	17.7	1.0	"	20.00		88.6	70-130	5.81	200	
Acetonitrile	24.9	5.0	"	20.00		124	70-130	35.1	200	
Methylene Chloride	20.3	1.0	"	20.00		102	64.7-139	5.88	200	B
Methyl-tert-Butyl Ether	23.3	1.0	"	20.00		117	34-133	0.896	200	
trans-1,2-Dichloroethene	18.7	1.0	"	20.00		93.5	75.1-127	11.4	200	
Acrylonitrile	21.7	5.0	"	20.00		108	67.2-148	2.28	200	
1,1-Dichloroethane	19.8	1.0	"	20.00		98.8	72.2-135	10.0	200	
Chloroprene	20.4	1.0	"	20.00		102	70-130	8.38	200	
Vinyl acetate	13.7	1.0	"	20.00		68.6	70-154	54.5	200	#
2,2-Dichloropropane	14.6	1.0	"	20.00		73.2	37-129	20.0	200	
cis-1,2-Dichloroethene	18.3	1.0	"	20.00		91.6	72-126	9.19	200	
Methyl Ethyl Ketone (2-Butanone)	118	5.0	"	100.0		118	45-128	1.16	200	
Propionitrile (Ethyl Cyanide)	21.7	5.0	"	20.00		109	70-130	1.91	200	
Methacrylonitrile	22.9	5.0	"	20.00		114	70-130	2.48	200	
Chloroform	19.4	1.0	"	20.00		96.8	76.1-135	10.2	200	
Bromochloromethane	19.6	1.0	"	20.00		98.0	73-126	5.61	200	
1,1,1-Trichloroethane	19.0	1.0	"	20.00		95.2	67.1-139	8.14	200	
1,1-Dichloropropene	22.5	1.0	"	20.00		112	70-130	11.7	200	
Carbon Tetrachloride	27.4	1.0	"	20.00		137	63.3-142	10.1	200	
Benzene	23.6	1.0	"	20.00		118	72-132	10.8	200	
1,2-Dichloroethane	19.4	1.0	"	20.00		97.0	72.9-139	4.05	200	
Trichloroethene	23.6	1.0	"	20.00		118	73.7-130	19.5	200	
1,2-Dichloropropane	23.7	1.0	"	20.00		119	71.3-137	6.93	200	
Bromodichloromethane	23.2	1.0	"	20.00		116	74.5-136	7.36	200	
Methyl Methacrylate	20.5	1.0	"	20.00		103	70-130	1.79	200	
Dibromomethane	19.8	1.0	"	20.00		99.2	66-125	5.33	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
LCS Dup (0928058-BSD1)				Prepared & Analyzed: 07/12/2009						
2-Chloroethyl Vinyl Ether	20.5	1.0	ug/L	20.00		103	42.5-161	4.94	200	
Methyl Isobutyl Ketone	109	5.0	"	100.0		109	41-143	1.79	200	
cis-1,3-Dichloropropene	21.0	1.0	"	20.00		105	74.6-124	0.0954	200	
Toluene	20.5	1.0	"	20.00		102	72.4-132	8.94	200	
trans-1,3-Dichloropropene	19.4	1.0	"	20.00		97.0	72.1-124	0.719	200	
Ethyl Methacrylate	22.8	1.0	"	20.00		114	70-130	4.48	200	
1,1,2-Trichloroethane	22.8	1.0	"	20.00		114	75.6-140	3.25	200	
Methyl Butyl Ketone (2-Hexanone)	116	5.0	"	100.0		116	43-147	0.155	200	
1,2-Dibromoethane	20.8	1.0	"	20.00		104	70-130	5.29	200	
Tetrachloroethene	34.7	1.0	"	20.00		173	69.9-125	61.5	200	L2
1,3-Dichloropropane	22.9	1.0	"	20.00		115	70-130	0.305	200	
Dibromochloromethane	24.2	1.0	"	20.00		121	69.9-134	2.47	200	
Chlorobenzene	22.2	1.0	"	20.00		111	67.3-133	5.88	200	
1,1,1,2-Tetrachloroethane	23.5	1.0	"	20.00		118	76-123	2.71	200	
Ethylbenzene	22.7	1.0	"	20.00		113	70.6-131	6.93	200	
m,p-Xylenes	44.6	2.0	"	40.00		112	71-123	8.70	200	
o-Xylene	22.5	1.0	"	20.00		112	80-119	8.78	200	
Styrene	23.0	1.0	"	20.00		115	79-117	8.23	200	
Bromoform	22.2	1.0	"	20.00		111	68.8-130	0.584	200	
Isopropylbenzene (Cumene)	21.7	1.0	"	20.00		109	70-130	5.58	200	
1,1,2,2-Tetrachloroethane	22.9	1.0	"	20.00		114	69.1-143	11.8	200	
1,2,3-Trichloropropane	23.6	1.0	"	20.00		118	70-130	1.80	200	
Bromobenzene	22.5	1.0	"	20.00		112	70-130	5.02	200	
Propylbenzene	22.7	1.0	"	20.00		114	70-130	6.88	200	
2-Chlorotoluene	22.4	1.0	"	20.00		112	70-130	6.55	200	
1,3,5-Trimethylbenzene	21.4	1.0	"	20.00		107	70-130	5.33	200	
4-Chlorotoluene	22.0	1.0	"	20.00		110	70-130	6.56	200	
tert-Butylbenzene	20.8	1.0	"	20.00		104	70-130	5.43	200	
1,2,4-Trimethylbenzene	21.8	1.0	"	20.00		109	70-130	6.20	200	
sec-Butylbenzene	21.4	1.0	"	20.00		107	70-130	7.57	200	
4-Isopropyltoluene	20.8	1.0	"	20.00		104	70-130	6.38	200	
1,3-Dichlorobenzene	21.3	1.0	"	20.00		106	74-125	2.67	200	
1,4-Dichlorobenzene	20.8	1.0	"	20.00		104	75-122	3.46	200	
trans-1,4-Dichloro-2-butene	20.1	1.0	"	20.00		101	70-130	10.1	200	
Butylbenzene	21.3	1.0	"	20.00		107	70-130	3.97	200	
1,2-Dichlorobenzene	21.5	1.0	"	20.00		107	74-124	2.84	200	
1,2-Dibromo-3-chloropropane	22.2	1.0	"	20.00		111	70-130	1.92	200	
1,2,4-Trichlorobenzene	19.4	1.0	"	20.00		97.2	45-134	0.723	200	
Hexachlorobutadiene	15.3	1.0	"	20.00		76.4	33-154	0.782	200	
Naphthalene	22.4	1.0	"	20.00		112	22-148	2.74	200	
1,2,3-Trichlorobenzene	18.1	1.0	"	20.00		90.6	70-130	0.276	200	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
LCS Dup (0928058-BSD1)				Prepared & Analyzed: 07/12/2009						
Surrogate: Dibromofluoromethane	*21.6*		*ug/L*	*25.00*		*86.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*84.8*	*80-120*			
Surrogate: Toluene-d8	*26.1*		*"*	*25.00*		*104*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.0*		*"*	*25.00*		*96.0*	*60-149*			
Matrix Spike (0928058-MS1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
Dichlorodifluoromethane	17.0	1.0	ug/L	20.00	ND	84.8	0-200			
Chloromethane	17.9	1.0	"	20.00	ND	89.5	0-200			
Vinyl chloride	19.6	1.0	"	20.00	ND	98.2	0-200			
Bromomethane	17.4	1.0	"	20.00	ND	87.0	0-200			
Chloroethane	20.1	1.0	"	20.00	ND	101	0-200			
Trichlorofluoromethane	19.3	1.0	"	20.00	ND	96.4	0-200			
Acrolein	23.5	5.0	"	100.0	ND	23.5	0-200			
1,1-Dichloroethene	14.6	1.0	"	20.00	ND	72.8	18.7-178			V6
Acetone	91.1	5.0	"	100.0	ND	91.1	0-200			
Iodomethane	12.6	1.0	"	20.00	ND	63.0	0-200			
Carbon disulfide	15.0	1.0	"	20.00	ND	74.8	0-200			
Allyl Chloride (3-Chloropropylene)	14.4	1.0	"	20.00	ND	72.0	0-200			
Acetonitrile	19.2	5.0	"	20.00	ND	95.8	0-200			
Methylene Chloride	13.2	1.0	"	20.00	ND	66.2	0-200			B
Methyl-tert-Butyl Ether	18.4	1.0	"	20.00	ND	91.9	0-200			
trans-1,2-Dichloroethene	15.1	1.0	"	20.00	ND	75.6	0-200			
Acrylonitrile	17.9	5.0	"	20.00	ND	89.6	0-200			
1,1-Dichloroethane	15.3	1.0	"	20.00	ND	76.5	0-200			
Chloroprene	16.6	1.0	"	20.00	ND	83.0	0-200			
Vinyl acetate	19.0	1.0	"	20.00	ND	94.8	0-200			
2,2-Dichloropropane	14.7	1.0	"	20.00	ND	73.4	0-200			
cis-1,2-Dichloroethene	14.1	1.0	"	20.00	ND	70.6	0-200			
Methyl Ethyl Ketone (2-Butanone)	97.4	5.0	"	100.0	ND	97.4	0-200			
Propionitrile (Ethyl Cyanide)	19.0	5.0	"	20.00	ND	95.0	0-200			
Methacrylonitrile	17.9	5.0	"	20.00	ND	89.4	0-200			
Chloroform	14.8	1.0	"	20.00	ND	74.1	0-200			
Bromochloromethane	15.2	1.0	"	20.00	ND	76.2	0-200			
1,1,1-Trichloroethane	15.5	1.0	"	20.00	ND	77.6	0-200			
1,1-Dichloropropene	18.3	1.0	"	20.00	ND	91.7	0-200			
Carbon Tetrachloride	22.8	1.0	"	20.00	ND	114	0-200			
Benzene	25.8	1.0	"	20.00	7.46	91.9	65.6-159			
1,2-Dichloroethane	15.2	1.0	"	20.00	ND	75.8	0-200			
Trichloroethene	17.1	1.0	"	20.00	ND	85.6	71-158			
1,2-Dichloropropane	18.2	1.0	"	20.00	ND	90.8	0-200			
Bromodichloromethane	17.7	1.0	"	20.00	ND	88.6	0-200			
Methyl Methacrylate	17.1	1.0	"	20.00	ND	85.3	0-200			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Matrix Spike (0928058-MS1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
Dibromomethane	15.5	1.0	ug/L	20.00	ND	77.7	0-200			
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200			U
Methyl Isobutyl Ketone	93.6	5.0	"	100.0	ND	93.6	0-200			
cis-1,3-Dichloropropene	16.2	1.0	"	20.00	ND	81.1	0-200			
Toluene	16.6	1.0	"	20.00	ND	83.2	60.8-171			
trans-1,3-Dichloropropene	15.2	1.0	"	20.00	ND	76.2	0-200			
Ethyl Methacrylate	17.8	1.0	"	20.00	ND	88.8	0-200			
1,1,2-Trichloroethane	18.1	1.0	"	20.00	ND	90.7	0-200			
Methyl Butyl Ketone (2-Hexanone)	95.4	5.0	"	100.0	ND	95.4	0-200			
1,2-Dibromoethane	16.0	1.0	"	20.00	ND	79.8	0-200			
Tetrachloroethene	15.7	1.0	"	20.00	ND	78.4	0-200			
1,3-Dichloropropane	18.5	1.0	"	20.00	ND	92.6	0-200			
Dibromochloromethane	19.3	1.0	"	20.00	ND	96.6	0-200			
Chlorobenzene	17.3	1.0	"	20.00	ND	86.4	76.5-147			
1,1,1,2-Tetrachloroethane	19.3	1.0	"	20.00	ND	96.6	0-200			
Ethylbenzene	18.1	1.0	"	20.00	ND	90.4	0-200			
m,p-Xylenes	34.6	2.0	"	40.00	ND	86.6	0-200			
o-Xylene	16.8	1.0	"	20.00	ND	84.0	0-200			
Styrene	17.1	1.0	"	20.00	ND	85.6	0-200			
Bromoform	18.0	1.0	"	20.00	ND	90.0	0-200			
Isopropylbenzene (Cumene)	17.4	1.0	"	20.00	ND	86.8	0-200			
1,1,2,2-Tetrachloroethane	20.1	1.0	"	20.00	ND	100	0-200			
1,2,3-Trichloropropane	19.2	1.0	"	20.00	ND	96.0	0-200			
Bromobenzene	17.4	1.0	"	20.00	ND	86.8	0-200			
Propylbenzene	18.1	1.0	"	20.00	ND	90.6	0-200			
2-Chlorotoluene	17.4	1.0	"	20.00	ND	86.8	0-200			
1,3,5-Trimethylbenzene	16.5	1.0	"	20.00	ND	82.6	0-200			
4-Chlorotoluene	16.9	1.0	"	20.00	ND	84.6	0-200			
tert-Butylbenzene	16.3	1.0	"	20.00	ND	81.7	0-200			
1,2,4-Trimethylbenzene	16.8	1.0	"	20.00	ND	83.8	0-200			
sec-Butylbenzene	17.3	1.0	"	20.00	ND	86.6	0-200			
4-Isopropyltoluene	17.0	1.0	"	20.00	ND	84.8	0-200			
1,3-Dichlorobenzene	16.7	1.0	"	20.00	ND	83.5	0-200			
1,4-Dichlorobenzene	16.0	1.0	"	20.00	ND	80.0	0-200			
trans-1,4-Dichloro-2-butene	17.0	1.0	"	20.00	ND	84.8	0-200			
Butylbenzene	17.3	1.0	"	20.00	ND	86.3	0-200			
1,2-Dichlorobenzene	16.7	1.0	"	20.00	ND	83.6	0-200			
1,2-Dibromo-3-chloropropane	16.8	1.0	"	20.00	ND	83.8	0-200			
1,2,4-Trichlorobenzene	14.3	1.0	"	20.00	ND	71.4	0-200			
Hexachlorobutadiene	12.6	1.0	"	20.00	ND	62.8	0-200			
Naphthalene	16.5	1.0	"	20.00	ND	82.4	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Matrix Spike (0928058-MS1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
1,2,3-Trichlorobenzene	13.6	1.0	ug/L	20.00	ND	68.1	0-200			
Surrogate: Dibromofluoromethane	*22.0*		"	*25.00*		*88.0*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.7*		"	*25.00*		*82.8*	*80-120*			
Surrogate: Toluene-d8	*27.2*		"	*25.00*		*109*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		"	*25.00*		*96.5*	*60-149*			
Matrix Spike Dup (0928058-MSD1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
Dichlorodifluoromethane	17.5	1.0	ug/L	20.00	ND	87.6	0-200	3.19	200	
Chloromethane	18.1	1.0	"	20.00	ND	90.7	0-200	1.33	200	
Vinyl chloride	20.3	1.0	"	20.00	ND	102	0-200	3.45	200	
Bromomethane	16.7	1.0	"	20.00	ND	83.7	0-200	3.81	200	
Chloroethane	20.3	1.0	"	20.00	ND	101	0-200	0.792	200	
Trichlorofluoromethane	19.0	1.0	"	20.00	ND	95.2	0-200	1.31	200	
Acrolein	24.9	5.0	"	100.0	ND	24.9	0-200	5.95	200	
1,1-Dichloroethene	14.3	1.0	"	20.00	ND	71.4	18.7-178	2.01	22.3	V6
Acetone	97.5	5.0	"	100.0	ND	97.5	0-200	6.73	200	
Iodomethane	13.2	1.0	"	20.00	ND	66.0	0-200	4.57	200	
Carbon disulfide	15.0	1.0	"	20.00	ND	74.9	0-200	0.0668	200	
Allyl Chloride (3-Chloropropylene)	14.7	1.0	"	20.00	ND	73.6	0-200	2.34	200	
Acetonitrile	20.2	5.0	"	20.00	ND	101	0-200	5.09	200	
Methylene Chloride	13.4	1.0	"	20.00	ND	67.2	0-200	1.35	200	B
Methyl-tert-Butyl Ether	18.5	1.0	"	20.00	ND	92.6	0-200	0.813	200	
trans-1,2-Dichloroethene	15.0	1.0	"	20.00	ND	75.1	0-200	0.664	200	
Acrylonitrile	18.4	5.0	"	20.00	ND	91.9	0-200	2.53	200	
1,1-Dichloroethane	15.4	1.0	"	20.00	ND	76.8	0-200	0.326	200	
Chloroprene	16.4	1.0	"	20.00	ND	82.2	0-200	0.908	200	
Vinyl acetate	18.9	1.0	"	20.00	ND	94.5	0-200	0.264	200	
2,2-Dichloropropane	14.6	1.0	"	20.00	ND	72.8	0-200	0.821	200	
cis-1,2-Dichloroethene	14.0	1.0	"	20.00	ND	70.0	0-200	0.853	200	
Methyl Ethyl Ketone (2-Butanone)	102	5.0	"	100.0	ND	102	0-200	5.11	200	
Propionitrile (Ethyl Cyanide)	19.3	5.0	"	20.00	ND	96.4	0-200	1.57	200	
Methacrylonitrile	18.9	5.0	"	20.00	ND	94.3	0-200	5.28	200	
Chloroform	14.9	1.0	"	20.00	ND	74.3	0-200	0.270	200	
Bromochloromethane	15.2	1.0	"	20.00	ND	76.2	0-200	0.0656	200	
1,1,1-Trichloroethane	15.3	1.0	"	20.00	ND	76.6	0-200	1.30	200	
1,1-Dichloropropene	17.7	1.0	"	20.00	ND	88.5	0-200	3.55	200	
Carbon Tetrachloride	22.6	1.0	"	20.00	ND	113	0-200	1.06	200	
Benzene	25.4	1.0	"	20.00	7.46	89.9	65.6-159	1.56	15.1	
1,2-Dichloroethane	15.2	1.0	"	20.00	ND	76.0	0-200	0.395	200	
Trichloroethene	16.8	1.0	"	20.00	ND	84.1	71-158	1.71	15.2	
1,2-Dichloropropane	18.1	1.0	"	20.00	ND	90.7	0-200	0.110	200	
Bromodichloromethane	17.6	1.0	"	20.00	ND	88.2	0-200	0.509	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Matrix Spike Dup (0928058-MSD1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
Methyl Methacrylate	17.1	1.0	ug/L	20.00	ND	85.5	0-200	0.234	200	
Dibromomethane	15.7	1.0	"	20.00	ND	78.7	0-200	1.28	200	
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200		200	U
Methyl Isobutyl Ketone	94.9	5.0	"	100.0	ND	94.9	0-200	1.32	200	
cis-1,3-Dichloropropene	16.3	1.0	"	20.00	ND	81.4	0-200	0.431	200	
Toluene	16.2	1.0	"	20.00	ND	81.2	60.8-171	2.43	17.1	
trans-1,3-Dichloropropene	15.3	1.0	"	20.00	ND	76.4	0-200	0.328	200	
Ethyl Methacrylate	18.0	1.0	"	20.00	ND	90.1	0-200	1.40	200	
1,1,2-Trichloroethane	18.2	1.0	"	20.00	ND	90.9	0-200	0.220	200	
Methyl Butyl Ketone (2-Hexanone)	99.9	5.0	"	100.0	ND	99.9	0-200	4.64	200	
1,2-Dibromoethane	16.3	1.0	"	20.00	ND	81.5	0-200	2.05	200	
Tetrachloroethene	15.7	1.0	"	20.00	ND	78.6	0-200	0.255	200	
1,3-Dichloropropane	18.6	1.0	"	20.00	ND	93.2	0-200	0.700	200	
Dibromochloromethane	19.2	1.0	"	20.00	ND	95.8	0-200	0.780	200	
Chlorobenzene	17.0	1.0	"	20.00	ND	85.2	76.5-147	1.34	13.6	
1,1,1,2-Tetrachloroethane	19.0	1.0	"	20.00	ND	95.2	0-200	1.41	200	
Ethylbenzene	17.8	1.0	"	20.00	ND	88.9	0-200	1.67	200	
m,p-Xylenes	34.7	2.0	"	40.00	ND	86.7	0-200	0.0865	200	
o-Xylene	16.9	1.0	"	20.00	ND	84.6	0-200	0.711	200	
Styrene	17.2	1.0	"	20.00	ND	86.0	0-200	0.408	200	
Bromoform	18.1	1.0	"	20.00	ND	90.7	0-200	0.830	200	
Isopropylbenzene (Cumene)	17.6	1.0	"	20.00	ND	88.0	0-200	1.37	200	
1,1,2,2-Tetrachloroethane	21.8	1.0	"	20.00	ND	109	0-200	8.13	200	
1,2,3-Trichloropropane	19.4	1.0	"	20.00	ND	97.2	0-200	1.19	200	
Bromobenzene	17.4	1.0	"	20.00	ND	87.0	0-200	0.345	200	
Propylbenzene	18.4	1.0	"	20.00	ND	92.0	0-200	1.53	200	
2-Chlorotoluene	17.7	1.0	"	20.00	ND	88.5	0-200	1.94	200	
1,3,5-Trimethylbenzene	16.8	1.0	"	20.00	ND	83.8	0-200	1.56	200	
4-Chlorotoluene	17.1	1.0	"	20.00	ND	85.4	0-200	1.00	200	
tert-Butylbenzene	16.6	1.0	"	20.00	ND	83.0	0-200	1.58	200	
1,2,4-Trimethylbenzene	17.1	1.0	"	20.00	ND	85.4	0-200	1.89	200	
sec-Butylbenzene	17.5	1.0	"	20.00	ND	87.6	0-200	1.03	200	
4-Isopropyltoluene	17.2	1.0	"	20.00	ND	86.0	0-200	1.46	200	
1,3-Dichlorobenzene	16.9	1.0	"	20.00	ND	84.4	0-200	1.07	200	
1,4-Dichlorobenzene	16.3	1.0	"	20.00	ND	81.6	0-200	1.98	200	
trans-1,4-Dichloro-2-butene	17.7	1.0	"	20.00	ND	88.6	0-200	4.27	200	
Butylbenzene	18.1	1.0	"	20.00	ND	90.6	0-200	4.81	200	
1,2-Dichlorobenzene	17.3	1.0	"	20.00	ND	86.3	0-200	3.24	200	
1,2-Dibromo-3-chloropropane	19.6	1.0	"	20.00	ND	98.0	0-200	15.7	200	
1,2,4-Trichlorobenzene	15.9	1.0	"	20.00	ND	79.6	0-200	10.9	200	
Hexachlorobutadiene	15.4	1.0	"	20.00	ND	77.0	0-200	20.3	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928058 - EPA 5030B										
Matrix Spike Dup (0928058-MSD1)	**Source: 09G0180-12**			Prepared & Analyzed: 07/11/2009						
Naphthalene	20.4	1.0	ug/L	20.00	ND	102	0-200	21.5	200	
1,2,3-Trichlorobenzene	16.4	1.0	"	20.00	ND	82.0	0-200	18.6	200	
Surrogate: Dibromofluoromethane	*21.6*		*"*	*25.00*		*86.4*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.1*		*"*	*25.00*		*84.3*	*80-120*			
Surrogate: Toluene-d8	*26.9*		*"*	*25.00*		*108*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*"*	*25.00*		*97.5*	*60-149*			
Batch 0928129 - EPA 5030B										
Blank (0928129-BLK1)				Prepared & Analyzed: 07/14/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	3.68	1.0	"							B1
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Blank (0928129-BLK1)				Prepared & Analyzed: 07/14/2009						
Trichloroethene	ND	1.0	ug/L							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

Project: Landfill
Project Number: Landfill
Project Manager: Russ Becker

Report: 09G0180
Reported: 09/25/2009 16:04

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Blank (0928129-BLK1)				Prepared & Analyzed: 07/14/2009						
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*22.1*		*"*	*25.00*		*88.5*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.5*		*"*	*25.00*		*86.0*	*80-120*			
Surrogate: Toluene-d8	*25.1*		*"*	*25.00*		*101*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*"*	*25.00*		*96.3*	*60-149*			
LCS (0928129-BS1)				Prepared & Analyzed: 07/14/2009						
Dichlorodifluoromethane	15.7	1.0	ug/L	20.00		78.4	27-127			
Chloromethane	18.3	1.0	"	20.00		91.3	62.5-141			
Vinyl chloride	18.9	1.0	"	20.00		94.3	65.3-143			
Bromomethane	15.0	1.0	"	20.00		74.8	56-180			
Chloroethane	19.4	1.0	"	20.00		97.2	62.3-161			
Trichlorofluoromethane	16.5	1.0	"	20.00		82.3	35-157			
Acrolein	33.2	5.0	"	100.0		33.2	26.6-169			
1,1-Dichloroethene	17.2	1.0	"	20.00		86.2	64.6-138			
Acetone	116	5.0	"	100.0		116	35-159			
Iodomethane	14.3	1.0	"	20.00		71.6	70-130			
Carbon disulfide	17.6	1.0	"	20.00		88.0	48-142			
Allyl Chloride (3-Chloropropylene)	19.5	1.0	"	20.00		97.6	70-130			
Acetonitrile	26.5	5.0	"	20.00		133	70-130			L2
Methylene Chloride	21.0	1.0	"	20.00		105	64.7-139			B
Methyl-tert-Butyl Ether	25.6	1.0	"	20.00		128	34-133			
trans-1,2-Dichloroethene	19.2	1.0	"	20.00		96.2	75.1-127			
Acrylonitrile	23.3	5.0	"	20.00		116	67.2-148			
1,1-Dichloroethane	20.8	1.0	"	20.00		104	72.2-135			
Chloroprene	20.9	1.0	"	20.00		105	70-130			
Vinyl acetate	25.8	1.0	"	20.00		129	70-154			
2,2-Dichloropropane	21.2	1.0	"	20.00		106	37-129			
cis-1,2-Dichloroethene	21.8	1.0	"	20.00		109	72-126			
Methyl Ethyl Ketone (2-Butanone)	130	5.0	"	100.0		130	45-128			L2
Propionitrile (Ethyl Cyanide)	23.6	5.0	"	20.00		118	70-130			
Methacrylonitrile	24.1	5.0	"	20.00		121	70-130			
Chloroform	19.8	1.0	"	20.00		99.0	76.1-135			
Bromochloromethane	20.7	1.0	"	20.00		104	73-126			
1,1,1-Trichloroethane	20.1	1.0	"	20.00		100	67.1-139			
1,1-Dichloropropene	22.7	1.0	"	20.00		114	70-130			
Carbon Tetrachloride	26.3	1.0	"	20.00		132	63.3-142			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
LCS (0928129-BS1)				Prepared & Analyzed: 07/14/2009						
Benzene	24.1	1.0	ug/L	20.00		121	72-132			
1,2-Dichloroethane	20.4	1.0	"	20.00		102	72.9-139			
Trichloroethene	22.4	1.0	"	20.00		112	73.7-130			
1,2-Dichloropropane	25.2	1.0	"	20.00		126	71.3-137			
Bromodichloromethane	24.6	1.0	"	20.00		123	74.5-136			
Methyl Methacrylate	22.1	1.0	"	20.00		111	70-130			
Dibromomethane	20.4	1.0	"	20.00		102	66-125			
2-Chloroethyl Vinyl Ether	21.2	1.0	"	20.00		106	42.5-161			
Methyl Isobutyl Ketone	113	5.0	"	100.0		113	41-143			
cis-1,3-Dichloropropene	23.2	1.0	"	20.00		116	74.6-124			
Toluene	20.7	1.0	"	20.00		104	72.4-132			
trans-1,3-Dichloropropene	21.1	1.0	"	20.00		105	72.1-124			
Ethyl Methacrylate	24.5	1.0	"	20.00		123	70-130			
1,1,2-Trichloroethane	23.2	1.0	"	20.00		116	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	127	5.0	"	100.0		127	43-147			
1,2-Dibromoethane	21.5	1.0	"	20.00		107	70-130			
Tetrachloroethene	19.6	1.0	"	20.00		97.8	69.9-125			
1,3-Dichloropropane	24.0	1.0	"	20.00		120	70-130			
Dibromochloromethane	24.6	1.0	"	20.00		123	69.9-134			
Chlorobenzene	22.6	1.0	"	20.00		113	67.3-133			
1,1,1,2-Tetrachloroethane	24.3	1.0	"	20.00		122	76-123			
Ethylbenzene	24.0	1.0	"	20.00		120	70.6-131			
m,p-Xylenes	46.9	2.0	"	40.00		117	71-123			
o-Xylene	24.1	1.0	"	20.00		120	80-119			L2
Styrene	24.2	1.0	"	20.00		121	79-117			L2
Bromoform	22.6	1.0	"	20.00		113	68.8-130			
Isopropylbenzene (Cumene)	22.5	1.0	"	20.00		113	70-130			
1,1,2,2-Tetrachloroethane	25.8	1.0	"	20.00		129	69.1-143			
1,2,3-Trichloropropane	23.5	1.0	"	20.00		117	70-130			
Bromobenzene	23.2	1.0	"	20.00		116	70-130			
Propylbenzene	23.6	1.0	"	20.00		118	70-130			
2-Chlorotoluene	23.2	1.0	"	20.00		116	70-130			
1,3,5-Trimethylbenzene	21.8	1.0	"	20.00		109	70-130			
4-Chlorotoluene	22.0	1.0	"	20.00		110	70-130			
tert-Butylbenzene	21.4	1.0	"	20.00		107	70-130			
1,2,4-Trimethylbenzene	22.0	1.0	"	20.00		110	70-130			
sec-Butylbenzene	21.9	1.0	"	20.00		110	70-130			
4-Isopropyltoluene	21.7	1.0	"	20.00		108	70-130			
1,3-Dichlorobenzene	22.0	1.0	"	20.00		110	74-125			
1,4-Dichlorobenzene	21.5	1.0	"	20.00		107	75-122			
trans-1,4-Dichloro-2-butene	22.1	1.0	"	20.00		111	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
LCS (0928129-BS1)				Prepared & Analyzed: 07/14/2009						
Butylbenzene	22.6	1.0	ug/L	20.00		113	70-130			
1,2-Dichlorobenzene	22.4	1.0	"	20.00		112	74-124			
1,2-Dibromo-3-chloropropane	22.9	1.0	"	20.00		114	70-130			
1,2,4-Trichlorobenzene	19.5	1.0	"	20.00		97.3	45-134			
Hexachlorobutadiene	16.0	1.0	"	20.00		79.8	33-154			
Naphthalene	21.5	1.0	"	20.00		107	22-148			
1,2,3-Trichlorobenzene	18.4	1.0	"	20.00		91.8	70-130			
Surrogate: Dibromofluoromethane	*21.7*		*"*	*25.00*		*86.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.6*		*"*	*25.00*		*82.3*	*80-120*			
Surrogate: Toluene-d8	*25.1*		*"*	*25.00*		*100*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.8*		*"*	*25.00*		*99.3*	*60-149*			
LCS Dup (0928129-BSD1)				Prepared & Analyzed: 07/15/2009						
Dichlorodifluoromethane	13.8	1.0	ug/L	20.00		68.9	27-127	12.9	200	
Chloromethane	17.2	1.0	"	20.00		86.1	62.5-141	5.86	200	
Vinyl chloride	17.3	1.0	"	20.00		86.4	65.3-143	8.69	200	
Bromomethane	14.6	1.0	"	20.00		73.2	56-180	2.30	200	
Chloroethane	18.1	1.0	"	20.00		90.6	62.3-161	7.03	200	
Trichlorofluoromethane	14.4	1.0	"	20.00		72.2	35-157	13.0	200	
Acrolein	30.2	5.0	"	100.0		30.2	26.6-169	9.30	200	
1,1-Dichloroethene	16.4	1.0	"	20.00		81.8	64.6-138	5.36	200	
Acetone	451	5.0	"	100.0		451	35-159	118	200	#
Iodomethane	14.8	1.0	"	20.00		74.1	70-130	3.50	200	
Carbon disulfide	16.2	1.0	"	20.00		80.8	48-142	8.59	200	
Allyl Chloride (3-Chloropropylene)	17.6	1.0	"	20.00		88.0	70-130	10.3	200	
Acetonitrile	24.6	5.0	"	20.00		123	70-130	7.55	200	
Methylene Chloride	20.6	1.0	"	20.00		103	64.7-139	1.78	200	B
Methyl-tert-Butyl Ether	25.0	1.0	"	20.00		125	34-133	2.17	200	
trans-1,2-Dichloroethene	18.1	1.0	"	20.00		90.6	75.1-127	6.10	200	
Acrylonitrile	23.3	5.0	"	20.00		116	67.2-148	0.0430	200	
1,1-Dichloroethane	19.6	1.0	"	20.00		97.8	72.2-135	6.19	200	
Chloroprene	19.8	1.0	"	20.00		98.8	70-130	5.60	200	
Vinyl acetate	11.2	1.0	"	20.00		56.2	70-154	78.6	200	#
2,2-Dichloropropane	13.2	1.0	"	20.00		66.0	37-129	46.5	200	
cis-1,2-Dichloroethene	19.8	1.0	"	20.00		98.8	72-126	9.95	200	
Methyl Ethyl Ketone (2-Butanone)	136	5.0	"	100.0		136	45-128	4.32	200	#
Propionitrile (Ethyl Cyanide)	23.2	5.0	"	20.00		116	70-130	1.97	200	
Methacrylonitrile	23.8	5.0	"	20.00		119	70-130	1.21	200	
Chloroform	19.0	1.0	"	20.00		95.1	76.1-135	4.02	200	
Bromochloromethane	19.8	1.0	"	20.00		99.1	73-126	4.39	200	
1,1,1-Trichloroethane	18.8	1.0	"	20.00		94.0	67.1-139	6.74	200	
1,1-Dichloropropene	21.0	1.0	"	20.00		105	70-130	7.86	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
LCS Dup (0928129-BSD1)				Prepared & Analyzed: 07/15/2009						
Carbon Tetrachloride	26.0	1.0	ug/L	20.00		130	63.3-142	1.38	200	
Benzene	22.0	1.0	"	20.00		110	72-132	9.19	200	
1,2-Dichloroethane	19.7	1.0	"	20.00		98.4	72.9-139	3.55	200	
Trichloroethene	23.0	1.0	"	20.00		115	73.7-130	2.82	200	
1,2-Dichloropropane	23.8	1.0	"	20.00		119	71.3-137	5.72	200	
Bromodichloromethane	23.2	1.0	"	20.00		116	74.5-136	5.95	200	
Methyl Methacrylate	24.6	1.0	"	20.00		123	70-130	10.5	200	
Dibromomethane	20.2	1.0	"	20.00		101	66-125	0.888	200	
2-Chloroethyl Vinyl Ether	21.6	1.0	"	20.00		108	42.5-161	1.87	200	
Methyl Isobutyl Ketone	122	5.0	"	100.0		122	41-143	7.01	200	
cis-1,3-Dichloropropene	21.3	1.0	"	20.00		106	74.6-124	8.86	200	
Toluene	20.2	1.0	"	20.00		101	72.4-132	2.34	200	
trans-1,3-Dichloropropene	19.9	1.0	"	20.00		99.3	72.1-124	6.01	200	
Ethyl Methacrylate	24.3	1.0	"	20.00		121	70-130	1.02	200	
1,1,2-Trichloroethane	23.2	1.0	"	20.00		116	75.6-140	0.259	200	
Methyl Butyl Ketone (2-Hexanone)	125	5.0	"	100.0		125	43-147	1.49	200	
1,2-Dibromoethane	21.0	1.0	"	20.00		105	70-130	2.07	200	
Tetrachloroethene	32.7	1.0	"	20.00		164	69.9-125	50.3	200	#
1,3-Dichloropropane	22.1	1.0	"	20.00		111	70-130	8.27	200	
Dibromochloromethane	23.0	1.0	"	20.00		115	69.9-134	6.51	200	
Chlorobenzene	20.2	1.0	"	20.00		101	67.3-133	11.1	200	
1,1,1,2-Tetrachloroethane	22.9	1.0	"	20.00		114	76-123	6.10	200	
Ethylbenzene	20.6	1.0	"	20.00		103	70.6-131	15.6	200	
m,p-Xylenes	40.4	2.0	"	40.00		101	71-123	14.9	200	
o-Xylene	20.9	1.0	"	20.00		105	80-119	14.1	200	
Styrene	21.0	1.0	"	20.00		105	79-117	14.1	200	
Bromoform	21.8	1.0	"	20.00		109	68.8-130	3.56	200	
Isopropylbenzene (Cumene)	20.2	1.0	"	20.00		101	70-130	10.8	200	
1,1,2,2-Tetrachloroethane	21.6	1.0	"	20.00		108	69.1-143	17.4	200	
1,2,3-Trichloropropane	23.8	1.0	"	20.00		119	70-130	1.52	200	
Bromobenzene	21.2	1.0	"	20.00		106	70-130	8.90	200	
Propylbenzene	20.9	1.0	"	20.00		104	70-130	12.2	200	
2-Chlorotoluene	20.9	1.0	"	20.00		105	70-130	10.1	200	
1,3,5-Trimethylbenzene	20.0	1.0	"	20.00		100	70-130	8.57	200	
4-Chlorotoluene	20.5	1.0	"	20.00		102	70-130	7.29	200	
tert-Butylbenzene	19.5	1.0	"	20.00		97.5	70-130	9.29	200	
1,2,4-Trimethylbenzene	20.4	1.0	"	20.00		102	70-130	7.54	200	
sec-Butylbenzene	20.1	1.0	"	20.00		100	70-130	8.81	200	
4-Isopropyltoluene	20.9	1.0	"	20.00		104	70-130	3.90	200	
1,3-Dichlorobenzene	20.2	1.0	"	20.00		101	74-125	8.61	200	
1,4-Dichlorobenzene	19.5	1.0	"	20.00		97.6	75-122	9.42	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
LCS Dup (0928129-BSD1)				Prepared & Analyzed: 07/15/2009						
trans-1,4-Dichloro-2-butene	19.6	1.0	ug/L	20.00		97.8	70-130	12.3	200	
Butylbenzene	19.9	1.0	"	20.00		99.5	70-130	12.6	200	
1,2-Dichlorobenzene	20.4	1.0	"	20.00		102	74-124	9.37	200	
1,2-Dibromo-3-chloropropane	22.8	1.0	"	20.00		114	70-130	0.482	200	
1,2,4-Trichlorobenzene	19.7	1.0	"	20.00		98.3	45-134	1.02	200	
Hexachlorobutadiene	14.7	1.0	"	20.00		73.4	33-154	8.42	200	
Naphthalene	23.3	1.0	"	20.00		116	22-148	8.18	200	
1,2,3-Trichlorobenzene	18.4	1.0	"	20.00		91.8	70-130	0.00	200	
Surrogate: Dibromofluoromethane	*23.1*		"	*25.00*		*92.5*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.6*		"	*25.00*		*90.4*	*80-120*			
Surrogate: Toluene-d8	*25.9*		"	*25.00*		*103*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*45.8*		"	*25.00*		*183*	*60-149*			*S1*
Matrix Spike (0928129-MS1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
Dichlorodifluoromethane	18.1	1.0	ug/L	20.00	ND	90.4	0-200			
Chloromethane	19.0	1.0	"	20.00	ND	95.0	0-200			
Vinyl chloride	21.4	1.0	"	20.00	ND	107	0-200			
Bromomethane	16.0	1.0	"	20.00	ND	80.0	0-200			
Chloroethane	20.8	1.0	"	20.00	ND	104	0-200			
Trichlorofluoromethane	19.2	1.0	"	20.00	ND	96.2	0-200			
Acrolein	28.0	5.0	"	100.0	ND	28.0	0-200			
1,1-Dichloroethene	18.1	1.0	"	20.00	ND	90.4	18.7-178			
Acetone	107	5.0	"	100.0	ND	107	0-200			
Iodomethane	13.9	1.0	"	20.00	ND	69.4	0-200			
Carbon disulfide	18.1	1.0	"	20.00	ND	90.4	0-200			
Allyl Chloride (3-Chloropropylene)	18.6	1.0	"	20.00	ND	92.8	0-200			
Acetonitrile	23.5	5.0	"	20.00	ND	118	0-200			
Methylene Chloride	16.9	1.0	"	20.00	0.450	82.1	0-200			B
Methyl-tert-Butyl Ether	22.4	1.0	"	20.00	ND	112	0-200			
trans-1,2-Dichloroethene	18.8	1.0	"	20.00	ND	94.1	0-200			
Acrylonitrile	21.4	5.0	"	20.00	ND	107	0-200			
1,1-Dichloroethane	19.4	1.0	"	20.00	ND	97.2	0-200			
Chloroprene	21.2	1.0	"	20.00	ND	106	0-200			
Vinyl acetate	23.8	1.0	"	20.00	ND	119	0-200			
2,2-Dichloropropane	19.7	1.0	"	20.00	ND	98.3	0-200			
cis-1,2-Dichloroethene	20.5	1.0	"	20.00	ND	102	0-200			
Methyl Ethyl Ketone (2-Butanone)	119	5.0	"	100.0	ND	119	0-200			
Propionitrile (Ethyl Cyanide)	22.1	5.0	"	20.00	ND	111	0-200			
Methacrylonitrile	22.7	5.0	"	20.00	ND	114	0-200			
Chloroform	18.9	1.0	"	20.00	ND	94.6	0-200			
Bromochloromethane	19.2	1.0	"	20.00	ND	96.0	0-200			
1,1,1-Trichloroethane	19.5	1.0	"	20.00	ND	97.7	0-200			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Matrix Spike (0928129-MS1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
1,1-Dichloropropene	23.2	1.0	ug/L	20.00	ND	116	0-200			
Carbon Tetrachloride	28.0	1.0	"	20.00	ND	140	0-200			
Benzene	22.7	1.0	"	20.00	ND	114	65.6-159			
1,2-Dichloroethane	19.0	1.0	"	20.00	ND	94.8	0-200			
Trichloroethene	21.4	1.0	"	20.00	ND	107	71-158			
1,2-Dichloropropane	22.6	1.0	"	20.00	ND	113	0-200			
Bromodichloromethane	22.4	1.0	"	20.00	ND	112	0-200			
Methyl Methacrylate	20.3	1.0	"	20.00	ND	101	0-200			
Dibromomethane	18.5	1.0	"	20.00	ND	92.6	0-200			
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200			U
Methyl Isobutyl Ketone	108	5.0	"	100.0	ND	108	0-200			
cis-1,3-Dichloropropene	20.7	1.0	"	20.00	ND	104	0-200			
Toluene	20.5	1.0	"	20.00	ND	103	60.8-171			
trans-1,3-Dichloropropene	18.8	1.0	"	20.00	ND	94.2	0-200			
Ethyl Methacrylate	21.4	1.0	"	20.00	ND	107	0-200			
1,1,2-Trichloroethane	21.8	1.0	"	20.00	ND	109	0-200			
Methyl Butyl Ketone (2-Hexanone)	115	5.0	"	100.0	ND	115	0-200			
1,2-Dibromoethane	19.4	1.0	"	20.00	ND	97.0	0-200			
Tetrachloroethene	18.9	1.0	"	20.00	ND	94.7	0-200			
1,3-Dichloropropane	21.5	1.0	"	20.00	ND	108	0-200			
Dibromochloromethane	22.6	1.0	"	20.00	ND	113	0-200			
Chlorobenzene	20.8	1.0	"	20.00	ND	104	76.5-147			
1,1,1,2-Tetrachloroethane	23.1	1.0	"	20.00	ND	116	0-200			
Ethylbenzene	22.4	1.0	"	20.00	ND	112	0-200			
m,p-Xylenes	43.4	2.0	"	40.00	ND	109	0-200			
o-Xylene	21.4	1.0	"	20.00	ND	107	0-200			
Styrene	21.7	1.0	"	20.00	ND	109	0-200			
Bromoform	20.9	1.0	"	20.00	ND	104	0-200			
Isopropylbenzene (Cumene)	21.3	1.0	"	20.00	ND	106	0-200			
1,1,2,2-Tetrachloroethane	24.2	1.0	"	20.00	ND	121	0-200			
1,2,3-Trichloropropane	21.7	1.0	"	20.00	ND	109	0-200			
Bromobenzene	20.9	1.0	"	20.00	ND	105	0-200			
Propylbenzene	22.4	1.0	"	20.00	ND	112	0-200			
2-Chlorotoluene	21.3	1.0	"	20.00	ND	106	0-200			
1,3,5-Trimethylbenzene	20.2	1.0	"	20.00	ND	101	0-200			
4-Chlorotoluene	20.6	1.0	"	20.00	ND	103	0-200			
tert-Butylbenzene	20.0	1.0	"	20.00	ND	100	0-200			
1,2,4-Trimethylbenzene	20.3	1.0	"	20.00	ND	101	0-200			
sec-Butylbenzene	20.9	1.0	"	20.00	ND	105	0-200			
4-Isopropyltoluene	20.0	1.0	"	20.00	ND	100	0-200			
1,3-Dichlorobenzene	20.2	1.0	"	20.00	ND	101	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Matrix Spike (0928129-MS1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
1,4-Dichlorobenzene	19.5	1.0	ug/L	20.00	ND	97.4	0-200			
trans-1,4-Dichloro-2-butene	21.2	1.0	"	20.00	ND	106	0-200			
Butylbenzene	21.4	1.0	"	20.00	ND	107	0-200			
1,2-Dichlorobenzene	19.9	1.0	"	20.00	ND	99.6	0-200			
1,2-Dibromo-3-chloropropane	20.1	1.0	"	20.00	ND	100	0-200			
1,2,4-Trichlorobenzene	17.5	1.0	"	20.00	ND	87.7	0-200			
Hexachlorobutadiene	15.4	1.0	"	20.00	ND	77.1	0-200			
Naphthalene	20.4	1.0	"	20.00	ND	102	0-200			
1,2,3-Trichlorobenzene	16.4	1.0	"	20.00	ND	82.1	0-200			
Surrogate: Dibromofluoromethane	*22.6*		*"*	*25.00*		*90.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.9*		*"*	*25.00*		*91.6*	*80-120*			
Surrogate: Toluene-d8	*26.9*		*"*	*25.00*		*108*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.7*		*"*	*25.00*		*94.9*	*60-149*			
Matrix Spike Dup (0928129-MSD1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
Dichlorodifluoromethane	19.2	1.0	ug/L	20.00	ND	96.2	0-200	6.16	200	
Chloromethane	19.8	1.0	"	20.00	ND	99.0	0-200	4.02	200	
Vinyl chloride	22.8	1.0	"	20.00	ND	114	0-200	6.33	200	
Bromomethane	17.3	1.0	"	20.00	ND	86.7	0-200	8.04	200	
Chloroethane	21.9	1.0	"	20.00	ND	109	0-200	5.30	200	
Trichlorofluoromethane	18.6	1.0	"	20.00	ND	93.2	0-200	3.12	200	
Acrolein	30.0	5.0	"	100.0	ND	30.0	0-200	6.79	200	
1,1-Dichloroethene	18.2	1.0	"	20.00	ND	90.9	18.7-178	0.607	22.3	
Acetone	112	5.0	"	100.0	ND	112	0-200	4.70	200	
Iodomethane	15.4	1.0	"	20.00	ND	77.0	0-200	10.4	200	
Carbon disulfide	18.3	1.0	"	20.00	ND	91.4	0-200	1.16	200	
Allyl Chloride (3-Chloropropylene)	18.0	1.0	"	20.00	ND	90.0	0-200	3.01	200	
Acetonitrile	24.3	5.0	"	20.00	ND	121	0-200	3.14	200	
Methylene Chloride	17.0	1.0	"	20.00	0.450	82.9	0-200	0.944	200	B
Methyl-tert-Butyl Ether	22.6	1.0	"	20.00	ND	113	0-200	1.02	200	
trans-1,2-Dichloroethene	19.2	1.0	"	20.00	ND	95.9	0-200	1.89	200	
Acrylonitrile	22.0	5.0	"	20.00	ND	110	0-200	2.68	200	
1,1-Dichloroethane	19.8	1.0	"	20.00	ND	99.2	0-200	2.04	200	
Chloroprene	21.5	1.0	"	20.00	ND	107	0-200	1.12	200	
Vinyl acetate	24.1	1.0	"	20.00	ND	120	0-200	1.25	200	
2,2-Dichloropropane	19.8	1.0	"	20.00	ND	99.2	0-200	0.911	200	
cis-1,2-Dichloroethene	20.8	1.0	"	20.00	ND	104	0-200	1.55	200	
Methyl Ethyl Ketone (2-Butanone)	122	5.0	"	100.0	ND	122	0-200	1.96	200	
Propionitrile (Ethyl Cyanide)	22.5	5.0	"	20.00	ND	113	0-200	1.70	200	
Methacrylonitrile	22.8	5.0	"	20.00	ND	114	0-200	0.132	200	
Chloroform	19.4	1.0	"	20.00	ND	97.2	0-200	2.71	200	
Bromochloromethane	19.9	1.0	"	20.00	ND	99.4	0-200	3.38	200	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Matrix Spike Dup (0928129-MSD1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
1,1,1-Trichloroethane	19.9	1.0	ug/L	20.00	ND	99.4	0-200	1.78	200	
1,1-Dichloropropene	23.4	1.0	"	20.00	ND	117	0-200	0.987	200	
Carbon Tetrachloride	28.8	1.0	"	20.00	ND	144	0-200	2.75	200	
Benzene	23.2	1.0	"	20.00	ND	116	65.6-159	2.09	15.1	
1,2-Dichloroethane	19.4	1.0	"	20.00	ND	96.8	0-200	2.09	200	
Trichloroethene	22.0	1.0	"	20.00	ND	110	71-158	2.85	15.2	
1,2-Dichloropropane	23.3	1.0	"	20.00	ND	116	0-200	2.96	200	
Bromodichloromethane	22.7	1.0	"	20.00	ND	113	0-200	1.29	200	
Methyl Methacrylate	20.9	1.0	"	20.00	ND	105	0-200	3.20	200	
Dibromomethane	18.8	1.0	"	20.00	ND	94.0	0-200	1.50	200	
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200		200	U
Methyl Isobutyl Ketone	110	5.0	"	100.0	ND	110	0-200	2.25	200	
cis-1,3-Dichloropropene	21.0	1.0	"	20.00	ND	105	0-200	1.10	200	
Toluene	20.8	1.0	"	20.00	ND	104	60.8-171	1.16	17.1	
trans-1,3-Dichloropropene	19.5	1.0	"	20.00	ND	97.6	0-200	3.60	200	
Ethyl Methacrylate	21.7	1.0	"	20.00	ND	109	0-200	1.72	200	
1,1,2-Trichloroethane	21.8	1.0	"	20.00	ND	109	0-200	0.229	200	
Methyl Butyl Ketone (2-Hexanone)	116	5.0	"	100.0	ND	116	0-200	1.12	200	
1,2-Dibromoethane	20.0	1.0	"	20.00	ND	100	0-200	2.99	200	
Tetrachloroethene	18.6	1.0	"	20.00	ND	93.0	0-200	1.81	200	
1,3-Dichloropropane	21.6	1.0	"	20.00	ND	108	0-200	0.324	200	
Dibromochloromethane	22.1	1.0	"	20.00	ND	110	0-200	2.11	200	
Chlorobenzene	21.0	1.0	"	20.00	ND	105	76.5-147	1.00	13.6	
1,1,1,2-Tetrachloroethane	22.2	1.0	"	20.00	ND	111	0-200	3.97	200	
Ethylbenzene	21.9	1.0	"	20.00	ND	110	0-200	2.44	200	
m,p-Xylenes	42.0	2.0	"	40.00	ND	105	0-200	3.42	200	
o-Xylene	20.8	1.0	"	20.00	ND	104	0-200	2.84	200	
Styrene	21.3	1.0	"	20.00	ND	106	0-200	2.09	200	
Bromoform	20.6	1.0	"	20.00	ND	103	0-200	1.45	200	
Isopropylbenzene (Cumene)	20.6	1.0	"	20.00	ND	103	0-200	3.29	200	
1,1,2,2-Tetrachloroethane	24.1	1.0	"	20.00	ND	120	0-200	0.456	200	
1,2,3-Trichloropropane	21.8	1.0	"	20.00	ND	109	0-200	0.413	200	
Bromobenzene	20.5	1.0	"	20.00	ND	102	0-200	2.22	200	
Propylbenzene	22.2	1.0	"	20.00	ND	111	0-200	1.08	200	
2-Chlorotoluene	20.8	1.0	"	20.00	ND	104	0-200	2.28	200	
1,3,5-Trimethylbenzene	19.9	1.0	"	20.00	ND	99.6	0-200	1.30	200	
4-Chlorotoluene	19.9	1.0	"	20.00	ND	99.6	0-200	3.16	200	
tert-Butylbenzene	19.7	1.0	"	20.00	ND	98.4	0-200	1.61	200	
1,2,4-Trimethylbenzene	20.1	1.0	"	20.00	ND	101	0-200	0.594	200	
sec-Butylbenzene	20.8	1.0	"	20.00	ND	104	0-200	0.479	200	
4-Isopropyltoluene	20.1	1.0	"	20.00	ND	101	0-200	0.548	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928129 - EPA 5030B										
Matrix Spike Dup (0928129-MSD1)	**Source: 09G0180-20**			Prepared & Analyzed: 07/14/2009						
1,3-Dichlorobenzene	19.9	1.0	ug/L	20.00	ND	99.6	0-200	1.59	200	
1,4-Dichlorobenzene	19.4	1.0	"	20.00	ND	96.8	0-200	0.721	200	
trans-1,4-Dichloro-2-butene	21.0	1.0	"	20.00	ND	105	0-200	0.902	200	
Butylbenzene	22.0	1.0	"	20.00	ND	110	0-200	3.00	200	
1,2-Dichlorobenzene	19.8	1.0	"	20.00	ND	99.2	0-200	0.453	200	
1,2-Dibromo-3-chloropropane	21.4	1.0	"	20.00	ND	107	0-200	6.56	200	
1,2,4-Trichlorobenzene	18.6	1.0	"	20.00	ND	92.9	0-200	5.76	200	
Hexachlorobutadiene	17.1	1.0	"	20.00	ND	85.7	0-200	10.6	200	
Naphthalene	23.7	1.0	"	20.00	ND	118	0-200	15.0	200	
1,2,3-Trichlorobenzene	18.3	1.0	"	20.00	ND	91.6	0-200	11.0	200	
Surrogate: Dibromofluoromethane	*23.0*		*"*	*25.00*		*92.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*23.0*		*"*	*25.00*		*92.1*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*"*	*25.00*		*105*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*22.5*		*"*	*25.00*		*90.1*	*60-149*			
Batch 0929051 - EPA 5030B										
Blank (0929051-BLK1)				Prepared & Analyzed: 07/16/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	3.64	1.0	"							B1
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Blank (0929051-BLK1)				Prepared & Analyzed: 07/16/2009						
Methacrylonitrile	ND	5.0	ug/L							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Blank (0929051-BLK1)				Prepared & Analyzed: 07/16/2009						
1,2,4-Trimethylbenzene	ND	1.0	ug/L							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*23.2*		*"*	*25.00*		*92.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.6*		*"*	*25.00*		*90.3*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*"*	*25.00*		*106*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*"*	*25.00*		*97.7*	*60-149*			
LCS (0929051-BS1)				Prepared & Analyzed: 07/16/2009						
Dichlorodifluoromethane	15.4	1.0	ug/L	20.00		77.0	27-127			
Chloromethane	18.1	1.0	"	20.00		90.3	62.5-141			
Vinyl chloride	18.3	1.0	"	20.00		91.6	65.3-143			
Bromomethane	16.0	1.0	"	20.00		80.2	56-180			
Chloroethane	18.8	1.0	"	20.00		93.8	62.3-161			
Trichlorofluoromethane	16.7	1.0	"	20.00		83.4	35-157			
Acrolein	197	5.0	"	100.0		197	26.6-169			L2
1,1-Dichloroethene	17.4	1.0	"	20.00		87.0	64.6-138			
Acetone	99.5	5.0	"	100.0		99.5	35-159			
Iodomethane	14.5	1.0	"	20.00		72.6	70-130			
Carbon disulfide	18.6	1.0	"	20.00		93.0	48-142			
Allyl Chloride (3-Chloropropylene)	17.9	1.0	"	20.00		89.7	70-130			
Acetonitrile	16.1	5.0	"	20.00		80.3	70-130			
Methylene Chloride	18.7	1.0	"	20.00		93.4	64.7-139			B
Methyl-tert-Butyl Ether	22.7	1.0	"	20.00		114	34-133			
trans-1,2-Dichloroethene	17.8	1.0	"	20.00		88.8	75.1-127			
Acrylonitrile	20.0	5.0	"	20.00		99.8	67.2-148			
1,1-Dichloroethane	18.3	1.0	"	20.00		91.6	72.2-135			
Chloroprene	19.0	1.0	"	20.00		95.0	70-130			
Vinyl acetate	24.3	1.0	"	20.00		122	70-154			
2,2-Dichloropropane	18.9	1.0	"	20.00		94.5	37-129			
cis-1,2-Dichloroethene	16.3	1.0	"	20.00		81.6	72-126			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
LCS (0929051-BS1)				Prepared & Analyzed: 07/16/2009						
Methyl Ethyl Ketone (2-Butanone)	108	5.0	ug/L	100.0		108	45-128			
Propionitrile (Ethyl Cyanide)	20.9	5.0	"	20.00		104	70-130			
Methacrylonitrile	21.2	5.0	"	20.00		106	70-130			
Chloroform	17.1	1.0	"	20.00		85.7	76.1-135			
Bromochloromethane	17.9	1.0	"	20.00		89.4	73-126			
1,1,1-Trichloroethane	17.8	1.0	"	20.00		89.1	67.1-139			
1,1-Dichloropropene	20.6	1.0	"	20.00		103	70-130			
Carbon Tetrachloride	24.8	1.0	"	20.00		124	63.3-142			
Benzene	21.1	1.0	"	20.00		106	72-132			
1,2-Dichloroethane	17.3	1.0	"	20.00		86.5	72.9-139			
Trichloroethene	19.5	1.0	"	20.00		97.6	73.7-130			
1,2-Dichloropropane	21.2	1.0	"	20.00		106	71.3-137			
Bromodichloromethane	20.5	1.0	"	20.00		102	74.5-136			
Methyl Methacrylate	19.5	1.0	"	20.00		97.6	70-130			
Dibromomethane	18.1	1.0	"	20.00		90.4	66-125			
2-Chloroethyl Vinyl Ether	19.0	1.0	"	20.00		94.9	42.5-161			
Methyl Isobutyl Ketone	98.6	5.0	"	100.0		98.6	41-143			
cis-1,3-Dichloropropene	19.8	1.0	"	20.00		98.8	74.6-124			
Toluene	18.8	1.0	"	20.00		93.8	72.4-132			
trans-1,3-Dichloropropene	18.4	1.0	"	20.00		91.8	72.1-124			
Ethyl Methacrylate	20.4	1.0	"	20.00		102	70-130			
1,1,2-Trichloroethane	20.1	1.0	"	20.00		101	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	105	5.0	"	100.0		105	43-147			
1,2-Dibromoethane	18.0	1.0	"	20.00		90.2	70-130			
Tetrachloroethene	17.7	1.0	"	20.00		88.4	69.9-125			
1,3-Dichloropropane	21.4	1.0	"	20.00		107	70-130			
Dibromochloromethane	21.9	1.0	"	20.00		109	69.9-134			
Chlorobenzene	20.3	1.0	"	20.00		102	67.3-133			
1,1,1,2-Tetrachloroethane	22.0	1.0	"	20.00		110	76-123			
Ethylbenzene	20.9	1.0	"	20.00		105	70.6-131			
m,p-Xylenes	40.8	2.0	"	40.00		102	71-123			
o-Xylene	20.6	1.0	"	20.00		103	80-119			
Styrene	21.2	1.0	"	20.00		106	79-117			
Bromoform	20.5	1.0	"	20.00		102	68.8-130			
Isopropylbenzene (Cumene)	20.2	1.0	"	20.00		101	70-130			
1,1,2,2-Tetrachloroethane	23.7	1.0	"	20.00		119	69.1-143			
1,2,3-Trichloropropane	21.2	1.0	"	20.00		106	70-130			
Bromobenzene	21.0	1.0	"	20.00		105	70-130			
Propylbenzene	21.2	1.0	"	20.00		106	70-130			
2-Chlorotoluene	20.8	1.0	"	20.00		104	70-130			
1,3,5-Trimethylbenzene	20.0	1.0	"	20.00		99.8	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
LCS (0929051-BS1)				Prepared & Analyzed: 07/16/2009						
4-Chlorotoluene	20.3	1.0	ug/L	20.00		101	70-130			
tert-Butylbenzene	19.7	1.0	"	20.00		98.7	70-130			
1,2,4-Trimethylbenzene	20.3	1.0	"	20.00		101	70-130			
sec-Butylbenzene	20.2	1.0	"	20.00		101	70-130			
4-Isopropyltoluene	19.8	1.0	"	20.00		99.1	70-130			
1,3-Dichlorobenzene	20.1	1.0	"	20.00		100	74-125			
1,4-Dichlorobenzene	19.7	1.0	"	20.00		98.4	75-122			
trans-1,4-Dichloro-2-butene	20.6	1.0	"	20.00		103	70-130			
Butylbenzene	21.2	1.0	"	20.00		106	70-130			
1,2-Dichlorobenzene	20.2	1.0	"	20.00		101	74-124			
1,2-Dibromo-3-chloropropane	20.1	1.0	"	20.00		100	70-130			
1,2,4-Trichlorobenzene	18.8	1.0	"	20.00		94.2	45-134			
Hexachlorobutadiene	15.5	1.0	"	20.00		77.4	33-154			
Naphthalene	21.5	1.0	"	20.00		107	22-148			
1,2,3-Trichlorobenzene	17.7	1.0	"	20.00		88.6	70-130			
Surrogate: Dibromofluoromethane	*21.8*		*"*	*25.00*		*87.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: Toluene-d8	*27.3*		*"*	*25.00*		*109*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*"*	*25.00*		*96.7*	*60-149*			
LCS Dup (0929051-BSD1)				Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	13.2	1.0	ug/L	20.00		66.0	27-127	15.4	200	
Chloromethane	15.5	1.0	"	20.00		77.3	62.5-141	15.5	200	
Vinyl chloride	16.1	1.0	"	20.00		80.4	65.3-143	12.9	200	
Bromomethane	7.65	1.0	"	20.00		38.2	56-180	70.8	200	#
Chloroethane	17.1	1.0	"	20.00		85.3	62.3-161	9.44	200	
Trichlorofluoromethane	14.7	1.0	"	20.00		73.3	35-157	13.0	200	
Acrolein	154	5.0	"	100.0		154	26.6-169	24.5	200	
1,1-Dichloroethene	15.4	1.0	"	20.00		76.8	64.6-138	12.5	200	
Acetone	99.7	5.0	"	100.0		99.7	35-159	0.120	200	
Iodomethane	9.34	1.0	"	20.00		46.7	70-130	43.4	200	#
Carbon disulfide	17.9	1.0	"	20.00		89.6	48-142	3.73	200	
Allyl Chloride (3-Chloropropylene)	15.8	1.0	"	20.00		79.1	70-130	12.6	200	
Acetonitrile	15.6	5.0	"	20.00		78.0	70-130	2.97	200	
Methylene Chloride	18.2	1.0	"	20.00		90.8	64.7-139	2.77	200	B
Methyl-tert-Butyl Ether	20.5	1.0	"	20.00		103	34-133	10.1	200	
trans-1,2-Dichloroethene	15.7	1.0	"	20.00		78.6	75.1-127	12.2	200	
Acrylonitrile	20.2	5.0	"	20.00		101	67.2-148	1.29	200	
1,1-Dichloroethane	16.8	1.0	"	20.00		83.8	72.2-135	8.90	200	
Chloroprene	16.4	1.0	"	20.00		81.8	70-130	14.9	200	
Vinyl acetate	12.6	1.0	"	20.00		63.2	70-154	63.2	200	#
2,2-Dichloropropane	11.8	1.0	"	20.00		58.8	37-129	46.7	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
LCS Dup (0929051-BSD1)				Prepared & Analyzed: 07/17/2009						
cis-1,2-Dichloroethene	17.0	1.0	ug/L	20.00		85.0	72-126	4.20	200	
Methyl Ethyl Ketone (2-Butanone)	105	5.0	"	100.0		105	45-128	2.17	200	
Propionitrile (Ethyl Cyanide)	20.2	5.0	"	20.00		101	70-130	3.41	200	
Methacrylonitrile	20.6	5.0	"	20.00		103	70-130	2.63	200	
Chloroform	16.3	1.0	"	20.00		81.4	76.1-135	5.09	200	
Bromochloromethane	17.4	1.0	"	20.00		86.9	73-126	2.84	200	
1,1,1-Trichloroethane	15.8	1.0	"	20.00		79.2	67.1-139	11.8	200	
1,1-Dichloropropene	18.2	1.0	"	20.00		91.2	70-130	12.0	200	
Carbon Tetrachloride	22.7	1.0	"	20.00		114	63.3-142	8.51	200	
Benzene	19.4	1.0	"	20.00		97.2	72-132	8.43	200	
1,2-Dichloroethane	17.0	1.0	"	20.00		84.8	72.9-139	1.93	200	
Trichloroethene	19.1	1.0	"	20.00		95.6	73.7-130	2.12	200	
1,2-Dichloropropane	19.8	1.0	"	20.00		98.8	71.3-137	7.22	200	
Bromodichloromethane	19.6	1.0	"	20.00		98.2	74.5-136	4.29	200	
Methyl Methacrylate	19.0	1.0	"	20.00		95.0	70-130	2.70	200	
Dibromomethane	17.0	1.0	"	20.00		85.1	66-125	5.98	200	
2-Chloroethyl Vinyl Ether	17.8	1.0	"	20.00		89.2	42.5-161	6.14	200	
Methyl Isobutyl Ketone	102	5.0	"	100.0		102	41-143	3.07	200	
cis-1,3-Dichloropropene	17.4	1.0	"	20.00		87.0	74.6-124	12.8	200	
Toluene	17.2	1.0	"	20.00		85.8	72.4-132	8.85	200	
trans-1,3-Dichloropropene	16.5	1.0	"	20.00		82.6	72.1-124	10.6	200	
Ethyl Methacrylate	20.3	1.0	"	20.00		102	70-130	0.295	200	
1,1,2-Trichloroethane	20.0	1.0	"	20.00		100	75.6-140	0.498	200	
Methyl Butyl Ketone (2-Hexanone)	107	5.0	"	100.0		107	43-147	2.26	200	
1,2-Dibromoethane	18.0	1.0	"	20.00		90.1	70-130	0.111	200	
Tetrachloroethene	29.8	1.0	"	20.00		149	69.9-125	51.2	200	#
1,3-Dichloropropane	20.9	1.0	"	20.00		104	70-130	2.55	200	
Dibromochloromethane	21.1	1.0	"	20.00		106	69.9-134	3.53	200	
Chlorobenzene	19.0	1.0	"	20.00		95.2	67.3-133	6.56	200	
1,1,1,2-Tetrachloroethane	20.6	1.0	"	20.00		103	76-123	6.38	200	
Ethylbenzene	19.2	1.0	"	20.00		96.1	70.6-131	8.52	200	
m,p-Xylenes	37.4	2.0	"	40.00		93.6	71-123	8.52	200	
o-Xylene	18.9	1.0	"	20.00		94.7	80-119	8.49	200	
Styrene	19.8	1.0	"	20.00		99.2	79-117	6.72	200	
Bromoform	20.3	1.0	"	20.00		101	68.8-130	0.933	200	
Isopropylbenzene (Cumene)	18.7	1.0	"	20.00		93.6	70-130	7.76	200	
1,1,2,2-Tetrachloroethane	21.4	1.0	"	20.00		107	69.1-143	10.5	200	
1,2,3-Trichloropropane	22.4	1.0	"	20.00		112	70-130	5.55	200	
Bromobenzene	19.9	1.0	"	20.00		99.6	70-130	5.47	200	
Propylbenzene	19.6	1.0	"	20.00		97.9	70-130	8.04	200	
2-Chlorotoluene	19.4	1.0	"	20.00		96.8	70-130	6.98	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
LCS Dup (0929051-BSD1)				Prepared & Analyzed: 07/17/2009						
1,3,5-Trimethylbenzene	18.3	1.0	ug/L	20.00		91.6	70-130	8.46	200	
4-Chlorotoluene	18.9	1.0	"	20.00		94.6	70-130	6.89	200	
tert-Butylbenzene	17.6	1.0	"	20.00		88.2	70-130	11.2	200	
1,2,4-Trimethylbenzene	18.8	1.0	"	20.00		94.1	70-130	7.37	200	
sec-Butylbenzene	18.0	1.0	"	20.00		90.0	70-130	11.7	200	
4-Isopropyltoluene	17.6	1.0	"	20.00		88.2	70-130	11.7	200	
1,3-Dichlorobenzene	18.5	1.0	"	20.00		92.6	74-125	8.13	200	
1,4-Dichlorobenzene	18.3	1.0	"	20.00		91.4	75-122	7.37	200	
trans-1,4-Dichloro-2-butene	19.1	1.0	"	20.00		95.7	70-130	7.11	200	
Butylbenzene	18.2	1.0	"	20.00		91.0	70-130	15.1	200	
1,2-Dichlorobenzene	19.1	1.0	"	20.00		95.4	74-124	5.70	200	
1,2-Dibromo-3-chloropropane	20.1	1.0	"	20.00		101	70-130	0.149	200	
1,2,4-Trichlorobenzene	16.8	1.0	"	20.00		84.2	45-134	11.2	200	
Hexachlorobutadiene	12.1	1.0	"	20.00		60.4	33-154	24.7	200	
Naphthalene	21.2	1.0	"	20.00		106	22-148	1.08	200	
1,2,3-Trichlorobenzene	16.1	1.0	"	20.00		80.6	70-130	9.34	200	
Surrogate: Dibromofluoromethane	*22.1*		*"*	*25.00*		*88.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.9*		*"*	*25.00*		*87.5*	*80-120*			
Surrogate: Toluene-d8	*27.0*		*"*	*25.00*		*108*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*"*	*25.00*		*96.9*	*60-149*			
Matrix Spike (0929051-MS1)	**Source: 09G0180-28**			Prepared & Analyzed: 07/16/2009						
Dichlorodifluoromethane	17.7	1.0	ug/L	20.00	ND	88.4	0-200			
Chloromethane	19.8	1.0	"	20.00	ND	99.0	0-200			
Vinyl chloride	20.2	1.0	"	20.00	ND	101	0-200			
Bromomethane	15.3	1.0	"	20.00	ND	76.6	0-200			
Chloroethane	20.6	1.0	"	20.00	ND	103	0-200			
Trichlorofluoromethane	18.7	1.0	"	20.00	ND	93.6	0-200			
Acrolein	193	5.0	"	100.0	ND	193	0-200			
1,1-Dichloroethene	20.5	1.0	"	20.00	ND	102	18.7-178			
Acetone	118	5.0	"	100.0	ND	118	0-200			
Iodomethane	17.4	1.0	"	20.00	ND	86.8	0-200			
Carbon disulfide	24.6	1.0	"	20.00	ND	123	0-200			
Allyl Chloride (3-Chloropropylene)	20.4	1.0	"	20.00	ND	102	0-200			
Acetonitrile	25.8	5.0	"	20.00	ND	129	0-200			
Methylene Chloride	17.0	1.0	"	20.00	0.320	83.5	0-200			B
Methyl-tert-Butyl Ether	23.3	1.0	"	20.00	ND	117	0-200			
trans-1,2-Dichloroethene	20.0	1.0	"	20.00	ND	99.9	0-200			
Acrylonitrile	21.5	5.0	"	20.00	ND	108	0-200			
1,1-Dichloroethane	21.9	1.0	"	20.00	1.63	101	0-200			
Chloroprene	21.5	1.0	"	20.00	ND	108	0-200			
Vinyl acetate	25.8	1.0	"	20.00	ND	129	0-200			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Matrix Spike (0929051-MS1)	**Source: 09G0180-28**		Prepared & Analyzed: 07/16/2009							
2,2-Dichloropropane	20.8	1.0	ug/L	20.00	ND	104	0-200			
cis-1,2-Dichloroethene	18.4	1.0	"	20.00	ND	92.2	0-200			
Methyl Ethyl Ketone (2-Butanone)	121	5.0	"	100.0	9.28	112	0-200			
Propionitrile (Ethyl Cyanide)	22.1	5.0	"	20.00	ND	110	0-200			
Methacrylonitrile	22.7	5.0	"	20.00	ND	114	0-200			
Chloroform	19.0	1.0	"	20.00	ND	95.0	0-200			
Bromochloromethane	18.9	1.0	"	20.00	ND	94.7	0-200			
1,1,1-Trichloroethane	19.9	1.0	"	20.00	ND	99.4	0-200			
1,1-Dichloropropene	24.0	1.0	"	20.00	ND	120	0-200			
Carbon Tetrachloride	25.5	1.0	"	20.00	ND	128	0-200			
Benzene	179	1.0	"	20.00	159	101	65.6-159			
1,2-Dichloroethane	18.0	1.0	"	20.00	ND	90.2	0-200			
Trichloroethene	22.0	1.0	"	20.00	ND	110	71-158			
1,2-Dichloropropane	22.5	1.0	"	20.00	ND	112	0-200			
Bromodichloromethane	21.3	1.0	"	20.00	ND	107	0-200			
Methyl Methacrylate	21.4	1.0	"	20.00	ND	107	0-200			
Dibromomethane	18.5	1.0	"	20.00	ND	92.7	0-200			
2-Chloroethyl Vinyl Ether	3.00	1.0	"	20.00	ND	15.0	0-200			
Methyl Isobutyl Ketone	111	5.0	"	100.0	ND	111	0-200			
cis-1,3-Dichloropropene	20.6	1.0	"	20.00	ND	103	0-200			
Toluene	340	1.0	"	20.00	324	79.4	60.8-171			
trans-1,3-Dichloropropene	19.0	1.0	"	20.00	ND	95.2	0-200			
Ethyl Methacrylate	21.6	1.0	"	20.00	ND	108	0-200			
1,1,2-Trichloroethane	21.6	1.0	"	20.00	ND	108	0-200			
Methyl Butyl Ketone (2-Hexanone)	116	5.0	"	100.0	ND	116	0-200			
1,2-Dibromoethane	19.5	1.0	"	20.00	ND	97.5	0-200			
Tetrachloroethene	20.6	1.0	"	20.00	ND	103	0-200			
1,3-Dichloropropane	23.1	1.0	"	20.00	ND	115	0-200			
Dibromochloromethane	22.9	1.0	"	20.00	ND	114	0-200			
Chlorobenzene	22.0	1.0	"	20.00	ND	110	76.5-147			
1,1,1,2-Tetrachloroethane	23.7	1.0	"	20.00	ND	119	0-200			
Ethylbenzene	28.5	1.0	"	20.00	4.64	119	0-200			
m,p-Xylenes	103	2.0	"	40.00	60.8	106	0-200			
o-Xylene	52.6	1.0	"	20.00	30.1	113	0-200			
Styrene	25.3	1.0	"	20.00	ND	126	0-200			
Bromoform	21.6	1.0	"	20.00	ND	108	0-200			
Isopropylbenzene (Cumene)	24.7	1.0	"	20.00	0.930	119	0-200			
1,1,2,2-Tetrachloroethane	25.4	1.0	"	20.00	ND	127	0-200			
1,2,3-Trichloropropane	23.3	1.0	"	20.00	ND	117	0-200			
Bromobenzene	22.7	1.0	"	20.00	ND	114	0-200			
Propylbenzene	25.8	1.0	"	20.00	1.21	123	0-200			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Matrix Spike (0929051-MS1)	**Source: 09G0180-28**			Prepared & Analyzed: 07/16/2009						
2-Chlorotoluene	24.1	1.0	ug/L	20.00	ND	120	0-200			
1,3,5-Trimethylbenzene	33.8	1.0	"	20.00	11.5	112	0-200			
4-Chlorotoluene	22.5	1.0	"	20.00	ND	112	0-200			
tert-Butylbenzene	22.4	1.0	"	20.00	ND	112	0-200			
1,2,4-Trimethylbenzene	48.7	1.0	"	20.00	26.2	113	0-200			
sec-Butylbenzene	23.9	1.0	"	20.00	ND	120	0-200			
4-Isopropyltoluene	25.0	1.0	"	20.00	0.770	121	0-200			
1,3-Dichlorobenzene	21.3	1.0	"	20.00	ND	107	0-200			
1,4-Dichlorobenzene	21.3	1.0	"	20.00	ND	106	0-200			
trans-1,4-Dichloro-2-butene	22.2	1.0	"	20.00	ND	111	0-200			
Butylbenzene	25.1	1.0	"	20.00	ND	126	0-200			
1,2-Dichlorobenzene	21.0	1.0	"	20.00	ND	105	0-200			
1,2-Dibromo-3-chloropropane	23.9	1.0	"	20.00	ND	120	0-200			
1,2,4-Trichlorobenzene	20.8	1.0	"	20.00	ND	104	0-200			
Hexachlorobutadiene	19.2	1.0	"	20.00	ND	95.8	0-200			
Naphthalene	1680	1.0	"	20.00	1590	427	0-200			M6
1,2,3-Trichlorobenzene	18.7	1.0	"	20.00	ND	93.6	0-200			
Surrogate: Dibromofluoromethane	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.5*		*"*	*25.00*		*82.0*	*80-120*			
Surrogate: Toluene-d8	*27.4*		*"*	*25.00*		*109*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.3*		*"*	*25.00*		*97.4*	*60-149*			
Matrix Spike Dup (0929051-MSD1)	**Source: 09G0180-28**			Prepared & Analyzed: 07/16/2009						
Dichlorodifluoromethane	16.3	1.0	ug/L	20.00	ND	81.3	0-200	8.31	200	
Chloromethane	18.7	1.0	"	20.00	ND	93.4	0-200	5.77	200	
Vinyl chloride	18.8	1.0	"	20.00	ND	94.1	0-200	7.12	200	
Bromomethane	14.5	1.0	"	20.00	ND	72.6	0-200	5.43	200	
Chloroethane	19.2	1.0	"	20.00	ND	96.0	0-200	6.99	200	
Trichlorofluoromethane	18.0	1.0	"	20.00	ND	90.2	0-200	3.64	200	
Acrolein	176	5.0	"	100.0	ND	176	0-200	9.17	200	
1,1-Dichloroethene	19.6	1.0	"	20.00	ND	98.0	18.7-178	4.34	22.3	
Acetone	117	5.0	"	100.0	ND	117	0-200	1.09	200	
Iodomethane	17.0	1.0	"	20.00	ND	84.8	0-200	2.21	200	
Carbon disulfide	24.0	1.0	"	20.00	ND	120	0-200	2.71	200	
Allyl Chloride (3-Chloropropylene)	20.1	1.0	"	20.00	ND	100	0-200	1.73	200	
Acetonitrile	25.7	5.0	"	20.00	ND	129	0-200	0.388	200	
Methylene Chloride	16.4	1.0	"	20.00	0.320	80.2	0-200	3.95	200	B
Methyl-tert-Butyl Ether	23.1	1.0	"	20.00	ND	116	0-200	1.03	200	
trans-1,2-Dichloroethene	19.2	1.0	"	20.00	ND	95.8	0-200	4.14	200	
Acrylonitrile	21.2	5.0	"	20.00	ND	106	0-200	1.50	200	
1,1-Dichloroethane	20.9	1.0	"	20.00	1.63	96.4	0-200	4.39	200	
Chloroprene	20.6	1.0	"	20.00	ND	103	0-200	4.37	200	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Matrix Spike Dup (0929051-MSD1)	**Source: 09G0180-28**			Prepared & Analyzed: 07/16/2009						
Vinyl acetate	25.6	1.0	ug/L	20.00	ND	128	0-200	1.01	200	
2,2-Dichloropropane	20.0	1.0	"	20.00	ND	100	0-200	3.77	200	
cis-1,2-Dichloroethene	17.9	1.0	"	20.00	ND	89.5	0-200	2.92	200	
Methyl Ethyl Ketone (2-Butanone)	117	5.0	"	100.0	9.28	108	0-200	3.24	200	
Propionitrile (Ethyl Cyanide)	22.6	5.0	"	20.00	ND	113	0-200	2.06	200	
Methacrylonitrile	21.7	5.0	"	20.00	ND	109	0-200	4.50	200	
Chloroform	18.3	1.0	"	20.00	ND	91.6	0-200	3.65	200	
Bromochloromethane	18.5	1.0	"	20.00	ND	92.6	0-200	2.30	200	
1,1,1-Trichloroethane	19.1	1.0	"	20.00	ND	95.7	0-200	3.74	200	
1,1-Dichloropropene	22.8	1.0	"	20.00	ND	114	0-200	5.21	200	
Carbon Tetrachloride	24.9	1.0	"	20.00	ND	125	0-200	2.50	200	
Benzene	172	1.0	"	20.00	159	61.7	65.6-159	4.45	15.1	M6
1,2-Dichloroethane	17.8	1.0	"	20.00	ND	89.0	0-200	1.45	200	
Trichloroethene	21.3	1.0	"	20.00	ND	107	71-158	3.32	15.2	
1,2-Dichloropropane	22.3	1.0	"	20.00	ND	112	0-200	0.759	200	
Bromodichloromethane	20.7	1.0	"	20.00	ND	104	0-200	2.90	200	
Methyl Methacrylate	22.1	1.0	"	20.00	ND	110	0-200	3.08	200	
Dibromomethane	18.1	1.0	"	20.00	ND	90.5	0-200	2.40	200	
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200		200	U
Methyl Isobutyl Ketone	111	5.0	"	100.0	ND	111	0-200	0.0270	200	
cis-1,3-Dichloropropene	20.3	1.0	"	20.00	ND	101	0-200	1.52	200	
Toluene	328	1.0	"	20.00	324	19.7	60.8-171	3.57	17.1	M6
trans-1,3-Dichloropropene	18.8	1.0	"	20.00	ND	94.0	0-200	1.27	200	
Ethyl Methacrylate	21.6	1.0	"	20.00	ND	108	0-200	0.0464	200	
1,1,2-Trichloroethane	21.3	1.0	"	20.00	ND	107	0-200	1.44	200	
Methyl Butyl Ketone (2-Hexanone)	115	5.0	"	100.0	ND	115	0-200	1.05	200	
1,2-Dibromoethane	19.2	1.0	"	20.00	ND	96.2	0-200	1.34	200	
Tetrachloroethene	19.9	1.0	"	20.00	ND	99.4	0-200	3.61	200	
1,3-Dichloropropane	22.3	1.0	"	20.00	ND	112	0-200	3.30	200	
Dibromochloromethane	22.6	1.0	"	20.00	ND	113	0-200	1.14	200	
Chlorobenzene	21.6	1.0	"	20.00	ND	108	76.5-147	1.88	13.6	
1,1,1,2-Tetrachloroethane	23.4	1.0	"	20.00	ND	117	0-200	1.40	200	
Ethylbenzene	27.5	1.0	"	20.00	4.64	114	0-200	3.50	200	
m,p-Xylenes	98.4	2.0	"	40.00	60.8	94.1	0-200	4.70	200	
o-Xylene	50.4	1.0	"	20.00	30.1	102	0-200	4.35	200	
Styrene	24.3	1.0	"	20.00	ND	122	0-200	3.75	200	
Bromoform	21.4	1.0	"	20.00	ND	107	0-200	1.30	200	
Isopropylbenzene (Cumene)	24.0	1.0	"	20.00	0.930	116	0-200	2.91	200	
1,1,2,2-Tetrachloroethane	24.9	1.0	"	20.00	ND	124	0-200	2.19	200	
1,2,3-Trichloropropane	22.9	1.0	"	20.00	ND	115	0-200	1.60	200	
Bromobenzene	22.3	1.0	"	20.00	ND	112	0-200	1.82	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929051 - EPA 5030B										
Matrix Spike Dup (0929051-MSD1)	**Source: 09G0180-28**			Prepared & Analyzed: 07/16/2009						
Propylbenzene	25.0	1.0	ug/L	20.00	1.21	119	0-200	3.23	200	
2-Chlorotoluene	23.8	1.0	"	20.00	ND	119	0-200	1.25	200	
1,3,5-Trimethylbenzene	33.4	1.0	"	20.00	11.5	109	0-200	1.37	200	
4-Chlorotoluene	21.8	1.0	"	20.00	ND	109	0-200	2.98	200	
tert-Butylbenzene	21.6	1.0	"	20.00	ND	108	0-200	3.23	200	
1,2,4-Trimethylbenzene	46.9	1.0	"	20.00	26.2	104	0-200	3.75	200	
sec-Butylbenzene	23.2	1.0	"	20.00	ND	116	0-200	3.23	200	
4-Isopropyltoluene	24.3	1.0	"	20.00	0.770	118	0-200	2.76	200	
1,3-Dichlorobenzene	21.1	1.0	"	20.00	ND	106	0-200	0.895	200	
1,4-Dichlorobenzene	20.6	1.0	"	20.00	ND	103	0-200	3.10	200	
trans-1,4-Dichloro-2-butene	21.4	1.0	"	20.00	ND	107	0-200	3.21	200	
Butylbenzene	24.6	1.0	"	20.00	ND	123	0-200	1.89	200	
1,2-Dichlorobenzene	20.9	1.0	"	20.00	ND	104	0-200	0.335	200	
1,2-Dibromo-3-chloropropane	26.2	1.0	"	20.00	ND	131	0-200	9.33	200	
1,2,4-Trichlorobenzene	22.4	1.0	"	20.00	ND	112	0-200	6.94	200	
Hexachlorobutadiene	22.1	1.0	"	20.00	ND	111	0-200	14.4	200	
Naphthalene	1660	1.0	"	20.00	1590	331	0-200	1.16	200	M6
1,2,3-Trichlorobenzene	21.5	1.0	"	20.00	ND	108	0-200	13.8	200	
Surrogate: Dibromofluoromethane	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*19.8*		*"*	*25.00*		*79.2*	*80-120*			#
Surrogate: Toluene-d8	*27.6*		*"*	*25.00*		*110*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*"*	*25.00*		*97.5*	*60-149*			
Batch 0929054 - EPA 5030B										
Blank (0929054-BLK1)				Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	3.57	1.0	"							B1
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Blank (0929054-BLK1)				Prepared & Analyzed: 07/17/2009						
Acrylonitrile	ND	5.0	ug/L							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
Methyl Butyl Ketone (2-Hexanone)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Blank (0929054-BLK1)				Prepared & Analyzed: 07/17/2009						
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*22.8*		*"*	*25.00*		*91.3*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.1*		*"*	*25.00*		*88.6*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*"*	*25.00*		*106*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.0*		*"*	*25.00*		*96.2*	*60-149*			
LCS (0929054-BS1)				Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	15.5	1.0	ug/L	20.00		77.4	27-127			
Chloromethane	17.3	1.0	"	20.00		86.6	62.5-141			
Vinyl chloride	18.4	1.0	"	20.00		91.8	65.3-143			
Bromomethane	8.26	1.0	"	20.00		41.3	56-180			#
Chloroethane	19.4	1.0	"	20.00		96.8	62.3-161			
Trichlorofluoromethane	15.0	1.0	"	20.00		75.2	35-157			
Acrolein	196	5.0	"	100.0		196	26.6-169			L2
1,1-Dichloroethene	18.6	1.0	"	20.00		93.2	64.6-138			
Acetone	111	5.0	"	100.0		111	35-159			
Iodomethane	12.1	1.0	"	20.00		60.4	70-130			#
Carbon disulfide	20.6	1.0	"	20.00		103	48-142			
Allyl Chloride (3-Chloropropylene)	19.1	1.0	"	20.00		95.4	70-130			
Acetonitrile	25.1	5.0	"	20.00		126	70-130			
Methylene Chloride	20.1	1.0	"	20.00		100	64.7-139			B

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
LCS (0929054-BS1)				Prepared & Analyzed: 07/17/2009						
Methyl-tert-Butyl Ether	23.3	1.0	ug/L	20.00		117	34-133			
trans-1,2-Dichloroethene	18.3	1.0	"	20.00		91.6	75.1-127			
Acrylonitrile	21.9	5.0	"	20.00		110	67.2-148			
1,1-Dichloroethane	19.8	1.0	"	20.00		98.8	72.2-135			
Chloroprene	19.5	1.0	"	20.00		97.4	70-130			
Vinyl acetate	26.4	1.0	"	20.00		132	70-154			
2,2-Dichloropropane	19.8	1.0	"	20.00		98.9	37-129			
cis-1,2-Dichloroethene	18.0	1.0	"	20.00		90.0	72-126			
Methyl Ethyl Ketone (2-Butanone)	116	5.0	"	100.0		116	45-128			
Propionitrile (Ethyl Cyanide)	22.8	5.0	"	20.00		114	70-130			
Methacrylonitrile	22.7	5.0	"	20.00		114	70-130			
Chloroform	18.8	1.0	"	20.00		93.8	76.1-135			
Bromochloromethane	19.3	1.0	"	20.00		96.6	73-126			
1,1,1-Trichloroethane	18.8	1.0	"	20.00		94.0	67.1-139			
1,1-Dichloropropene	22.2	1.0	"	20.00		111	70-130			
Carbon Tetrachloride	26.3	1.0	"	20.00		132	63.3-142			
Benzene	22.4	1.0	"	20.00		112	72-132			
1,2-Dichloroethane	18.9	1.0	"	20.00		94.4	72.9-139			
Trichloroethene	20.6	1.0	"	20.00		103	73.7-130			
1,2-Dichloropropane	22.7	1.0	"	20.00		114	71.3-137			
Bromodichloromethane	22.7	1.0	"	20.00		113	74.5-136			
Methyl Methacrylate	19.9	1.0	"	20.00		99.4	70-130			
Dibromomethane	18.9	1.0	"	20.00		94.4	66-125			
2-Chloroethyl Vinyl Ether	18.2	1.0	"	20.00		91.0	42.5-161			
Methyl Isobutyl Ketone	102	5.0	"	100.0		102	41-143			
cis-1,3-Dichloropropene	21.0	1.0	"	20.00		105	74.6-124			
Toluene	19.3	1.0	"	20.00		96.5	72.4-132			
trans-1,3-Dichloropropene	19.3	1.0	"	20.00		96.7	72.1-124			
Ethyl Methacrylate	22.6	1.0	"	20.00		113	70-130			
1,1,2-Trichloroethane	21.3	1.0	"	20.00		106	75.6-140			
Methyl Butyl Ketone (2-Hexanone)	116	5.0	"	100.0		116	43-147			
1,2-Dibromoethane	19.7	1.0	"	20.00		98.4	70-130			
Tetrachloroethene	17.2	1.0	"	20.00		86.1	69.9-125			
1,3-Dichloropropane	21.3	1.0	"	20.00		107	70-130			
Dibromochloromethane	22.0	1.0	"	20.00		110	69.9-134			
Chlorobenzene	20.9	1.0	"	20.00		104	67.3-133			
1,1,1,2-Tetrachloroethane	21.8	1.0	"	20.00		109	76-123			
Ethylbenzene	22.3	1.0	"	20.00		111	70.6-131			
m,p-Xylenes	43.5	2.0	"	40.00		109	71-123			
o-Xylene	21.9	1.0	"	20.00		110	80-119			
Styrene	22.3	1.0	"	20.00		111	79-117			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
LCS (0929054-BS1)				Prepared & Analyzed: 07/17/2009						
Bromoform	20.7	1.0	ug/L	20.00		104	68.8-130			
Isopropylbenzene (Cumene)	22.4	1.0	"	20.00		112	70-130			
1,1,2,2-Tetrachloroethane	25.4	1.0	"	20.00		127	69.1-143			
1,2,3-Trichloropropane	22.3	1.0	"	20.00		112	70-130			
Bromobenzene	22.4	1.0	"	20.00		112	70-130			
Propylbenzene	23.2	1.0	"	20.00		116	70-130			
2-Chlorotoluene	22.4	1.0	"	20.00		112	70-130			
1,3,5-Trimethylbenzene	21.2	1.0	"	20.00		106	70-130			
4-Chlorotoluene	21.9	1.0	"	20.00		110	70-130			
tert-Butylbenzene	21.1	1.0	"	20.00		106	70-130			
1,2,4-Trimethylbenzene	21.7	1.0	"	20.00		108	70-130			
sec-Butylbenzene	21.6	1.0	"	20.00		108	70-130			
4-Isopropyltoluene	20.8	1.0	"	20.00		104	70-130			
1,3-Dichlorobenzene	21.3	1.0	"	20.00		106	74-125			
1,4-Dichlorobenzene	20.6	1.0	"	20.00		103	75-122			
trans-1,4-Dichloro-2-butene	22.3	1.0	"	20.00		112	70-130			
Butylbenzene	22.3	1.0	"	20.00		112	70-130			
1,2-Dichlorobenzene	21.6	1.0	"	20.00		108	74-124			
1,2-Dibromo-3-chloropropane	22.4	1.0	"	20.00		112	70-130			
1,2,4-Trichlorobenzene	19.3	1.0	"	20.00		96.5	45-134			
Hexachlorobutadiene	16.1	1.0	"	20.00		80.6	33-154			
Naphthalene	22.2	1.0	"	20.00		111	22-148			
1,2,3-Trichlorobenzene	18.1	1.0	"	20.00		90.6	70-130			
Surrogate: Dibromofluoromethane	*23.0*		*"*	*25.00*		*92.0*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.1*		*"*	*25.00*		*88.4*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*"*	*25.00*		*103*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.8*		*"*	*25.00*		*99.2*	*60-149*			

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Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
LCS Dup (0929054-BSD1)				Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	12.1	1.0	ug/L	20.00		60.6	27-127	24.3	200	
Chloromethane	14.5	1.0	"	20.00		72.4	62.5-141	17.9	200	
Vinyl chloride	15.1	1.0	"	20.00		75.6	65.3-143	19.5	200	
Bromomethane	9.41	1.0	"	20.00		47.0	56-180	13.0	200	#
Chloroethane	16.3	1.0	"	20.00		81.3	62.3-161	17.4	200	
Trichlorofluoromethane	13.1	1.0	"	20.00		65.6	35-157	13.6	200	
Acrolein	153	5.0	"	100.0		153	26.6-169	24.4	200	
1,1-Dichloroethene	16.1	1.0	"	20.00		80.7	64.6-138	14.4	200	
Acetone	108	5.0	"	100.0		108	35-159	2.84	200	
Iodomethane	11.6	1.0	"	20.00		57.8	70-130	4.48	200	#
Carbon disulfide	17.7	1.0	"	20.00		88.4	48-142	15.1	200	
Allyl Chloride (3-Chloropropylene)	16.0	1.0	"	20.00		80.0	70-130	17.6	200	
Acetonitrile	23.2	5.0	"	20.00		116	70-130	7.87	200	
Methylene Chloride	18.8	1.0	"	20.00		94.2	64.7-139	6.52	200	B
Methyl-tert-Butyl Ether	20.9	1.0	"	20.00		105	34-133	10.8	200	
trans-1,2-Dichloroethene	16.6	1.0	"	20.00		83.0	75.1-127	9.91	200	
Acrylonitrile	21.2	5.0	"	20.00		106	67.2-148	3.15	200	
1,1-Dichloroethane	17.3	1.0	"	20.00		86.6	72.2-135	13.1	200	
Chloroprene	16.8	1.0	"	20.00		84.0	70-130	14.7	200	
Vinyl acetate	11.4	1.0	"	20.00		56.8	70-154	79.6	200	#
2,2-Dichloropropane	12.4	1.0	"	20.00		62.2	37-129	45.6	200	
cis-1,2-Dichloroethene	17.5	1.0	"	20.00		87.4	72-126	2.93	200	
Methyl Ethyl Ketone (2-Butanone)	109	5.0	"	100.0		109	45-128	6.64	200	
Propionitrile (Ethyl Cyanide)	20.8	5.0	"	20.00		104	70-130	8.81	200	
Methacrylonitrile	21.3	5.0	"	20.00		107	70-130	6.36	200	
Chloroform	16.9	1.0	"	20.00		84.5	76.1-135	10.4	200	
Bromochloromethane	18.2	1.0	"	20.00		91.2	73-126	5.75	200	
1,1,1-Trichloroethane	16.2	1.0	"	20.00		80.8	67.1-139	15.0	200	
1,1-Dichloropropene	18.4	1.0	"	20.00		91.8	70-130	18.9	200	
Carbon Tetrachloride	23.4	1.0	"	20.00		117	63.3-142	11.9	200	
Benzene	20.0	1.0	"	20.00		100	72-132	11.5	200	
1,2-Dichloroethane	18.0	1.0	"	20.00		89.8	72.9-139	4.99	200	
Trichloroethene	20.0	1.0	"	20.00		99.9	73.7-130	3.15	200	
1,2-Dichloropropane	20.3	1.0	"	20.00		102	71.3-137	11.1	200	
Bromodichloromethane	20.6	1.0	"	20.00		103	74.5-136	9.67	200	
Methyl Methacrylate	19.3	1.0	"	20.00		96.4	70-130	3.01	200	
Dibromomethane	17.8	1.0	"	20.00		88.8	66-125	6.00	200	
2-Chloroethyl Vinyl Ether	17.2	1.0	"	20.00		85.9	42.5-161	5.77	200	
Methyl Isobutyl Ketone	103	5.0	"	100.0		103	41-143	1.38	200	
cis-1,3-Dichloropropene	18.4	1.0	"	20.00		92.2	74.6-124	12.8	200	
Toluene	17.8	1.0	"	20.00		88.9	72.4-132	8.20	200	

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
LCS Dup (0929054-BSD1)				Prepared & Analyzed: 07/17/2009						
trans-1,3-Dichloropropene	16.8	1.0	ug/L	20.00		83.8	72.1-124	14.4	200	
Ethyl Methacrylate	20.1	1.0	"	20.00		100	70-130	11.8	200	
1,1,2-Trichloroethane	20.6	1.0	"	20.00		103	75.6-140	3.54	200	
Methyl Butyl Ketone (2-Hexanone)	109	5.0	"	100.0		109	43-147	6.95	200	
1,2-Dibromoethane	18.5	1.0	"	20.00		92.4	70-130	6.29	200	
Tetrachloroethene	29.5	1.0	"	20.00		147	69.9-125	52.5	200	L2
1,3-Dichloropropane	20.9	1.0	"	20.00		105	70-130	1.85	200	
Dibromochloromethane	20.8	1.0	"	20.00		104	69.9-134	5.14	200	
Chlorobenzene	19.0	1.0	"	20.00		95.0	67.3-133	9.58	200	
1,1,1,2-Tetrachloroethane	20.6	1.0	"	20.00		103	76-123	6.08	200	
Ethylbenzene	19.0	1.0	"	20.00		95.2	70.6-131	15.7	200	
m,p-Xylenes	36.9	2.0	"	40.00		92.2	71-123	16.4	200	
o-Xylene	18.6	1.0	"	20.00		93.0	80-119	16.4	200	
Styrene	19.2	1.0	"	20.00		95.8	79-117	15.0	200	
Bromoform	19.9	1.0	"	20.00		99.4	68.8-130	4.09	200	
Isopropylbenzene (Cumene)	18.3	1.0	"	20.00		91.4	70-130	20.0	200	
1,1,2,2-Tetrachloroethane	21.6	1.0	"	20.00		108	69.1-143	16.2	200	
1,2,3-Trichloropropane	22.2	1.0	"	20.00		111	70-130	0.629	200	
Bromobenzene	20.2	1.0	"	20.00		101	70-130	10.8	200	
Propylbenzene	18.8	1.0	"	20.00		94.2	70-130	20.7	200	
2-Chlorotoluene	19.4	1.0	"	20.00		96.9	70-130	14.5	200	
1,3,5-Trimethylbenzene	18.0	1.0	"	20.00		89.8	70-130	16.4	200	
4-Chlorotoluene	18.8	1.0	"	20.00		94.2	70-130	15.2	200	
tert-Butylbenzene	16.8	1.0	"	20.00		83.9	70-130	22.9	200	
1,2,4-Trimethylbenzene	18.4	1.0	"	20.00		91.8	70-130	16.5	200	
sec-Butylbenzene	17.2	1.0	"	20.00		85.8	70-130	23.0	200	
4-Isopropyltoluene	16.8	1.0	"	20.00		83.8	70-130	21.7	200	
1,3-Dichlorobenzene	18.5	1.0	"	20.00		92.6	74-125	13.8	200	
1,4-Dichlorobenzene	18.4	1.0	"	20.00		92.0	75-122	11.2	200	
trans-1,4-Dichloro-2-butene	19.7	1.0	"	20.00		98.3	70-130	12.6	200	
Butylbenzene	17.5	1.0	"	20.00		87.6	70-130	24.2	200	
1,2-Dichlorobenzene	18.9	1.0	"	20.00		94.4	74-124	13.3	200	
1,2-Dibromo-3-chloropropane	19.9	1.0	"	20.00		99.4	70-130	11.9	200	
1,2,4-Trichlorobenzene	16.0	1.0	"	20.00		80.0	45-134	18.8	200	
Hexachlorobutadiene	11.5	1.0	"	20.00		57.5	33-154	33.5	200	
Naphthalene	19.5	1.0	"	20.00		97.3	22-148	13.1	200	
1,2,3-Trichlorobenzene	15.1	1.0	"	20.00		75.6	70-130	18.0	200	
Surrogate: Dibromofluoromethane	*22.7*		*"*	*25.00*		*91.0*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.4*		*"*	*25.00*		*89.8*	*80-120*			
Surrogate: Toluene-d8	*26.8*		*"*	*25.00*		*107*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.5*		*"*	*25.00*		*97.8*	*60-149*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Matrix Spike (0929054-MS1)	**Source: 09G0560-02**			Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	21.3	1.0	ug/L	20.00	ND	107	0-200			
Chloromethane	22.2	1.0	"	20.00	ND	111	0-200			
Vinyl chloride	23.2	1.0	"	20.00	ND	116	0-200			
Bromomethane	12.0	1.0	"	20.00	ND	59.8	0-200			
Chloroethane	23.6	1.0	"	20.00	ND	118	0-200			
Trichlorofluoromethane	22.6	1.0	"	20.00	ND	113	0-200			
Acrolein	219	5.0	"	100.0	ND	219	0-200			M2
1,1-Dichloroethene	22.2	1.0	"	20.00	ND	111	18.7-178			
Acetone	244	5.0	"	100.0	126	118	0-200			
Iodomethane	14.5	1.0	"	20.00	ND	72.4	0-200			
Carbon disulfide	23.8	1.0	"	20.00	ND	119	0-200			
Allyl Chloride (3-Chloropropylene)	21.4	1.0	"	20.00	ND	107	0-200			
Acetonitrile	18.5	5.0	"	20.00	ND	92.6	0-200			
Methylene Chloride	18.1	1.0	"	20.00	0.310	89.0	0-200			B
Methyl-tert-Butyl Ether	21.4	1.0	"	20.00	ND	107	0-200			
trans-1,2-Dichloroethene	21.1	1.0	"	20.00	ND	106	0-200			
Acrylonitrile	23.2	5.0	"	20.00	ND	116	0-200			
1,1-Dichloroethane	21.6	1.0	"	20.00	ND	108	0-200			
Chloroprene	23.0	1.0	"	20.00	ND	115	0-200			
Vinyl acetate	26.3	1.0	"	20.00	ND	132	0-200			
2,2-Dichloropropane	21.8	1.0	"	20.00	ND	109	0-200			
cis-1,2-Dichloroethene	22.3	1.0	"	20.00	ND	111	0-200			
Methyl Ethyl Ketone (2-Butanone)	137	5.0	"	100.0	13.0	124	0-200			
Propionitrile (Ethyl Cyanide)	23.9	5.0	"	20.00	ND	119	0-200			
Methacrylonitrile	23.6	5.0	"	20.00	ND	118	0-200			
Chloroform	26.5	1.0	"	20.00	6.24	101	0-200			
Bromochloromethane	20.2	1.0	"	20.00	ND	101	0-200			
1,1,1-Trichloroethane	21.0	1.0	"	20.00	ND	105	0-200			
1,1-Dichloropropene	24.2	1.0	"	20.00	ND	121	0-200			
Carbon Tetrachloride	30.2	1.0	"	20.00	ND	151	0-200			
Benzene	23.5	1.0	"	20.00	ND	117	65.6-159			
1,2-Dichloroethane	19.3	1.0	"	20.00	ND	96.6	0-200			
Trichloroethene	21.7	1.0	"	20.00	ND	108	71-158			
1,2-Dichloropropane	22.6	1.0	"	20.00	ND	113	0-200			
Bromodichloromethane	26.3	1.0	"	20.00	3.34	115	0-200			
Methyl Methacrylate	20.7	1.0	"	20.00	ND	104	0-200			
Dibromomethane	19.3	1.0	"	20.00	ND	96.7	0-200			
2-Chloroethyl Vinyl Ether	0.550	1.0	"	20.00	ND	2.75	0-200			U
Methyl Isobutyl Ketone	108	5.0	"	100.0	ND	108	0-200			
cis-1,3-Dichloropropene	20.7	1.0	"	20.00	ND	103	0-200			
Toluene	21.7	1.0	"	20.00	ND	109	60.8-171			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Matrix Spike (0929054-MS1)	**Source: 09G0560-02**			Prepared & Analyzed: 07/17/2009						
trans-1,3-Dichloropropene	19.0	1.0	ug/L	20.00	ND	95.0	0-200			
Ethyl Methacrylate	22.8	1.0	"	20.00	ND	114	0-200			
1,1,2-Trichloroethane	21.0	1.0	"	20.00	ND	105	0-200			
Methyl Butyl Ketone (2-Hexanone)	122	5.0	"	100.0	ND	122	0-200			
1,2-Dibromoethane	19.6	1.0	"	20.00	ND	97.8	0-200			
Tetrachloroethene	18.8	1.0	"	20.00	ND	93.8	0-200			
1,3-Dichloropropane	20.7	1.0	"	20.00	ND	104	0-200			
Dibromochloromethane	22.3	1.0	"	20.00	1.12	106	0-200			
Chlorobenzene	21.8	1.0	"	20.00	ND	109	76.5-147			
1,1,1,2-Tetrachloroethane	22.0	1.0	"	20.00	ND	110	0-200			
Ethylbenzene	24.1	1.0	"	20.00	ND	120	0-200			
m,p-Xylenes	46.7	2.0	"	40.00	ND	117	0-200			
o-Xylene	22.9	1.0	"	20.00	ND	114	0-200			
Styrene	23.0	1.0	"	20.00	ND	115	0-200			
Bromoform	20.2	1.0	"	20.00	ND	101	0-200			
Isopropylbenzene (Cumene)	25.8	1.0	"	20.00	ND	129	0-200			
1,1,2,2-Tetrachloroethane	25.4	1.0	"	20.00	ND	127	0-200			
1,2,3-Trichloropropane	23.2	1.0	"	20.00	ND	116	0-200			
Bromobenzene	24.0	1.0	"	20.00	ND	120	0-200			
Propylbenzene	26.8	1.0	"	20.00	ND	134	0-200			
2-Chlorotoluene	24.5	1.0	"	20.00	ND	122	0-200			
1,3,5-Trimethylbenzene	23.6	1.0	"	20.00	ND	118	0-200			
4-Chlorotoluene	23.8	1.0	"	20.00	ND	119	0-200			
tert-Butylbenzene	24.9	1.0	"	20.00	ND	125	0-200			
1,2,4-Trimethylbenzene	23.0	1.0	"	20.00	ND	115	0-200			
sec-Butylbenzene	27.4	1.0	"	20.00	ND	137	0-200			
4-Isopropyltoluene	40.2	1.0	"	20.00	10.4	149	0-200			
1,3-Dichlorobenzene	22.2	1.0	"	20.00	ND	111	0-200			
1,4-Dichlorobenzene	21.5	1.0	"	20.00	ND	108	0-200			
trans-1,4-Dichloro-2-butene	23.7	1.0	"	20.00	ND	118	0-200			
Butylbenzene	29.1	1.0	"	20.00	ND	146	0-200			
1,2-Dichlorobenzene	21.8	1.0	"	20.00	ND	109	0-200			
1,2-Dibromo-3-chloropropane	23.1	1.0	"	20.00	ND	115	0-200			
1,2,4-Trichlorobenzene	17.2	1.0	"	20.00	ND	85.8	0-200			
Hexachlorobutadiene	21.0	1.0	"	20.00	ND	105	0-200			
Naphthalene	17.5	1.0	"	20.00	ND	87.3	0-200			
1,2,3-Trichlorobenzene	13.9	1.0	"	20.00	ND	69.6	0-200			
Surrogate: Dibromofluoromethane	*23.5*		"	*25.00*		*94.0*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.3*		"	*25.00*		*89.2*	*80-120*			
Surrogate: Toluene-d8	*26.1*		"	*25.00*		*104*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*26.0*		"	*25.00*		*104*	*60-149*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Matrix Spike Dup (0929054-MSD1)	**Source: 09G0560-02**			Prepared & Analyzed: 07/17/2009						
Dichlorodifluoromethane	19.5	1.0	ug/L	20.00	ND	97.4	0-200	9.16	200	
Chloromethane	20.1	1.0	"	20.00	ND	101	0-200	9.55	200	
Vinyl chloride	21.7	1.0	"	20.00	ND	108	0-200	7.03	200	
Bromomethane	13.2	1.0	"	20.00	ND	66.0	0-200	9.93	200	
Chloroethane	22.2	1.0	"	20.00	ND	111	0-200	6.51	200	
Trichlorofluoromethane	21.2	1.0	"	20.00	ND	106	0-200	6.53	200	
Acrolein	218	5.0	"	100.0	ND	218	0-200	0.713	200	M2
1,1-Dichloroethene	21.0	1.0	"	20.00	ND	105	18.7-178	5.59	22.3	
Acetone	239	5.0	"	100.0	126	112	0-200	2.09	200	
Iodomethane	15.2	1.0	"	20.00	ND	76.0	0-200	4.79	200	
Carbon disulfide	22.4	1.0	"	20.00	ND	112	0-200	5.80	200	
Allyl Chloride (3-Chloropropylene)	20.6	1.0	"	20.00	ND	103	0-200	3.95	200	
Acetonitrile	26.1	5.0	"	20.00	ND	131	0-200	34.1	200	
Methylene Chloride	17.4	1.0	"	20.00	0.310	85.7	0-200	3.77	200	B
Methyl-tert-Butyl Ether	21.4	1.0	"	20.00	ND	107	0-200	0.280	200	
trans-1,2-Dichloroethene	20.1	1.0	"	20.00	ND	100	0-200	4.90	200	
Acrylonitrile	23.0	5.0	"	20.00	ND	115	0-200	1.17	200	
1,1-Dichloroethane	20.3	1.0	"	20.00	ND	101	0-200	6.17	200	
Chloroprene	21.8	1.0	"	20.00	ND	109	0-200	5.54	200	
Vinyl acetate	25.9	1.0	"	20.00	ND	129	0-200	1.80	200	
2,2-Dichloropropane	20.2	1.0	"	20.00	ND	101	0-200	7.77	200	
cis-1,2-Dichloroethene	18.7	1.0	"	20.00	ND	93.3	0-200	17.6	200	
Methyl Ethyl Ketone (2-Butanone)	132	5.0	"	100.0	13.0	119	0-200	3.59	200	
Propionitrile (Ethyl Cyanide)	23.1	5.0	"	20.00	ND	116	0-200	3.32	200	
Methacrylonitrile	22.6	5.0	"	20.00	ND	113	0-200	4.46	200	
Chloroform	24.8	1.0	"	20.00	6.24	92.7	0-200	6.60	200	
Bromochloromethane	19.4	1.0	"	20.00	ND	96.8	0-200	4.20	200	
1,1,1-Trichloroethane	19.7	1.0	"	20.00	ND	98.6	0-200	6.29	200	
1,1-Dichloropropene	22.9	1.0	"	20.00	ND	114	0-200	5.69	200	
Carbon Tetrachloride	28.6	1.0	"	20.00	ND	143	0-200	5.33	200	
Benzene	22.4	1.0	"	20.00	ND	112	65.6-159	4.62	15.1	
1,2-Dichloroethane	18.5	1.0	"	20.00	ND	92.7	0-200	4.17	200	
Trichloroethene	20.8	1.0	"	20.00	ND	104	71-158	4.38	15.2	
1,2-Dichloropropane	21.8	1.0	"	20.00	ND	109	0-200	3.83	200	
Bromodichloromethane	25.2	1.0	"	20.00	3.34	109	0-200	4.54	200	
Methyl Methacrylate	21.1	1.0	"	20.00	ND	106	0-200	1.96	200	
Dibromomethane	18.1	1.0	"	20.00	ND	90.6	0-200	6.46	200	
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND		0-200		200	U
Methyl Isobutyl Ketone	108	5.0	"	100.0	ND	108	0-200	0.102	200	
cis-1,3-Dichloropropene	20.2	1.0	"	20.00	ND	101	0-200	2.35	200	
Toluene	20.8	1.0	"	20.00	ND	104	60.8-171	4.28	17.1	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929054 - EPA 5030B										
Matrix Spike Dup (0929054-MSD1)	**Source: 09G0560-02**			Prepared & Analyzed: 07/17/2009						
trans-1,3-Dichloropropene	18.4	1.0	ug/L	20.00	ND	92.2	0-200	2.94	200	
Ethyl Methacrylate	22.0	1.0	"	20.00	ND	110	0-200	3.61	200	
1,1,2-Trichloroethane	20.4	1.0	"	20.00	ND	102	0-200	2.76	200	
Methyl Butyl Ketone (2-Hexanone)	118	5.0	"	100.0	ND	118	0-200	3.13	200	
1,2-Dibromoethane	18.9	1.0	"	20.00	ND	94.5	0-200	3.38	200	
Tetrachloroethene	18.2	1.0	"	20.00	ND	91.2	0-200	2.76	200	
1,3-Dichloropropane	21.1	1.0	"	20.00	ND	106	0-200	1.96	200	
Dibromochloromethane	22.6	1.0	"	20.00	1.12	107	0-200	1.29	200	
Chlorobenzene	21.4	1.0	"	20.00	ND	107	76.5-147	2.09	13.6	
1,1,1,2-Tetrachloroethane	22.0	1.0	"	20.00	ND	110	0-200	0.0454	200	
Ethylbenzene	22.8	1.0	"	20.00	ND	114	0-200	5.20	200	
m,p-Xylenes	43.6	2.0	"	40.00	ND	109	0-200	6.89	200	
o-Xylene	21.4	1.0	"	20.00	ND	107	0-200	6.59	200	
Styrene	21.7	1.0	"	20.00	ND	109	0-200	5.59	200	
Bromoform	19.8	1.0	"	20.00	ND	99.0	0-200	2.00	200	
Isopropylbenzene (Cumene)	24.2	1.0	"	20.00	ND	121	0-200	6.53	200	
1,1,2,2-Tetrachloroethane	26.1	1.0	"	20.00	ND	130	0-200	2.49	200	
1,2,3-Trichloropropane	23.6	1.0	"	20.00	ND	118	0-200	1.67	200	
Bromobenzene	23.3	1.0	"	20.00	ND	116	0-200	2.92	200	
Propylbenzene	25.5	1.0	"	20.00	ND	128	0-200	4.82	200	
2-Chlorotoluene	23.6	1.0	"	20.00	ND	118	0-200	3.74	200	
1,3,5-Trimethylbenzene	22.5	1.0	"	20.00	ND	113	0-200	4.90	200	
4-Chlorotoluene	22.8	1.0	"	20.00	ND	114	0-200	4.50	200	
tert-Butylbenzene	23.9	1.0	"	20.00	ND	120	0-200	4.01	200	
1,2,4-Trimethylbenzene	21.9	1.0	"	20.00	ND	109	0-200	4.90	200	
sec-Butylbenzene	26.7	1.0	"	20.00	ND	134	0-200	2.33	200	
4-Isopropyltoluene	39.2	1.0	"	20.00	10.4	144	0-200	2.44	200	
1,3-Dichlorobenzene	21.4	1.0	"	20.00	ND	107	0-200	3.66	200	
1,4-Dichlorobenzene	20.7	1.0	"	20.00	ND	104	0-200	3.84	200	
trans-1,4-Dichloro-2-butene	23.3	1.0	"	20.00	ND	116	0-200	1.75	200	
Butylbenzene	29.6	1.0	"	20.00	ND	148	0-200	1.53	200	
1,2-Dichlorobenzene	20.8	1.0	"	20.00	ND	104	0-200	4.27	200	
1,2-Dibromo-3-chloropropane	24.4	1.0	"	20.00	ND	122	0-200	5.44	200	
1,2,4-Trichlorobenzene	20.1	1.0	"	20.00	ND	100	0-200	15.8	200	
Hexachlorobutadiene	26.7	1.0	"	20.00	ND	134	0-200	23.8	200	
Naphthalene	21.5	1.0	"	20.00	ND	108	0-200	20.9	200	
1,2,3-Trichlorobenzene	17.9	1.0	"	20.00	ND	89.6	0-200	25.1	200	
Surrogate: Dibromofluoromethane	*22.5*		*"*	*25.00*		*89.8*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: Toluene-d8	*26.7*		*"*	*25.00*		*107*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*25.7*		*"*	*25.00*		*103*	*60-149*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928142 - EPA 625										
Blank (0928142-BLK1)				Prepared: 07/10/2009 Analyzed: 07/16/2009						
N-Nitrosodimethylamine	ND	10	ug/L							U
Pyridine	ND	20	"							U
Aniline	ND	10	"							U
Bis(2-Chloroethyl)ether	ND	10	"							U
Phenol	ND	10	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	10	"							U
1,3-Dichlorobenzene	ND	10	"							U
1,4-Dichlorobenzene	ND	10	"							U
1,2-Dichlorobenzene	ND	10	"							U
Pentachloroethane	ND	1.0	"							U
Bis(2-chloroisopropyl)ether	ND	10	"							U
2-Methylphenol	ND	10	"							U
Hexachloroethane	ND	10	"							U
4-Methylphenol, 3-Methylphenol	ND	10	"							U
Nitrobenzene	ND	10	"							U
Isophorone	ND	10	"							U
2-Nitrophenol	ND	10	"							U
2,4-Dimethylphenol	ND	10	"							U
bis(2-Chloroethoxy)methane	ND	10	"							U
2,4-Dichlorophenol	ND	10	"							U
1,2,4-Trichlorobenzene	ND	10	"							U
Naphthalene	ND	10	"							U
Hexachlorobutadiene	ND	10	"							U
4-Chloro-3-methylphenol	ND	20	"							U
2-Methylnaphthalene	ND	10	"							U
Hexachlorocyclopentadiene	ND	10	"							V6, U
2,4,6-Trichlorophenol	ND	10	"							U
2,4,5-Trichlorophenol	ND	10	"							U
2-Chloronaphthalene	ND	10	"							U
Acenaphthylene	ND	10	"							U
Dimethylphthalate	ND	10	"							U
2,6-Dinitrotoluene	ND	10	"							U
Acenaphthene	ND	10	"							U
2,4-Dinitrophenol	ND	50	"							U
Dibenzofuran	ND	10	"							U
2,4-Dinitrotoluene	ND	10	"							U
4-Nitrophenol	ND	50	"							U
Fluorene	ND	10	"							U
4-Chlorophenyl-phenylether	ND	10	"							U
Diethylphthalate	ND	10	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928142 - EPA 625										
Blank (0928142-BLK1)				Prepared: 07/10/2009 Analyzed: 07/16/2009						
4,6-Dinitro-2-methylphenol	ND	50	ug/L							U
4-Bromophenyl-phenylether	ND	10	"							U
Hexachlorobenzene	ND	10	"							U
Pentachlorophenol	ND	50	"							U
Phenanthrene	ND	10	"							U
Anthracene	ND	10	"							U
Di-n-butylphthalate	ND	10	"							U
Fluoranthene	ND	10	"							U
Pyrene	ND	10	"							U
Butylbenzylphthalate	ND	10	"							U
3,3´-Dichlorobenzidine	ND	20	"							U
Benz(a)anthracene	ND	10	"							U
Chrysene	ND	10	"							U
Bis(2-Ethylhexyl)phthalate	ND	10	"							U
Di-n-octylphthalate	ND	10	"							U
Benzo[b]fluoranthene	ND	10	"							U
Benzo[k]fluoranthene	ND	10	"							U
Benzo[a]pyrene	ND	10	"							U
Indeno[1,2,3-cd]pyrene	ND	10	"							U
Dibenz[a,h]anthracene	ND	10	"							U
Benzo[g,h,i]perylene	ND	10	"							U
Surrogate: 2-Fluorophenol	*73.0*		*"*	*150.0*		*48.7*	*10-83*			
Surrogate: Phenol-d5	*53.7*		*"*	*150.0*		*35.8*	*13-62*			
Surrogate: Nitrobenzene-d5	*86.5*		*"*	*100.0*		*86.5*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*107*		*"*	*100.0*		*107*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*148*		*"*	*150.0*		*98.8*	*24-142*			
Surrogate: Terphenyl-d14	*86.6*		*"*	*100.0*		*86.6*	*24-129*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0928142 - EPA 625										
LCS (0928142-BS1)				Prepared: 07/10/2009 Analyzed: 07/16/2009						
Phenol	21.6	10	ug/L	50.00		43.2	11-113			
2-Chlorophenol	37.4	10	"	50.00		74.9	13-109			
1,4-Dichlorobenzene	43.8	10	"	50.00		87.6	34-111			
1,2,4-Trichlorobenzene	46.9	10	"	50.00		93.8	23-126			
4-Chloro-3-methylphenol	45.1	20	"	50.00		90.1	16-127			
Acenaphthene	46.9	10	"	50.00		93.8	36-123			
2,4-Dinitrotoluene	46.2	10	"	50.00		92.5	24-123			
4-Nitrophenol	20.9	50	"	50.00		41.9	0.5-121			U
Pentachlorophenol	42.9	50	"	50.00		85.8	12-103			U
Pyrene	43.9	10	"	50.00		87.9	31-121			
Surrogate: 2-Fluorophenol	*78.7*		"	*150.0*		*52.5*	*10-83*			
Surrogate: Phenol-d5	*58.5*		"	*150.0*		*39.0*	*13-62*			
Surrogate: Nitrobenzene-d5	*88.3*		"	*100.0*		*88.3*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*110*		"	*100.0*		*110*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*149*		"	*150.0*		*99.6*	*24-142*			
Surrogate: Terphenyl-d14	*98.4*		"	*100.0*		*98.4*	*24-129*			
LCS Dup (0928142-BSD1)				Prepared: 07/10/2009 Analyzed: 07/16/2009						
Phenol	22.3	10	ug/L	50.00		44.7	11-113	3.37	200	
2-Chlorophenol	38.8	10	"	50.00		77.7	13-109	3.62	200	
1,4-Dichlorobenzene	46.0	10	"	50.00		91.9	34-111	4.84	200	
1,2,4-Trichlorobenzene	48.9	10	"	50.00		97.9	23-126	4.24	200	
4-Chloro-3-methylphenol	46.8	20	"	50.00		93.7	16-127	3.87	200	
Acenaphthene	49.4	10	"	50.00		98.7	36-123	5.17	200	
2,4-Dinitrotoluene	47.6	10	"	50.00		95.1	24-123	2.82	200	
4-Nitrophenol	21.4	50	"	50.00		42.8	0.5-121	2.27	200	U
Pentachlorophenol	44.1	50	"	50.00		88.3	12-103	2.85	200	U
Pyrene	45.4	10	"	50.00		90.8	31-121	3.31	200	
Surrogate: 2-Fluorophenol	*79.2*		"	*150.0*		*52.8*	*10-83*			
Surrogate: Phenol-d5	*58.7*		"	*150.0*		*39.2*	*13-62*			
Surrogate: Nitrobenzene-d5	*88.4*		"	*100.0*		*88.4*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*119*		"	*100.0*		*119*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*152*		"	*150.0*		*101*	*24-142*			
Surrogate: Terphenyl-d14	*100*		"	*100.0*		*100*	*24-129*			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929066 - EPA 625										
Blank (0929066-BLK1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
N-Nitrosodimethylamine	ND	10	ug/L							U
Pyridine	ND	20	"							U
Aniline	ND	10	"							U
Bis(2-Chloroethyl)ether	ND	10	"							U
Phenol	ND	10	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	10	"							U
1,3-Dichlorobenzene	ND	10	"							U
1,4-Dichlorobenzene	ND	10	"							U
1,2-Dichlorobenzene	ND	10	"							U
Pentachloroethane	ND	1.0	"							U
Bis(2-chloroisopropyl)ether	ND	10	"							U
2-Methylphenol	ND	10	"							U
Hexachloroethane	ND	10	"							U
4-Methylphenol, 3-Methylphenol	ND	10	"							U
Nitrobenzene	ND	10	"							U
Isophorone	ND	10	"							U
2-Nitrophenol	ND	10	"							U
2,4-Dimethylphenol	ND	10	"							U
bis(2-Chloroethoxy)methane	ND	10	"							U
2,4-Dichlorophenol	ND	10	"							U
1,2,4-Trichlorobenzene	ND	10	"							U
Naphthalene	ND	10	"							U
Hexachlorobutadiene	ND	10	"							U
4-Chloro-3-methylphenol	ND	20	"							U
2-Methylnaphthalene	ND	10	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	10	"							U
2,4,5-Trichlorophenol	ND	10	"							U
2-Chloronaphthalene	ND	10	"							U
Acenaphthylene	ND	10	"							U
Dimethylphthalate	ND	10	"							U
2,6-Dinitrotoluene	ND	10	"							U
Acenaphthene	ND	10	"							U
2,4-Dinitrophenol	ND	50	"							U
Dibenzofuran	ND	10	"							U
2,4-Dinitrotoluene	ND	10	"							U
4-Nitrophenol	ND	50	"							U
Fluorene	ND	10	"							U
4-Chlorophenyl-phenylether	ND	10	"							U
Diethylphthalate	ND	10	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929066 - EPA 625										
Blank (0929066-BLK1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
4,6-Dinitro-2-methylphenol	ND	50	ug/L							U
4-Bromophenyl-phenylether	ND	10	"							U
Hexachlorobenzene	ND	10	"							U
Pentachlorophenol	ND	50	"							U
Phenanthrene	ND	10	"							U
Anthracene	ND	10	"							U
Di-n-butylphthalate	ND	10	"							U
Fluoranthene	ND	10	"							U
Pyrene	ND	10	"							U
Butylbenzylphthalate	ND	10	"							U
3,3´-Dichlorobenzidine	ND	20	"							U
Benz(a)anthracene	ND	10	"							U
Chrysene	ND	10	"							U
Bis(2-Ethylhexyl)phthalate	ND	10	"							U
Di-n-octylphthalate	ND	10	"							U
Benzo[b]fluoranthene	ND	10	"							U
Benzo[k]fluoranthene	ND	10	"							U
Benzo[a]pyrene	ND	10	"							U
Indeno[1,2,3-cd]pyrene	ND	10	"							U
Dibenz[a,h]anthracene	ND	10	"							U
Benzo[g,h,i]perylene	ND	10	"							U
Surrogate: 2-Fluorophenol	*69.3*		*"*	*150.0*		*46.2*	*10-83*			
Surrogate: Phenol-d5	*51.6*		*"*	*150.0*		*34.4*	*13-62*			
Surrogate: Nitrobenzene-d5	*77.8*		*"*	*100.0*		*77.8*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*66.6*		*"*	*100.0*		*66.6*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*109*		*"*	*150.0*		*72.4*	*24-142*			
Surrogate: Terphenyl-d14	*64.5*		*"*	*100.0*		*64.5*	*24-129*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929066 - EPA 625										
LCS (0929066-BS1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
N-Nitrosodimethylamine	24.3	10	ug/L	50.00		48.6	0-200			
Pyridine	19.7	20	"	50.00		39.4	0-200			U
Aniline	33.6	10	"	50.00		67.3	0-200			
Bis(2-Chloroethyl)ether	39.5	10	"	50.00		79.0	0-200			
Phenol	17.9	10	"	50.00		35.8	11-113			
2-Chlorophenol	34.6	10	"	50.00		69.2	13-109			
1,4-Dichlorobenzene	33.4	10	"	50.00		66.7	34-111			
Bis(2-chloroisopropyl)ether	38.0	10	"	50.00		75.9	0-200			
2-Methylphenol	31.0	10	"	50.00		62.0	0-200			
Hexachloroethane	33.9	10	"	50.00		67.8	0-200			
4-Methylphenol, 3-Methylphenol	31.0	10	"	50.00		62.0	0-200			
Nitrobenzene	36.7	10	"	50.00		73.5	0-200			
Isophorone	55.5	10	"	50.00		111	0-200			
2-Nitrophenol	38.2	10	"	50.00		76.3	0-200			
bis(2-Chloroethoxy)methane	39.0	10	"	50.00		78.0	0-200			
1,2,4-Trichlorobenzene	34.9	10	"	50.00		69.8	23-126			
Naphthalene	34.0	10	"	50.00		68.0	0-200			
Hexachlorobutadiene	32.0	10	"	50.00		64.0	0-200			
4-Chloro-3-methylphenol	37.2	20	"	50.00		74.4	16-127			
2-Methylnaphthalene	33.9	10	"	50.00		67.9	0-200			
Hexachlorocyclopentadiene	87.3	10	"	50.00		175	0-200			
2,4,5-Trichlorophenol	39.8	10	"	50.00		79.6	0-200			
2-Chloronaphthalene	35.3	10	"	50.00		70.6	0-200			
Acenaphthylene	41.2	10	"	50.00		82.4	0-200			
Dimethylphthalate	40.7	10	"	50.00		81.4	0-200			
Acenaphthene	35.3	10	"	50.00		70.6	36-123			
Dibenzofuran	35.4	10	"	50.00		70.7	0-200			
2,4-Dinitrotoluene	38.1	10	"	50.00		76.2	24-123			
4-Nitrophenol	17.7	50	"	50.00		35.5	0.5-121			U
Fluorene	34.4	10	"	50.00		68.7	0-200			
4-Chlorophenyl-phenylether	38.8	10	"	50.00		77.7	0-200			
Diethylphthalate	40.9	10	"	50.00		81.9	0-200			
4,6-Dinitro-2-methylphenol	36.9	50	"	50.00		73.8	0-200			U
4-Bromophenyl-phenylether	45.0	10	"	50.00		90.0	0-200			
Hexachlorobenzene	35.7	10	"	50.00		71.4	0-200			
Pentachlorophenol	29.8	50	"	50.00		59.6	12-103			U
Phenanthrene	35.3	10	"	50.00		70.6	0-200			
Anthracene	36.2	10	"	50.00		72.4	0-200			
Di-n-butylphthalate	42.8	10	"	50.00		85.7	0-200			
Fluoranthene	34.6	10	"	50.00		69.2	0-200			
Pyrene	35.3	10	"	50.00		70.6	31-121			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929066 - EPA 625										
LCS (0929066-BS1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
Butylbenzylphthalate	36.6	10	ug/L	50.00		73.2	0-200			
Benz(a)anthracene	35.6	10	"	50.00		71.1	0-200			
Chrysene	34.7	10	"	50.00		69.5	0-200			
Bis(2-Ethylhexyl)phthalate	40.9	10	"	50.00		81.8	0-200			
Di-n-octylphthalate	39.3	10	"	50.00		78.6	0-200			
Benzo[b]fluoranthene	35.6	10	"	50.00		71.2	0-200			
Benzo[k]fluoranthene	36.2	10	"	50.00		72.5	0-200			
Benzo[a]pyrene	36.9	10	"	50.00		73.7	0-200			
Indeno[1,2,3-cd]pyrene	36.6	10	"	50.00		73.2	0-200			
Dibenz[a,h]anthracene	35.9	10	"	50.00		71.8	0-200			
Benzo[g,h,i]perylene	35.8	10	"	50.00		71.6	0-200			
Surrogate: 2-Fluorophenol	*69.0*		*"*	*150.0*		*46.0*	*10-83*			
Surrogate: Phenol-d5	*50.7*		*"*	*150.0*		*33.8*	*13-62*			
Surrogate: Nitrobenzene-d5	*76.1*		*"*	*100.0*		*76.1*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*64.7*		*"*	*100.0*		*64.7*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*106*		*"*	*150.0*		*70.9*	*24-142*			
Surrogate: Terphenyl-d14	*65.8*		*"*	*100.0*		*65.8*	*24-129*			
LCS Dup (0929066-BSD1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
N-Nitrosodimethylamine	25.8	10	ug/L	50.00		51.6	0-200	5.99	200	
Pyridine	25.2	20	"	50.00		50.5	0-200	24.7	200	
Aniline	35.7	10	"	50.00		71.4	0-200	5.89	200	
Bis(2-Chloroethyl)ether	42.0	10	"	50.00		84.0	0-200	6.04	200	
Phenol	19.5	10	"	50.00		39.0	11-113	8.45	200	
2-Chlorophenol	36.3	10	"	50.00		72.6	13-109	4.79	200	
1,4-Dichlorobenzene	35.8	10	"	50.00		71.5	34-111	7.00	200	
Bis(2-chloroisopropyl)ether	39.9	10	"	50.00		79.8	0-200	4.98	200	
2-Methylphenol	32.3	10	"	50.00		64.5	0-200	4.01	200	
Hexachloroethane	35.0	10	"	50.00		69.9	0-200	3.05	200	
4-Methylphenol, 3-Methylphenol	32.4	10	"	50.00		64.8	0-200	4.32	200	
Nitrobenzene	37.9	10	"	50.00		75.8	0-200	3.14	200	
Isophorone	57.1	10	"	50.00		114	0-200	2.82	200	
2-Nitrophenol	39.5	10	"	50.00		79.0	0-200	3.48	200	
bis(2-Chloroethoxy)methane	40.4	10	"	50.00		80.9	0-200	3.68	200	
1,2,4-Trichlorobenzene	35.9	10	"	50.00		71.8	23-126	2.85	200	
Naphthalene	35.6	10	"	50.00		71.1	0-200	4.46	200	
Hexachlorobutadiene	33.2	10	"	50.00		66.3	0-200	3.50	200	
4-Chloro-3-methylphenol	38.1	20	"	50.00		76.2	16-127	2.36	200	
2-Methylnaphthalene	35.5	10	"	50.00		70.9	0-200	4.41	200	
Hexachlorocyclopentadiene	89.6	10	"	50.00		179	0-200	2.60	200	
2,4,5-Trichlorophenol	39.8	10	"	50.00		79.6	0-200	0.00	200	
2-Chloronaphthalene	36.7	10	"	50.00		73.4	0-200	3.81	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929066 - EPA 625										
LCS Dup (0929066-BSD1)				Prepared: 07/14/2009 Analyzed: 07/25/2009						
Acenaphthylene	43.5	10	ug/L	50.00		87.0	0-200	5.48	200	
Dimethylphthalate	42.2	10	"	50.00		84.3	0-200	3.52	200	
Acenaphthene	37.0	10	"	50.00		74.0	36-123	4.71	200	
Dibenzofuran	37.1	10	"	50.00		74.3	0-200	4.91	200	
2,4-Dinitrotoluene	38.5	10	"	50.00		77.0	24-123	0.940	200	
4-Nitrophenol	18.1	50	"	50.00		36.2	0.5-121	1.90	200	U
Fluorene	36.3	10	"	50.00		72.6	0-200	5.47	200	
4-Chlorophenyl-phenylether	40.1	10	"	50.00		80.3	0-200	3.29	200	
Diethylphthalate	43.5	10	"	50.00		87.0	0-200	6.02	200	
4,6-Dinitro-2-methylphenol	36.6	50	"	50.00		73.2	0-200	0.871	200	U
4-Bromophenyl-phenylether	45.8	10	"	50.00		91.7	0-200	1.87	200	
Hexachlorobenzene	36.3	10	"	50.00		72.7	0-200	1.75	200	
Pentachlorophenol	28.0	50	"	50.00		55.9	12-103	6.37	200	U
Phenanthrene	36.6	10	"	50.00		73.1	0-200	3.53	200	
Anthracene	37.5	10	"	50.00		74.9	0-200	3.48	200	
Di-n-butylphthalate	44.5	10	"	50.00		89.1	0-200	3.87	200	
Fluoranthene	36.0	10	"	50.00		72.0	0-200	3.96	200	
Pyrene	36.7	10	"	50.00		73.4	31-121	4.00	200	
Butylbenzylphthalate	37.5	10	"	50.00		75.0	0-200	2.32	200	
Benz(a)anthracene	36.5	10	"	50.00		73.0	0-200	2.66	200	
Chrysene	36.1	10	"	50.00		72.2	0-200	3.87	200	
Bis(2-Ethylhexyl)phthalate	41.7	10	"	50.00		83.4	0-200	1.98	200	
Di-n-octylphthalate	41.7	10	"	50.00		83.4	0-200	5.95	200	
Benzo[b]fluoranthene	37.3	10	"	50.00		74.6	0-200	4.64	200	
Benzo[k]fluoranthene	38.8	10	"	50.00		77.6	0-200	6.88	200	
Benzo[a]pyrene	38.4	10	"	50.00		76.7	0-200	3.99	200	
Indeno[1,2,3-cd]pyrene	37.9	10	"	50.00		75.7	0-200	3.36	200	
Dibenz[a,h]anthracene	37.2	10	"	50.00		74.5	0-200	3.61	200	
Benzo[g,h,i]perylene	36.9	10	"	50.00		73.8	0-200	3.00	200	
Surrogate: 2-Fluorophenol	*72.5*		*"*	*150.0*		*48.3*	*10-83*			
Surrogate: Phenol-d5	*54.1*		*"*	*150.0*		*36.1*	*13-62*			
Surrogate: Nitrobenzene-d5	*77.1*		*"*	*100.0*		*77.1*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*67.8*		*"*	*100.0*		*67.8*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*108*		*"*	*150.0*		*72.1*	*24-142*			
Surrogate: Terphenyl-d14	*68.5*		*"*	*100.0*		*68.5*	*24-129*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
Blank (0929099-BLK1)				Prepared: 07/16/2009 Analyzed: 07/25/2009						
N-Nitrosodimethylamine	ND	10	ug/L							U
Pyridine	ND	20	"							U
Aniline	ND	10	"							U
Bis(2-Chloroethyl)ether	ND	10	"							U
Phenol	ND	10	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	10	"							U
1,3-Dichlorobenzene	ND	10	"							U
1,4-Dichlorobenzene	ND	10	"							U
1,2-Dichlorobenzene	ND	10	"							U
Pentachloroethane	ND	1.0	"							U
Bis(2-chloroisopropyl)ether	ND	10	"							U
2-Methylphenol	ND	10	"							U
Hexachloroethane	ND	10	"							U
4-Methylphenol, 3-Methylphenol	ND	10	"							U
Nitrobenzene	ND	10	"							U
Isophorone	ND	10	"							U
2-Nitrophenol	ND	10	"							U
2,4-Dimethylphenol	ND	10	"							U
bis(2-Chloroethoxy)methane	ND	10	"							U
2,4-Dichlorophenol	ND	10	"							U
1,2,4-Trichlorobenzene	ND	10	"							U
Naphthalene	ND	10	"							U
Hexachlorobutadiene	ND	10	"							U
4-Chloro-3-methylphenol	ND	20	"							U
2-Methylnaphthalene	ND	10	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	10	"							U
2,4,5-Trichlorophenol	ND	10	"							U
2-Chloronaphthalene	ND	10	"							U
Acenaphthylene	ND	10	"							U
Dimethylphthalate	ND	10	"							U
2,6-Dinitrotoluene	ND	10	"							U
Acenaphthene	ND	10	"							U
2,4-Dinitrophenol	ND	50	"							U
Dibenzofuran	ND	10	"							U
2,4-Dinitrotoluene	ND	10	"							U
4-Nitrophenol	ND	50	"							U
Fluorene	ND	10	"							U
4-Chlorophenyl-phenylether	ND	10	"							U
Diethylphthalate	ND	10	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
Blank (0929099-BLK1)				Prepared: 07/16/2009 Analyzed: 07/25/2009						
4,6-Dinitro-2-methylphenol	ND	50	ug/L							U
4-Bromophenyl-phenylether	ND	10	"							U
Hexachlorobenzene	ND	10	"							U
Pentachlorophenol	ND	50	"							U
Phenanthrene	ND	10	"							U
Anthracene	ND	10	"							U
Di-n-butylphthalate	ND	10	"							U
Fluoranthene	ND	10	"							U
Pyrene	ND	10	"							U
Butylbenzylphthalate	ND	10	"							U
3,3´-Dichlorobenzidine	ND	20	"							U
Benz(a)anthracene	ND	10	"							U
Chrysene	ND	10	"							U
Bis(2-Ethylhexyl)phthalate	ND	10	"							U
Di-n-octylphthalate	ND	10	"							U
Benzo[b]fluoranthene	ND	10	"							U
Benzo[k]fluoranthene	ND	10	"							U
Benzo[a]pyrene	ND	10	"							U
Indeno[1,2,3-cd]pyrene	ND	10	"							U
Dibenz[a,h]anthracene	ND	10	"							U
Benzo[g,h,i]perylene	ND	10	"							U
Surrogate: 2-Fluorophenol	*77.8*		*"*	*150.0*		*51.9*	*10-83*			
Surrogate: Phenol-d5	*62.4*		*"*	*150.0*		*41.6*	*13-62*			
Surrogate: Nitrobenzene-d5	*67.2*		*"*	*100.0*		*67.2*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*59.3*		*"*	*100.0*		*59.3*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*99.5*		*"*	*150.0*		*66.4*	*24-142*			
Surrogate: Terphenyl-d14	*58.0*		*"*	*100.0*		*58.0*	*24-129*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
LCS (0929099-BS1)				Prepared: 07/16/2009 Analyzed: 07/25/2009						
N-Nitrosodimethylamine	20.8	10	ug/L	50.00		41.6	0-200			
Pyridine	14.1	20	"	50.00		28.2	0-200			U
Aniline	24.8	10	"	50.00		49.6	0-200			
Bis(2-Chloroethyl)ether	35.9	10	"	50.00		71.8	0-200			
Phenol	14.3	10	"	50.00		28.6	11-113			
2-Chlorophenol	30.4	10	"	50.00		60.7	13-109			
1,4-Dichlorobenzene	29.5	10	"	50.00		58.9	34-111			
Bis(2-chloroisopropyl)ether	34.9	10	"	50.00		69.9	0-200			
2-Methylphenol	25.9	10	"	50.00		51.8	0-200			
Hexachloroethane	29.1	10	"	50.00		58.2	0-200			
4-Methylphenol, 3-Methylphenol	26.1	10	"	50.00		52.3	0-200			
Nitrobenzene	32.7	10	"	50.00		65.4	0-200			
Isophorone	49.2	10	"	50.00		98.3	0-200			
2-Nitrophenol	33.8	10	"	50.00		67.5	0-200			
bis(2-Chloroethoxy)methane	34.5	10	"	50.00		69.1	0-200			
1,2,4-Trichlorobenzene	30.6	10	"	50.00		61.1	23-126			
Naphthalene	30.2	10	"	50.00		60.3	0-200			
Hexachlorobutadiene	28.6	10	"	50.00		57.2	0-200			
4-Chloro-3-methylphenol	32.2	20	"	50.00		64.3	16-127			
2-Methylnaphthalene	30.0	10	"	50.00		60.0	0-200			
Hexachlorocyclopentadiene	75.8	10	"	50.00		152	0-200			
2,4,5-Trichlorophenol	35.1	10	"	50.00		70.3	0-200			
2-Chloronaphthalene	31.4	10	"	50.00		62.7	0-200			
Acenaphthylene	37.0	10	"	50.00		74.1	0-200			
Dimethylphthalate	36.6	10	"	50.00		73.3	0-200			
Acenaphthene	31.7	10	"	50.00		63.3	36-123			
Dibenzofuran	32.1	10	"	50.00		64.2	0-200			
2,4-Dinitrotoluene	33.6	10	"	50.00		67.3	24-123			
4-Nitrophenol	14.5	50	"	50.00		29.0	0.5-121			U
Fluorene	31.2	10	"	50.00		62.3	0-200			
4-Chlorophenyl-phenylether	34.7	10	"	50.00		69.4	0-200			
Diethylphthalate	35.9	10	"	50.00		71.8	0-200			
4,6-Dinitro-2-methylphenol	28.8	50	"	50.00		57.5	0-200			U
4-Bromophenyl-phenylether	40.2	10	"	50.00		80.3	0-200			
Hexachlorobenzene	31.5	10	"	50.00		63.1	0-200			
Pentachlorophenol	17.6	50	"	50.00		35.2	12-103			U
Phenanthrene	31.6	10	"	50.00		63.2	0-200			
Anthracene	32.5	10	"	50.00		65.1	0-200			
Di-n-butylphthalate	38.4	10	"	50.00		76.9	0-200			
Fluoranthene	30.9	10	"	50.00		61.7	0-200			
Pyrene	31.5	10	"	50.00		63.0	31-121			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
LCS (0929099-BS1)				Prepared: 07/16/2009 Analyzed: 07/25/2009						
Butylbenzylphthalate	31.0	10	ug/L	50.00		62.1	0-200			
Benz(a)anthracene	31.5	10	"	50.00		62.9	0-200			
Chrysene	30.7	10	"	50.00		61.4	0-200			
Bis(2-Ethylhexyl)phthalate	37.6	10	"	50.00		75.2	0-200			
Di-n-octylphthalate	34.2	10	"	50.00		68.4	0-200			
Benzo[b]fluoranthene	31.6	10	"	50.00		63.1	0-200			
Benzo[k]fluoranthene	32.1	10	"	50.00		64.2	0-200			
Benzo[a]pyrene	32.5	10	"	50.00		65.0	0-200			
Indeno[1,2,3-cd]pyrene	32.4	10	"	50.00		64.7	0-200			
Dibenz[a,h]anthracene	32.0	10	"	50.00		64.0	0-200			
Benzo[g,h,i]perylene	31.7	10	"	50.00		63.3	0-200			
Surrogate: 2-Fluorophenol	*61.4*		*"*	*150.0*		*40.9*	*10-83*			
Surrogate: Phenol-d5	*43.4*		*"*	*150.0*		*28.9*	*13-62*			
Surrogate: Nitrobenzene-d5	*70.4*		*"*	*100.0*		*70.4*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*61.2*		*"*	*100.0*		*61.2*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*100*		*"*	*150.0*		*67.0*	*24-142*			
Surrogate: Terphenyl-d14	*62.6*		*"*	*100.0*		*62.6*	*24-129*			
LCS Dup (0929099-BSD1)				Prepared: 07/16/2009 Analyzed: 07/26/2009						
N-Nitrosodimethylamine	19.4	10	ug/L	50.00		38.8	0-200	6.91	200	
Pyridine	18.5	20	"	50.00		37.1	0-200	27.2	200	U
Aniline	26.2	10	"	50.00		52.5	0-200	5.64	200	
Bis(2-Chloroethyl)ether	34.7	10	"	50.00		69.4	0-200	3.40	200	
Phenol	13.4	10	"	50.00		26.7	11-113	6.79	200	
2-Chlorophenol	27.5	10	"	50.00		55.0	13-109	9.96	200	
1,4-Dichlorobenzene	26.9	10	"	50.00		53.7	34-111	9.23	200	
Bis(2-chloroisopropyl)ether	31.9	10	"	50.00		63.9	0-200	8.97	200	
2-Methylphenol	23.7	10	"	50.00		47.4	0-200	8.86	200	
Hexachloroethane	26.2	10	"	50.00		52.4	0-200	10.5	200	
4-Methylphenol, 3-Methylphenol	23.5	10	"	50.00		47.0	0-200	10.5	200	
Nitrobenzene	30.2	10	"	50.00		60.4	0-200	7.95	200	
Isophorone	44.9	10	"	50.00		89.8	0-200	9.10	200	
2-Nitrophenol	30.1	10	"	50.00		60.1	0-200	11.6	200	
bis(2-Chloroethoxy)methane	31.6	10	"	50.00		63.1	0-200	9.02	200	
1,2,4-Trichlorobenzene	27.4	10	"	50.00		54.7	23-126	11.0	200	
Naphthalene	27.8	10	"	50.00		55.7	0-200	8.00	200	
Hexachlorobutadiene	25.7	10	"	50.00		51.4	0-200	10.7	200	
4-Chloro-3-methylphenol	28.1	20	"	50.00		56.1	16-127	13.6	200	
2-Methylnaphthalene	28.4	10	"	50.00		56.7	0-200	5.72	200	
Hexachlorocyclopentadiene	68.4	10	"	50.00		137	0-200	10.3	200	
2,4,5-Trichlorophenol	30.8	10	"	50.00		61.7	0-200	13.0	200	
2-Chloronaphthalene	28.4	10	"	50.00		56.8	0-200	9.87	200	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
LCS Dup (0929099-BSD1)				Prepared: 07/16/2009 Analyzed: 07/26/2009						
Acenaphthylene	34.9	10	ug/L	50.00		69.7	0-200	6.06	200	
Dimethylphthalate	34.8	10	"	50.00		69.5	0-200	5.27	200	
Acenaphthene	29.6	10	"	50.00		59.1	36-123	6.89	200	
Dibenzofuran	29.7	10	"	50.00		59.5	0-200	7.60	200	
2,4-Dinitrotoluene	30.6	10	"	50.00		61.3	24-123	9.37	200	
4-Nitrophenol	12.7	50	"	50.00		25.5	0.5-121	12.8	200	U
Fluorene	29.8	10	"	50.00		59.7	0-200	4.26	200	
4-Chlorophenyl-phenylether	32.4	10	"	50.00		64.9	0-200	6.73	200	
Diethylphthalate	34.7	10	"	50.00		69.3	0-200	3.43	200	
4,6-Dinitro-2-methylphenol	25.1	50	"	50.00		50.2	0-200	13.6	200	U
4-Bromophenyl-phenylether	37.2	10	"	50.00		74.5	0-200	7.55	200	
Hexachlorobenzene	29.7	10	"	50.00		59.5	0-200	5.84	200	
Pentachlorophenol	13.0	50	"	50.00		26.0	12-103	30.1	200	U
Phenanthrene	30.0	10	"	50.00		59.9	0-200	5.26	200	
Anthracene	30.9	10	"	50.00		61.8	0-200	5.20	200	
Di-n-butylphthalate	37.4	10	"	50.00		74.8	0-200	2.72	200	
Fluoranthene	30.2	10	"	50.00		60.5	0-200	2.06	200	
Pyrene	30.2	10	"	50.00		60.4	31-121	4.28	200	
Butylbenzylphthalate	29.4	10	"	50.00		58.9	0-200	5.26	200	
Benz(a)anthracene	30.1	10	"	50.00		60.3	0-200	4.32	200	
Chrysene	29.3	10	"	50.00		58.6	0-200	4.53	200	
Bis(2-Ethylhexyl)phthalate	35.6	10	"	50.00		71.1	0-200	5.50	200	
Di-n-octylphthalate	34.0	10	"	50.00		67.9	0-200	0.733	200	
Benzo[b]fluoranthene	30.9	10	"	50.00		61.8	0-200	2.08	200	
Benzo[k]fluoranthene	30.3	10	"	50.00		60.5	0-200	5.84	200	
Benzo[a]pyrene	31.2	10	"	50.00		62.5	0-200	4.02	200	
Indeno[1,2,3-cd]pyrene	30.8	10	"	50.00		61.7	0-200	4.81	200	
Dibenz[a,h]anthracene	30.8	10	"	50.00		61.6	0-200	3.82	200	
Benzo[g,h,i]perylene	29.6	10	"	50.00		59.1	0-200	6.86	200	
Surrogate: 2-Fluorophenol	*56.5*		*"*	*150.0*		*37.7*	*10-83*			
Surrogate: Phenol-d5	*40.0*		*"*	*150.0*		*26.7*	*13-62*			
Surrogate: Nitrobenzene-d5	*66.6*		*"*	*100.0*		*66.6*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*60.4*		*"*	*100.0*		*60.4*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*97.1*		*"*	*150.0*		*64.7*	*24-142*			
Surrogate: Terphenyl-d14	*62.8*		*"*	*100.0*		*62.8*	*24-129*			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
Matrix Spike (0929099-MS1)	**Source: 09G0180-20**		Prepared: 07/16/2009 Analyzed: 07/26/2009							
N-Nitrosodimethylamine	26.1	10	ug/L	51.55	ND	50.6	0-200			D
Pyridine	24.1	21	"	51.55	0.00	46.7	0-200			D
Aniline	32.8	10	"	51.55	ND	63.7	0-200			D
Bis(2-Chloroethyl)ether	38.8	10	"	51.55	ND	75.2	0-200			D
Phenol	15.9	10	"	51.55	ND	30.9	12-110			D
2-Chlorophenol	32.6	10	"	51.55	ND	63.3	27-123			D
1,4-Dichlorobenzene	33.7	10	"	51.55	ND	65.4	36-97			D
Bis(2-chloroisopropyl)ether	38.2	10	"	51.55	ND	74.1	0-200			D
2-Methylphenol	28.7	10	"	51.55	ND	55.6	0-200			D
Hexachloroethane	34.4	10	"	51.55	ND	66.7	0-200			D
4-Methylphenol, 3-Methylphenol	28.9	10	"	51.55	ND	56.1	0-200			D
Nitrobenzene	35.6	10	"	51.55	ND	69.1	0-200			D
Isophorone	54.1	10	"	51.55	ND	105	0-200			D
2-Nitrophenol	36.8	10	"	51.55	ND	71.4	0-200			D
bis(2-Chloroethoxy)methane	38.1	10	"	51.55	ND	73.9	0-200			D
1,2,4-Trichlorobenzene	35.5	10	"	51.55	ND	68.9	39-98			D
Naphthalene	33.4	10	"	51.55	ND	64.8	0-200			D
Hexachlorobutadiene	33.4	10	"	51.55	ND	64.8	0-200			D
4-Chloro-3-methylphenol	35.4	21	"	51.55	ND	68.6	23-97			D
2-Methylnaphthalene	32.7	10	"	51.55	ND	63.5	0-200			D
Hexachlorocyclopentadiene	91.0	10	"	51.55	ND	177	0-200			D
2,4,5-Trichlorophenol	37.7	10	"	51.55	ND	73.1	0-200			D
2-Chloronaphthalene	34.7	10	"	51.55	ND	67.4	0-200			D
Acenaphthylene	39.4	10	"	51.55	ND	76.4	0-200			D
Dimethylphthalate	39.5	10	"	51.55	ND	76.7	0-200			D
Acenaphthene	33.7	10	"	51.55	ND	65.4	46-118			D
Dibenzofuran	33.9	10	"	51.55	ND	65.7	0-200			D
2,4-Dinitrotoluene	36.7	10	"	51.55	ND	71.2	24-96			D
4-Nitrophenol	16.8	52	"	51.55	ND	32.5	10-80			U, D
Fluorene	32.1	10	"	51.55	ND	62.2	0-200			D
4-Chlorophenyl-phenylether	37.5	10	"	51.55	ND	72.7	0-200			D
Diethylphthalate	38.0	10	"	51.55	ND	73.7	0-200			D
4,6-Dinitro-2-methylphenol	33.1	52	"	51.55	ND	64.2	0-200			U, D
4-Bromophenyl-phenylether	43.5	10	"	51.55	ND	84.4	0-200			D
Hexachlorobenzene	34.0	10	"	51.55	ND	65.9	0-200			D
Pentachlorophenol	23.2	52	"	51.55	ND	44.9	9-103			U, D
Phenanthrene	33.3	10	"	51.55	ND	64.6	0-200			D
Anthracene	34.6	10	"	51.55	ND	67.1	0-200			D
Di-n-butylphthalate	41.3	10	"	51.55	ND	80.2	0-200			D
Fluoranthene	32.7	10	"	51.55	ND	63.5	0-200			D
Pyrene	32.8	10	"	51.55	ND	63.6	26-127			D

The results in this report apply to the samples analyzed in accordance with the chain of

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

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
Matrix Spike (0929099-MS1)	**Source: 09G0180-20**			Prepared: 07/16/2009 Analyzed: 07/26/2009						
Butylbenzylphthalate	33.8	10	ug/L	51.55	ND	65.5	0-200			D
Benz(a)anthracene	33.8	10	"	51.55	ND	65.6	0-200			D
Chrysene	32.5	10	"	51.55	ND	63.0	0-200			D
Bis(2-Ethylhexyl)phthalate	107	10	"	51.55	63.1	84.7	0-200			D
Di-n-octylphthalate	36.5	10	"	51.55	ND	70.8	0-200			D
Benzo[b]fluoranthene	34.5	10	"	51.55	ND	67.0	0-200			D
Benzo[k]fluoranthene	32.6	10	"	51.55	ND	63.3	0-200			D
Benzo[a]pyrene	35.0	10	"	51.55	ND	67.9	0-200			D
Indeno[1,2,3-cd]pyrene	35.0	10	"	51.55	ND	67.9	0-200			D
Dibenz[a,h]anthracene	33.9	10	"	51.55	ND	65.9	0-200			D
Benzo[g,h,i]perylene	34.3	10	"	51.55	ND	66.6	0-200			D
Surrogate: 2-Fluorophenol	*64.4*		*"*	*154.6*		*41.7*	*10-83*			
Surrogate: Phenol-d5	*46.7*		*"*	*154.6*		*30.2*	*13-62*			
Surrogate: Nitrobenzene-d5	*73.8*		*"*	*103.1*		*71.6*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*62.4*		*"*	*103.1*		*60.5*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*103*		*"*	*154.6*		*66.4*	*24-142*			
Surrogate: Terphenyl-d14	*60.6*		*"*	*103.1*		*58.8*	*24-129*			
Matrix Spike Dup (0929099-MSD1)	**Source: 09G0180-20**			Prepared: 07/16/2009 Analyzed: 07/26/2009						
N-Nitrosodimethylamine	24.6	10	ug/L	51.55	ND	47.7	0-200	5.82	200	D
Pyridine	22.6	21	"	51.55	0.00	43.9	0-200	6.18	200	D
Aniline	31.8	10	"	51.55	ND	61.8	0-200	3.09	200	D
Bis(2-Chloroethyl)ether	37.0	10	"	51.55	ND	71.8	0-200	4.60	200	D
Phenol	17.0	10	"	51.55	ND	33.0	12-110	6.51	42	D
2-Chlorophenol	32.9	10	"	51.55	ND	63.7	27-123	0.724	40	D
1,4-Dichlorobenzene	32.3	10	"	51.55	ND	62.7	36-97	4.34	28	D
Bis(2-chloroisopropyl)ether	36.8	10	"	51.55	ND	71.4	0-200	3.79	200	D
2-Methylphenol	29.2	10	"	51.55	ND	56.7	0-200	1.92	200	D
Hexachloroethane	32.5	10	"	51.55	ND	63.0	0-200	5.58	200	D
4-Methylphenol, 3-Methylphenol	29.3	10	"	51.55	ND	56.8	0-200	1.24	200	D
Nitrobenzene	34.6	10	"	51.55	ND	67.1	0-200	2.91	200	D
Isophorone	51.5	10	"	51.55	ND	99.9	0-200	4.94	200	D
2-Nitrophenol	35.8	10	"	51.55	ND	69.5	0-200	2.70	200	D
bis(2-Chloroethoxy)methane	36.2	10	"	51.55	ND	70.1	0-200	5.17	200	D
1,2,4-Trichlorobenzene	33.8	10	"	51.55	ND	65.6	39-98	5.00	28	D
Naphthalene	32.3	10	"	51.55	ND	62.6	0-200	3.39	200	D
Hexachlorobutadiene	31.5	10	"	51.55	ND	61.1	0-200	5.91	200	D
4-Chloro-3-methylphenol	34.7	21	"	51.55	ND	67.4	23-97	1.74	200	D
2-Methylnaphthalene	31.3	10	"	51.55	ND	60.6	0-200	4.61	200	D
Hexachlorocyclopentadiene	85.6	10	"	51.55	ND	166	0-200	6.14	200	D
2,4,5-Trichlorophenol	36.1	10	"	51.55	ND	70.1	0-200	4.30	200	D
2-Chloronaphthalene	33.6	10	"	51.55	ND	65.1	0-200	3.47	200	D

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0929099 - EPA 625										
Matrix Spike Dup (0929099-MSD1)	**Source: 09G0180-20**			Prepared: 07/16/2009 Analyzed: 07/26/2009						
Acenaphthylene	38.4	10	ug/L	51.55	ND	74.5	0-200	2.57	200	D
Dimethylphthalate	37.5	10	"	51.55	ND	72.8	0-200	5.22	200	D
Acenaphthene	32.9	10	"	51.55	ND	63.7	46-118	2.57	31	D
Dibenzofuran	33.1	10	"	51.55	ND	64.3	0-200	2.28	200	D
2,4-Dinitrotoluene	34.6	10	"	51.55	ND	67.2	24-96	5.72	38	D
4-Nitrophenol	17.1	52	"	51.55	ND	33.1	10-80	1.71	50	U, D
Fluorene	31.5	10	"	51.55	ND	61.1	0-200	1.85	200	D
4-Chlorophenyl-phenylether	35.5	10	"	51.55	ND	69.0	0-200	5.23	200	D
Diethylphthalate	35.8	10	"	51.55	ND	69.4	0-200	6.01	200	D
4,6-Dinitro-2-methylphenol	32.9	52	"	51.55	ND	63.8	0-200	0.594	200	U, D
4-Bromophenyl-phenylether	41.5	10	"	51.55	ND	80.6	0-200	4.61	200	D
Hexachlorobenzene	32.7	10	"	51.55	ND	63.4	0-200	3.93	200	D
Pentachlorophenol	22.9	52	"	51.55	ND	44.4	9-103	1.16	50	U, D
Phenanthrene	32.5	10	"	51.55	ND	63.1	0-200	2.35	200	D
Anthracene	33.6	10	"	51.55	ND	65.2	0-200	2.87	200	D
Di-n-butylphthalate	38.7	10	"	51.55	ND	75.1	0-200	6.54	200	D
Fluoranthene	31.5	10	"	51.55	ND	61.1	0-200	3.85	200	D
Pyrene	32.3	10	"	51.55	ND	62.6	26-127	1.55	31	D
Butylbenzylphthalate	31.1	10	"	51.55	ND	60.3	0-200	8.36	200	D
Benz(a)anthracene	32.4	10	"	51.55	ND	62.9	0-200	4.11	200	D
Chrysene	31.5	10	"	51.55	ND	61.1	0-200	3.06	200	D
Bis(2-Ethylhexyl)phthalate	97.8	10	"	51.55	63.1	67.3	0-200	8.77	200	D
Di-n-octylphthalate	34.8	10	"	51.55	ND	67.5	0-200	4.80	200	D
Benzo[b]fluoranthene	32.9	10	"	51.55	ND	63.8	0-200	4.83	200	D
Benzo[k]fluoranthene	32.0	10	"	51.55	ND	62.1	0-200	1.98	200	D
Benzo[a]pyrene	33.5	10	"	51.55	ND	65.0	0-200	4.36	200	D
Indeno[1,2,3-cd]pyrene	33.4	10	"	51.55	ND	64.7	0-200	4.86	200	D
Dibenz[a,h]anthracene	32.7	10	"	51.55	ND	63.5	0-200	3.68	200	D
Benzo[g,h,i]perylene	32.6	10	"	51.55	ND	63.2	0-200	5.18	200	D
Surrogate: 2-Fluorophenol	*64.9*		"	*154.6*		*41.9*	*10-83*			
Surrogate: Phenol-d5	*47.8*		"	*154.6*		*30.9*	*13-62*			
Surrogate: Nitrobenzene-d5	*70.7*		"	*103.1*		*68.6*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*60.5*		"	*103.1*		*58.6*	*35-138*			
Surrogate: 2,4,6-Tribromophenol	*101*		"	*154.6*		*65.2*	*24-142*			
Surrogate: Terphenyl-d14	*59.8*		"	*103.1*		*58.0*	*24-129*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Notes and Definitions

M2	The matrix spike recovery was biased high. The reported result was below the reporting limit. No negative impact on the data.
B	Analyte is found in method blank.
B1	Target analyte detected in method blank at or above reporting limit.
B2	Target analyte detected in method blank at or above reporting limit. Concentration found in the samples was 20 times the concentration found in the method blank.
B3	Target analyte detected in method blank at or above reporting limit. The analyte concentration was below the reporting limit.
D	Sample Diluted
E	Concentration estimated due to target analyte exceeding linear range.
E3	Concentration estimated due to internal standard recoveries out of acceptance limits.
E7	Result for 2-Chloroethyl vinyl ether estimated due to matrix spike recovery out of acceptance limits.
#	QC not in acceptance limits.
L2	The LCS recovery was above the laboratory acceptance limits. The target analyte concentration was below the reporting limit. No negative impact on the data.
Z10	Sample analyzed outside maximum tune check period. Results are estimated.
M5	The matrix spike recovery was biased low, the reported result is estimated.
M6	The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample is disproportionate to the spike level. The LCS recovery is acceptable.
R1	Sample Duplicate RPD was out of acceptance limits.
R3	Sample Duplicate RPD was out of acceptance limits. The result concentration was within 5 times the reporting limit and the difference was less than the reporting limit.
S1	Surrogate recovery was above laboratory acceptance limits. No negative impact on the data.
S3	Surrogate recovery was below laboratory acceptance limits. Re-extraction/re-analysis confirms low recovery due to matrix interference.
U	Sample concentration is less than the MDL.
V6	CCV recovery was below acceptance limits. The reported result is estimated.
H1	Sample analyzed past maximum recommended holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09G0180
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 09/25/2009 16:04
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Certifications

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.

- A2LA (Microbiology): 410.02
- A2LA (Environmental): 410.01
- A2LA (ELLAP): 410.01
- CPSC: 1115
- Maryland (Drinking Water): 109
- NELAC (NY): 11158
- Pennsylvania: 68-00339
- USDA: S-53726
- Virginia (Drinking Water): 00152

Cooler Receipt Log

Cooler ID: Day 1 **Cooler Temp:** 2.10 °C

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:

Cooler ID: Day 2 (A) **Cooler Temp:** 2.70 °C

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:

Cooler ID: Day 2 (B) **Cooler Temp:** 2.90 °C

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:

Cooler ID: Day 2 (C) **Cooler Temp:** 2.60 °C

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:

Cooler ID: Day 3 (A) **Cooler Temp:** 1.90 °C

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:

Cooler ID: Day 3 (B) **Cooler Temp:** 2.40 °C

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:

Cooler ID: Day 3 (C) **Cooler Temp:** 1.70 °C

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:

Cooler ID: Day 4 (A) **Cooler Temp:** 2.10 °C

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:

Cooler ID: Day 4 (B) **Cooler Temp:** 2.20 °C

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:

Cooler ID: Day 4 (C) **Cooler Temp:** 1.70 °C

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:

Cooler ID: Day 5 (A) **Cooler Temp:** 2.60 °C

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:

Cooler ID: Day 5 (B)

Cooler Temp: 2.30 °C

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:

Cooler ID: Day 6

Cooler Temp: 2.10 °C

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

Work Order Number: 09G0180 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.**_____ °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-05 S	GL-05 D	GL-15 S 9:55	GL-15D 11:04	GL-19 DPZPZM003	TS01 PDM007	+TripBlank 0716						
Volatiles (8260)	8260	2 VOA's w/HCl	2			x x	x x									
Semi-Volatiles	8270	3 amber liters Cool 4°C	3			x	x									
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1			x	✓									
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0			x	✓									
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1			x	x									
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1			x	x									

Relinquished By (signature)/Date & Time:

7/6/9 1545

Received By (signature)/Date & Time:

Melanie Dunyak 7-6-09 1545

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-15 (Shallow) Tag: _____

Date of Purging: 7/6/9 Start Time: 9:40 Finish Time: 9:55 Weather: 70-75° Sun

Date of Collection: 7/6/9 Time of Collection: 9:55

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good		Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	9.90
Depth to Bottom from Top of Casing (0.01 ft.)	22.55
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	9.88

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	17.1	16.7	16.4	16.3	16.3	16.3
pH	7.91	8.11	8.16	8.16	8.13	8.17
Specific Conductance (umhos/cm)	1737	1887	1905	1962	1987	1989
Dissolved Oxygen (mg/l)	0.63	0.00				
Oxidation Reduction (eH)	186.6	183.6	189.8	191.1	198.2	200.6

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor no

Color clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 6 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-15 (Deep) Tag: _____

Date of Purging: 7/6/9 Start Time: 10:57 Finish Time: 11:04 Weather: 75-80°Sun

Date of Collection: 7/6/19 Time of Collection: 1104

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	15.32
Depth to Bottom from Top of Casing (0.01 ft.)	45.75
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	

Number of minutes purged	0	3	6	9	12	Sample Reading
Temperature (°C)	22.4	19.8	18.7	18.1	18.1	
pH	11.85	11.98	12.05	12.05	12.05	
Specific Conductance (umhos/cm)	6630	6350	6440	6600	6600	
Dissolved Oxygen (mg/l)	1.65	1.51	1.51	1.60	1.58	
Oxidation Reduction (eH)	74.1	51.5	20.5	20.6	20.5	

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor no

Color clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 6 / 9. (Tech – JH)

HQN:groundisg.doc.white

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09G0180 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 2.9 / 2.6°C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S 12:39	GL-02 D 1137	GL-16 S 0907	GL-16 D 1025
Volatiles (8260)	8260	2 VOA's w/HCl	2										✓	✓	✓	✓
Semi-Volatiles	8270	3 amber liters Cool 4°C	3										✓	✓	✓	✓
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1										✓	✓	✓	✓
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1										✓	✓	✓	✓
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1										✓	✓	✓	✓

Relinquished By (signature)/Date & Time: 7/7/9 1445

Received By (signature)/Date & Time: Stephanie Dwojski 7-7-09 1445

Trip Blank Time 0545 7/7/9 JH

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09G0180 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.**_____ °C

Contact: Russ Becker Field Technician: _____

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-05 S 0648	GL-05 D 0741	GL-15 S	GL-15D	GL-19 DPZPZM003	TS01 PDM007							
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time:

7/7/9 1445

Received By (signature)/Date & Time:

Melanie Duszynski 7-7-09 1445

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-05 (Shallow) Tag: _____

Date of Purging: 7/7/9 Start Time: 0620 Finish Time: 0648 Weather: 65-70° Sun

Date of Collection: 7/7/9 Time of Collection: 0648

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	22.35
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	23.86

						Sample Reading	
Number of minutes purged	0	3	6	9	12	15	18
Temperature (°C)	18.5	17.5	17.2	16.6	16.0	15.8	15.7
pH	6.95	6.53	6.30	5.88	5.60	5.45	5.41
Specific Conductance (umhos/cm)	1187	1186	1112	1012	1035	1059	1060
Dissolved Oxygen (mg/l)	0.58	0.00	—				
Oxidation Reduction (eH)	14.1	0.0	17.1	43.3	57.2	57.0	60.1

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor No

Color yellowish Tint

Rate of Purge 120 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-05 (Deep) Tag: _____

Date of Purging: 7/7/9 Start Time: 0726 Finish Time: 0741 Weather: 65° Sun

Date of Collection: 7/7/9 Time of Collection: 0741

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	24.90
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	23.12

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	18.2	16.7	16.5	16.4	16.6	16.4
pH	6.35	6.13	6.09	5.98	5.97	5.99
Specific Conductance (umhos/cm)	3070	3110	3110	3090	3090	3090
Dissolved Oxygen (mg/l)	0.67	0.27				
Oxidation Reduction (eH)	-60.3	-19.9	-18.1	-16.4	-19.8	-19.7

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor no

Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-16 Shallow Tag: _____

Date of Purging: 7/7/9 Start Time: 0857 Finish Time: 0907 Weather: 70° Sun

Date of Collection: 7/7/9 Time of Collection: 0907

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	17.51
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	19.86

	0	3	6	9	12	15	Sample Reading
Number of minutes purged							
Temperature (°C)	18.2	18.3	18.2	18.2	18.2	18.3	
pH	4.25	4.25	4.25	4.22	4.22	4.23	
Specific Conductance (umhos/cm)	1190	1175	1203	1205	1201	1203	
Dissolved Oxygen (mg/l)	0.03	0.04	0.01	0.00			
Oxidation Reduction (eH)	114.5	125.4	133.9	137.8	139.6	140.1	

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor _____

Color _____

Rate of Purge 100-110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-16 Deep Tag: _____

Date of Purging: 7/7/9 Start Time: 10:07 Finish Time: 10:25 Weather: 70-75° Sun
Date of Collection: 7/7/9 Time of Collection: 10:25

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	PVC
Depth Measurements Performed (PVC/Metal)	2
Depth to Water from Top of Casing (0.01 ft.) prior to purging	20.36
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	21.19

Number of minutes purged	0	3	6	9	12	Sample Reading 15	18
Temperature (°C)	21.3	19.4	19.1	19.2	18.7	18.5	18.3
pH	12.73	12.36	12.39	12.42	12.42	12.41	12.40
Specific Conductance (umhos/cm)	10300	10340	10300	10460	10510	10530	10550
Dissolved Oxygen (mg/l)	3.94	4.21	4.22	4.13	3.88	3.93	3.91
Oxidation Reduction (eH)	-107.8	-99.8	-96.4	-92.8	-90.9	-89.2	-88.9

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor _____
Color _____

Rate of Purge 110-115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-02 Deep Tag: _____

Date of Purging: 7/7/9 Start Time: 11:22 Finish Time: 11:37 Weather: 75° Sun
Date of Collection: 7/7/9 Time of Collection: 11:37

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	22.83
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	24.31

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	22.4	20.0	19.0	18.6	18.5	18.5
pH	2.92	2.88	2.96	3.03	3.05	3.08
Specific Conductance (umhos/cm)	4310	4340	4360	4360	4340	4350
Dissolved Oxygen (mg/l)	1.65	1.30	1.03	1.24	0.80	0.87
Oxidation Reduction (eH)	339.7	388.6	412.9	428.6	432.6	436.1

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor no
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-02 Shallow Tag: _____

Date of Purging: 7/7/9 Start Time: 1227 Finish Time: 12:39 Weather: 80° Sun
Date of Collection: 7/7/9 Time of Collection: 12:39

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	21.10
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	22.75

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	20.3	20.5	21.7	22.9	23.1	
pH	7.20	7.22	7.21	7.22	7.22	
Specific Conductance (umhos/cm)	1763	1749	1755	1750	1745	
Dissolved Oxygen (mg/l)	0.43	0.30	0.13	0.14	0.13	
Oxidation Reduction (eH)	-136.8	-138.1	-139.5	-140.1	-142.2	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor _____
Color Dark Greyish

Rate of Purge _____ **milliliters / minute**

Comments: Very dark Strong Odor Cleared up some during purge cycle

Reference SOP Field-014
Readings were performed on date of sampling 7 / 7 / 9. (Tech – JH)

HQN:groundisg.doc.white

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09G0180 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 1.9 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

x 1 Set of Duplicates JH

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-12 S	GL-12 D	GL-13 S	GL-13 D	GL-14 S	GL-14 D	GL-10 S 12:00	GL-10 D 1242	GL-11 S	GL-11 D	GL-09 PZP001	GL-09 PZM016	
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 7/8/9 1440

Received By (signature)/Date & Time: Melanie Dusinski 7-8-09 1440.

1.) CLP-Like QC Package
2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09G0180 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 2.4/1.7 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

9:37 10:38 0654 0855 x 1 set of Duplic JH

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D	GL-16 S	GL-16 D
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 7/8/9 1440

Received By (signature)/Date & Time: Melanie Dunyak 7-8-09 1440

1.) CLP-Like QC Package
2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** JH Site: **Landfill**
Well **I.D.**: GL-17 ~~Deep~~ Shallow Tag: _____

Date of Purging: 7/8/9 Start Time: 6:42 Finish Time: 0654 Weather: 65-70 Sun
Date of Collection: 7/8/9 Time of Collection: 0654

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	20.91
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	21.76

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	16.9	16.8	16.7	16.8	16.8	
pH	7.69	7.71	7.71	7.70	7.70	
Specific Conductance (umhos/cm)	5920	5970	6030	6040	6030	
Dissolved Oxygen (mg/l)	1.24	1.08	0.93	1.00	0.95	
Oxidation Reduction (eH)	-133.8	-143.9	-147.7	-149.3	-150.1	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color yellowish

Rate of Purge 120 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** JH
Site: **Landfill**
Well **I.D.**: GL-17 ~~Shallow~~ Deep
Tag: _____

Date of Purging: 7/8/9 Start Time: 0740 Finish Time: 0755 Weather: 65 70 Sun
Date of Collection: 7/8/9 Time of Collection: 0755

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	13.57
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	14.94

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	17.41	17.2	17.1	17.1	17.2	17.1	
pH	10.60	10.66	10.69	10.71	10.73	10.73	
Specific Conductance (umhos/cm)	3350	3370	3360	3360	3370	3300	
Dissolved Oxygen (mg/l)	0.89	0.37	0.17	0.15	0.10	0.07	
Oxidation Reduction (eH)	-194.8	-194.4	-181.7	-182.7	-178.4	-179.5	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: 1 Set of Duplicates (1 of 3)

Reference SOP Field-014
Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-18 Shallow Tag: _____

Date of Purging: 7/8/9 Start Time: 0922 Finish Time: 9:37 Weather: 70° Sun

Date of Collection: 7/8/9 Time of Collection: 9:37

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	8.35
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	9.41

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	20.8	19.4	18.6	18.0	17.9	18.2	
pH	10.46	10.59	10.65	10.72	10.74	10.72	
Specific Conductance (umhos/cm)	2290	2250	2240	2280	2260	2280	
Dissolved Oxygen (mg/l)	0.12	0.16	0.00	0.10	0.12	0.12	
Oxidation Reduction (eH)	-232.1	-261.8	-273.1	-289.6	-292.4	-294.4	

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor Yes

Color Yellow Tint

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-18 Deep Tag: _____

Date of Purging: 7/8/9 Start Time: 10:23 Finish Time: 10:38 Weather: 70° Sun

Date of Collection: _____ Time of Collection: 10:38

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	✓	Lock	
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	19.40
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	21.73

	0	3	6	9	12	15	Sample Reading
Number of minutes purged							
Temperature (°C)	19.7	18.8	18.3	18.3	18.2	8.2	
pH	5.33	4.95	4.79	4.76	4.75	4.75	
Specific Conductance (umhos/cm)	5220	5390	5410	5250	5400	5410	
Dissolved Oxygen (mg/l)	1.56	1.41	1.25	1.18 @	1.11	1.07	
Oxidation Reduction (eH)	1.4	35.7	6.35	78.0	86.0	90.1	

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor Slight

Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-10 Shallow Tag: _____

Date of Purging: 7/8/9 Start Time: 11:45 Finish Time: 12:00 Weather: 75° Sun
Date of Collection: 7/8/9 Time of Collection: 12:00

Well Status:

Good	✓	Grout	
Good	✗ ✓ JH	Casing	OK
Good	✗	Lock	Missing Lock
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	9.17
Depth to Bottom from Top of Casing (0.01 ft.)	
Depth of Water in the Well (gallon)	
Volume of water in the Well (gallon)	
Depth to Water from Top of Casing (0.01 ft.) after purging	
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	10.31

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	21.3	21.1	19.8	17.8	17.4	17.4
pH	5.93	5.93	6.10	6.02	5.99	6.00
Specific Conductance (umhos/cm)	414	410	440	441	437	440
Dissolved Oxygen (mg/l)	0.01	0.01	0.04	0.02	0.02	0.02
Oxidation Reduction (eH)	-27.9	-18.0	-32.9	-21.2	-18.1	-17.9

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Cloudy

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-10 Deep Tag: _____

Date of Purging: 7/8/9 Start Time: 1230 Finish Time: 1242 Weather: 75° Sun
Date of Collection: 7/8/9 Time of Collection: 1242

Well Status:

Good	✓	Grout	
Good	✓	Casing	
Good	X	Lock	NO Lock
Good	✓	Obstructions	

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	21.04
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	23.16

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	18.4	17.4	17.1	17.1	17.1	
pH	6.38	6.41	6.40	6.42	6.41	
Specific Conductance (umhos/cm)	301	293	297	293	293	
Dissolved Oxygen (mg/l)	0.24	0.23	0.21	0.22	0.23	
Oxidation Reduction (eH)	-76.0	-78.2	-80.6	-82.7	-83.2	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110-120 **milliliters / minute**

Comments: 1 set of Duplicates (2 of 3)

Reference SOP Field-014
Readings were performed on date of sampling 7 / 8 / 9. (Tech – JH)

HQN:groundisg.doc.white

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COVER LETTER

January 07, 2010

Report No.: 09J0523

Russ Becker
Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Landfill

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 10/26/2009 15:45.

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
- Case Narative
- Test Results
- QC Summary
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody
- Data



Final report reviewed by: Michael D. Arbaugh/Customer Services Manager — 1/7/2010 Report issue date

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

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
GL-14D	09J0523-01	Ground Water	Not Specified	10/12/2009 13:45	10/26/2009 15:45
GL-14D DUP	09J0523-02	Ground Water	Not Specified	10/12/2009 13:45	10/26/2009 15:45
GL-10S	09J0523-03	Ground Water	Not Specified	10/12/2009 12:25	10/26/2009 15:45
GL-10D	09J0523-04	Ground Water	Not Specified	10/12/2009 11:04	10/26/2009 15:45
GL-12S	09J0523-05	Ground Water	Not Specified	10/13/2009 14:40	10/26/2009 15:45
GL-12D	09J0523-06	Ground Water	Not Specified	10/13/2009 13:33	10/26/2009 15:45
GL-13S	09J0523-07	Ground Water	Not Specified	10/13/2009 12:03	10/26/2009 15:45
GL-13D	09J0523-08	Ground Water	Not Specified	10/13/2009 10:38	10/26/2009 15:45
GL-14S	09J0523-09	Ground Water	Not Specified	10/13/2009 09:08	10/26/2009 15:45
GL-08S	09J0523-10	Ground Water	Not Specified	10/14/2009 09:14	10/26/2009 15:45
GL-08D	09J0523-11	Ground Water	Not Specified	10/14/2009 10:28	10/26/2009 15:45
GL-03S	09J0523-12	Ground Water	Not Specified	10/14/2009 14:29	10/26/2009 15:45
GL-03D	09J0523-13	Ground Water	Not Specified	10/14/2009 13:26	10/26/2009 15:45
GL-20	09J0523-14	Ground Water	Not Specified	10/16/2009 09:41	10/26/2009 15:45
GL-16 S	09J0523-15	Ground Water	Not Specified	10/16/2009 12:47	10/26/2009 15:45
GL-16 S DUP	09J0523-16	Ground Water	Not Specified	10/16/2009 12:47	10/26/2009 15:45
GL-16 D	09J0523-17	Ground Water	Not Specified	10/16/2009 11:13	10/26/2009 15:45
GL-05S	09J0523-18	Ground Water	Not Specified	10/21/2009 08:48	10/26/2009 15:45
GL-05D	09J0523-19	Ground Water	Not Specified	10/21/2009 10:03	10/26/2009 15:45
GL-02S	09J0523-20	Ground Water	Not Specified	10/21/2009 12:58	10/26/2009 15:45
GL-02D	09J0523-21	Ground Water	Not Specified	10/21/2009 11:37	10/26/2009 15:45
GL-11S	09J0523-22	Ground Water	Not Specified	10/22/2009 12:03	10/26/2009 15:45
GL-17S	09J0523-23	Ground Water	Not Specified	10/22/2009 10:28	10/26/2009 15:45
GL-17D	09J0523-24	Ground Water	Not Specified	10/22/2009 09:13	10/26/2009 15:45
GL-11D	09J0523-25	Ground Water	Not Specified	10/26/2009 14:00	10/26/2009 15:45
GL-09 PZP001	09J0523-26	Ground Water	Not Specified	10/26/2009 08:42	10/26/2009 15:45
GL-09 PZM016	09J0523-27	Ground Water	Not Specified	10/26/2009 07:42	10/26/2009 15:45
GL-15S	09J0523-28	Ground Water	Not Specified	10/26/2009 12:50	10/26/2009 15:45
GL-15D	09J0523-29	Ground Water	Not Specified	10/26/2009 11:57	10/26/2009 15:45

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
GL-19 PZM003	09J0523-30	Ground Water	Not Specified	10/26/2009 11:10	10/26/2009 15:45
TS01 PDM007	09J0523-31	Ground Water	Not Specified	10/26/2009 10:08	10/26/2009 15:45

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

CASE NARRATIVE

Severstal Sparrows Point
Landfill
Russ Becker
1430 Sparrows Point Blvd
Sparrows Point , MD 21219

31 sample(s) were received by Lisa M. Grant of Microbac laboratories, Baltimore Division on 10/26/2009 3:45:00 PM and sample(s) condition(s) were checked and found to be acceptable unless otherwise noted in the 'Cooler Receipt Log' or 'Statement of Qualifications' sections of this report. The samples were logged into the LIMS by Lisa M. Grant on 10/12/2009 3:41:00 PM and compared to the client DQO. Any deviations from the client DQO and method specific quality control requirements are noted in the 'Statement of Data Qualifications'.

Other Notes/Comments:
Conductivity was performed in the laboratory due to field meter malfunctions during the project. Samples GL-14D, GL-14D DUP, GL-10S, GL-10D were not performed due to sample disposal.
None.

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**72**	1.0	mg CaCO3/L	101309 1215	101309 1215	VAS	Sm (20) 2320B	
Chloride	**25**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**66**	10	mg/L	102109 1518	102209 1220	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.7**	0.10	mg/L	101409 1000	101409 1356	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0082**	0.0050	mg/L	101309 1026	101309 1057	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**320**	10	mg/L	101409 0720	101409 1430	LCR	ASTM D516-02	D
Total Dissolved Solids	**460**	40	mg/L	101309 1200	101409 1200	LCR	SM (20) 2540 C	
Turbidity	**33**	0.10	NTU	101309 0915	101309 0915	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101309 0542	101409 1413	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**28**	0.17	mg/L	101309 0706	101409 1328	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Barium	**0.061**	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	101309 1500	101409 1328	APS	EPA 200.7/6010B	
Calcium	**5.1**	0.050	mg/L	101309 0706	101409 1328	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Iron	**52**	0.0050	mg/L	101309 0706	101409 1328	APS	EPA 200.7/6010B	
Potassium	**0.94**	0.010	mg/L	101309 0706	101409 1328	APS	EPA 200.7/6010B	
Magnesium	**3.6**	0.010	mg/L	101309 0706	101409 1328	APS	EPA 200.7/6010B	
Manganese	**1.6**	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Sodium	**8.7**	1.0	mg/L	101309 0706	101409 1328	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101309 0748	101409 1215	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Benzene	**1.8**	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101309 1157	101309 1157	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.0%*	*80-120*	*101309 1157*	*101309 1157*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.1%*	*80-120*	*101309 1157*	*101309 1157*		*EPA 8260B*	
Surrogate: Toluene-d8		*94.9%*	*75-120*	*101309 1157*	*101309 1157*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.4%*	*60-149*	*101309 1157*	*101309 1157*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Anthracene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D

09J0523-01 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Pyrene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**46**	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	101509 1400	101909 1654	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.7%*	*14-71*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Surrogate: Phenol-d5		*30.8%*	*6-54*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*62.2%*	*54-77*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*68.6%*	*54-78*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*71.9%*	*68-93*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*77.0%*	*65-86*	*101509 1400*	*101909 1654*		*EPA 8270C*	
Field Sampling/Testing								
pH	**6.50**	1.00	pH Units	101209 1345	101209 1345	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**60**	1.0	mg CaCO3/L	101309 1215	101309 1215	VAS	Sm (20) 2320B	
Chloride	**25**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**67**	10	mg/L	102109 1518	102209 1222	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.5**	0.10	mg/L	101409 1000	101409 1356	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0079**	0.0050	mg/L	101309 1026	101309 1057	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**320**	10	mg/L	101409 0720	101409 1430	LCR	ASTM D516-02	D
Total Dissolved Solids	**360**	40	mg/L	101309 1200	101409 1200	LCR	SM (20) 2540 C	
Turbidity	**90**	0.10	NTU	101309 0915	101309 0915	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101309 0542	101409 1415	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**28**	0.17	mg/L	101309 0706	101409 1358	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Barium	**0.061**	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	101309 1500	101409 1358	APS	EPA 200.7/6010B	
Calcium	**5.3**	0.050	mg/L	101309 0706	101409 1358	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Iron	**53**	0.0050	mg/L	101309 0706	101409 1358	APS	EPA 200.7/6010B	
Potassium	**0.97**	0.010	mg/L	101309 0706	101409 1358	APS	EPA 200.7/6010B	
Magnesium	**3.7**	0.010	mg/L	101309 0706	101409 1358	APS	EPA 200.7/6010B	
Manganese	**1.6**	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Sodium	**8.9**	1.0	mg/L	101309 0706	101409 1358	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101309 0748	101409 1230	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Benzene	**1.7**	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101309 1234	101309 1234	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*85.6%*	*80-120*	*101309 1234*	*101309 1234*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.4%*	*80-120*	*101309 1234*	*101309 1234*		*EPA 8260B*	
Surrogate: Toluene-d8		*96.0%*	*75-120*	*101309 1234*	*101309 1234*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*88.5%*	*60-149*	*101309 1234*	*101309 1234*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Naphthalene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14D DUP

09J0523-02 (Ground Water) Sampled: 10/12/2009 13:45; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**17**	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 1731	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.5%*	*14-71*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.4%*	*6-54*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*64.6%*	*54-77*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*70.2%*	*54-78*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*75.7%*	*68-93*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*77.0%*	*65-86*	*101509 1400*	*101909 1731*		*EPA 8270C*	
Field Sampling/Testing								
pH	**6.50**	1.00	pH Units	101209 1345	101209 1345	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**48**	1.0	mg CaCO3/L	101309 1215	101309 1215	VAS	Sm (20) 2320B	
Chloride	**15**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**44**	10	mg/L	102109 1518	102209 1224	LCR	EPA410.4/HACH8000	
Ammonia as N	**2.9**	0.10	mg/L	101409 1000	101409 1356	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.013**	0.0050	mg/L	101309 1026	101309 1057	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**120**	5.0	mg/L	101409 0720	101409 1430	LCR	ASTM D516-02	D
Total Dissolved Solids	**260**	20	mg/L	101309 1200	101409 1200	LCR	SM (20) 2540 C	
Turbidity	**50**	0.10	NTU	101309 0915	101309 0915	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101309 0542	101409 1417	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**54**	0.17	mg/L	101309 0706	101409 1402	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Barium	**0.059**	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	101309 1500	101409 1402	APS	EPA 200.7/6010B	
Calcium	**11**	0.050	mg/L	101309 0706	101409 1402	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Iron	**42**	0.0050	mg/L	101309 0706	101409 1402	APS	EPA 200.7/6010B	
Potassium	**0.99**	0.010	mg/L	101309 0706	101409 1402	APS	EPA 200.7/6010B	
Magnesium	**6.6**	0.010	mg/L	101309 0706	101409 1402	APS	EPA 200.7/6010B	
Manganese	**1.0**	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Sodium	**20**	1.0	mg/L	101309 0706	101409 1402	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101309 0748	101409 1234	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101309 1312	101309 1312	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.5%*	*80-120*	*101309 1312*	*101309 1312*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*86.2%*	*80-120*	*101309 1312*	*101309 1312*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.2%*	*75-120*	*101309 1312*	*101309 1312*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.6%*	*60-149*	*101309 1312*	*101309 1312*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Naphthalene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10S

09J0523-03 (Ground Water) Sampled: 10/12/2009 12:25; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 1807	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*48.8%*	*14-71*	*101509 1400*	*101909 1807*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.9%*	*6-54*	*101509 1400*	*101909 1807*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*65.3%*	*54-77*	*101509 1400*	*101909 1807*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*73.6%*	*54-78*	*101509 1400*	*101909 1807*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*75.1%*	*68-93*	*101509 1400*	*101909 1807*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*78.9%*	*65-86*	*101509 1400*	*101909 1807*		*EPA 8270C*	

Field Sampling/Testing

pH	**4.00**	1.00	pH Units	101209 1225	101209 1225	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Alkalinity	**42**	1.0	mg CaCO3/L	101309 1215	101309 1215	VAS	Sm (20) 2320B	
Chloride	**14**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**57**	10	mg/L	102109 1518	102209 1226	LCR	EPA410.4/HACH8000	
Ammonia as N	**4.1**	0.10	mg/L	101409 1000	101409 1356	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0057**	0.0050	mg/L	101309 1026	101309 1057	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**30**	2.0	mg/L	101409 0720	101409 1430	LCR	ASTM D516-02	D
Total Dissolved Solids	**160**	20	mg/L	101309 1200	101409 1200	LCR	SM (20) 2540 C	
Turbidity	**240**	0.10	NTU	101309 0915	101309 0915	VAS	EPA 180.1	

Mercury, Total by EPA 200/7000 Series Methods

Mercury	ND	0.00020	mg/L	101309 0542	101409 1420	APS	EPA 245.1/7470A	

Metals, Total by EPA 200/6000 Series Methods

Hardness (as CaCO3)	**27**	0.17	mg/L	101309 0706	101409 1406	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Barium	**0.097**	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	101309 1500	101409 1406	APS	EPA 200.7/6010B	
Calcium	**5.9**	0.050	mg/L	101309 0706	101409 1406	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Iron	**51**	0.0050	mg/L	101309 0706	101409 1406	APS	EPA 200.7/6010B	
Potassium	**6.9**	0.010	mg/L	101309 0706	101409 1406	APS	EPA 200.7/6010B	
Magnesium	**3.0**	0.010	mg/L	101309 0706	101409 1406	APS	EPA 200.7/6010B	
Manganese	**0.82**	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Sodium	**15**	1.0	mg/L	101309 0706	101409 1406	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Selenium	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101309 0748	101409 1237	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Carbon Tetrachloride	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Benzene	**4.5**	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
tert-Butylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101309 1504	101309 1504	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*85.0%*	*80-120*	*101309 1504*	*101309 1504*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.4%*	*80-120*	*101309 1504*	*101309 1504*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.0%*	*75-120*	*101309 1504*	*101309 1504*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*91.0%*	*60-149*	*101309 1504*	*101309 1504*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Naphthalene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-10D

09J0523-04 (Ground Water) Sampled: 10/12/2009 11:04; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**41**	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 1844	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*46.5%*	*14-71*	*101509 1400*	*101909 1844*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.1%*	*6-54*	*101509 1400*	*101909 1844*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*62.8%*	*54-77*	*101509 1400*	*101909 1844*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*70.0%*	*54-78*	*101509 1400*	*101909 1844*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.5%*	*68-93*	*101509 1400*	*101909 1844*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*78.1%*	*65-86*	*101509 1400*	*101909 1844*		*EPA 8270C*	

Field Sampling/Testing

pH	**6.50**	1.00	pH Units	101209 1104	101209 1104	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**51**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**47**	10	mg/L	102109 1518	102209 1228	LCR	EPA410.4/HACH8000	
Conductivity	**640**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**0.45**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.013**	0.0050	mg/L	101409 1116	101409 1116	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**170**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**270**	20	mg/L	102009 0754	102009 0941	LCR	SM (20) 2540 C	
Turbidity	**43**	0.10	NTU	101409 1415	101409 1415	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1301	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**120**	0.83	mg/L	101509 0628	102809 1756	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Barium	**0.021**	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	
Calcium	**25**	0.25	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	
Cadmium	**0.0012**	0.00050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Cobalt	**0.086**	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Chromium	**0.0029**	0.0025	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Copper	**0.0033**	0.0020	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Iron	**12**	0.025	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	
Potassium	**3.2**	0.050	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	B2
Magnesium	**15**	0.050	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	
Manganese	**0.36**	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Sodium	**42**	5.0	mg/L	101509 0628	102809 1756	APS	EPA 200.7/6010B	
Nickel	**0.12**	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Lead	**0.0030**	0.0020	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Zinc	**0.34**	0.020	mg/L	101509 0631	101609 1356	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101409 1533	101409 1533	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*85.9%*	*80-120*	*101409 1533*	*101409 1533*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*90.4%*	*80-120*	*101409 1533*	*101409 1533*		*EPA 8260B*	
Surrogate: Toluene-d8		*94.6%*	*75-120*	*101409 1533*	*101409 1533*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.1%*	*60-149*	*101409 1533*	*101409 1533*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Hexachlorobenzene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Phenanthrene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Di-n-butylphthalate	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Fluoranthene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Pyrene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	S4, U, D
Butylbenzylphthalate	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**110**	11	ug/L	101509 1400	102109 1752	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	101509 1400	101909 1921	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*41.3%*	*14-71*	*101509 1400*	*101909 1921*		*EPA 8270C*	
Surrogate: Phenol-d5		*27.9%*	*6-54*	*101509 1400*	*101909 1921*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*56.5%*	*54-77*	*101509 1400*	*101909 1921*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.3%*	*54-78*	*101509 1400*	*101909 1921*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*65.3%*	*68-93*	*101509 1400*	*101909 1921*		*EPA 8270C*	*S4*
Surrogate: Terphenyl-d14		*72.1%*	*65-86*	*101509 1400*	*101909 1921*		*EPA 8270C*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12S

09J0523-05 (Ground Water) Sampled: 10/13/2009 14:40; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**4.50**	1.00	pH Units	101309 1440	101309 1440	LMG	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance wit

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**210**	5.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**62**	10	mg/L	102109 1518	102209 1230	LCR	EPA410.4/HACH8000	
Conductivity	**1800**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**3.2**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0064**	0.0050	mg/L	101409 1116	101409 1116	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**180**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**500**	40	mg/L	102009 0754	102009 0941	LCR	SM (20) 2540 C	
Turbidity	**84**	0.10	NTU	101409 1415	101409 1415	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1304	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**140**	0.83	mg/L	101509 0628	102809 1800	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Barium	**0.031**	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	
Calcium	**20**	0.25	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Iron	**130**	0.025	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	
Potassium	**3.2**	0.050	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	B2
Magnesium	**21**	0.050	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	
Manganese	**2.9**	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Sodium	**110**	5.0	mg/L	101509 0628	102809 1800	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1400	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Volatile Organic Compounds by EPA Method 8260B								
4-Chlorotoluene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101409 1610	101409 1610	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.1%*	*80-120*	*101409 1610*	*101409 1610*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*91.0%*	*80-120*	*101409 1610*	*101409 1610*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.6%*	*75-120*	*101409 1610*	*101409 1610*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.6%*	*60-149*	*101409 1610*	*101409 1610*		*EPA 8260B*	
Acid and Base/Neutral Extractables by EPA Method 8270C								
N-Nitrosodimethylamine	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Anthracene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-12D

09J0523-06 (Ground Water) Sampled: 10/13/2009 13:33; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Pyrene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**7.9**	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	101509 1400	101909 1957	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*43.1%*	*14-71*	*101509 1400*	*101909 1957*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.5%*	*6-54*	*101509 1400*	*101909 1957*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*58.7%*	*54-77*	*101509 1400*	*101909 1957*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*64.8%*	*54-78*	*101509 1400*	*101909 1957*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*70.6%*	*68-93*	*101509 1400*	*101909 1957*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*78.4%*	*65-86*	*101509 1400*	*101909 1957*		*EPA 8270C*	

Field Sampling/Testing

pH	**6.10**	1.00	pH Units	101309 1333	101309 1333	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**32**	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**77**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**86**	10	mg/L	102109 1518	102209 1232	LCR	EPA410.4/HACH8000	
Conductivity	**2000**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**0.46**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	101409 1116	101409 1116	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**850**	25	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1300**	20	mg/L	102009 0754	102009 0942	LCR	SM (20) 2540 C	
Turbidity	**6.0**	0.10	NTU	101409 1415	101409 1415	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1306	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**510**	0.83	mg/L	101509 0628	102809 1804	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Barium	**0.021**	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	
Calcium	**85**	0.25	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Cobalt	**0.18**	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Iron	**160**	0.025	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	
Potassium	**34**	0.050	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	B2
Magnesium	**72**	0.050	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	
Manganese	**5.7**	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Sodium	**66**	5.0	mg/L	101509 0628	102809 1804	APS	EPA 200.7/6010B	
Nickel	**0.22**	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Zinc	**0.30**	0.020	mg/L	101509 0631	101609 1404	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Volatile Organic Compounds by EPA Method 8260B								
4-Chlorotoluene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101409 1647	101409 1647	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.5%*	*80-120*	*101409 1647*	*101409 1647*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*90.5%*	*80-120*	*101409 1647*	*101409 1647*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.4%*	*75-120*	*101409 1647*	*101409 1647*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.1%*	*60-149*	*101409 1647*	*101409 1647*		*EPA 8260B*	
Acid and Base/Neutral Extractables by EPA Method 8270C								
N-Nitrosodimethylamine	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Pyridine	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Aniline	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Phenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Isophorone	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Naphthalene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Fluorene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Anthracene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13S

09J0523-07 (Ground Water) Sampled: 10/13/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Pyrene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Chrysene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**6.2**	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.6	ug/L	101509 1400	101909 2034	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*42.1%*	*14-71*	*101509 1400*	*101909 2034*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.5%*	*6-54*	*101509 1400*	*101909 2034*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*56.2%*	*54-77*	*101509 1400*	*101909 2034*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*63.3%*	*54-78*	*101509 1400*	*101909 2034*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*69.4%*	*68-93*	*101509 1400*	*101909 2034*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*76.4%*	*65-86*	*101509 1400*	*101909 2034*		*EPA 8270C*	

Field Sampling/Testing

pH	**5.40**	1.00	pH Units	101309 1203	101309 1203	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**90**	2.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**290**	20	mg/L	102109 1518	102209 1234	LCR	EPA410.4/HACH8000	D
Conductivity	**2900**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**2.7**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	101409 1116	101409 1116	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**880**	50	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1600**	40	mg/L	102009 0754	102009 0942	LCR	SM (20) 2540 C	
Turbidity	**110**	0.10	NTU	101409 1415	101409 1415	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1308	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**230**	0.83	mg/L	101509 0628	102809 1808	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Barium	**0.091**	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	
Calcium	**32**	0.25	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Iron	**390**	0.025	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	
Potassium	**1.9**	0.050	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	B2
Magnesium	**36**	0.050	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	
Manganese	**32**	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Sodium	**31**	5.0	mg/L	101509 0628	102809 1808	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1408	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101409 1723	101409 1723	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*86.6%*	*80-120*	*101409 1723*	*101409 1723*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*91.1%*	*80-120*	*101409 1723*	*101409 1723*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.1%*	*75-120*	*101409 1723*	*101409 1723*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.8%*	*60-149*	*101409 1723*	*101409 1723*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Naphthalene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-13D

09J0523-08 (Ground Water) Sampled: 10/13/2009 10:38; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	S4, U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 2110	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*42.2%*	*14-71*	*101509 1400*	*101909 2110*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.7%*	*6-54*	*101509 1400*	*101909 2110*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*58.9%*	*54-77*	*101509 1400*	*101909 2110*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*64.5%*	*54-78*	*101509 1400*	*101909 2110*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*64.2%*	*68-93*	*101509 1400*	*101909 2110*		*EPA 8270C*	*S4*
Surrogate: Terphenyl-d14		*75.5%*	*65-86*	*101509 1400*	*101909 2110*		*EPA 8270C*	

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**6.20**	1.00	pH Units	101309 1038	101309 1038	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**22**	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**9.0**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**34**	10	mg/L	102109 1518	102209 1236	LCR	EPA410.4/HACH8000	
Conductivity	**190**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**1.2**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.054**	0.0050	mg/L	101409 1116	101409 1116	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**43**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**230**	40	mg/L	102009 0754	102009 0942	LCR	SM (20) 2540 C	
Turbidity	**55**	0.10	NTU	101409 1415	101409 1415	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1310	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**40**	0.83	mg/L	101509 0628	102809 1831	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Arsenic	**0.0050**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Barium	**0.033**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	
Calcium	**12**	0.25	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Cobalt	**0.0052**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Chromium	**0.0058**	0.0025	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Iron	**17**	0.025	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	
Potassium	**1.5**	0.050	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	B2
Magnesium	**2.6**	0.050	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	
Manganese	**0.30**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Sodium	**5.5**	5.0	mg/L	101509 0628	102809 1831	APS	EPA 200.7/6010B	
Nickel	**0.0052**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0028**	0.0020	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Vanadium	**0.0055**	0.0050	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1411	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Volatile Organic Compounds by EPA Method 8260B								
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101409 1800	101409 1800	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*85.7%*	*80-120*	*101409 1800*	*101409 1800*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*91.0%*	*80-120*	*101409 1800*	*101409 1800*		*EPA 8260B*	
Surrogate: Toluene-d8		*96.6%*	*75-120*	*101409 1800*	*101409 1800*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.9%*	*60-149*	*101409 1800*	*101409 1800*		*EPA 8260B*	
Acid and Base/Neutral Extractables by EPA Method 8270C								
N-Nitrosodimethylamine	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Isophorone	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2-Nitrophenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2,4-Dimethylphenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2,4-Dichlorophenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Naphthalene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Hexachlorobutadiene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2-Methylnaphthalene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
2-Chloronaphthalene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Hexachlorobenzene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Phenanthrene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Di-n-butylphthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Fluoranthene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Pyrene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Butylbenzylphthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Benz(a)anthracene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Chrysene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Bis(2-Ethylhexyl)phthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Di-n-octylphthalate	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Benzo[a]pyrene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	101509 1400	101909 2147	RIS	EPA 8270C	S4, U, D
Surrogate: 2-Fluorophenol		*40.0%*	*14-71*	*101509 1400*	*101909 2147*		*EPA 8270C*	
Surrogate: Phenol-d5		*28.2%*	*6-54*	*101509 1400*	*101909 2147*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*51.7%*	*54-77*	*101509 1400*	*101909 2147*		*EPA 8270C*	*S4*
Surrogate: 2-Fluorobiphenyl		*57.1%*	*54-78*	*101509 1400*	*101909 2147*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*54.0%*	*68-93*	*101509 1400*	*101909 2147*		*EPA 8270C*	*S4*
Surrogate: Terphenyl-d14		*58.0%*	*65-86*	*101509 1400*	*101909 2147*		*EPA 8270C*	*S4*

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-14S

09J0523-09 (Ground Water) Sampled: 10/13/2009 09:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**6.00**	1.00	pH Units	101309 0908	101309 0908	LMG	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**260**	4.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**340**	10	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**300**	20	mg/L	102109 1518	102209 1238	LCR	EPA410.4/HACH8000	D
Conductivity	**2900**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**43**	1.0	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.017**	0.0050	mg/L	101509 0717	101509 0717	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**430**	25	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1600**	20	mg/L	102009 0754	102009 0942	LCR	SM (20) 2540 C	
Turbidity	**2.0**	0.10	NTU	101509 1030	101509 1030	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1312	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**460**	0.83	mg/L	101509 0628	102809 1835	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Arsenic	**0.014**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Barium	**0.046**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	
Calcium	**190**	0.25	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Copper	**0.0037**	0.0020	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Iron	**0.63**	0.025	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	
Potassium	**83**	0.050	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.050	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	
Manganese	**0.018**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Sodium	**340**	5.0	mg/L	101509 0628	102809 1835	APS	EPA 200.7/6010B	
Nickel	**0.014**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Lead	**0.0025**	0.0020	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Selenium	**0.011**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Vanadium	**0.024**	0.0050	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1415	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1-Dichloroethane	**1.8**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Benzene	**140**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Toluene	**220**	20	ug/L	101609 1715	101609 1715	EMG	EPA 8260B	D
trans-1,3-Dichloropropene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Ethylbenzene	**3.6**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
m,p-Xylenes	**46**	2.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
o-Xylene	**22**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	**9.3**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
4-Chlorotoluene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**22**	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Naphthalene	**900**	20	ug/L	101609 1715	101609 1715	EMG	EPA 8260B	D
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	U
Total Xylenes	**67**	3.0	ug/L	101409 1837	101409 1837	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*85.7%*	*80-120*	*101409 1837*	*101409 1837*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.7%*	*80-120*	*101409 1837*	*101409 1837*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.6%*	*75-120*	*101409 1837*	*101409 1837*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.0%*	*60-149*	*101409 1837*	*101409 1837*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Pyridine	**20**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Aniline	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2-Methylphenol	**38**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Hexachloroethane	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**76**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Nitrobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**84**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Naphthalene	**770**	53	ug/L	101509 1400	102109 1829	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2-Methylnaphthalene	**22**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Acenaphthylene	**11**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Dimethylphthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Acenaphthene	**6.0**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Dibenzofuran	**13**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
2,4-Dinitrotoluene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Fluorene	**13**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Pentachlorophenol	**13**	11	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Phenanthrene	**13**	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	D
Anthracene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Butylbenzylphthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Benz(a)anthracene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Chrysene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Di-n-octylphthalate	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	101509 1400	101909 2224	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*44.6%*	*14-71*	*101509 1400*	*101909 2224*		*EPA 8270C*	
Surrogate: Phenol-d5		*32.5%*	*6-54*	*101509 1400*	*101909 2224*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*75.5%*	*54-77*	*101509 1400*	*101909 2224*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*74.3%*	*54-78*	*101509 1400*	*101909 2224*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*87.2%*	*68-93*	*101509 1400*	*101909 2224*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*185%*	*65-86*	*101509 1400*	*101909 2224*		*EPA 8270C*	*E3, S1*

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08S

09J0523-10 (Ground Water) Sampled: 10/14/2009 09:14; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**6.90**	1.00	pH Units	101409 0914	101409 0914	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**56**	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**110**	2.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**240**	20	mg/L	102109 1518	102209 1240	LCR	EPA410.4/HACH8000	D
Conductivity	**5200**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**4.6**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0058**	0.0050	mg/L	101509 0717	101509 0717	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**76**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**2300**	40	mg/L	102009 0754	102009 0943	LCR	SM (20) 2540 C	
Turbidity	**140**	0.10	NTU	101509 1030	101509 1030	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1319	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**520**	0.83	mg/L	101509 0628	102809 1839	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Barium	**0.58**	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1839	APS	EPA 200.7/6010B	
Calcium	**59**	0.25	mg/L	101509 0628	102809 1839	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Cobalt	**0.0074**	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Copper	**0.0038**	0.0020	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Iron	**200**	0.025	mg/L	101509 0628	102809 1839	APS	EPA 200.7/6010B	
Potassium	**4.9**	0.050	mg/L	101509 0628	102809 1839	APS	EPA 200.7/6010B	B2
Magnesium	**92**	0.050	mg/L	101509 0628	102809 1839	APS	EPA 200.7/6010B	
Manganese	**8.9**	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Sodium	**560**	10	mg/L	101509 0628	110309 1934	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Selenium	**0.014**	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1419	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Benzene	**2.1**	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Toluene	**2.9**	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Naphthalene	**6.2**	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101609 1524	101609 1524	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*83.7%*	*80-120*	*101609 1524*	*101609 1524*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.5%*	*80-120*	*101609 1524*	*101609 1524*		*EPA 8260B*	
Surrogate: Toluene-d8		*93.1%*	*75-120*	*101609 1524*	*101609 1524*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.8%*	*60-149*	*101609 1524*	*101609 1524*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Naphthalene	**7.3**	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-08D

09J0523-11 (Ground Water) Sampled: 10/14/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 2300	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*43.9%*	*14-71*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.6%*	*6-54*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*57.5%*	*54-77*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.0%*	*54-78*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.1%*	*68-93*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*68.9%*	*65-86*	*101509 1400*	*101909 2300*		*EPA 8270C*	
Field Sampling/Testing								
pH	**7.00**	1.00	pH Units	101409 1028	101409 1028	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**200**	4.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**9.0**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**51**	10	mg/L	102109 1518	102209 1242	LCR	EPA410.4/HACH8000	
Conductivity	**1300**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**1.8**	0.10	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0076**	0.0050	mg/L	101509 0717	101509 0717	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**120**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**580**	10	mg/L	102009 0754	102009 0943	LCR	SM (20) 2540 C	
Turbidity	**1.0**	0.10	NTU	101509 1030	101509 1030	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1321	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**370**	0.83	mg/L	101509 0628	102809 1843	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Barium	**0.061**	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	
Calcium	**150**	0.25	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Copper	**0.0031**	0.0020	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Iron	ND	0.025	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	
Potassium	**19**	0.050	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	B2
Magnesium	ND	0.050	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	
Manganese	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Sodium	**10**	5.0	mg/L	101509 0628	102809 1843	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Lead	**0.0073**	0.0020	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Vanadium	**0.015**	0.0050	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1423	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Benzene	**4.3**	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Naphthalene	**7.3**	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101609 1601	101609 1601	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*83.2%*	*80-120*	*101609 1601*	*101609 1601*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.8%*	*80-120*	*101609 1601*	*101609 1601*		*EPA 8260B*	
Surrogate: Toluene-d8		*91.8%*	*75-120*	*101609 1601*	*101609 1601*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.4%*	*60-149*	*101609 1601*	*101609 1601*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Naphthalene	**7.8**	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2-Methylnaphthalene	**5.7**	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03S

09J0523-12 (Ground Water) Sampled: 10/14/2009 14:29; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**51**	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	101909 2337	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*42.0%*	*14-71*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.2%*	*6-54*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*60.6%*	*54-77*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*63.5%*	*54-78*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*71.2%*	*68-93*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*70.1%*	*65-86*	*101509 1400*	*101909 2337*		*EPA 8270C*	
Field Sampling/Testing								
pH	**11.3**	1.00	pH Units	101409 1429	101409 1429	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**680**	10	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**48**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**300**	20	mg/L	102109 1518	102209 1244	LCR	EPA410.4/HACH8000	D
Conductivity	**2200**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	H1
Ammonia as N	**9.7**	1.0	mg/L	101509 1000	101509 1509	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.016**	0.0050	mg/L	101509 0717	101509 0717	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**180**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1200**	20	mg/L	102009 0754	102009 0943	LCR	SM (20) 2540 C	
Turbidity	**88**	0.10	NTU	101509 1030	101509 1030	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	101609 1147	102009 1323	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**540**	0.83	mg/L	101509 0628	102809 1847	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Arsenic	**0.0075**	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Barium	**0.075**	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Beryllium	ND	0.0050	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	
Calcium	**100**	0.25	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Iron	**0.13**	0.025	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	
Potassium	**15**	0.050	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	B2
Magnesium	**69**	0.050	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	
Manganese	**0.18**	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Sodium	**190**	5.0	mg/L	101509 0628	102809 1847	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Selenium	**0.0077**	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	101509 0631	101609 1438	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Benzene	**46**	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Naphthalene	**3.7**	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101609 1638	101609 1638	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*82.6%*	*80-120*	*101609 1638*	*101609 1638*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*83.1%*	*80-120*	*101609 1638*	*101609 1638*		*EPA 8260B*	
Surrogate: Toluene-d8		*92.0%*	*75-120*	*101609 1638*	*101609 1638*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.3%*	*60-149*	*101609 1638*	*101609 1638*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Aniline	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Phenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Naphthalene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-03D

09J0523-13 (Ground Water) Sampled: 10/14/2009 13:26; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**31**	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	101509 1400	102009 0014	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*41.5%*	*14-71*	*101509 1400*	*102009 0014*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.7%*	*6-54*	*101509 1400*	*102009 0014*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*58.3%*	*54-77*	*101509 1400*	*102009 0014*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*73.6%*	*54-78*	*101509 1400*	*102009 0014*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*82.5%*	*68-93*	*101509 1400*	*102009 0014*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*89.4%*	*65-86*	*101509 1400*	*102009 0014*		*EPA 8270C*	*S1*
Field Sampling/Testing								
pH	**8.20**	1.00	pH Units	101409 1326	101409 1326	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**80**	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**78**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**110**	10	mg/L	102109 1518	102209 1246	LCR	EPA410.4/HACH8000	
Conductivity	**800**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**7.3**	1.0	mg/L	101709 0500	101809 0914	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.0060**	0.0050	mg/L	101609 1719	101609 1733	LBG	EPA 353.2	B1
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	LBG	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**140**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**490**	20	mg/L	102009 0754	102009 0943	LCR	SM (20) 2540 C	
Turbidity	**0.78**	0.10	NTU	101709 0033	101709 0033	BMC	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102009 0707	102009 1707	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**35**	0.54	mg/L	102009 0533	102009 1522	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Barium	**0.036**	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102009 0533	102009 1522	APS	EPA 200.7/6010B	
Calcium	**13**	0.20	mg/L	102009 0533	102009 1522	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Iron	**0.057**	0.0050	mg/L	102009 0533	102009 1522	APS	EPA 200.7/6010B	
Potassium	**54**	0.10	mg/L	102009 0533	110509 1022	APS	EPA 200.7/6010B	
Magnesium	**0.45**	0.010	mg/L	102009 0533	102009 1522	APS	EPA 200.7/6010B	
Manganese	**0.0050**	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Sodium	**90**	1.0	mg/L	102009 0533	102009 1522	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Lead	**0.0047**	0.0020	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Vanadium	**0.0099**	0.0050	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102009 0541	102109 1713	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1-Dichloroethane	**5.6**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Benzene	**43**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Toluene	**1.2**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
o-Xylene	**1.6**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.9**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Hexachlorobutadiene	**2.5**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
Naphthalene	**11**	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	U
Total Xylenes	**3.2**	3.0	ug/L	101909 1522	101909 1522	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*96.1%*	*80-120*	*101909 1522*	*101909 1522*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*99.4%*	*80-120*	*101909 1522*	*101909 1522*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*101909 1522*	*101909 1522*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.0%*	*60-149*	*101909 1522*	*101909 1522*		*EPA 8260B*	

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	101909 1230	102109 2359	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	**15**	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	
Hexachloroethane	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4-Dimethylphenol	**110**	25	ug/L	101909 1230	102209 1725	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Naphthalene	**11**	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	
Hexachlorobutadiene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Dibenzofuran	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Anthracene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-20

09J0523-14 (Ground Water) Sampled: 10/16/2009 09:41; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**200**	25	ug/L	101909 1230	102209 1725	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Benzo[b]fluoranthene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Benzo[k]fluoranthene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Benzo[a]pyrene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Dibenz[a,h]anthracene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Benzo[g,h,i]perylene	ND	5.0	ug/L	101909 1230	102109 2359	RIS	EPA 8270C	E3, U
Surrogate: 2-Fluorophenol		*48.9%*	*14-71*	*101909 1230*	*102109 2359*		*EPA 8270C*	
Surrogate: Phenol-d5		*34.4%*	*6-54*	*101909 1230*	*102109 2359*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*84.7%*	*54-77*	*101909 1230*	*102109 2359*		*EPA 8270C*	*S1*
Surrogate: 2-Fluorobiphenyl		*89.5%*	*54-78*	*101909 1230*	*102109 2359*		*EPA 8270C*	*S1*
Surrogate: 2,4,6-Tribromophenol		*101%*	*68-93*	*101909 1230*	*102109 2359*		*EPA 8270C*	*S1*
Surrogate: Terphenyl-d14		*114%*	*65-86*	*101909 1230*	*102109 2359*		*EPA 8270C*	*S1*

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**10.4**	1.00	pH Units	101609 0941	101609 0941	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**90**	2.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**84**	10	mg/L	102109 1518	102209 1248	LCR	EPA410.4/HACH8000	
Conductivity	**1600**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.28**	0.10	mg/L	101709 0500	101809 0914	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0095**	0.0050	mg/L	101609 1719	101609 1733	LBG	EPA 353.2	B1
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	LBG	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**240**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**770**	20	mg/L	102009 0754	102009 0944	LCR	SM (20) 2540 C	
Turbidity	**9.3**	0.10	NTU	101709 0033	101709 0033	BMC	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102009 0707	102009 1709	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**330**	0.54	mg/L	102009 0533	102009 1822	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Barium	**0.019**	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Beryllium	**0.0030**	0.0010	mg/L	102009 0533	102009 1822	APS	EPA 200.7/6010B	
Calcium	**17**	0.20	mg/L	102009 0533	102009 1822	APS	EPA 200.7/6010B	
Cadmium	**0.0014**	0.00050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Cobalt	**0.25**	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Chromium	**0.0032**	0.0025	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Copper	**0.0053**	0.0020	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Iron	**18**	0.0050	mg/L	102009 0533	102009 1822	APS	EPA 200.7/6010B	
Potassium	**1.1**	0.010	mg/L	102009 0533	102009 1822	APS	EPA 200.7/6010B	
Magnesium	**69**	0.010	mg/L	102009 0533	102009 1822	APS	EPA 200.7/6010B	
Manganese	**0.53**	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Sodium	**120**	10	mg/L	102009 0533	102909 1126	APS	EPA 200.7/6010B	
Nickel	**0.36**	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

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Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0042**	0.0020	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Selenium	**0.0054**	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	
Zinc	**0.75**	0.020	mg/L	102009 0541	102109 1717	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101909 1559	101909 1559	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*95.2%*	*80-120*	*101909 1559*	*101909 1559*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*98.9%*	*80-120*	*101909 1559*	*101909 1559*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*101909 1559*	*101909 1559*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.2%*	*60-149*	*101909 1559*	*101909 1559*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Pyridine	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Aniline	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Phenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Isophorone	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Naphthalene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	10	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	10	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Fluorene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	10	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Pyrene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Chrysene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**24**	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.1	ug/L	101909 1230	102209 0035	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*52.0%*	*14-71*	*101909 1230*	*102209 0035*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.8%*	*6-54*	*101909 1230*	*102209 0035*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*91.3%*	*54-77*	*101909 1230*	*102209 0035*		*EPA 8270C*	*S1*
Surrogate: 2-Fluorobiphenyl		*98.2%*	*54-78*	*101909 1230*	*102209 0035*		*EPA 8270C*	*S1*
Surrogate: 2,4,6-Tribromophenol		*103%*	*68-93*	*101909 1230*	*102209 0035*		*EPA 8270C*	*S1*
Surrogate: Terphenyl-d14		*101%*	*65-86*	*101909 1230*	*102209 0035*		*EPA 8270C*	*S1*

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S

09J0523-15 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
pH	**4.20**	1.00	pH Units	101609 1247	101609 1247	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**88**	2.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	D
COD, Total	**84**	10	mg/L	102109 1518	102209 1250	LCR	EPA410.4/HACH8000	
Conductivity	**1600**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.16**	0.10	mg/L	101709 0500	101809 0914	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0083**	0.0050	mg/L	101609 1719	101609 1733	LBG	EPA 353.2	B1
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	LBG	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**240**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**730**	20	mg/L	102009 0754	102009 0944	LCR	SM (20) 2540 C	
Turbidity	**5.6**	0.10	NTU	101709 0033	101709 0033	BMC	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102009 0707	102009 1711	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**330**	0.54	mg/L	102009 0533	102009 1826	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Barium	**0.021**	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Beryllium	**0.0031**	0.0010	mg/L	102009 0533	102009 1826	APS	EPA 200.7/6010B	
Calcium	**18**	0.20	mg/L	102009 0533	102009 1826	APS	EPA 200.7/6010B	
Cadmium	**0.0012**	0.00050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Cobalt	**0.25**	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Chromium	**0.0035**	0.0025	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Copper	**0.0045**	0.0020	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Iron	**19**	0.0050	mg/L	102009 0533	102009 1826	APS	EPA 200.7/6010B	
Potassium	**1.2**	0.010	mg/L	102009 0533	102009 1826	APS	EPA 200.7/6010B	
Magnesium	**70**	0.010	mg/L	102009 0533	102009 1826	APS	EPA 200.7/6010B	
Manganese	**0.55**	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Sodium	**120**	10	mg/L	102009 0533	102909 1129	APS	EPA 200.7/6010B	
Nickel	**0.37**	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0042**	0.0020	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Selenium	**0.0061**	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	
Zinc	**0.75**	0.020	mg/L	102009 0541	102109 1720	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101909 1635	101909 1635	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*97.5%*	*80-120*	*101909 1635*	*101909 1635*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*100%*	*80-120*	*101909 1635*	*101909 1635*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*101909 1635*	*101909 1635*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.2%*	*60-149*	*101909 1635*	*101909 1635*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Pyridine	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Aniline	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Phenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Isophorone	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Naphthalene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	10	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	10	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	10	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Fluorene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	10	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Pyrene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Chrysene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**15**	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.1	ug/L	101909 1230	102209 0112	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*44.9%*	*14-71*	*101909 1230*	*102209 0112*		*EPA 8270C*	
Surrogate: Phenol-d5		*28.9%*	*6-54*	*101909 1230*	*102209 0112*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*75.8%*	*54-77*	*101909 1230*	*102209 0112*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*85.2%*	*54-78*	*101909 1230*	*102209 0112*		*EPA 8270C*	*S1*
Surrogate: 2,4,6-Tribromophenol		*88.1%*	*68-93*	*101909 1230*	*102209 0112*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*86.7%*	*65-86*	*101909 1230*	*102209 0112*		*EPA 8270C*	*S1*

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GL-16 S DUP

09J0523-16 (Ground Water) Sampled: 10/16/2009 12:47; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**4.20**	1.00	pH Units	101609 1247	101609 1247	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**140**	2.0	mg CaCO3/L	101909 1110	101909 1110	VAS	Sm (20) 2320B	
Chloride	**99**	1.0	mg/L	102009 1200	102009 1332	LCR	SM (20) 4500Cl-C	
COD, Total	**60**	10	mg/L	102109 1518	102209 1252	LCR	EPA410.4/HACH8000	
Conductivity	**13000**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**3.7**	0.10	mg/L	101709 0500	101809 0914	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0050**	0.0050	mg/L	101609 1719	101609 1733	LBG	EPA 353.2	B1
Nitrate as N	ND	0.050	mg/L	102009 0924	102009 0924	LBG	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102009 0924	102009 0924	VAS	EPA 353.2	
Sulfate as SO4	**370**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**5700**	40	mg/L	102009 0754	102009 0944	LCR	SM (20) 2540 C	
Turbidity	**40**	0.10	NTU	101709 0033	101709 0033	BMC	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	**0.00048**	0.00020	mg/L	102009 0707	102009 1713	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**1000**	0.91	mg/L	102009 0533	102909 1133	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Arsenic	**0.022**	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Barium	**0.074**	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102009 0533	102009 1830	APS	EPA 200.7/6010B	
Calcium	**76**	0.20	mg/L	102009 0533	102009 1830	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Copper	**0.018**	0.0020	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Iron	**36**	0.0050	mg/L	102009 0533	102009 1830	APS	EPA 200.7/6010B	
Potassium	**70**	0.10	mg/L	102009 0533	110509 1034	APS	EPA 200.7/6010B	
Magnesium	**210**	0.10	mg/L	102009 0533	102909 1133	APS	EPA 200.7/6010B	
Manganese	**0.55**	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Sodium	**2000**	100	mg/L	102009 0533	110509 1229	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Lead	ND	0.0020	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Selenium	**0.041**	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102009 0541	102109 1724	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**7.1**	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	
2-Butanone (MEK)	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	101909 1712	101909 1712	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*95.8%*	*80-120*	*101909 1712*	*101909 1712*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*99.0%*	*80-120*	*101909 1712*	*101909 1712*		*EPA 8260B*	
Surrogate: Toluene-d8		*100%*	*75-120*	*101909 1712*	*101909 1712*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*93.6%*	*60-149*	*101909 1712*	*101909 1712*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2-Methylphenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Hexachloroethane	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Naphthalene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Dibenzofuran	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**6.6**	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	
Di-n-octylphthalate	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	5.0	ug/L	101909 1230	102209 0149	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*47.8%*	*14-71*	*101909 1230*	*102209 0149*		*EPA 8270C*	
Surrogate: Phenol-d5		*30.6%*	*6-54*	*101909 1230*	*102209 0149*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*86.5%*	*54-77*	*101909 1230*	*102209 0149*		*EPA 8270C*	*S1*
Surrogate: 2-Fluorobiphenyl		*94.4%*	*54-78*	*101909 1230*	*102209 0149*		*EPA 8270C*	*S1*
Surrogate: 2,4,6-Tribromophenol		*88.2%*	*68-93*	*101909 1230*	*102209 0149*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*95.7%*	*65-86*	*101909 1230*	*102209 0149*		*EPA 8270C*	*S1*

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GL-16 D

09J0523-17 (Ground Water) Sampled: 10/16/2009 11:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**8.00**	1.00	pH Units	101609 1113	101609 1113	LMG	SM (20) 4500-H B	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**28**	1.0	mg CaCO3/L	102209 1020	102209 1020	VAS	Sm (20) 2320B	
Chloride	**86**	1.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	
COD, Total	**17**	10	mg/L	110309 1352	110409 1104	LCR	EPA410.4/HACH8000	
Conductivity	**1500**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.61**	0.10	mg/L	102209 0600	102209 1324	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.057**	0.0050	mg/L	102209 0635	102209 0635	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**200**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**800**	40	mg/L	102809 0720	102809 0723	LCR	SM (20) 2540 C	
Turbidity	**53**	0.10	NTU	102209 0810	102209 0810	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1600	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**370**	0.67	mg/L	102309 1117	111009 1357	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Arsenic	**0.041**	0.0050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Barium	**0.20**	0.0050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110409 2255	APS	EPA 200.7/6010B	
Calcium	**38**	0.25	mg/L	102309 1117	111009 1357	APS	EPA 200.7/6010B	
Cadmium	**0.0014**	0.00050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Cobalt	**0.21**	0.0050	mg/L	102309 1122	103109 2022	PRM	EPA 200.8/6020	
Chromium	**0.14**	0.0025	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Copper	**0.085**	0.0020	mg/L	102309 1122	103109 2022	PRM	EPA 200.8/6020	
Iron	**190**	0.025	mg/L	102309 1117	111009 1357	APS	EPA 200.7/6010B	
Potassium	**3.8**	0.050	mg/L	102309 1117	111009 1357	APS	EPA 200.7/6010B	
Magnesium	**68**	0.010	mg/L	102309 1117	110409 2255	APS	EPA 200.7/6010B	
Manganese	**2.4**	0.0050	mg/L	102309 1122	103109 2022	PRM	EPA 200.8/6020	
Sodium	**88**	5.0	mg/L	102309 1117	111009 1357	APS	EPA 200.7/6010B	
Nickel	**0.29**	0.0050	mg/L	102309 1122	103109 2022	PRM	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.061**	0.0020	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Selenium	**0.0068**	0.0050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Vanadium	**0.18**	0.0050	mg/L	102309 1122	102909 1758	PRM	EPA 200.8/6020	
Zinc	**0.62**	0.020	mg/L	102309 1122	103109 2022	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1152	102809 1152	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.8%*	*80-120*	*102809 1152*	*102809 1152*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.7%*	*80-120*	*102809 1152*	*102809 1152*		*EPA 8260B*	
Surrogate: Toluene-d8		*99.1%*	*75-120*	*102809 1152*	*102809 1152*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.0%*	*60-149*	*102809 1152*	*102809 1152*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Hexachloroethane	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Naphthalene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Dibenzofuran	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**28**	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	
Di-n-octylphthalate	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	5.0	ug/L	102209 0810	102709 1238	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*37.3%*	*14-71*	*102209 0810*	*102709 1238*		*EPA 8270C*	
Surrogate: Phenol-d5		*23.4%*	*6-54*	*102209 0810*	*102709 1238*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*53.4%*	*54-77*	*102209 0810*	*102709 1238*		*EPA 8270C*	#
Surrogate: 2-Fluorobiphenyl		*55.6%*	*54-78*	*102209 0810*	*102709 1238*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*80.6%*	*68-93*	*102209 0810*	*102709 1238*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*66.4%*	*65-86*	*102209 0810*	*102709 1238*		*EPA 8270C*	

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GL-05S

09J0523-18 (Ground Water) Sampled: 10/21/2009 08:48; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**5.10**	1.00	pH Units	102109 0848	102109 0848	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**44**	1.0	mg CaCO3/L	102209 1020	102209 1020	VAS	Sm (20) 2320B	
Chloride	**1300**	25	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**130**	10	mg/L	110309 1352	110409 1106	LCR	EPA410.4/HACH8000	
Conductivity	**4400**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**2.9**	0.10	mg/L	102209 0600	102209 1324	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102209 0635	102209 0635	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**210**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1700**	40	mg/L	102809 0720	102809 0723	LCR	SM (20) 2540 C	
Turbidity	**130**	0.10	NTU	102209 0810	102209 0810	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1603	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**250**	13	mg/L	102309 1117	111009 1401	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Barium	**0.092**	0.0050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110409 2259	APS	EPA 200.7/6010B	
Calcium	**27**	5.0	mg/L	102309 1117	111009 1401	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102309 1122	103109 2026	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102309 1122	103109 2026	PRM	EPA 200.8/6020	
Iron	**200**	0.50	mg/L	102309 1117	111009 1401	APS	EPA 200.7/6010B	
Potassium	**1.8**	1.0	mg/L	102309 1117	111009 1401	APS	EPA 200.7/6010B	
Magnesium	**45**	0.010	mg/L	102309 1117	110409 2259	APS	EPA 200.7/6010B	
Manganese	**4.6**	0.0050	mg/L	102309 1122	103109 2026	PRM	EPA 200.8/6020	
Sodium	**380**	100	mg/L	102309 1117	111009 1401	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	102309 1122	103109 2026	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Selenium	**0.010**	0.0050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102309 1122	102909 1802	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102309 1122	103109 2026	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1230	102809 1230	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.0%*	*80-120*	*102809 1230*	*102809 1230*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.7%*	*80-120*	*102809 1230*	*102809 1230*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102809 1230*	*102809 1230*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.2%*	*60-149*	*102809 1230*	*102809 1230*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Hexachloroethane	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Naphthalene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Dibenzofuran	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Anthracene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U

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Baltimore Division

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-05D

09J0523-19 (Ground Water) Sampled: 10/21/2009 10:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**40**	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	
Di-n-octylphthalate	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	5.0	ug/L	102209 0810	102709 1315	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*45.0%*	*14-71*	*102209 0810*	*102709 1315*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.3%*	*6-54*	*102209 0810*	*102709 1315*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*61.6%*	*54-77*	*102209 0810*	*102709 1315*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.4%*	*54-78*	*102209 0810*	*102709 1315*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*79.2%*	*68-93*	*102209 0810*	*102709 1315*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*92.3%*	*65-86*	*102209 0810*	*102709 1315*		*EPA 8270C*	*S1*

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**5.80**	1.00	pH Units	102109 1003	102109 1003	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**170**	2.0	mg CaCO3/L	102209 1020	102209 1020	VAS	Sm (20) 2320B	
Chloride	**180**	2.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**150**	10	mg/L	110309 1352	110409 1108	LCR	EPA410.4/HACH8000	
Conductivity	**2100**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**6.7**	1.0	mg/L	102209 0600	102209 1324	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.011**	0.0050	mg/L	102209 0635	102209 0635	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**260**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1200**	20	mg/L	102809 0720	102809 0723	LCR	SM (20) 2540 C	
Turbidity	**21**	0.10	NTU	102209 0810	102209 0810	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1605	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**580**	0.67	mg/L	102309 1117	111009 1413	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Arsenic	**0.0062**	0.0050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Barium	**0.037**	0.0050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110509 0943	APS	EPA 200.7/6010B	
Calcium	**110**	0.25	mg/L	102309 1117	111009 1413	APS	EPA 200.7/6010B	
Cadmium	**0.0015**	0.00050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102309 1122	103109 2030	PRM	EPA 200.8/6020	
Chromium	**0.0060**	0.0025	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Copper	**0.0082**	0.0020	mg/L	102309 1122	103109 2030	PRM	EPA 200.8/6020	
Iron	**10**	0.0050	mg/L	102309 1117	110509 0943	APS	EPA 200.7/6010B	
Potassium	**64**	0.050	mg/L	102309 1117	111009 1413	APS	EPA 200.7/6010B	
Magnesium	**73**	0.010	mg/L	102309 1117	110509 0943	APS	EPA 200.7/6010B	
Manganese	**0.44**	0.0050	mg/L	102309 1122	103109 2030	PRM	EPA 200.8/6020	
Sodium	**110**	5.0	mg/L	102309 1117	111009 1413	APS	EPA 200.7/6010B	
Nickel	**0.027**	0.0050	mg/L	102309 1122	103109 2030	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.034**	0.0020	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Selenium	**0.013**	0.0050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Vanadium	**0.0060**	0.0050	mg/L	102309 1122	102909 1806	PRM	EPA 200.8/6020	
Zinc	**0.40**	0.020	mg/L	102309 1122	103109 2030	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1-Dichloroethane	**11**	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**2.0**	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	
2-Butanone (MEK)	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bromochloromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Chlorotoluene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1307	102809 1307	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*89.9%*	*80-120*	*102809 1307*	*102809 1307*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.7%*	*80-120*	*102809 1307*	*102809 1307*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102809 1307*	*102809 1307*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.4%*	*60-149*	*102809 1307*	*102809 1307*		*EPA 8260B*	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

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09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

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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	102209 0810	102709 1351	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Hexachloroethane	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Naphthalene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dibenzofuran	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Anthracene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Di-n-butylphthalate	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	**6.9**	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	
Di-n-octylphthalate	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	5.0	ug/L	102209 0810	102709 1351	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*34.8%*	*14-71*	*102209 0810*	*102709 1351*		*EPA 8270C*	
Surrogate: Phenol-d5		*23.7%*	*6-54*	*102209 0810*	*102709 1351*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*48.2%*	*54-77*	*102209 0810*	*102709 1351*		*EPA 8270C*	#
Surrogate: 2-Fluorobiphenyl		*53.5%*	*54-78*	*102209 0810*	*102709 1351*		*EPA 8270C*	#
Surrogate: 2,4,6-Tribromophenol		*60.9%*	*68-93*	*102209 0810*	*102709 1351*		*EPA 8270C*	#
Surrogate: Terphenyl-d14		*87.7%*	*65-86*	*102209 0810*	*102709 1351*		*EPA 8270C*	*S1*

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02S

09J0523-20 (Ground Water) Sampled: 10/21/2009 12:58; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**6.80**	1.00	pH Units	102109 1258	102109 1258	LMG	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**100**	2.0	mg CaCO3/L	102209 1020	102209 1020	VAS	Sm (20) 2320B	
Chloride	**1300**	25	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**70**	10	mg/L	110309 1352	110409 1110	LCR	EPA410.4/HACH8000	
Conductivity	**5300**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**2.8**	0.10	mg/L	102209 0600	102209 1324	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102209 0635	102209 0635	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**130**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1800**	40	mg/L	102809 0720	102809 0723	LCR	SM (20) 2540 C	
Turbidity	**130**	0.10	NTU	102209 0810	102209 0810	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1607	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**450**	0.17	mg/L	102309 1117	110509 0947	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Arsenic	**0.0052**	0.0050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Barium	**0.094**	0.0050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110509 0947	APS	EPA 200.7/6010B	
Calcium	**45**	0.050	mg/L	102309 1117	110509 0947	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102309 1122	103109 2033	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102309 1122	103109 2033	PRM	EPA 200.8/6020	
Iron	**150**	0.50	mg/L	102309 1117	111009 1417	APS	EPA 200.7/6010B	
Potassium	**16**	0.010	mg/L	102309 1117	110509 0947	APS	EPA 200.7/6010B	
Magnesium	**83**	0.010	mg/L	102309 1117	110509 0947	APS	EPA 200.7/6010B	
Manganese	**5.8**	0.0050	mg/L	102309 1122	103109 2033	PRM	EPA 200.8/6020	
Sodium	**590**	100	mg/L	102309 1117	111009 1417	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	102309 1122	103109 2033	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Selenium	**0.017**	0.0050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102309 1122	102909 1810	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102309 1122	103109 2033	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1344	102809 1344	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.0%*	*80-120*	*102809 1344*	*102809 1344*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*89.5%*	*80-120*	*102809 1344*	*102809 1344*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102809 1344*	*102809 1344*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.7%*	*60-149*	*102809 1344*	*102809 1344*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Pyridine	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Aniline	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Phenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Acetophenone	0.0		ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2-Chlorophenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
1,3-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
1,4-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
1,2-Dichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Pentachloroethane	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Hexachloroethane	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Nitrobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Isophorone	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2-Nitrophenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4-Dimethylphenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4-Dichlorophenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
1,2,4-Trichlorobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Naphthalene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Hexachlorobutadiene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4-Chloro-3-methylphenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2-Methylnaphthalene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Hexachlorocyclopentadiene	ND	10	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4,6-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4,5-Trichlorophenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2-Chloronaphthalene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Acenaphthylene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Dimethylphthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,6-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Acenaphthene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4-Dinitrophenol	ND	10	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Dibenzofuran	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
2,4-Dinitrotoluene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4-Nitrophenol	ND	10	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Fluorene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4-Chlorophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Diethylphthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
4-Bromophenyl-phenylether	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Hexachlorobenzene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Pentachlorophenol	ND	10	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Phenanthrene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Anthracene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-02D

09J0523-21 (Ground Water) Sampled: 10/21/2009 11:37; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Fluoranthene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Pyrene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Butylbenzylphthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
3,3´-Dichlorobenzidine	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Benz(a)anthracene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Chrysene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Bis(2-Ethylhexyl)phthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Di-n-octylphthalate	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Benzo[b]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Benzo[k]fluoranthene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Benzo[a]pyrene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Dibenz[a,h]anthracene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Benzo[g,h,i]perylene	ND	5.0	ug/L	102209 0810	102709 1428	RIS	EPA 8270C	U
Surrogate: 2-Fluorophenol		*47.2%*	*14-71*	*102209 0810*	*102709 1428*		*EPA 8270C*	
Surrogate: Phenol-d5		*30.8%*	*6-54*	*102209 0810*	*102709 1428*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*64.3%*	*54-77*	*102209 0810*	*102709 1428*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*69.6%*	*54-78*	*102209 0810*	*102709 1428*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*77.0%*	*68-93*	*102209 0810*	*102709 1428*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*97.4%*	*65-86*	*102209 0810*	*102709 1428*		*EPA 8270C*	*S1*

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**5.50**	1.00	pH Units	102109 1137	102109 1137	LMG	SM (20) 4500-H B	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**86**	1.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	
COD, Total	**11**	10	mg/L	110309 1352	110409 1112	LCR	EPA410.4/HACH8000	
Conductivity	**690**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.17**	0.10	mg/L	102309 0325	102609 1017	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0063**	0.0050	mg/L	102309 0327	102309 0327	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**140**	5.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**650**	20	mg/L	102809 0720	102809 0724	LCR	SM (20) 2540 C	
Turbidity	**22**	0.10	NTU	102309 1010	102309 1010	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1609	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**160**	0.17	mg/L	102309 1117	110509 0951	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Barium	**0.037**	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Beryllium	**0.0033**	0.0010	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Calcium	**14**	0.050	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Cadmium	**0.0024**	0.00050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Cobalt	**0.13**	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Chromium	**0.0057**	0.0025	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Copper	**0.0056**	0.0020	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Iron	**4.9**	0.0050	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Potassium	**1.1**	0.010	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Magnesium	**32**	0.010	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Manganese	**0.70**	0.0050	mg/L	102309 1122	103109 2037	PRM	EPA 200.8/6020	
Sodium	**67**	1.0	mg/L	102309 1117	110509 0951	APS	EPA 200.7/6010B	
Nickel	**0.22**	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0030**	0.0020	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	
Zinc	**0.40**	0.020	mg/L	102309 1122	111009 1046	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Dichlorodifluoromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Benzene	**36**	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1536	102809 1536	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.0%*	*80-120*	*102809 1536*	*102809 1536*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*87.2%*	*80-120*	*102809 1536*	*102809 1536*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*102809 1536*	*102809 1536*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.9%*	*60-149*	*102809 1536*	*102809 1536*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**40**	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110409 1623	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*31.8%*	*0.974-78.2*	*102809 1330*	*110409 1623*		*EPA 8270C*	
Surrogate: Phenol-d5		*24.7%*	*0-57.5*	*102809 1330*	*110409 1623*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*65.0%*	*15.3-131*	*102809 1330*	*110409 1623*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*62.9%*	*3.75-142*	*102809 1330*	*110409 1623*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*73.6%*	*12.5-139*	*102809 1330*	*110409 1623*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*61.3%*	*16.6-136*	*102809 1330*	*110409 1623*		*EPA 8270C*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11S

09J0523-22 (Ground Water) Sampled: 10/22/2009 12:03; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**4.00**	1.00	pH Units	102209 1203	102209 1203	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**240**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**290**	5.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**290**	20	mg/L	110309 1352	110409 1114	LCR	EPA410.4/HACH8000	D
Conductivity	**3700**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.76**	0.10	mg/L	102309 0325	102609 1017	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102309 0327	102309 0327	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**1000**	100	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**2400**	20	mg/L	102809 0720	102809 0724	LCR	SM (20) 2540 C	
Turbidity	**68**	0.10	NTU	102309 1010	102309 1010	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1611	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**840**	13	mg/L	102309 1117	111009 1421	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Arsenic	**0.021**	0.0050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Barium	**0.024**	0.0050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110509 0955	APS	EPA 200.7/6010B	
Calcium	**340**	5.0	mg/L	102309 1117	111009 1421	APS	EPA 200.7/6010B	
Cadmium	**0.0025**	0.00050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102309 1122	103109 2041	PRM	EPA 200.8/6020	
Chromium	**0.016**	0.0025	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Copper	**0.017**	0.0020	mg/L	102309 1122	103109 2041	PRM	EPA 200.8/6020	
Iron	**12**	0.0050	mg/L	102309 1117	110509 0955	APS	EPA 200.7/6010B	
Potassium	**200**	1.0	mg/L	102309 1117	111009 1421	APS	EPA 200.7/6010B	
Magnesium	ND	0.010	mg/L	102309 1117	110509 0955	APS	EPA 200.7/6010B	
Manganese	**0.13**	0.0050	mg/L	102309 1122	103109 2041	PRM	EPA 200.8/6020	
Sodium	**280**	100	mg/L	102309 1117	111009 1421	APS	EPA 200.7/6010B	
Nickel	**0.054**	0.0050	mg/L	102309 1122	103109 2041	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.049**	0.0020	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Selenium	**0.0094**	0.0050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Vanadium	**0.12**	0.0050	mg/L	102309 1122	102909 1828	PRM	EPA 200.8/6020	
Zinc	**0.25**	0.020	mg/L	102309 1122	103109 2041	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Vinyl chloride	**1.7**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
Bromomethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Acetone	**9.9**	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
Iodomethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1-Dichloroethane	**7.6**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
Chloroprene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**1.4**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
2-Butanone (MEK)	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bromochloromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Benzene	**7100**	100	ug/L	102909 1839	102909 1839	EMG	EPA 8260B	D
1,2-Dichloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	**62**	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Toluene	**5.2**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Ethylbenzene	**1.4**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
m,p-Xylenes	**2.3**	2.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
o-Xylene	**2.4**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
Styrene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Propylbenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.2**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Naphthalene	**33**	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	U
Total Xylenes	**4.6**	3.0	ug/L	102809 1614	102809 1614	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*89.6%*	*80-120*	*102809 1614*	*102809 1614*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*85.4%*	*80-120*	*102809 1614*	*102809 1614*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*102809 1614*	*102809 1614*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.5%*	*60-149*	*102809 1614*	*102809 1614*		*EPA 8260B*	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Aniline	**8.7**	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Phenol	**62**	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2-Methylphenol	**12**	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**96**	11	ug/L	102809 1330	110509 1308	RIS	EPA 8270C	D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**160**	11	ug/L	102809 1330	110509 1308	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Naphthalene	**14**	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Anthracene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Di-n-butylphthalate	**7.1**	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	D
Fluoranthene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**85**	11	ug/L	102809 1330	110509 1308	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110409 1700	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*31.8%*	*0.974-78.2*	*102809 1330*	*110409 1700*		*EPA 8270C*	
Surrogate: Phenol-d5		*25.5%*	*0-57.5*	*102809 1330*	*110409 1700*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*60.5%*	*15.3-131*	*102809 1330*	*110409 1700*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*57.4%*	*3.75-142*	*102809 1330*	*110409 1700*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*78.8%*	*12.5-139*	*102809 1330*	*110409 1700*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*91.4%*	*16.6-136*	*102809 1330*	*110409 1700*		*EPA 8270C*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17S

09J0523-23 (Ground Water) Sampled: 10/22/2009 10:28; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**10.0**	1.00	pH Units	102209 1028	102209 1028	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**390**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**33**	1.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	
COD, Total	**270**	20	mg/L	110309 1352	110409 1116	LCR	EPA410.4/HACH8000	D
Conductivity	**7900**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**19**	1.0	mg/L	102309 0325	102609 1017	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	102309 0327	102309 0327	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102309 0559	102309 0559	VAS	EPA 353.2	
Sulfate as SO4	**400**	25	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**3900**	20	mg/L	102809 0720	102809 0724	LCR	SM (20) 2540 C	
Turbidity	**13**	0.10	NTU	102309 1010	102309 1010	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102409 1031	102609 1614	HG	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**640**	0.83	mg/L	102309 1117	111009 1615	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Arsenic	**0.020**	0.0050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Barium	**0.11**	0.0050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102309 1117	110509 0959	APS	EPA 200.7/6010B	
Calcium	**99**	0.25	mg/L	102309 1117	111009 1615	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102309 1122	103109 2045	PRM	EPA 200.8/6020	
Chromium	**0.0035**	0.0025	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102309 1122	103109 2045	PRM	EPA 200.8/6020	
Iron	**1.7**	0.0050	mg/L	102309 1117	110509 0959	APS	EPA 200.7/6010B	
Potassium	**54**	0.050	mg/L	102309 1117	111009 1615	APS	EPA 200.7/6010B	
Magnesium	**95**	0.050	mg/L	102309 1117	111009 1615	APS	EPA 200.7/6010B	
Manganese	**0.30**	0.0050	mg/L	102309 1122	103109 2045	PRM	EPA 200.8/6020	
Sodium	**1200**	100	mg/L	102309 1117	111109 1612	APS	EPA 200.7/6010B	
Nickel	**0.0070**	0.0050	mg/L	102309 1122	103109 2045	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Selenium	**0.033**	0.0050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102309 1122	102909 1832	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102309 1122	103109 2045	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Benzene	**5.6**	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
m,p-Xylenes	**4.4**	2.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	
o-Xylene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	U
Total Xylenes	**4.4**	3.0	ug/L	102909 1340	102909 1340	EMG	EPA 8260B	
Surrogate: Dibromofluoromethane		*90.5%*	*80-120*	*102909 1340*	*102909 1340*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*94.2%*	*80-120*	*102909 1340*	*102909 1340*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102909 1340*	*102909 1340*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*99.8%*	*60-149*	*102909 1340*	*102909 1340*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Anthracene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-17D

09J0523-24 (Ground Water) Sampled: 10/22/2009 09:13; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-butylphthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110409 1736	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*70.6%*	*0.974-78.2*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Surrogate: Phenol-d5		*56.3%*	*0-57.5*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*117%*	*15.3-131*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*107%*	*3.75-142*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*138%*	*12.5-139*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*91.6%*	*16.6-136*	*102809 1330*	*110409 1736*		*EPA 8270C*	
Field Sampling/Testing								
pH	**7.20**	1.00	pH Units	102209 0913	102209 0913	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**130**	2.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**29**	1.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	
COD, Total	**21**	10	mg/L	110309 1352	110409 1118	LCR	EPA410.4/HACH8000	
Conductivity	**1400**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**2.2**	0.10	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**3.5**	1.0	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	
Total Dissolved Solids	**700**	20	mg/L	102809 0720	102809 0724	LCR	SM (20) 2540 C	
Turbidity	**76**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1533	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**220**	0.17	mg/L	102909 0800	110409 2018	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Barium	**0.087**	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2018	APS	EPA 200.7/6010B	
Calcium	**80**	0.050	mg/L	102909 0800	110409 2018	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102809 1153	103109 1903	PRM	EPA 200.8/6020	
Iron	**20**	0.0050	mg/L	102909 0800	110409 2018	APS	EPA 200.7/6010B	
Potassium	**1.8**	0.010	mg/L	102909 0800	111009 1619	APS	EPA 200.7/6010B	
Magnesium	**3.9**	0.010	mg/L	102909 0800	110409 2018	APS	EPA 200.7/6010B	
Manganese	**0.72**	0.0050	mg/L	102809 1153	103109 1903	PRM	EPA 200.8/6020	
Sodium	**19**	1.0	mg/L	102909 0800	110409 2018	APS	EPA 200.7/6010B	
Nickel	**0.0089**	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102809 1153	102909 1855	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102909 1417	102909 1417	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*91.8%*	*80-120*	*102909 1417*	*102909 1417*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*96.3%*	*80-120*	*102909 1417*	*102909 1417*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102909 1417*	*102909 1417*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*101%*	*60-149*	*102909 1417*	*102909 1417*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Anthracene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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Baltimore Division

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-11D

09J0523-25 (Ground Water) Sampled: 10/26/2009 14:00; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110409 1813	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*33.4%*	*0.974-78.2*	*102809 1330*	*110409 1813*		*EPA 8270C*	
Surrogate: Phenol-d5		*25.9%*	*0-57.5*	*102809 1330*	*110409 1813*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*56.8%*	*15.3-131*	*102809 1330*	*110409 1813*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*54.2%*	*3.75-142*	*102809 1330*	*110409 1813*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.9%*	*12.5-139*	*102809 1330*	*110409 1813*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*65.8%*	*16.6-136*	*102809 1330*	*110409 1813*		*EPA 8270C*	

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**9.20**	1.00	pH Units	102609 1400	102609 1400	LMG	SM (20) 4500-H B	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**320**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**520**	10	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**280**	20	mg/L	110309 1352	110409 1120	LCR	EPA410.4/HACH8000	D
Conductivity	**3400**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**110**	5.0	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	D
Nitrite as N	**0.0064**	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**280**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**2300**	20	mg/L	102809 0720	102809 0725	LCR	SM (20) 2540 C	
Turbidity	**24**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1535	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**610**	1.3	mg/L	102909 0800	111009 1623	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Arsenic	**0.029**	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Barium	**0.049**	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2022	APS	EPA 200.7/6010B	
Calcium	**250**	0.50	mg/L	102909 0800	111009 1623	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Chromium	**0.0063**	0.0025	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Copper	**0.0095**	0.0020	mg/L	102809 1153	103109 1907	PRM	EPA 200.8/6020	
Iron	**2.6**	0.0050	mg/L	102909 0800	110409 2022	APS	EPA 200.7/6010B	
Potassium	**74**	0.10	mg/L	102909 0800	111009 1623	APS	EPA 200.7/6010B	
Magnesium	ND	0.010	mg/L	102909 0800	110409 2022	APS	EPA 200.7/6010B	
Manganese	**0.063**	0.0050	mg/L	102809 1153	103109 1907	PRM	EPA 200.8/6020	
Sodium	**270**	10	mg/L	102909 0800	111009 1623	APS	EPA 200.7/6010B	
Nickel	**0.017**	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0042**	0.0020	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Selenium	**0.012**	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Vanadium	**0.015**	0.0050	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102809 1153	102909 1859	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Acetone	**440**	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
Iodomethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
2-Butanone (MEK)	**68**	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bromochloromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Benzene	**1.1**	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Toluene	**2.8**	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Chlorotoluene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	**1.8**	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Naphthalene	**28**	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102909 1454	102909 1454	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.1%*	*80-120*	*102909 1454*	*102909 1454*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*94.8%*	*80-120*	*102909 1454*	*102909 1454*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*102909 1454*	*102909 1454*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.8%*	*60-149*	*102909 1454*	*102909 1454*		*EPA 8260B*	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

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	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Pyridine	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Aniline	**6.0**	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	D
Bis(2-Chloroethyl)ether	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Phenol	**97**	27	ug/L	102809 1330	110509 1345	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2-Methylphenol	**19**	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	D
Hexachloroethane	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**150**	27	ug/L	102809 1330	110509 1345	RIS	EPA 8270C	D
Nitrobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Isophorone	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**37**	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Naphthalene	**14**	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Fluorene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Anthracene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Pyrene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Chrysene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**7.4**	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.4	ug/L	102809 1330	110409 1849	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*28.0%*	*0.974-78.2*	*102809 1330*	*110409 1849*		*EPA 8270C*	
Surrogate: Phenol-d5		*21.7%*	*0-57.5*	*102809 1330*	*110409 1849*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*52.5%*	*15.3-131*	*102809 1330*	*110409 1849*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*51.3%*	*3.75-142*	*102809 1330*	*110409 1849*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*72.5%*	*12.5-139*	*102809 1330*	*110409 1849*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*77.4%*	*16.6-136*	*102809 1330*	*110409 1849*		*EPA 8270C*	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZP001

09J0523-26 (Ground Water) Sampled: 10/26/2009 08:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**10.4**	1.00	pH Units	102609 0842	102609 0842	LMG	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**320**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**260**	10	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**64**	10	mg/L	110309 1352	110409 1122	LCR	EPA410.4/HACH8000	
Conductivity	**2700**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**2.4**	0.10	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**120**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1500**	40	mg/L	102809 0720	102809 0725	LCR	SM (20) 2540 C	
Turbidity	**61**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1537	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**470**	0.17	mg/L	102909 0800	110409 2026	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Arsenic	**0.015**	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Barium	**0.23**	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2026	APS	EPA 200.7/6010B	
Calcium	**42**	0.050	mg/L	102909 0800	110409 2026	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Cobalt	**0.0087**	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Chromium	**0.0026**	0.0025	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Copper	**0.0024**	0.0020	mg/L	102809 1153	103109 1911	PRM	EPA 200.8/6020	
Iron	**81**	0.050	mg/L	102909 0800	111009 1627	APS	EPA 200.7/6010B	
Potassium	**11**	0.10	mg/L	102909 0800	111009 1627	APS	EPA 200.7/6010B	
Magnesium	**88**	0.010	mg/L	102909 0800	110409 2026	APS	EPA 200.7/6010B	
Manganese	**3.6**	0.0050	mg/L	102809 1153	103109 1911	PRM	EPA 200.8/6020	
Sodium	**310**	10	mg/L	102909 0800	111009 1627	APS	EPA 200.7/6010B	
Nickel	ND	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Lead	ND	0.0020	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Selenium	**0.016**	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102809 1153	102909 1902	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1843	102809 1843	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.8%*	*80-120*	*102809 1843*	*102809 1843*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*92.4%*	*80-120*	*102809 1843*	*102809 1843*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102809 1843*	*102809 1843*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.4%*	*60-149*	*102809 1843*	*102809 1843*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Pyrene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	102809 1330	110409 1926	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*45.2%*	*0.974-78.2*	*102809 1330*	*110409 1926*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.6%*	*0-57.5*	*102809 1330*	*110409 1926*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*67.0%*	*15.3-131*	*102809 1330*	*110409 1926*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*65.8%*	*3.75-142*	*102809 1330*	*110409 1926*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*85.5%*	*12.5-139*	*102809 1330*	*110409 1926*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*78.0%*	*16.6-136*	*102809 1330*	*110409 1926*		*EPA 8270C*	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-09 PZM016

09J0523-27 (Ground Water) Sampled: 10/26/2009 07:42; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**5.90**	1.00	pH Units	102609 0742	102609 0742	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

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Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**22**	1.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**98**	2.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**13**	10	mg/L	110309 1352	110409 1124	LCR	EPA410.4/HACH8000	
Conductivity	**1400**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.16**	0.10	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	
Nitrite as N	**0.0078**	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**250**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**880**	20	mg/L	102809 0720	102809 0725	LCR	SM (20) 2540 C	
Turbidity	**42**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1540	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**250**	0.67	mg/L	102909 0800	111009 1639	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Arsenic	**0.0050**	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Barium	**0.072**	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2054	APS	EPA 200.7/6010B	
Calcium	**25**	0.25	mg/L	102909 0800	111009 1639	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Cobalt	**0.12**	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Chromium	**0.020**	0.0025	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Copper	**0.0095**	0.0020	mg/L	102809 1153	103109 1915	PRM	EPA 200.8/6020	
Iron	**40**	0.0050	mg/L	102909 0800	110409 2054	APS	EPA 200.7/6010B	
Potassium	**1.4**	0.050	mg/L	102909 0800	111009 1639	APS	EPA 200.7/6010B	
Magnesium	**46**	0.010	mg/L	102909 0800	110409 2054	APS	EPA 200.7/6010B	
Manganese	**1.1**	0.0050	mg/L	102809 1153	103109 1915	PRM	EPA 200.8/6020	
Sodium	**81**	5.0	mg/L	102909 0800	111009 1639	APS	EPA 200.7/6010B	
Nickel	**0.16**	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0046**	0.0020	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Selenium	ND	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Vanadium	**0.023**	0.0050	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	
Zinc	**0.24**	0.020	mg/L	102809 1153	102909 1917	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102809 1920	102809 1920	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*90.8%*	*80-120*	*102809 1920*	*102809 1920*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*92.8%*	*80-120*	*102809 1920*	*102809 1920*		*EPA 8260B*	
Surrogate: Toluene-d8		*101%*	*75-120*	*102809 1920*	*102809 1920*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*95.8%*	*60-149*	*102809 1920*	*102809 1920*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

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Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Di-n-butylphthalate	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Pyrene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	**88**	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	D
Di-n-octylphthalate	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	102809 1330	110409 2002	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*43.2%*	*0.974-78.2*	*102809 1330*	*110409 2002*		*EPA 8270C*	
Surrogate: Phenol-d5		*33.5%*	*0-57.5*	*102809 1330*	*110409 2002*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*70.3%*	*15.3-131*	*102809 1330*	*110409 2002*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*70.6%*	*3.75-142*	*102809 1330*	*110409 2002*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*88.7%*	*12.5-139*	*102809 1330*	*110409 2002*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*72.6%*	*16.6-136*	*102809 1330*	*110409 2002*		*EPA 8270C*	

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GL-15S

09J0523-28 (Ground Water) Sampled: 10/26/2009 12:50; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**7.50**	1.00	pH Units	102609 1250	102609 1250	LMG	SM (20) 4500-H B	

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**150**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**99**	1.0	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	
COD, Total	**33**	10	mg/L	110309 1352	110409 1126	LCR	EPA410.4/HACH8000	
Conductivity	**14000**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**3.9**	0.10	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**240**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**6800**	40	mg/L	102809 0720	102809 0725	LCR	SM (20) 2540 C	
Turbidity	**78**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1542	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**1100**	1.7	mg/L	102909 0800	111009 1643	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Arsenic	**0.019**	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Barium	**0.077**	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2058	APS	EPA 200.7/6010B	
Calcium	**79**	0.50	mg/L	102909 0800	111009 1643	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Copper	ND	0.0020	mg/L	102809 1153	103109 1918	PRM	EPA 200.8/6020	
Iron	**30**	0.0050	mg/L	102909 0800	110409 2058	APS	EPA 200.7/6010B	
Potassium	**63**	0.10	mg/L	102909 0800	111009 1643	APS	EPA 200.7/6010B	
Magnesium	**220**	0.10	mg/L	102909 0800	111009 1643	APS	EPA 200.7/6010B	
Manganese	**0.55**	0.0050	mg/L	102809 1153	103109 1918	PRM	EPA 200.8/6020	
Sodium	**2100**	10	mg/L	102909 0800	111009 1643	APS	EPA 200.7/6010B	
Nickel	**0.0054**	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Selenium	**0.034**	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	102809 1153	102909 1921	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	**7.8**	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	
2-Butanone (MEK)	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102909 1531	102909 1531	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.8%*	*80-120*	*102909 1531*	*102909 1531*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*95.9%*	*80-120*	*102909 1531*	*102909 1531*		*EPA 8260B*	
Surrogate: Toluene-d8		*103%*	*75-120*	*102909 1531*	*102909 1531*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*99.2%*	*60-149*	*102909 1531*	*102909 1531*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Pyridine	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Aniline	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Phenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Methylphenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Isophorone	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Naphthalene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Fluorene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Anthracene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-15D

09J0523-29 (Ground Water) Sampled: 10/26/2009 11:57; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Di-n-butylphthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Pyrene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Chrysene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.5	ug/L	102809 1330	110409 2039	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*41.1%*	*0.974-78.2*	*102809 1330*	*110409 2039*		*EPA 8270C*	
Surrogate: Phenol-d5		*30.6%*	*0-57.5*	*102809 1330*	*110409 2039*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*66.0%*	*15.3-131*	*102809 1330*	*110409 2039*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*61.8%*	*3.75-142*	*102809 1330*	*110409 2039*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*80.7%*	*12.5-139*	*102809 1330*	*110409 2039*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*75.3%*	*16.6-136*	*102809 1330*	*110409 2039*		*EPA 8270C*	

Field Sampling/Testing

pH	**11.2**	1.00	pH Units	102609 1157	102609 1157	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	ND	1.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**3600**	50	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**57**	10	mg/L	110309 1352	110409 1128	LCR	EPA410.4/HACH8000	
Conductivity	**1700**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**0.16**	0.10	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**260**	10	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**1300**	20	mg/L	102809 0720	102809 0726	LCR	SM (20) 2540 C	
Turbidity	**8.5**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1544	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**350**	0.67	mg/L	102909 0800	111009 1647	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Arsenic	ND	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Barium	**0.025**	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Beryllium	**0.0034**	0.0010	mg/L	102909 0800	110409 2102	APS	EPA 200.7/6010B	
Calcium	**19**	0.25	mg/L	102909 0800	111009 1647	APS	EPA 200.7/6010B	
Cadmium	**0.0012**	0.00050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Cobalt	**0.24**	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Chromium	**0.0040**	0.0025	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Copper	**0.0026**	0.0020	mg/L	102809 1153	103109 1933	PRM	EPA 200.8/6020	
Iron	**20**	0.0050	mg/L	102909 0800	110409 2102	APS	EPA 200.7/6010B	
Potassium	**0.96**	0.050	mg/L	102909 0800	111009 1647	APS	EPA 200.7/6010B	
Magnesium	**75**	0.010	mg/L	102909 0800	110409 2102	APS	EPA 200.7/6010B	
Manganese	**0.57**	0.0050	mg/L	102809 1153	103109 1933	PRM	EPA 200.8/6020	
Sodium	**110**	5.0	mg/L	102909 0800	111009 1647	APS	EPA 200.7/6010B	
Nickel	**0.34**	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0024**	0.0020	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Selenium	**0.0054**	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	
Zinc	**0.67**	0.020	mg/L	102809 1153	102909 1925	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102909 1607	102909 1607	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*92.6%*	*80-120*	*102909 1607*	*102909 1607*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*95.8%*	*80-120*	*102909 1607*	*102909 1607*		*EPA 8260B*	
Surrogate: Toluene-d8		*102%*	*75-120*	*102909 1607*	*102909 1607*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*97.9%*	*60-149*	*102909 1607*	*102909 1607*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	M5, U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Di-n-butylphthalate	**8.5**	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	M5, D
Fluoranthene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	M5, U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110409 2115	RIS	EPA 8270C	E3, U, D
Surrogate: 2-Fluorophenol		*27.3%*	*0.974-78.2*	*102809 1330*	*110409 2115*		*EPA 8270C*	
Surrogate: Phenol-d5		*20.0%*	*0-57.5*	*102809 1330*	*110409 2115*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*51.5%*	*15.3-131*	*102809 1330*	*110409 2115*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*49.1%*	*3.75-142*	*102809 1330*	*110409 2115*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*70.9%*	*12.5-139*	*102809 1330*	*110409 2115*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*58.6%*	*16.6-136*	*102809 1330*	*110409 2115*		*EPA 8270C*	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-19 PZM003

09J0523-30 (Ground Water) Sampled: 10/26/2009 11:10; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
pH	**10.7**	1.00	pH Units	102609 1110	102609 1110	LMG	SM (20) 4500-H B	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**320**	4.0	mg CaCO3/L	102809 1240	102809 1240	VAS	Sm (20) 2320B	
Chloride	**1600**	50	mg/L	102709 1300	102709 1524	LCR	SM (20) 4500Cl-C	D
COD, Total	**130**	10	mg/L	110309 1352	110409 1130	LCR	EPA410.4/HACH8000	
Conductivity	**13000**	10	umhos/cm	111109 1800	111109 1800	VAS	SM (20) 2510B	
Ammonia as N	**20**	1.0	mg/L	102809 0330	102809 0733	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.0050	mg/L	102709 0951	102709 1027	VAS	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	102709 1138	102709 1138	VAS	EPA 353.2	
Sulfate as SO4	**1700**	50	mg/L	110309 0900	110309 1319	LCR	ASTM D516-02	D
Total Dissolved Solids	**7300**	10	mg/L	102809 0720	102809 0726	LCR	SM (20) 2540 C	
Turbidity	**2.4**	0.10	NTU	102709 1130	102709 1130	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	102709 1052	102709 1546	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**1500**	13	mg/L	102909 0800	111009 1651	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Arsenic	**0.019**	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Barium	**0.033**	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	102909 0800	110409 2106	APS	EPA 200.7/6010B	
Calcium	**600**	5.0	mg/L	102909 0800	111009 1651	APS	EPA 200.7/6010B	
Cadmium	**0.0015**	0.00050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Chromium	**0.0037**	0.0025	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Copper	**0.0033**	0.0020	mg/L	102809 1153	103109 1937	PRM	EPA 200.8/6020	
Iron	**1.0**	0.0050	mg/L	102909 0800	110409 2106	APS	EPA 200.7/6010B	
Potassium	**440**	1.0	mg/L	102909 0800	111009 1651	APS	EPA 200.7/6010B	
Magnesium	ND	0.010	mg/L	102909 0800	110409 2106	APS	EPA 200.7/6010B	
Manganese	**0.014**	0.0050	mg/L	102809 1153	103109 1937	PRM	EPA 200.8/6020	
Sodium	**1600**	100	mg/L	102909 0800	111009 1651	APS	EPA 200.7/6010B	
Nickel	**0.023**	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Lead	**0.0085**	0.0020	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Antimony	ND	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Selenium	**0.042**	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Vanadium	**0.068**	0.0050	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	
Zinc	**0.044**	0.020	mg/L	102809 1153	102909 1929	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1,1-Trichloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1-Dichloropropene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Benzene	**5.4**	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
4-Chlorotoluene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	102909 1644	102909 1644	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*93.3%*	*80-120*	*102909 1644*	*102909 1644*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*97.0%*	*80-120*	*102909 1644*	*102909 1644*		*EPA 8260B*	
Surrogate: Toluene-d8		*100%*	*75-120*	*102909 1644*	*102909 1644*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*99.9%*	*60-149*	*102909 1644*	*102909 1644*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2-Methylphenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Anthracene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Di-n-butylphthalate	**9.1**	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	D
Fluoranthene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	102809 1330	110509 0054	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*30.7%*	*0.974-78.2*	*102809 1330*	*110509 0054*		*EPA 8270C*	
Surrogate: Phenol-d5		*22.5%*	*0-57.5*	*102809 1330*	*110509 0054*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*60.0%*	*15.3-131*	*102809 1330*	*110509 0054*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*54.7%*	*3.75-142*	*102809 1330*	*110509 0054*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*68.4%*	*12.5-139*	*102809 1330*	*110509 0054*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*67.5%*	*16.6-136*	*102809 1330*	*110509 0054*		*EPA 8270C*	

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TS01 PDM007

09J0523-31 (Ground Water) Sampled: 10/26/2009 10:08; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Field Sampling/Testing								
pH	**11.1**	1.00	pH Units	102609 1008	102609 1008	LMG	SM (20) 4500-H B	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942058 - WetChem_TDS_Prep										
Blank (0942058-BLK1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0942058-BLK2)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	ND	10	mg/L							
LCS (0942058-BS1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	21000	100	mg/L	20000		105	90-111			
LCS (0942058-BS2)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	20000	100	mg/L	20000		101	90-111			
Duplicate (0942058-DUP1)		**Source: 09J0424-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	350	10	mg/L		360			2.78	10	
Duplicate (0942058-DUP2)		**Source: 09J0501-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Total Dissolved Solids	3400	10	mg/L		3200			4.84	10	
Batch 0942061 - Alkalinity_Prep										
Blank (0942061-BLK1)				Prepared & Analyzed: 10/13/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0942061-BS1)				Prepared & Analyzed: 10/13/2009						
Alkalinity	49.0	1.0	mg CaCO3/L	50.00		98.0	91-108			
Duplicate (0942061-DUP1)		**Source: 09J0424-01**		Prepared & Analyzed: 10/13/2009						
Alkalinity	148	4.0	mg CaCO3/L		148			0.00	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942061 - Alkalinity_Prep										
Matrix Spike (0942061-MS1)	**Source: 09J0424-01**			Prepared & Analyzed: 10/13/2009						
Alkalinity	224	4.0	mg CaCO3/L	80.00	148	95.0	83-114			
Batch 0942062 - WetChem_Prep										
Blank (0942062-BLK1)				Prepared & Analyzed: 10/13/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0942062-BS1)				Prepared & Analyzed: 10/13/2009						
Nitrite as N	0.560	0.012	mg/L	0.5000		112	90-110			L2
Duplicate (0942062-DUP1)	**Source: 09J0523-01**			Prepared & Analyzed: 10/13/2009						
Nitrite as N	0.00950	0.012	mg/L		0.00820			14.7	20	
Matrix Spike (0942062-MS1)	**Source: 09J0523-01**			Prepared & Analyzed: 10/13/2009						
Nitrite as N	0.195	0.012	mg/L	0.2250	0.00820	82.8	80-120			
Batch 0942063 - WetChem_Prep										
Blank (0942063-BLK1)				Prepared & Analyzed: 10/13/2009						
Turbidity	ND	0.10	NTU							
LCS (0942063-BS1)				Prepared & Analyzed: 10/13/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	
Duplicate (0942063-DUP1)	**Source: 09J0501-01**			Prepared & Analyzed: 10/13/2009						
Turbidity	ND	0.10	NTU		ND				5	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942107 - WetCem_SO4_Prep										
Blank (0942107-BLK1)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0942107-BLK2)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0942107-BLK3)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0942107-BLK4)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	ND	1.0	mg/L							
LCS (0942107-BS1)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	18.8	1.0	mg/L	20.00		94.2	80-120			
LCS (0942107-BS2)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	18.8	1.0	mg/L	20.00		94.2	80-120			
LCS (0942107-BS3)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	19.5	1.0	mg/L	20.00		97.6	80-120			
LCS (0942107-BS4)				Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	19.6	1.0	mg/L	20.00		98.2	80-120			
Duplicate (0942107-DUP1)		**Source: 09J0482-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	1190	100	mg/L		1180			0.321	20	D
Duplicate (0942107-DUP2)		**Source: 09J0174-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	27.9	2.0	mg/L		28.1			0.672	20	D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942107 - WetCem_SO4_Prep										
Duplicate (0942107-DUP3)		**Source: 09J0175-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	9.92	1.0	mg/L		9.90			0.182	20	
Duplicate (0942107-DUP4)		**Source: 09J0128-27**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	175	10	mg/L		177			0.967	20	D
Matrix Spike (0942107-MS1)		**Source: 09J0482-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	3110	100	mg/L	2000	1180	96.2	80-120		20	D
Matrix Spike (0942107-MS2)		**Source: 09J0174-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	65.5	2.0	mg/L	40.00	28.1	93.6	80-120		20	D
Matrix Spike (0942107-MS3)		**Source: 09J0175-01**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	29.4	1.0	mg/L	20.00	9.90	97.4	80-120		20	
Matrix Spike (0942107-MS4)		**Source: 09J0128-27**		Prepared & Analyzed: 10/14/2009						
Sulfate as SO4	374	10	mg/L	200.0	177	98.7	80-120		20	D
Batch 0942108 - WetChem_Prep										
Blank (0942108-BLK1)				Prepared & Analyzed: 10/14/2009						
Turbidity	ND	0.10	NTU							
Blank (0942108-BLK2)				Prepared & Analyzed: 10/14/2009						
Turbidity	ND	0.10	NTU							
LCS (0942108-BS1)				Prepared & Analyzed: 10/14/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942108 - WetChem_Prep										
LCS (0942108-BS2)				Prepared & Analyzed: 10/14/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	
Duplicate (0942108-DUP1)		**Source: 09J0523-05**		Prepared & Analyzed: 10/14/2009						
Turbidity	43.1	0.10	NTU		43.3			0.463	5	
Duplicate (0942108-DUP2)		**Source: 09J0570-01**		Prepared & Analyzed: 10/14/2009						
Turbidity	0.610	0.10	NTU		0.620			1.63	5	
Batch 0942113 - WetChem_Prep										
Blank (0942113-BLK1)				Prepared & Analyzed: 10/14/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0942113-BS1)				Prepared & Analyzed: 10/14/2009						
Nitrite as N	0.544	0.012	mg/L	0.5000		109	90-110			
Batch 0942116 - NH3_Prep										
Blank (0942116-BLK1)				Prepared & Analyzed: 10/14/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0942116-BS1)				Prepared & Analyzed: 10/14/2009						
Ammonia as N	2.00	0.10	mg/L	2.000		99.9	85-115			
Duplicate (0942116-DUP1)		**Source: 09J0424-01**		Prepared & Analyzed: 10/14/2009						
Ammonia as N	0.409	0.10	mg/L		0.398			2.68	20	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942116 - NH3_Prep										
Duplicate (0942116-DUP2)		**Source: 09J0503-01**		Prepared & Analyzed: 10/14/2009						
Ammonia as N	0.649	0.10	mg/L		0.649			0.0154	20	
Matrix Spike (0942116-MS1)		**Source: 09J0424-01**		Prepared & Analyzed: 10/14/2009						
Ammonia as N	2.02	0.10	mg/L	2.000	0.398	81.1	80-120			
Matrix Spike (0942116-MS2)		**Source: 09J0503-01**		Prepared & Analyzed: 10/14/2009						
Ammonia as N	2.70	0.10	mg/L	2.000	0.649	103	80-120			
Batch 0942139 - WetChem_Prep										
Blank (0942139-BLK1)				Prepared & Analyzed: 10/15/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0942139-BS1)				Prepared & Analyzed: 10/15/2009						
Nitrite as N	0.537	0.012	mg/L	0.5000		107	90-110			
Duplicate (0942139-DUP1)		**Source: 09J0523-12**		Prepared & Analyzed: 10/15/2009						
Nitrite as N	0.00520	0.012	mg/L		0.00760			37.5	20	R1
Matrix Spike (0942139-MS1)		**Source: 09J0523-12**		Prepared & Analyzed: 10/15/2009						
Nitrite as N	0.248	0.012	mg/L	0.2500	0.00760	96.3	80-120			
Batch 0942146 - WetChem_Prep										
Blank (0942146-BLK1)				Prepared & Analyzed: 10/15/2009						
Turbidity	ND	0.10	NTU							

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942146 - WetChem_Prep										
LCS (0942146-BS1)				Prepared & Analyzed: 10/15/2009						
Turbidity	10.0		NTU	10.00		100	80-120		5	
Duplicate (0942146-DUP1)		**Source: 09J0523-10**		Prepared & Analyzed: 10/15/2009						
Turbidity	2.01	0.10	NTU		2.02			0.496	5	
Batch 0942165 - NH3_Prep										
Blank (0942165-BLK1)				Prepared & Analyzed: 10/15/2009						
Ammonia as N	ND	0.10	mg/L							
Blank (0942165-BLK2)				Prepared & Analyzed: 10/15/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0942165-BS1)				Prepared & Analyzed: 10/15/2009						
Ammonia as N	2.03	0.10	mg/L	2.000		102	85-115			
LCS (0942165-BS2)				Prepared & Analyzed: 10/15/2009						
Ammonia as N	1.99	0.10	mg/L	2.000		99.7	85-115			
Duplicate (0942165-DUP1)		**Source: 09J0582-02**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	0.284	0.10	mg/L		0.255			10.7	20	
Duplicate (0942165-DUP2)		**Source: 09J0631-05**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	0.0512	0.10	mg/L		0.0472			8.13	20	
Duplicate (0942165-DUP3)		**Source: 09J0523-12**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	1.83	0.10	mg/L		1.83			0.251	20	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942165 - NH3_Prep										
Matrix Spike (0942165-MS1)		**Source: 09J0582-02**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	2.17	0.10	mg/L	2.000	0.255	95.8	80-120			
Matrix Spike (0942165-MS2)		**Source: 09J0631-05**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	1.90	0.10	mg/L	2.000	0.0472	92.6	80-120			
Matrix Spike (0942165-MS3)		**Source: 09J0523-12**		Prepared & Analyzed: 10/15/2009						
Ammonia as N	3.85	0.10	mg/L	2.000	1.83	101	80-120			
Batch 0942196 - NH3_Prep										
Blank (0942196-BLK1)				Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0942196-BS1)				Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	2.00	0.10	mg/L	2.000		99.9	85-115			
Duplicate (0942196-DUP1)		**Source: 09J0756-01**		Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	0.436	0.10	mg/L		0.436			0.0229	20	
Duplicate (0942196-DUP2)		**Source: 09J0639-02**		Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	0.0892	0.10	mg/L		0.0826			7.68	20	
Matrix Spike (0942196-MS1)		**Source: 09J0756-01**		Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	1.92	0.10	mg/L	2.000	0.436	74.3	80-120			M5
Matrix Spike (0942196-MS2)		**Source: 09J0639-02**		Prepared: 10/17/2009 Analyzed: 10/18/2009						
Ammonia as N	1.74	0.10	mg/L	2.000	0.0826	82.7	80-120			

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943008 - WetChem_Prep										
Blank (0943008-BLK1)				Prepared & Analyzed: 10/17/2009						
Turbidity	ND	0.10	NTU							
Blank (0943008-BLK2)				Prepared & Analyzed: 10/17/2009						
Turbidity	ND	0.10	NTU							
LCS (0943008-BS1)				Prepared & Analyzed: 10/17/2009						
Turbidity	10.1		NTU	10.00		101	80-120		5	
LCS (0943008-BS2)				Prepared & Analyzed: 10/17/2009						
Turbidity	10.2		NTU	10.00		102	80-120		5	
Duplicate (0943008-DUP1)		**Source: 09J0523-14**		Prepared & Analyzed: 10/17/2009						
Turbidity	0.790	0.10	NTU		0.780			1.27	5	
Duplicate (0943008-DUP2)		**Source: 09J0752-01**		Prepared & Analyzed: 10/17/2009						
Turbidity	9.05	0.10	NTU		9.01			0.443	5	
Batch 0943015 - Alkalinity_Prep										
Blank (0943015-BLK1)				Prepared & Analyzed: 10/19/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0943015-BS1)				Prepared & Analyzed: 10/19/2009						
Alkalinity	48.5	1.0	mg CaCO3/L	50.00		97.0	91-108			
Duplicate (0943015-DUP1)		**Source: 09J0523-05**		Prepared & Analyzed: 10/19/2009						
Alkalinity	ND	1.0	mg CaCO3/L		ND				18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943015 - Alkalinity_Prep										
Duplicate (0943015-DUP2)		**Source: 09J0523-15**		Prepared & Analyzed: 10/19/2009						
Alkalinity	ND	1.0	mg CaCO3/L		ND				18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	
Matrix Spike (0943015-MS1)		**Source: 09J0523-05**		Prepared & Analyzed: 10/19/2009						
Alkalinity	20.5	1.0	mg CaCO3/L	20.00	ND	102	83-114			
Matrix Spike (0943015-MS2)		**Source: 09J0523-15**		Prepared & Analyzed: 10/19/2009						
Alkalinity	21.0	1.0	mg CaCO3/L	20.00	ND	105	83-114			
Batch 0943055 - WetChem_TDS_Prep										
Blank (0943055-BLK1)				Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0943055-BLK2)				Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	ND	10	mg/L							
LCS (0943055-BS1)				Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	21000	100	mg/L	20000		105	90-111			
LCS (0943055-BS2)				Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	21000	100	mg/L	20000		106	90-111			
Duplicate (0943055-DUP1)		**Source: 09J0685-01**		Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	30	20	mg/L		30			0.509	10	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943055 - WetChem_TDS_Prep										
Duplicate (0943055-DUP2)		**Source: 09J0690-01**		Prepared & Analyzed: 10/20/2009						
Total Dissolved Solids	110	20	mg/L		110			3.75	10	
Batch 0943074 - Cl_Titration_Prep										
Blank (0943074-BLK1)				Prepared & Analyzed: 10/20/2009						
Chloride	ND	1.0	mg/L							
Blank (0943074-BLK2)				Prepared & Analyzed: 10/20/2009						
Chloride	ND	1.0	mg/L							
LCS (0943074-BS1)				Prepared & Analyzed: 10/20/2009						
Chloride	48.0	1.0	mg/L	50.00		96.0	94-108			
LCS (0943074-BS2)				Prepared & Analyzed: 10/20/2009						
Chloride	49.0	1.0	mg/L	50.00		98.0	94-108			
Duplicate (0943074-DUP1)		**Source: 09J0492-01**		Prepared & Analyzed: 10/20/2009						
Chloride	70.0	1.0	mg/L		70.0			0.00	11	
Duplicate (0943074-DUP2)		**Source: 09J0523-09**		Prepared & Analyzed: 10/20/2009						
Chloride	8.50	1.0	mg/L		9.00			5.71	11	
Matrix Spike (0943074-MS1)		**Source: 09J0492-01**		Prepared & Analyzed: 10/20/2009						
Chloride	95.0	1.0	mg/L	25.00	70.0	100	89-112			
Matrix Spike (0943074-MS2)		**Source: 09J0523-09**		Prepared & Analyzed: 10/20/2009						
Chloride	33.0	1.0	mg/L	25.00	9.00	96.0	89-112			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943083 - NO3_Prep										
Blank (0943083-BLK1)				Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							
LCS (0943083-BS1)				Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	2.67	0.050	mg/L	2.500		107	90-110			
Duplicate (0943083-DUP1)		**Source: 09J0683-18**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		0.00770					
Duplicate (0943083-DUP2)		**Source: 09J0683-17**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	0.0236	0.050	mg/L		0.00750			104		
Duplicate (0943083-DUP3)		**Source: 09J0683-16**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND					
Duplicate (0943083-DUP4)		**Source: 09J0683-14**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		0.00630					
Matrix Spike (0943083-MS1)		**Source: 09J0683-18**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	1.87	0.050	mg/L	2.000	0.00770	93.0	80-120			
Matrix Spike (0943083-MS2)		**Source: 09J0683-17**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	1.80	0.050	mg/L	2.000	0.00750	89.6	80-120			
Matrix Spike (0943083-MS3)		**Source: 09J0683-16**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	2.07	0.050	mg/L	2.000	ND	104	80-120			
Matrix Spike (0943083-MS4)		**Source: 09J0683-14**		Prepared & Analyzed: 10/20/2009						
Nitrate/Nitrite as N	1.94	0.050	mg/L	2.000	0.00630	96.9	80-120			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943124 - COD_Prep										
Blank (0943124-BLK1)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	ND	10	mg/L							
Blank (0943124-BLK2)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	ND	10	mg/L							
Blank (0943124-BLK3)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	ND	10	mg/L							
Blank (0943124-BLK4)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	ND	10	mg/L							
Blank (0943124-BLK5)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	ND	10	mg/L							
LCS (0943124-BS1)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	42.8		mg/L	40.04		107	82-119			
LCS (0943124-BS2)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	40.5		mg/L	40.04		101	82-119			
LCS (0943124-BS3)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	41.2		mg/L	40.04		103	82-119			
LCS (0943124-BS4)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	38.9		mg/L	40.04		97.3	82-119			
LCS (0943124-BS5)				Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	40.5		mg/L	40.04		101	82-119			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943124 - COD_Prep										
Duplicate (0943124-DUP1)		**Source: 09J0606-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	30.5	10	mg/L		29.0			5.15	15	
Duplicate (0943124-DUP2)		**Source: 09J0644-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	21.3	10	mg/L		22.1			3.53	15	
Duplicate (0943124-DUP3)		**Source: 09J0745-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	24.4	10	mg/L		25.2			3.09	15	
Duplicate (0943124-DUP4)		**Source: 09J0814-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	25.9	10	mg/L		25.9			0.00	15	
Duplicate (0943124-DUP5)		**Source: 09J0691-09**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	33.6	10	mg/L		34.4			2.26	15	
Matrix Spike (0943124-MS1)		**Source: 09J0606-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	77.3	10	mg/L	50.05	29.0	96.4	82-116		15	
Matrix Spike (0943124-MS2)		**Source: 09J0644-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	71.9	10	mg/L	50.05	22.1	99.5	82-116		15	
Matrix Spike (0943124-MS3)		**Source: 09J0745-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	71.9	10	mg/L	50.05	25.2	93.4	82-116		15	
Matrix Spike (0943124-MS4)		**Source: 09J0814-01**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	70.7	10	mg/L	50.05	25.9	89.6	82-116		15	
Matrix Spike (0943124-MS5)		**Source: 09J0691-09**		Prepared: 10/21/2009 Analyzed: 10/22/2009						
COD, Total	82.2	10	mg/L	50.05	34.4	95.7	82-116		15	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943148 - NH3_Prep										
Blank (0943148-BLK1)				Prepared & Analyzed: 10/22/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0943148-BS1)				Prepared & Analyzed: 10/22/2009						
Ammonia as N	2.07	0.10	mg/L	2.000		103	85-115			
Duplicate (0943148-DUP1)		**Source: 09J0857-01**		Prepared & Analyzed: 10/22/2009						
Ammonia as N	0.349	0.10	mg/L		0.293			17.6	20	
Duplicate (0943148-DUP2)		**Source: 09J0810-04**		Prepared & Analyzed: 10/22/2009						
Ammonia as N	0.142	0.10	mg/L		0.162			12.8	20	
Matrix Spike (0943148-MS1)		**Source: 09J0857-01**		Prepared & Analyzed: 10/22/2009						
Ammonia as N	2.06	0.10	mg/L	2.000	0.293	88.1	80-120			
Matrix Spike (0943148-MS2)		**Source: 09J0810-04**		Prepared & Analyzed: 10/22/2009						
Ammonia as N	2.58	0.10	mg/L	2.500	0.162	96.8	80-120			
Batch 0943168 - NH3_Prep										
Blank (0943168-BLK1)				Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0943168-BS1)				Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	2.18	0.10	mg/L	2.000		109	85-115			
Duplicate (0943168-DUP1)		**Source: 09J0918-02**		Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	0.256	0.10	mg/L		0.269			4.84	20	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943168 - NH3_Prep										
Duplicate (0943168-DUP2)		**Source: 09J0917-01**		Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	0.0621	0.10	mg/L		0.0679			8.92	20	
Matrix Spike (0943168-MS1)		**Source: 09J0918-02**		Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	1.64	0.10	mg/L	1.500	0.269	91.4	80-120			
Matrix Spike (0943168-MS2)		**Source: 09J0917-01**		Prepared: 10/23/2009 Analyzed: 10/26/2009						
Ammonia as N	1.93	0.10	mg/L	2.000	0.0679	93.0	80-120			
Batch 0943172 - Alkalinity_Prep										
Blank (0943172-BLK1)				Prepared & Analyzed: 10/22/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0943172-BS1)				Prepared & Analyzed: 10/22/2009						
Alkalinity	49.0	1.0	mg CaCO3/L	50.00		98.0	91-108			
Duplicate (0943172-DUP1)		**Source: 09J0855-01**		Prepared & Analyzed: 10/22/2009						
Alkalinity	70.0	1.0	mg CaCO3/L		70.0			0.00	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	
Duplicate (0943172-DUP2)		**Source: 09J0855-07**		Prepared & Analyzed: 10/22/2009						
Alkalinity	64.0	1.0	mg CaCO3/L		64.0			0.00	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943172 - Alkalinity_Prep										
Matrix Spike (0943172-MS1)	**Source: 09J0855-01**			Prepared & Analyzed: 10/22/2009						
Alkalinity	90.0	1.0	mg CaCO3/L	20.00	70.0	100	83-114			
Matrix Spike (0943172-MS2)	**Source: 09J0855-07**			Prepared & Analyzed: 10/22/2009						
Alkalinity	83.0	1.0	mg CaCO3/L	20.00	64.0	95.0	83-114			
Batch 0944004 - WetChem_Prep										
Blank (0944004-BLK1)				Prepared & Analyzed: 10/23/2009						
Turbidity	ND	0.10	NTU							
LCS (0944004-BS1)				Prepared & Analyzed: 10/23/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	
Duplicate (0944004-DUP1)	**Source: 09J0523-22**			Prepared & Analyzed: 10/23/2009						
Turbidity	21.8	0.10	NTU		21.8			0.00	5	
Batch 0944005 - WetChem_Prep										
Blank (0944005-BLK1)				Prepared & Analyzed: 10/22/2009						
Turbidity	ND	0.10	NTU							
LCS (0944005-BS1)				Prepared & Analyzed: 10/22/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	
Duplicate (0944005-DUP1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/22/2009						
Turbidity	53.2	0.10	NTU		53.3			0.188	5	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944006 - WetChem_Prep										
Blank (0944006-BLK1)				Prepared & Analyzed: 10/23/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0944006-BS1)				Prepared & Analyzed: 10/23/2009						
Nitrite as N	0.505	0.012	mg/L	0.5000		101	90-110			
Duplicate (0944006-DUP1)		**Source: 09J0523-22**		Prepared & Analyzed: 10/23/2009						
Nitrite as N	0.00490	0.012	mg/L		0.00630			25.0	20	R3
Matrix Spike (0944006-MS1)		**Source: 09J0523-22**		Prepared & Analyzed: 10/23/2009						
Nitrite as N	0.254	0.012	mg/L	0.2500	0.00630	99.2	80-120			
Batch 0944012 - WetChem_Prep										
Blank (0944012-BLK1)				Prepared & Analyzed: 10/22/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0944012-BS1)				Prepared & Analyzed: 10/22/2009						
Nitrite as N	0.516	0.012	mg/L	0.5000		103	90-110			
Duplicate (0944012-DUP1)		**Source: 09J0523-18**		Prepared & Analyzed: 10/22/2009						
Nitrite as N	0.0427	0.012	mg/L		0.0568			28.3	20	R1
Matrix Spike (0944012-MS1)		**Source: 09J0523-18**		Prepared & Analyzed: 10/22/2009						
Nitrite as N	0.264	0.012	mg/L	0.2500	0.0568	82.7	80-120			
Batch 0944017 - NO3_Prep										
Blank (0944017-BLK1)				Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944017 - NO3_Prep										
Blank (0944017-BLK2)				Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							
LCS (0944017-BS1)				Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	2.45	0.050	mg/L	2.500		98.0	90-110			
LCS (0944017-BS2)				Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	2.39	0.050	mg/L	2.500		95.4	90-110			
Duplicate (0944017-DUP1)		**Source: 09J0813-01**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	1.00	0.050	mg/L		1.05			4.62		
Duplicate (0944017-DUP2)		**Source: 09J0813-02**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	6.33	0.10	mg/L		6.52			3.07		
Duplicate (0944017-DUP3)		**Source: 09J0813-03**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	5.95	0.50	mg/L		6.24			4.80		
Matrix Spike (0944017-MS1)		**Source: 09J0813-01**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	3.05	0.050	mg/L	2.000	1.05	100	80-120			
Matrix Spike (0944017-MS2)		**Source: 09J0813-02**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	25.0	0.50	mg/L	20.00	6.52	92.4	80-120			
Matrix Spike (0944017-MS3)		**Source: 09J0813-03**		Prepared & Analyzed: 10/23/2009						
Nitrate/Nitrite as N	24.9	0.50	mg/L	20.00	6.24	93.1	80-120			
Batch 0944062 - WetChem_Prep										
Blank (0944062-BLK1)				Prepared & Analyzed: 10/27/2009						
Turbidity	ND	0.10	NTU							

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944062 - WetChem_Prep										
LCS (0944062-BS1)				Prepared & Analyzed: 10/27/2009						
Turbidity	10.8		NTU	10.00		108	80-120		5	
Duplicate (0944062-DUP1)		**Source: 09J0523-25**		Prepared & Analyzed: 10/27/2009						
Turbidity	75.5	0.10	NTU		75.6			0.132	5	
Batch 0944063 - WetChem_Prep										
Blank (0944063-BLK1)				Prepared & Analyzed: 10/16/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0944063-BS1)				Prepared & Analyzed: 10/16/2009						
Nitrite as N	0.544	0.012	mg/L	0.5000		109	90-110			
Duplicate (0944063-DUP1)		**Source: 09J0523-15**		Prepared & Analyzed: 10/16/2009						
Nitrite as N	0.00790	0.012	mg/L		0.00950			18.4	20	
Matrix Spike (0944063-MS1)		**Source: 09J0523-15**		Prepared & Analyzed: 10/16/2009						
Nitrite as N	0.207	0.012	mg/L	0.2500	0.00950	79.2	80-120			M5
Batch 0944064 - WetChem_Prep										
Blank (0944064-BLK1)				Prepared & Analyzed: 10/27/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0944064-BS1)				Prepared & Analyzed: 10/27/2009						
Nitrite as N	0.481	0.012	mg/L	0.5000		96.3	90-110			

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Wet Chemistry - Quality Control Summary

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Batch 0944064 - WetChem_Prep										
Duplicate (0944064-DUP1)		**Source: 09J0523-30**		Prepared & Analyzed: 10/27/2009						
Nitrite as N	ND	0.012	mg/L		ND				20	
Matrix Spike (0944064-MS1)		**Source: 09J0523-30**		Prepared & Analyzed: 10/27/2009						
Nitrite as N	0.229	0.012	mg/L	0.2500	ND	91.5	80-120			
Batch 0944069 - Cl_Titration_Prep										
Blank (0944069-BLK1)				Prepared & Analyzed: 10/27/2009						
Chloride	ND	1.0	mg/L							
Blank (0944069-BLK2)				Prepared & Analyzed: 10/27/2009						
Chloride	ND	1.0	mg/L							
Blank (0944069-BLK3)				Prepared & Analyzed: 10/27/2009						
Chloride	ND	1.0	mg/L							
LCS (0944069-BS1)				Prepared & Analyzed: 10/27/2009						
Chloride	50.5	1.0	mg/L	50.00		101	94-108			
LCS (0944069-BS2)				Prepared & Analyzed: 10/27/2009						
Chloride	50.5	1.0	mg/L	50.00		101	94-108			
LCS (0944069-BS3)				Prepared & Analyzed: 10/27/2009						
Chloride	49.0	1.0	mg/L	50.00		98.0	94-108			
Duplicate (0944069-DUP1)		**Source: 09J1036-01**		Prepared & Analyzed: 10/27/2009						
Chloride	420	10	mg/L		430			2.35	11	D

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944069 - Cl_Titration_Prep										
Duplicate (0944069-DUP2)		**Source: 09J1038-01**		Prepared & Analyzed: 10/27/2009						
Chloride	4.00	1.0	mg/L		4.00			0.00	11	
Duplicate (0944069-DUP3)		**Source: 09J0523-26**		Prepared & Analyzed: 10/27/2009						
Chloride	505	10	mg/L		520			2.93	11	D
Matrix Spike (0944069-MS1)		**Source: 09J1036-01**		Prepared & Analyzed: 10/27/2009						
Chloride	680	10	mg/L	250.0	430	100	89-112			D
Matrix Spike (0944069-MS2)		**Source: 09J1038-01**		Prepared & Analyzed: 10/27/2009						
Chloride	28.0	1.0	mg/L	25.00	4.00	96.0	89-112			
Matrix Spike (0944069-MS3)		**Source: 09J0523-26**		Prepared & Analyzed: 10/27/2009						
Chloride	760	10	mg/L	250.0	520	96.0	89-112			D
Batch 0944083 - NH3_Prep										
Blank (0944083-BLK1)				Prepared & Analyzed: 10/28/2009						
Ammonia as N	ND	0.10	mg/L							
LCS (0944083-BS1)				Prepared & Analyzed: 10/28/2009						
Ammonia as N	2.02	0.10	mg/L	2.000		101	85-115			
Duplicate (0944083-DUP1)		**Source: 09J0983-01**		Prepared & Analyzed: 10/28/2009						
Ammonia as N	0.293	0.10	mg/L		0.295			0.715	20	
Duplicate (0944083-DUP2)		**Source: 09J0523-27**		Prepared & Analyzed: 10/28/2009						
Ammonia as N	2.49	0.10	mg/L		2.40			3.63	20	

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Wet Chemistry - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944083 - NH3_Prep										
Matrix Spike (0944083-MS1)	**Source: 09J0983-01**			Prepared & Analyzed: 10/28/2009						
Ammonia as N	1.59	0.10	mg/L	1.500	0.295	86.5	80-120			
Matrix Spike (0944083-MS2)	**Source: 09J0523-27**			Prepared & Analyzed: 10/28/2009						
Ammonia as N	5.36	1.0	mg/L	2.500	2.40	119	80-120			D
Batch 0944087 - NO3_Prep										
Blank (0944087-BLK1)				Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							
Blank (0944087-BLK2)				Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							
LCS (0944087-BS1)				Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	2.66	0.050	mg/L	2.500		106	90-110			
LCS (0944087-BS2)				Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	2.58	0.050	mg/L	2.500		103	90-110			
Duplicate (0944087-DUP1)	**Source: 09J0983-01**			Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L		ND					
Duplicate (0944087-DUP2)	**Source: 09J0945-09**			Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	0.0193	0.050	mg/L		0.00970			66.2		
Matrix Spike (0944087-MS1)	**Source: 09J0983-01**			Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	2.39	0.050	mg/L	2.000	ND	119	80-120			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944087 - NO3_Prep										
Matrix Spike (0944087-MS2)		**Source: 09J0945-09**		Prepared & Analyzed: 10/27/2009						
Nitrate/Nitrite as N	2.11	0.050	mg/L	2.000	0.00970	105	80-120			
Batch 0944105 - WetChem_TDS_Prep										
Blank (0944105-BLK1)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0944105-BLK2)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	ND	10	mg/L							
Blank (0944105-BLK3)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	ND	10	mg/L							
LCS (0944105-BS1)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	22000	100	mg/L	20000		108	90-111			
LCS (0944105-BS2)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	21000	100	mg/L	20000		107	90-111			
LCS (0944105-BS3)				Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	20000	100	mg/L	20000		99.6	90-111			
Duplicate (0944105-DUP1)		**Source: 09J1049-02**		Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	1200	100	mg/L		1300			2.37	10	
Duplicate (0944105-DUP2)		**Source: 09J1036-01**		Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	1600	20	mg/L		1700			3.47	10	

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944105 - WetChem_TDS_Prep										
Duplicate (0944105-DUP3)		**Source: 09J0523-28**		Prepared & Analyzed: 10/28/2009						
Total Dissolved Solids	880	20	mg/L		880			0.225	10	
Batch 0944111 - Alkalinity_Prep										
Blank (0944111-BLK1)				Prepared & Analyzed: 10/28/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0944111-BS1)				Prepared & Analyzed: 10/28/2009						
Alkalinity	49.0	1.0	mg CaCO3/L	50.00		98.0	91-108			
Duplicate (0944111-DUP1)		**Source: 09J0983-01**		Prepared & Analyzed: 10/28/2009						
Alkalinity	110	2.0	mg CaCO3/L		110			0.00	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	
Duplicate (0944111-DUP2)		**Source: 09J0523-29**		Prepared & Analyzed: 10/28/2009						
Alkalinity	148	4.0	mg CaCO3/L		150			1.34	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	
Matrix Spike (0944111-MS1)		**Source: 09J0983-01**		Prepared & Analyzed: 10/28/2009						
Alkalinity	152	2.0	mg CaCO3/L	40.00	110	105	83-114			
Matrix Spike (0944111-MS2)		**Source: 09J0523-29**		Prepared & Analyzed: 10/28/2009						
Alkalinity	226	4.0	mg CaCO3/L	80.00	150	95.0	83-114			

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945068 - WetCem_SO4_Prep										
Blank (0945068-BLK1)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0945068-BLK2)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0945068-BLK3)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	ND	1.0	mg/L							
Blank (0945068-BLK4)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	ND	1.0	mg/L							
LCS (0945068-BS1)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	18.8	1.0	mg/L	20.00		94.0	80-120			
LCS (0945068-BS2)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	19.8	1.0	mg/L	20.00		99.1	80-120			
LCS (0945068-BS3)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	19.2	1.0	mg/L	20.00		96.2	80-120			
LCS (0945068-BS4)				Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	19.0	1.0	mg/L	20.00		95.2	80-120			
Duplicate (0945068-DUP1)		**Source: 09J1038-01**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	4.67	1.0	mg/L		4.73			1.23	20	
Duplicate (0945068-DUP2)		**Source: 09J0523-27**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	119	10	mg/L		118			0.656	20	D

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945068 - WetCem_SO4_Prep										
Duplicate (0945068-DUP3)		**Source: 09J0523-06**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	181	10	mg/L		183			1.07	20	D
Duplicate (0945068-DUP4)		**Source: 09J0523-23**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	1000	100	mg/L		1040			3.04	20	D
Matrix Spike (0945068-MS1)		**Source: 09J1038-01**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	23.6	1.0	mg/L	20.00	4.73	94.5	80-120		20	
Matrix Spike (0945068-MS2)		**Source: 09J0523-27**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	313	10	mg/L	200.0	118	97.1	80-120		20	D
Matrix Spike (0945068-MS3)		**Source: 09J0523-06**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	373	10	mg/L	200.0	183	95.4	80-120		20	D
Matrix Spike (0945068-MS4)		**Source: 09J0523-23**		Prepared & Analyzed: 11/03/2009						
Sulfate as SO4	2930	100	mg/L	2000	1040	94.5	80-120		20	D
Batch 0945076 - COD_Prep										
Blank (0945076-BLK1)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	ND	10	mg/L							
Blank (0945076-BLK2)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	ND	10	mg/L							
Blank (0945076-BLK3)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	ND	10	mg/L							

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945076 - COD_Prep										
LCS (0945076-BS1)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	43.4		mg/L	40.04		108	82-119			
LCS (0945076-BS2)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	45.6		mg/L	40.04		114	82-119			
LCS (0945076-BS3)				Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	44.1		mg/L	40.04		110	82-119			
Duplicate (0945076-DUP1)		**Source: 09J1219-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	ND	10	mg/L		ND				15	
Duplicate (0945076-DUP2)		**Source: 09J1218-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	20.1	10	mg/L		20.1			0.00	15	
Duplicate (0945076-DUP3)		**Source: 09K0023-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	19.4	10	mg/L		19.4			0.00	15	
Matrix Spike (0945076-MS1)		**Source: 09J1219-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	47.9	10	mg/L	50.05	ND	95.7	82-116		15	
Matrix Spike (0945076-MS2)		**Source: 09J1218-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	71.1	10	mg/L	50.05	20.1	102	82-116		15	
Matrix Spike (0945076-MS3)		**Source: 09K0023-01**		Prepared: 11/03/2009 Analyzed: 11/04/2009						
COD, Total	67.4	10	mg/L	50.05	19.4	95.9	82-116		15	
Batch 0946175 - WetChem_Prep										
Blank (0946175-BLK1)				Prepared & Analyzed: 11/11/2009						
Conductivity	ND	10	umhos/cm							

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0946175 - WetChem_Prep										
Blank (0946175-BLK2)				Prepared & Analyzed: 11/11/2009						
Conductivity	ND	10	umhos/cm							
LCS (0946175-BS1)				Prepared & Analyzed: 11/11/2009						
Conductivity	1410		umhos/cm	1413		99.6	92-105			
LCS (0946175-BS2)				Prepared & Analyzed: 11/11/2009						
Conductivity	1410		umhos/cm	1413		99.5	92-105			
Duplicate (0946175-DUP1)		**Source: 09J0523-06**		Prepared & Analyzed: 11/11/2009						
Conductivity	1830	10	umhos/cm		1830			0.00	5	
Duplicate (0946175-DUP2)		**Source: 09J0523-16**		Prepared & Analyzed: 11/11/2009						
Conductivity	1550	10	umhos/cm		1550			0.0742	5	
Duplicate (0946175-DUP3)		**Source: 09K0283-01**		Prepared & Analyzed: 11/11/2009						
Conductivity	2590	10	umhos/cm		2590			0.00	5	

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Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942043 - Metals_Hg_Prep										
Blank (0942043-BLK1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Mercury	ND	0.00020	mg/L							
LCS (0942043-BS1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Mercury	0.00212	0.00020	mg/L	0.002022		105	85-115			
Duplicate (0942043-DUP1)		**Source: 09J0424-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Mercury	ND	0.00020	mg/L		ND				20	
Matrix Spike (0942043-MS1)		**Source: 09J0424-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Mercury	0.00208	0.00020	mg/L	0.002022	ND	103	70-130		20	
Matrix Spike Dup (0942043-MSD1)		**Source: 09J0424-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Mercury	0.00210	0.00020	mg/L	0.002022	ND	104	70-130	0.962	20	
Batch 0942174 - Metals_Hg_Prep										
Blank (0942174-BLK1)				Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	ND	0.00020	mg/L							
Blank (0942174-BLK2)				Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	ND	0.00020	mg/L							
LCS (0942174-BS1)				Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00218	0.00020	mg/L	0.002022		108	85-115			
LCS (0942174-BS2)				Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00217	0.00020	mg/L	0.002022		107	85-115			

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Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942174 - Metals_Hg_Prep										
Duplicate (0942174-DUP1)		**Source: 09J0604-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.000118	0.00020	mg/L		0.0000471			86.1	20	R3
Duplicate (0942174-DUP2)		**Source: 09J0642-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.000124	0.00020	mg/L		0.0000636			64.7	20	R3
Matrix Spike (0942174-MS1)		**Source: 09J0604-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00237	0.00020	mg/L	0.002022	0.0000471	115	70-130		20	
Matrix Spike (0942174-MS2)		**Source: 09J0642-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00249	0.00020	mg/L	0.002022	0.0000636	120	70-130		20	
Matrix Spike Dup (0942174-MSD1)		**Source: 09J0604-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00234	0.00020	mg/L	0.002022	0.0000471	113	70-130	1.36	20	
Matrix Spike Dup (0942174-MSD2)		**Source: 09J0642-01**		Prepared: 10/16/2009 Analyzed: 10/20/2009						
Mercury	0.00250	0.00020	mg/L	0.002022	0.0000636	120	70-130	0.222	20	
Batch 0943054 - Metals_Hg_Prep										
Blank (0943054-BLK1)				Prepared & Analyzed: 10/20/2009						
Mercury	ND	0.00020	mg/L							
LCS (0943054-BS1)				Prepared & Analyzed: 10/20/2009						
Mercury	0.00203	0.00020	mg/L	0.002022		101	85-115			
Duplicate (0943054-DUP1)		**Source: 09J0752-01**		Prepared & Analyzed: 10/20/2009						
Mercury	ND	0.00020	mg/L		ND				20	

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Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943054 - Metals_Hg_Prep										
Matrix Spike (0943054-MS1)		**Source: 09J0752-01**		Prepared & Analyzed: 10/20/2009						
Mercury	0.00190	0.00020	mg/L	0.002022	ND	94.2	70-130		20	
Matrix Spike Dup (0943054-MSD1)		**Source: 09J0752-01**		Prepared & Analyzed: 10/20/2009						
Mercury	0.00189	0.00020	mg/L	0.002022	ND	93.5	70-130	0.764	20	
Batch 0943199 - Metals_Hg_Prep										
Blank (0943199-BLK1)				Prepared: 10/24/2009 Analyzed: 10/26/2009						
Mercury	ND	0.00020	mg/L							
LCS (0943199-BS1)				Prepared: 10/24/2009 Analyzed: 10/26/2009						
Mercury	0.00207	0.00020	mg/L	0.002022		102	85-115			
Duplicate (0943199-DUP1)		**Source: 09J0983-01**		Prepared: 10/24/2009 Analyzed: 10/26/2009						
Mercury	ND	0.00020	mg/L		ND				20	
Matrix Spike (0943199-MS1)		**Source: 09J0983-01**		Prepared: 10/24/2009 Analyzed: 10/26/2009						
Mercury	0.00112	0.00020	mg/L	0.001011	ND	110	70-130		20	
Matrix Spike Dup (0943199-MSD1)		**Source: 09J0983-01**		Prepared: 10/24/2009 Analyzed: 10/26/2009						
Mercury	0.00110	0.00020	mg/L	0.001011	ND	109	70-130	1.52	20	
Batch 0944059 - Metals_Hg_Prep										
Blank (0944059-BLK1)				Prepared & Analyzed: 10/27/2009						
Mercury	ND	0.00020	mg/L							

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Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944059 - Metals_Hg_Prep										
LCS (0944059-BS1)				Prepared & Analyzed: 10/27/2009						
Mercury	0.00199	0.00020	mg/L	0.002022		98.6	85-115			
Duplicate (0944059-DUP1)		**Source: 09J1034-01**		Prepared & Analyzed: 10/27/2009						
Mercury	ND	0.00020	mg/L		ND				20	
Matrix Spike (0944059-MS1)		**Source: 09J1034-01**		Prepared & Analyzed: 10/27/2009						
Mercury	0.00194	0.00020	mg/L	0.002022	ND	95.9	70-130		20	
Matrix Spike Dup (0944059-MSD1)		**Source: 09J1034-01**		Prepared & Analyzed: 10/27/2009						
Mercury	0.00197	0.00020	mg/L	0.002022	ND	97.3	70-130	1.44	20	
Batch M9J1403 - 0942044										
Instrument Blank (M9J1403-IBL1)				Prepared & Analyzed: 10/14/2009						
Mercury	ND	0.00020	ug/L							
Batch M9J2007 - 0942174										
Instrument Blank (M9J2007-IBL1)				Prepared & Analyzed: 10/20/2009						
Mercury	ND	0.00020	ug/L							
Batch M9J2012 - 0943056										
Instrument Blank (M9J2012-IBL1)				Prepared & Analyzed: 10/20/2009						
Mercury	ND	0.00020	ug/L							

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch M9J2701 - 0943199										
Instrument Blank (M9J2701-IBL1)				Prepared & Analyzed: 10/26/2009						
Mercury	ND	0.00020	ug/L							
Batch M9J2704 - 0944059										
Instrument Blank (M9J2704-IBL1)				Prepared & Analyzed: 10/27/2009						
Mercury	ND	0.00020	ug/L							

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942048 - EPA 200.2 ICP										
Blank (0942048-BLK1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	0.0287	0.0050	"							B2
Magnesium	ND	0.010	"							
Potassium	0.0396	0.010	"							B2
Sodium	ND	1.0	"							
LCS (0942048-BS1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Beryllium	1.06	0.0010	mg/L	1.000		106	85-115		20	
Calcium	9.65	0.050	"	10.00		96.5	85-115		20	
Iron	5.06	0.0050	"	5.000		101	85-115		20	
Magnesium	10.4	0.010	"	10.00		104	85-115		20	
Potassium	10.4	0.010	"	10.00		104	85-115		20	
Sodium	10.8	1.0	"	10.00		108	85-115		20	
Duplicate (0942048-DUP1)		**Source: 09J0523-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Beryllium	0.000639	0.0010	mg/L		ND				20	
Calcium	5.27	0.050	"		5.10			3.29	20	
Iron	53.9	0.0050	"		52.5			2.70	20	
Magnesium	3.71	0.010	"		3.62			2.42	20	
Potassium	0.975	0.010	"		0.937			4.00	20	
Sodium	8.99	1.0	"		8.68			3.44	20	
Matrix Spike (0942048-MS1)		**Source: 09J0523-01**		Prepared: 10/13/2009 Analyzed: 10/14/2009						
Beryllium	1.04	0.0010	mg/L	1.000	ND	104	80-120		20	
Calcium	14.8	0.050	"	10.00	5.10	97.2	80-120		20	
Iron	57.2	0.0050	"	5.000	52.5	95.4	80-120		20	
Magnesium	13.8	0.010	"	10.00	3.62	102	80-120		20	
Potassium	11.3	0.010	"	10.00	0.937	104	80-120		20	
Sodium	19.1	1.0	"	10.00	8.68	104	80-120		20	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942048 - EPA 200.2 ICP										
Matrix Spike Dup (0942048-MSD1)	**Source: 09J0523-01**			Prepared: 10/13/2009 Analyzed: 10/14/2009						
Beryllium	1.04	0.0010	mg/L	1.000	ND	104	80-120	0.00	20	
Calcium	14.8	0.050	"	10.00	5.10	97.3	80-120	0.0890	20	
Iron	57.0	0.0050	"	5.000	52.5	90.3	80-120	0.445	20	
Magnesium	13.9	0.010	"	10.00	3.62	103	80-120	0.716	20	
Potassium	11.3	0.010	"	10.00	0.937	103	80-120	0.259	20	
Sodium	19.2	1.0	"	10.00	8.68	106	80-120	0.770	20	
Batch 0942049 - EPA 200.2 ICPMS										
Blank (0942049-BLK1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
LCS (0942049-BS1)				Prepared: 10/13/2009 Analyzed: 10/14/2009						
Antimony	0.214	0.0050	mg/L	0.2000		107	85-115		20	
Arsenic	0.214	0.0050	"	0.2000		107	85-115		20	
Barium	0.206	0.0050	"	0.2000		103	85-115		20	
Cadmium	0.212	0.00050	"	0.2000		106	85-115		20	
Chromium	0.201	0.0025	"	0.2000		100	85-115		20	
Cobalt	0.205	0.0050	"	0.2000		103	85-115		20	
Copper	0.201	0.0020	"	0.2000		101	85-115		20	
Lead	0.207	0.0020	"	0.2000		103	85-115		20	
Manganese	0.203	0.0050	"	0.2000		102	85-115		20	
Nickel	0.202	0.0050	"	0.2000		101	85-115		20	
Selenium	0.229	0.0050	"	0.2000		114	85-115		20	
Silver	0.103	0.0020	"	0.1000		103	85-115		20	
Thallium	0.201	0.0020	"	0.2000		101	85-115		20	
Vanadium	0.201	0.0050	"	0.2000		100	85-115		20	
Zinc	0.223	0.020	"	0.2000		111	85-115		20	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942049 - EPA 200.2 ICPMS										
Duplicate (0942049-DUP1)	**Source: 09J0523-03**			Prepared: 10/13/2009 Analyzed: 10/14/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	0.00340	0.0050	"		0.00415			19.7	20	
Barium	0.0608	0.0050	"		0.0588			3.41	20	
Cadmium	ND	0.00050	"		ND				20	
Chromium	ND	0.0025	"		ND				20	
Cobalt	0.00125	0.0050	"		0.00113			9.89	20	
Copper	ND	0.0020	"		ND				20	
Lead	ND	0.0020	"		ND				20	
Manganese	1.05	0.0050	"		1.03			1.50	20	
Nickel	0.00236	0.0050	"		0.00193			19.8	20	
Selenium	ND	0.0050	"		ND				20	
Silver	ND	0.0020	"		ND				20	
Thallium	0.000751	0.0020	"		ND				20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	0.0220	0.020	"		0.0175			22.9	20	R3
Matrix Spike (0942049-MS1)	**Source: 09J0523-03**			Prepared: 10/13/2009 Analyzed: 10/14/2009						
Antimony	0.214	0.0050	mg/L	0.2000	ND	107	70-130		20	
Arsenic	0.216	0.0050	"	0.2000	0.00415	106	70-130		20	
Barium	0.266	0.0050	"	0.2000	0.0588	104	70-130		20	
Cadmium	0.211	0.00050	"	0.2000	ND	105	70-130		20	
Chromium	0.201	0.0025	"	0.2000	ND	101	70-130		20	
Cobalt	0.207	0.0050	"	0.2000	0.00113	103	70-130		20	
Copper	0.201	0.0020	"	0.2000	ND	100	70-130		20	
Lead	0.207	0.0020	"	0.2000	ND	104	70-130		20	
Manganese	1.24	0.0050	"	0.2000	1.03	108	70-130		20	
Nickel	0.204	0.0050	"	0.2000	0.00193	101	70-130		20	
Selenium	0.222	0.0050	"	0.2000	ND	111	70-130		20	
Silver	0.102	0.0020	"	0.1000	ND	102	70-130		20	
Thallium	0.200	0.0020	"	0.2000	ND	99.8	70-130		20	
Vanadium	0.202	0.0050	"	0.2000	ND	101	70-130		20	
Zinc	0.241	0.020	"	0.2000	0.0175	112	70-130		20	

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942049 - EPA 200.2 ICPMS										
Matrix Spike Dup (0942049-MSD1)	**Source: 09J0523-03**			Prepared: 10/13/2009 Analyzed: 10/14/2009						
Antimony	0.213	0.0050	mg/L	0.2000	ND	106	70-130	0.506	20	
Arsenic	0.217	0.0050	"	0.2000	0.00415	107	70-130	0.566	20	
Barium	0.261	0.0050	"	0.2000	0.0588	101	70-130	2.13	20	
Cadmium	0.208	0.00050	"	0.2000	ND	104	70-130	1.30	20	
Chromium	0.201	0.0025	"	0.2000	ND	101	70-130	0.0214	20	
Cobalt	0.206	0.0050	"	0.2000	0.00113	103	70-130	0.518	20	
Copper	0.201	0.0020	"	0.2000	ND	101	70-130	0.0935	20	
Lead	0.204	0.0020	"	0.2000	ND	102	70-130	1.44	20	
Manganese	1.23	0.0050	"	0.2000	1.03	99.4	70-130	1.31	20	
Nickel	0.205	0.0050	"	0.2000	0.00193	101	70-130	0.337	20	
Selenium	0.224	0.0050	"	0.2000	ND	112	70-130	1.18	20	
Silver	0.100	0.0020	"	0.1000	ND	100	70-130	1.50	20	
Thallium	0.201	0.0020	"	0.2000	ND	100	70-130	0.514	20	
Vanadium	0.204	0.0050	"	0.2000	ND	102	70-130	1.05	20	
Zinc	0.243	0.020	"	0.2000	0.0175	113	70-130	0.925	20	
Batch 0942130 - EPA 200.2 ICP										
Blank (0942130-BLK1)				Prepared: 10/15/2009 Analyzed: 10/28/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	0.0320	0.010	"							B2
Sodium	ND	1.0	"							
LCS (0942130-BS1)				Prepared: 10/15/2009 Analyzed: 10/28/2009						
Beryllium	1.03	0.0010	mg/L	1.000		103	85-115		20	
Calcium	10.8	0.050	"	10.00		108	85-115		20	
Iron	5.08	0.0050	"	5.000		102	85-115		20	
Magnesium	10.4	0.010	"	10.00		104	85-115		20	
Potassium	10.8	0.010	"	10.00		108	85-115		20	
Sodium	9.95	1.0	"	10.00		99.5	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942130 - EPA 200.2 ICP										
Duplicate (0942130-DUP1)		**Source: 09J0523-08**		Prepared: 10/15/2009 Analyzed: 10/28/2009						
Beryllium	0.00435	0.0050	mg/L		0.00422			3.20	20	
Calcium	32.3	0.25	"		31.5			2.36	20	
Iron	387	0.025	"		387			0.0312	20	
Magnesium	36.6	0.050	"		36.3			1.03	20	
Potassium	1.99	0.050	"		1.90			4.47	20	
Sodium	31.2	5.0	"		31.1			0.320	20	
Matrix Spike (0942130-MS1)		**Source: 09J0523-08**		Prepared: 10/15/2009 Analyzed: 10/28/2009						
Beryllium	0.932	0.0050	mg/L	1.000	0.00422	92.8	80-120		20	
Calcium	42.0	0.25	"	10.00	31.5	104	80-120		20	
Iron	394	0.025	"	5.000	387	138	80-120		20	M6
Magnesium	47.1	0.050	"	10.00	36.3	109	80-120		20	
Potassium	12.4	0.050	"	10.00	1.90	105	80-120		20	
Sodium	42.3	5.0	"	10.00	31.1	112	80-120		20	
Matrix Spike Dup (0942130-MSD1)		**Source: 09J0523-08**		Prepared: 10/15/2009 Analyzed: 10/28/2009						
Beryllium	0.941	0.0050	mg/L	1.000	0.00422	93.7	80-120	0.993	20	
Calcium	41.8	0.25	"	10.00	31.5	103	80-120	0.433	20	
Iron	387	0.025	"	5.000	387	NR	80-120	1.83	20	M6
Magnesium	46.4	0.050	"	10.00	36.3	102	80-120	1.49	20	
Potassium	12.6	0.050	"	10.00	1.90	107	80-120	1.93	20	
Sodium	40.8	5.0	"	10.00	31.1	97.4	80-120	3.48	20	
Post Spike (0942130-PS1)		**Source: 09J0523-08**		Prepared & Analyzed: 11/03/2009						
Beryllium	0.990		mg/L	1.000	0.000843	98.9	90-110			
Calcium	16.0		"	10.00	6.31	97.0	90-110			
Iron	84.1		"	5.000	77.5	133	90-110			M3
Magnesium	17.5		"	10.00	7.25	103	90-110			
Potassium	10.6		"	10.00	0.381	103	90-110			
Sodium	16.3		"	10.00	6.22	101	90-110			

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942131 - EPA 200.2 ICPMS										
Blank (0942131-BLK1)				Prepared: 10/15/2009 Analyzed: 10/16/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
LCS (0942131-BS1)				Prepared: 10/15/2009 Analyzed: 10/16/2009						
Antimony	0.214	0.0050	mg/L	0.2000		107	85-115		20	
Arsenic	0.211	0.0050	"	0.2000		105	85-115		20	
Barium	0.203	0.0050	"	0.2000		101	85-115		20	
Cadmium	0.217	0.00050	"	0.2000		109	85-115		20	
Chromium	0.207	0.0025	"	0.2000		104	85-115		20	
Cobalt	0.208	0.0050	"	0.2000		104	85-115		20	
Copper	0.200	0.0020	"	0.2000		100	85-115		20	
Lead	0.205	0.0020	"	0.2000		103	85-115		20	
Manganese	0.209	0.0050	"	0.2000		104	85-115		20	
Nickel	0.202	0.0050	"	0.2000		101	85-115		20	
Selenium	0.225	0.0050	"	0.2000		112	85-115		20	
Silver	0.103	0.0020	"	0.1000		103	85-115		20	
Thallium	0.198	0.0020	"	0.2000		99.0	85-115		20	
Vanadium	0.206	0.0050	"	0.2000		103	85-115		20	
Zinc	0.230	0.020	"	0.2000		115	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942131 - EPA 200.2 ICPMS										
Duplicate (0942131-DUP1)		**Source: 09J0523-08**		Prepared: 10/15/2009 Analyzed: 10/16/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	ND	0.0050	"		ND				20	
Barium	0.0884	0.0050	"		0.0912			3.05	20	
Cadmium	ND	0.00050	"		ND				20	
Chromium	ND	0.0025	"		ND				20	
Cobalt	ND	0.0050	"		ND				20	
Copper	ND	0.0020	"		ND				20	
Lead	0.000791	0.0020	"		0.000728			8.29	20	
Manganese	30.8	0.0050	"		31.6			2.54	20	
Nickel	ND	0.0050	"		ND				20	
Selenium	0.00189	0.0050	"		ND				20	
Silver	ND	0.0020	"		ND				20	
Thallium	0.00116	0.0020	"		ND				20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	ND	0.020	"		ND				20	
Matrix Spike (0942131-MS1)		**Source: 09J0523-08**		Prepared: 10/15/2009 Analyzed: 10/16/2009						
Antimony	0.210	0.0050	mg/L	0.2000	ND	105	70-130		20	
Arsenic	0.209	0.0050	"	0.2000	ND	105	70-130		20	
Barium	0.288	0.0050	"	0.2000	0.0912	98.2	70-130		20	
Cadmium	0.208	0.00050	"	0.2000	ND	104	70-130		20	
Chromium	0.205	0.0025	"	0.2000	ND	103	70-130		20	
Cobalt	0.205	0.0050	"	0.2000	ND	103	70-130		20	
Copper	0.197	0.0020	"	0.2000	ND	98.4	70-130		20	
Lead	0.208	0.0020	"	0.2000	0.000728	104	70-130		20	
Manganese	32.3	0.0050	"	0.2000	31.6	372	70-130		20	#
Nickel	0.197	0.0050	"	0.2000	ND	98.4	70-130		20	
Selenium	0.228	0.0050	"	0.2000	ND	114	70-130		20	
Silver	0.0990	0.0020	"	0.1000	ND	99.0	70-130		20	
Thallium	0.202	0.0020	"	0.2000	ND	101	70-130		20	
Vanadium	0.208	0.0050	"	0.2000	ND	104	70-130		20	
Zinc	0.213	0.020	"	0.2000	ND	106	70-130		20	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942131 - EPA 200.2 ICPMS										
Matrix Spike Dup (0942131-MSD1)	**Source: 09J0523-08**			Prepared: 10/15/2009 Analyzed: 10/16/2009						
Antimony	0.208	0.0050	mg/L	0.2000	ND	104	70-130	0.730	20	
Arsenic	0.208	0.0050	"	0.2000	ND	104	70-130	0.484	20	
Barium	0.288	0.0050	"	0.2000	0.0912	98.4	70-130	0.108	20	
Cadmium	0.207	0.00050	"	0.2000	ND	103	70-130	0.788	20	
Chromium	0.202	0.0025	"	0.2000	ND	101	70-130	1.41	20	
Cobalt	0.201	0.0050	"	0.2000	ND	100	70-130	2.15	20	
Copper	0.193	0.0020	"	0.2000	ND	96.6	70-130	1.87	20	
Lead	0.206	0.0020	"	0.2000	0.000728	103	70-130	0.720	20	
Manganese	31.8	0.0050	"	0.2000	31.6	103	70-130	1.68	20	
Nickel	0.195	0.0050	"	0.2000	ND	97.6	70-130	0.763	20	
Selenium	0.223	0.0050	"	0.2000	ND	112	70-130	2.12	20	
Silver	0.0984	0.0020	"	0.1000	ND	98.4	70-130	0.550	20	
Thallium	0.200	0.0020	"	0.2000	ND	100	70-130	0.987	20	
Vanadium	0.204	0.0050	"	0.2000	ND	102	70-130	1.80	20	
Zinc	0.212	0.020	"	0.2000	ND	106	70-130	0.310	20	
Batch 0943049 - EPA 200.2 ICP										
Blank (0943049-BLK1)				Prepared & Analyzed: 10/20/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
LCS (0943049-BS1)				Prepared & Analyzed: 10/20/2009						
Beryllium	0.982	0.0010	mg/L	1.000		98.2	85-115		20	
Calcium	9.83	0.050	"	10.00		98.3	85-115		20	
Iron	4.93	0.0050	"	5.000		98.7	85-115		20	
Magnesium	10.0	0.010	"	10.00		100	85-115		20	
Potassium	9.96	0.010	"	10.00		99.6	85-115		20	
Sodium	9.70	1.0	"	10.00		97.0	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943049 - EPA 200.2 ICP										
Duplicate (0943049-DUP1)		**Source: 09J0523-14**		Prepared & Analyzed: 10/20/2009						
Beryllium	0.000147	0.0010	mg/L		0.0000822			56.7	20	R3
Calcium	13.2	0.050	"		13.1			1.28	20	
Iron	0.0560	0.0050	"		0.0566			1.12	20	
Magnesium	0.455	0.010	"		0.454			0.418	20	
Potassium	55.1	0.10	"		54.2			1.70	20	
Sodium	90.7	1.0	"		90.1			0.682	20	
Matrix Spike (0943049-MS1)		**Source: 09J0523-14**		Prepared & Analyzed: 10/20/2009						
Beryllium	0.999	0.0010	mg/L	1.000	0.0000822	99.8	80-120		20	
Calcium	23.0	0.050	"	10.00	13.1	99.0	80-120		20	
Iron	5.10	0.0050	"	5.000	0.0566	101	80-120		20	
Magnesium	10.7	0.010	"	10.00	0.454	103	80-120		20	
Potassium	51.9	0.010	"	10.00	54.2	NR	80-120		20	
Sodium	101	1.0	"	10.00	90.1	105	80-120		20	
Matrix Spike Dup (0943049-MSD1)		**Source: 09J0523-14**		Prepared & Analyzed: 10/20/2009						
Beryllium	1.01	0.0010	mg/L	1.000	0.0000822	101	80-120	1.22	20	
Calcium	23.1	0.050	"	10.00	13.1	100	80-120	0.545	20	
Iron	5.14	0.0050	"	5.000	0.0566	102	80-120	0.881	20	
Magnesium	10.8	0.010	"	10.00	0.454	103	80-120	0.508	20	
Potassium	52.1	0.010	"	10.00	54.2	NR	80-120	0.341	20	
Sodium	101	1.0	"	10.00	90.1	108	80-120	0.313	20	
Post Spike (0943049-PS1)		**Source: 09J0523-14**		Prepared: 10/28/2009 Analyzed: 10/29/2009						
Beryllium	1.01		mg/L	1.000	0.00000822	101	90-110			
Calcium	11.7		"	10.00	1.31	104	90-110			
Iron	4.91		"	5.000	0.00566	98.1	90-110			
Magnesium	9.93		"	10.00	0.0454	98.8	90-110			
Potassium	16.1		"	10.00	5.42	106	90-110			
Sodium	19.3		"	10.00	9.01	102	90-110			

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943050 - EPA 200.2 ICPMS										
Blank (0943050-BLK1)				Prepared: 10/20/2009 Analyzed: 10/21/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
LCS (0943050-BS1)				Prepared: 10/20/2009 Analyzed: 10/21/2009						
Antimony	0.213	0.0050	mg/L	0.2000		107	85-115		20	
Arsenic	0.214	0.0050	"	0.2000		107	85-115		20	
Barium	0.202	0.0050	"	0.2000		101	85-115		20	
Cadmium	0.212	0.00050	"	0.2000		106	85-115		20	
Chromium	0.203	0.0025	"	0.2000		102	85-115		20	
Cobalt	0.206	0.0050	"	0.2000		103	85-115		20	
Copper	0.202	0.0020	"	0.2000		101	85-115		20	
Lead	0.206	0.0020	"	0.2000		103	85-115		20	
Manganese	0.206	0.0050	"	0.2000		103	85-115		20	
Nickel	0.204	0.0050	"	0.2000		102	85-115		20	
Selenium	0.200	0.0050	"	0.2000		99.8	85-115		20	
Silver	0.100	0.0020	"	0.1000		100	85-115		20	
Thallium	0.201	0.0020	"	0.2000		101	85-115		20	
Vanadium	0.203	0.0050	"	0.2000		101	85-115		20	
Zinc	0.225	0.020	"	0.2000		112	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943050 - EPA 200.2 ICPMS										
Duplicate (0943050-DUP1)	**Source: 09J0523-15**			Prepared: 10/20/2009 Analyzed: 10/21/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	0.00344	0.0050	"		0.00343			0.233	20	
Barium	0.0201	0.0050	"		0.0195			3.03	20	
Cadmium	0.00146	0.00050	"		0.00140			4.35	20	
Chromium	0.00353	0.0025	"		0.00317			10.9	20	
Cobalt	0.250	0.0050	"		0.247			1.24	20	
Copper	0.00522	0.0020	"		0.00531			1.75	20	
Lead	0.00423	0.0020	"		0.00418			1.14	20	
Manganese	0.538	0.0050	"		0.533			0.908	20	
Nickel	0.358	0.0050	"		0.356			0.602	20	
Selenium	0.00436	0.0050	"		0.00539			21.2	20	R3
Silver	ND	0.0020	"		ND				20	
Thallium	0.000577	0.0020	"		ND				20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	0.749	0.020	"		0.745			0.585	20	
Matrix Spike (0943050-MS1)	**Source: 09J0523-15**			Prepared: 10/20/2009 Analyzed: 10/21/2009						
Antimony	0.209	0.0050	mg/L	0.2000	ND	104	70-130		20	
Arsenic	0.216	0.0050	"	0.2000	0.00343	106	70-130		20	
Barium	0.208	0.0050	"	0.2000	0.0195	94.1	70-130		20	
Cadmium	0.209	0.00050	"	0.2000	0.00140	104	70-130		20	
Chromium	0.201	0.0025	"	0.2000	0.00317	99.2	70-130		20	
Cobalt	0.452	0.0050	"	0.2000	0.247	102	70-130		20	
Copper	0.200	0.0020	"	0.2000	0.00531	97.3	70-130		20	
Lead	0.198	0.0020	"	0.2000	0.00418	96.7	70-130		20	
Manganese	0.746	0.0050	"	0.2000	0.533	106	70-130		20	
Nickel	0.560	0.0050	"	0.2000	0.356	102	70-130		20	
Selenium	0.235	0.0050	"	0.2000	0.00539	115	70-130		20	
Silver	0.0966	0.0020	"	0.1000	ND	96.6	70-130		20	
Thallium	0.186	0.0020	"	0.2000	ND	92.9	70-130		20	
Vanadium	0.206	0.0050	"	0.2000	ND	103	70-130		20	
Zinc	0.979	0.020	"	0.2000	0.745	117	70-130		20	

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943050 - EPA 200.2 ICPMS										
Matrix Spike Dup (0943050-MSD1)	**Source: 09J0523-15**			Prepared: 10/20/2009 Analyzed: 10/21/2009						
Antimony	0.209	0.0050	mg/L	0.2000	ND	105	70-130	0.280	20	
Arsenic	0.218	0.0050	"	0.2000	0.00343	107	70-130	1.21	20	
Barium	0.210	0.0050	"	0.2000	0.0195	95.2	70-130	0.972	20	
Cadmium	0.209	0.00050	"	0.2000	0.00140	104	70-130	0.155	20	
Chromium	0.202	0.0025	"	0.2000	0.00317	99.3	70-130	0.150	20	
Cobalt	0.456	0.0050	"	0.2000	0.247	104	70-130	0.845	20	
Copper	0.202	0.0020	"	0.2000	0.00531	98.2	70-130	0.838	20	
Lead	0.200	0.0020	"	0.2000	0.00418	97.7	70-130	1.03	20	
Manganese	0.742	0.0050	"	0.2000	0.533	104	70-130	0.484	20	
Nickel	0.565	0.0050	"	0.2000	0.356	104	70-130	0.865	20	
Selenium	0.233	0.0050	"	0.2000	0.00539	114	70-130	1.17	20	
Silver	0.0973	0.0020	"	0.1000	ND	97.3	70-130	0.712	20	
Thallium	0.188	0.0020	"	0.2000	ND	94.1	70-130	1.32	20	
Vanadium	0.206	0.0050	"	0.2000	ND	103	70-130	0.161	20	
Zinc	0.985	0.020	"	0.2000	0.745	120	70-130	0.562	20	
Batch 0943178 - EPA 200.2 ICP										
Blank (0943178-BLK1)				Prepared: 10/23/2009 Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
LCS (0943178-BS1)				Prepared: 10/23/2009 Analyzed: 11/04/2009						
Beryllium	1.07	0.0010	mg/L	1.000		107	85-115		20	
Calcium	10.1	0.050	"	10.00		101	85-115		20	
Iron	5.36	0.0050	"	5.000		107	85-115		20	
Magnesium	10.8	0.010	"	10.00		108	85-115		20	
Potassium	10.0	0.010	"	10.00		100	85-115		20	
Sodium	10.4	1.0	"	10.00		104	85-115		20	

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943178 - EPA 200.2 ICP										
Duplicate (0943178-DUP1)	**Source: 09J0523-19**			Prepared: 10/23/2009 Analyzed: 11/05/2009						
Beryllium	ND	0.0010	mg/L		ND				20	
Calcium	28.1	0.050	"		26.9			4.53	20	
Iron	205	0.50	"		201			1.62	20	
Magnesium	44.7	0.010	"		44.9			0.249	20	
Potassium	1.35	1.0	"		1.78			27.1	20	R3
Sodium	386	100	"		380			1.53	20	
Matrix Spike (0943178-MS1)	**Source: 09J0523-19**			Prepared: 10/23/2009 Analyzed: 11/05/2009						
Beryllium	1.01	0.0010	mg/L	1.000	ND	101	80-120		20	
Calcium	37.8	0.050	"	10.00	26.9	109	80-120		20	
Iron	207	0.0050	"	5.000	201	103	80-120		20	
Magnesium	53.6	0.010	"	10.00	44.9	87.1	80-120		20	
Potassium	16.1	0.010	"	10.00	1.78	143	80-120		20	
Sodium	ND	1.0	"	10.00	380	NR	80-120		20	
Matrix Spike Dup (0943178-MSD1)	**Source: 09J0523-19**			Prepared: 10/23/2009 Analyzed: 11/05/2009						
Beryllium	0.986	0.0010	mg/L	1.000	ND	98.6	80-120	2.12	20	
Calcium	37.2	0.050	"	10.00	26.9	103	80-120	1.63	20	
Iron	204	0.0050	"	5.000	201	55.9	80-120	1.15	20	
Magnesium	53.0	0.010	"	10.00	44.9	81.4	80-120	1.06	20	
Potassium	15.8	0.010	"	10.00	1.78	140	80-120	1.84	20	
Sodium	ND	1.0	"	10.00	380	NR	80-120		20	
Post Spike (0943178-PS1)	**Source: 09J0523-19**			Prepared & Analyzed: 11/10/2009						
Beryllium	0.978		mg/L	1.000	-0.0000542	97.8	90-110			
Calcium	9.89		"	10.00	0.269	96.2	90-110			
Iron	6.97		"	5.000	2.01	99.1	90-110			
Magnesium	10.3		"	10.00	0.449	98.8	90-110			
Potassium	9.51		"	10.00	0.0178	94.9	90-110			
Sodium	12.9		"	10.00	3.80	90.7	90-110			

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943179 - EPA 200.2 ICPMS										
Blank (0943179-BLK1)				Prepared: 10/23/2009 Analyzed: 10/29/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
Blank (0943179-BLK2)				Prepared: 10/23/2009 Analyzed: 10/31/2009						
Cobalt	ND	0.0050	mg/L							
Copper	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Zinc	ND	0.020	"							
LCS (0943179-BS1)				Prepared: 10/23/2009 Analyzed: 10/29/2009						
Antimony	0.199	0.0050	mg/L	0.2000		99.4	85-115		20	
Arsenic	0.193	0.0050	"	0.2000		96.4	85-115		20	
Barium	0.217	0.0050	"	0.2000		109	85-115		20	
Cadmium	0.195	0.00050	"	0.2000		97.4	85-115		20	
Chromium	0.225	0.0025	"	0.2000		112	85-115		20	
Cobalt	0.203	0.0050	"	0.2000		102	85-115		20	
Copper	0.186	0.0020	"	0.2000		93.0	85-115		20	
Lead	0.214	0.0020	"	0.2000		107	85-115		20	
Manganese	0.239	0.0050	"	0.2000		120	85-115		20	
Nickel	0.194	0.0050	"	0.2000		97.2	85-115		20	
Selenium	0.190	0.0050	"	0.2000		95.1	85-115		20	
Silver	0.0941	0.0020	"	0.1000		94.1	85-115		20	
Thallium	0.201	0.0020	"	0.2000		101	85-115		20	
Vanadium	0.225	0.0050	"	0.2000		113	85-115		20	
Zinc	0.165	0.020	"	0.2000		82.7	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943179 - EPA 200.2 ICPMS										
LCS (0943179-BS2)				Prepared: 10/23/2009 Analyzed: 10/31/2009						
Cobalt	0.220	0.0050	mg/L	0.2000		110	85-115		20	
Copper	0.202	0.0020	"	0.2000		101	85-115		20	
Manganese	0.228	0.0050	"	0.2000		114	85-115		20	
Nickel	0.209	0.0050	"	0.2000		104	85-115		20	
Zinc	0.187	0.020	"	0.2000		93.7	85-115		20	
Duplicate (0943179-DUP1)		**Source: 09J0523-22**		Prepared: 10/23/2009 Analyzed: 11/10/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	ND	0.0050	"		0.00210				20	
Barium	0.0363	0.0050	"		0.0373			2.72	20	R1
Cadmium	0.00254	0.00050	"		0.00236			7.56	20	
Chromium	0.00520	0.0025	"		0.00567			8.78	20	
Cobalt	0.128	0.0050	"		0.129			0.216	20	
Copper	0.00540	0.0020	"		0.00555			2.79	20	
Lead	0.00292	0.0020	"		0.00298			2.03	20	
Manganese	0.392	0.0050	"		0.698			56.1	20	
Nickel	0.218	0.0050	"		0.218			0.126	20	
Selenium	0.00324	0.0050	"		0.00281			14.4	20	
Silver	ND	0.0020	"		ND				20	
Thallium	0.000550	0.0020	"		0.000571			3.75	20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	0.403	0.020	"		0.403			0.102	20	
Duplicate (0943179-DUP2)		**Source: 09J0523-22**		Prepared: 10/23/2009 Analyzed: 10/31/2009						
Cobalt	0.126	0.0050	mg/L		0.129			1.81	20	
Copper	0.00543	0.0020	"		0.00555			2.18	20	R1
Manganese	0.372	0.0050	"		0.698			60.9	20	R1
Nickel	0.212	0.0050	"		0.218			3.03	20	
Zinc	0.395	0.020	"		0.403			2.04	20	

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943179 - EPA 200.2 ICPMS										
Matrix Spike (0943179-MS1)	**Source: 09J0523-22**			Prepared: 10/23/2009 Analyzed: 11/10/2009						
Antimony	0.194	0.0050	mg/L	0.2000	ND	97.2	70-130		20	
Arsenic	0.215	0.0050	"	0.2000	0.00210	107	70-130		20	
Barium	0.234	0.0050	"	0.2000	0.0373	98.3	70-130		20	
Cadmium	0.213	0.00050	"	0.2000	0.00236	105	70-130		20	
Chromium	0.205	0.0025	"	0.2000	0.00567	99.8	70-130		20	
Cobalt	0.343	0.0050	"	0.2000	0.129	107	70-130		20	
Copper	0.217	0.0020	"	0.2000	0.00555	106	70-130		20	
Lead	0.215	0.0020	"	0.2000	0.00298	106	70-130		20	
Manganese	0.626	0.0050	"	0.2000	0.698	NR	70-130		20	
Nickel	0.422	0.0050	"	0.2000	0.218	102	70-130		20	
Selenium	0.221	0.0050	"	0.2000	0.00281	109	70-130		20	
Silver	0.102	0.0020	"	0.1000	ND	102	70-130		20	
Thallium	0.196	0.0020	"	0.2000	0.000571	97.5	70-130		20	
Vanadium	0.206	0.0050	"	0.2000	ND	103	70-130		20	
Zinc	0.633	0.020	"	0.2000	0.403	115	70-130		20	
Matrix Spike (0943179-MS2)	**Source: 09J0523-22**			Prepared: 10/23/2009 Analyzed: 10/31/2009						
Cobalt	0.339	0.0050	mg/L	0.2000	0.129	105	70-130		20	
Copper	0.204	0.0020	"	0.2000	0.00555	99.1	70-130		20	
Manganese	0.591	0.0050	"	0.2000	0.698	NR	70-130		20	M5
Nickel	0.409	0.0050	"	0.2000	0.218	95.5	70-130		20	
Zinc	0.663	0.020	"	0.2000	0.403	130	70-130		20	
Matrix Spike Dup (0943179-MSD1)	**Source: 09J0523-22**			Prepared: 10/23/2009 Analyzed: 11/10/2009						
Antimony	0.193	0.0050	mg/L	0.2000	ND	96.4	70-130	0.844	20	
Arsenic	0.212	0.0050	"	0.2000	0.00210	105	70-130	1.64	20	
Barium	0.233	0.0050	"	0.2000	0.0373	97.9	70-130	0.326	20	
Cadmium	0.212	0.00050	"	0.2000	0.00236	105	70-130	0.649	20	
Chromium	0.204	0.0025	"	0.2000	0.00567	98.9	70-130	0.862	20	
Cobalt	0.339	0.0050	"	0.2000	0.129	105	70-130	1.27	20	
Copper	0.214	0.0020	"	0.2000	0.00555	104	70-130	0.988	20	
Lead	0.215	0.0020	"	0.2000	0.00298	106	70-130	0.216	20	
Manganese	0.637	0.0050	"	0.2000	0.698	NR	70-130	1.76	20	
Nickel	0.419	0.0050	"	0.2000	0.218	100	70-130	0.780	20	
Selenium	0.219	0.0050	"	0.2000	0.00281	108	70-130	1.01	20	
Silver	0.101	0.0020	"	0.1000	ND	101	70-130	0.537	20	
Thallium	0.198	0.0020	"	0.2000	0.000571	98.6	70-130	1.10	20	
Vanadium	0.205	0.0050	"	0.2000	ND	102	70-130	0.585	20	
Zinc	0.622	0.020	"	0.2000	0.403	110	70-130	1.70	20	

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943179 - EPA 200.2 ICPMS										
Matrix Spike Dup (0943179-MSD2)	**Source: 09J0523-22**			Prepared: 10/23/2009 Analyzed: 10/31/2009						
Cobalt	0.338	0.0050	mg/L	0.2000	0.129	105	70-130	0.201	20	
Copper	0.205	0.0020	"	0.2000	0.00555	99.9	70-130	0.871	20	
Manganese	0.605	0.0050	"	0.2000	0.698	NR	70-130	2.36	20	M5
Nickel	0.408	0.0050	"	0.2000	0.218	94.8	70-130	0.330	20	
Zinc	0.604	0.020	"	0.2000	0.403	100	70-130	9.28	20	
Batch 0944107 - EPA 200.2 ICPMS										
Blank (0944107-BLK1)				Prepared: 10/28/2009 Analyzed: 10/29/2009						
Antimony	ND	0.0050	mg/L							
Arsenic	ND	0.0050	"							
Barium	ND	0.0050	"							
Cadmium	ND	0.00050	"							
Chromium	ND	0.0025	"							
Cobalt	ND	0.0050	"							
Copper	ND	0.0020	"							
Lead	ND	0.0020	"							
Manganese	ND	0.0050	"							
Nickel	ND	0.0050	"							
Selenium	ND	0.0050	"							
Silver	ND	0.0020	"							
Thallium	ND	0.0020	"							
Vanadium	ND	0.0050	"							
Zinc	ND	0.020	"							
Blank (0944107-BLK2)				Prepared: 10/28/2009 Analyzed: 10/31/2009						
Copper	ND	0.0020	mg/L							
Manganese	ND	0.0050	"							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944107 - EPA 200.2 ICPMS										
LCS (0944107-BS1)				Prepared: 10/28/2009 Analyzed: 10/29/2009						
Antimony	0.203	0.0050	mg/L	0.2000		102	85-115		20	
Arsenic	0.201	0.0050	"	0.2000		101	85-115		20	
Barium	0.217	0.0050	"	0.2000		109	85-115		20	
Cadmium	0.202	0.00050	"	0.2000		101	85-115		20	
Chromium	0.222	0.0025	"	0.2000		111	85-115		20	
Cobalt	0.199	0.0050	"	0.2000		99.5	85-115		20	
Copper	0.179	0.0020	"	0.2000		89.5	85-115		20	
Lead	0.213	0.0020	"	0.2000		106	85-115		20	
Manganese	0.234	0.0050	"	0.2000		117	85-115		20	
Nickel	0.188	0.0050	"	0.2000		94.0	85-115		20	
Selenium	0.213	0.0050	"	0.2000		107	85-115		20	
Silver	0.0917	0.0020	"	0.1000		91.7	85-115		20	
Thallium	0.201	0.0020	"	0.2000		101	85-115		20	
Vanadium	0.223	0.0050	"	0.2000		111	85-115		20	
Zinc	0.179	0.020	"	0.2000		89.6	85-115		20	
LCS (0944107-BS2)				Prepared: 10/28/2009 Analyzed: 10/31/2009						
Copper	0.206	0.0020	mg/L	0.2000		103	85-115		20	
Manganese	0.223	0.0050	"	0.2000		111	85-115		20	
Duplicate (0944107-DUP1)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/29/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	ND	0.0050	"		ND				20	
Barium	0.0794	0.0050	"		0.0866			8.62	20	
Cadmium	ND	0.00050	"		ND				20	
Chromium	ND	0.0025	"		ND				20	
Cobalt	ND	0.0050	"		ND				20	
Copper	ND	0.0020	"		ND				20	
Lead	ND	0.0020	"		ND				20	
Manganese	0.709	0.0050	"		0.723			1.88	20	
Nickel	0.00814	0.0050	"		0.00889			8.73	20	
Selenium	ND	0.0050	"		ND				20	
Silver	ND	0.0020	"		0.000351				20	
Thallium	ND	0.0020	"		0.00114				20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	ND	0.020	"		ND				20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944107 - EPA 200.2 ICPMS										
Duplicate (0944107-DUP2)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/31/2009						
Copper	ND	0.0020	mg/L		ND				20	
Manganese	0.669	0.0050	"		0.723			7.73	20	
Matrix Spike (0944107-MS1)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/29/2009						
Antimony	0.213	0.0050	mg/L	0.2000	ND	106	70-130		20	
Arsenic	0.219	0.0050	"	0.2000	ND	110	70-130		20	
Barium	0.299	0.0050	"	0.2000	0.0866	106	70-130		20	
Cadmium	0.217	0.00050	"	0.2000	ND	108	70-130		20	
Chromium	0.221	0.0025	"	0.2000	ND	110	70-130		20	
Cobalt	0.198	0.0050	"	0.2000	ND	99.0	70-130		20	
Copper	0.178	0.0020	"	0.2000	ND	89.1	70-130		20	
Lead	0.216	0.0020	"	0.2000	ND	108	70-130		20	
Manganese	0.946	0.0050	"	0.2000	0.723	112	70-130		20	
Nickel	0.195	0.0050	"	0.2000	0.00889	92.8	70-130		20	
Selenium	0.250	0.0050	"	0.2000	ND	125	70-130		20	
Silver	0.0949	0.0020	"	0.1000	0.000351	94.6	70-130		20	
Thallium	0.201	0.0020	"	0.2000	0.00114	99.9	70-130		20	
Vanadium	0.232	0.0050	"	0.2000	ND	116	70-130		20	
Zinc	0.202	0.020	"	0.2000	ND	101	70-130		20	
Matrix Spike (0944107-MS2)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/31/2009						
Copper	0.202	0.0020	mg/L	0.2000	ND	101	70-130		20	
Manganese	0.894	0.0050	"	0.2000	0.723	85.7	70-130		20	
Matrix Spike Dup (0944107-MSD1)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/29/2009						
Antimony	0.208	0.0050	mg/L	0.2000	ND	104	70-130	2.15	20	
Arsenic	0.219	0.0050	"	0.2000	ND	109	70-130	0.381	20	
Barium	0.296	0.0050	"	0.2000	0.0866	105	70-130	1.12	20	
Cadmium	0.215	0.00050	"	0.2000	ND	108	70-130	0.626	20	
Chromium	0.220	0.0025	"	0.2000	ND	110	70-130	0.312	20	
Cobalt	0.197	0.0050	"	0.2000	ND	98.5	70-130	0.437	20	
Copper	0.178	0.0020	"	0.2000	ND	88.8	70-130	0.246	20	
Lead	0.213	0.0020	"	0.2000	ND	106	70-130	1.27	20	
Manganese	0.937	0.0050	"	0.2000	0.723	107	70-130	0.903	20	
Nickel	0.193	0.0050	"	0.2000	0.00889	92.0	70-130	0.825	20	
Selenium	0.249	0.0050	"	0.2000	ND	124	70-130	0.470	20	
Silver	0.0930	0.0020	"	0.1000	0.000351	92.7	70-130	2.05	20	
Thallium	0.200	0.0020	"	0.2000	0.00114	99.3	70-130	0.564	20	
Vanadium	0.228	0.0050	"	0.2000	ND	114	70-130	1.57	20	
Zinc	0.200	0.020	"	0.2000	ND	100	70-130	0.967	20	

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Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944107 - EPA 200.2 ICPMS										
Matrix Spike Dup (0944107-MSD2)		**Source: 09J0523-25**		Prepared: 10/28/2009 Analyzed: 10/31/2009						
Copper	0.200	0.0020	mg/L	0.2000	ND	100	70-130	0.699	20	
Manganese	0.884	0.0050	"	0.2000	0.723	80.7	70-130	1.12	20	
Batch 0944138 - EPA 200.2 ICP										
Blank (0944138-BLK1)				Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
Blank (0944138-BLK2)				Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	0.0119	0.010	"							
Sodium	ND	1.0	"							
LCS (0944138-BS1)				Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	1.05	0.0010	mg/L	1.000		105	85-115		20	
Calcium	11.2	0.050	"	10.00		112	85-115		20	
Iron	5.28	0.0050	"	5.000		106	85-115		20	
Magnesium	10.6	0.010	"	10.00		106	85-115		20	
Potassium	11.4	0.010	"	10.00		114	85-115		20	
Sodium	9.93	1.0	"	10.00		99.3	85-115		20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944138 - EPA 200.2 ICP										
LCS (0944138-BS2)				Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	1.03	0.0010	mg/L	1.000		103	85-115		20	
Calcium	10.9	0.050	"	10.00		109	85-115		20	
Iron	5.21	0.0050	"	5.000		104	85-115		20	
Magnesium	10.5	0.010	"	10.00		105	85-115		20	
Potassium	11.0	0.010	"	10.00		110	85-115		20	
Sodium	9.95	1.0	"	10.00		99.5	85-115		20	
Duplicate (0944138-DUP1)		**Source: 09J0523-27**		Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	0.000876	0.0010	mg/L		0.000925			5.45	20	
Calcium	41.7	0.050	"		42.4			1.73	20	
Iron	81.0	0.050	"		81.0			0.0363	20	
Magnesium	87.1	0.010	"		88.4			1.40	20	
Potassium	10.7	0.10	"		10.8			0.353	20	
Sodium	305	10	"		305			0.0423	20	
Duplicate (0944138-DUP2)		**Source: 09J1106-11**		Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L		ND				20	
Calcium	192	0.050	"		198			2.79	20	
Iron	233	0.0050	"		240			2.76	20	
Magnesium	99.1	0.010	"		101			2.22	20	
Potassium	10.9	0.010	"		11.2			3.19	20	
Sodium	199	1.0	"		202			1.80	20	
Matrix Spike (0944138-MS1)		**Source: 09J0523-27**		Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	1.03	0.0010	mg/L	1.000	0.000925	103	80-120		20	
Calcium	52.3	0.050	"	10.00	42.4	98.1	80-120		20	
Iron	85.7	0.0050	"	5.000	81.0	94.8	80-120		20	
Magnesium	98.3	0.010	"	10.00	88.4	99.1	80-120		20	
Potassium	24.1	0.010	"	10.00	10.8	133	80-120		20	
Sodium	ND	1.0	"	10.00	305	NR	80-120		20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944138 - EPA 200.2 ICP										
Matrix Spike (0944138-MS2)	**Source: 09J1106-11**			Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	0.993	0.0010	mg/L	1.000	ND	99.3	80-120		20	
Calcium	205	0.050	"	10.00	198	72.4	80-120		20	
Iron	241	0.0050	"	5.000	240	33.4	80-120		20	
Magnesium	111	0.010	"	10.00	101	99.2	80-120		20	
Potassium	22.5	0.010	"	10.00	11.2	112	80-120		20	
Sodium	212	1.0	"	10.00	202	97.5	80-120		20	
Matrix Spike Dup (0944138-MSD1)	**Source: 09J0523-27**			Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	1.01	0.0010	mg/L	1.000	0.000925	101	80-120	1.50	20	
Calcium	51.3	0.050	"	10.00	42.4	88.3	80-120	1.89	20	
Iron	85.0	0.0050	"	5.000	81.0	81.0	80-120	0.807	20	
Magnesium	96.6	0.010	"	10.00	88.4	82.0	80-120	1.76	20	
Potassium	23.7	0.010	"	10.00	10.8	129	80-120	1.67	20	
Sodium	ND	1.0	"	10.00	305	NR	80-120		20	
Matrix Spike Dup (0944138-MSD2)	**Source: 09J1106-11**			Prepared: 10/29/2009 Analyzed: 11/04/2009						
Beryllium	0.989	0.0010	mg/L	1.000	ND	98.9	80-120	0.358	20	
Calcium	205	0.050	"	10.00	198	72.5	80-120	0.00488	20	
Iron	241	0.0050	"	5.000	240	36.5	80-120	0.0650	20	
Magnesium	112	0.010	"	10.00	101	109	80-120	0.867	20	
Potassium	22.4	0.010	"	10.00	11.2	112	80-120	0.222	20	
Sodium	213	1.0	"	10.00	202	109	80-120	0.563	20	
Post Spike (0944138-PS1)	**Source: 09J0523-27**			Prepared & Analyzed: 11/10/2009						
Beryllium	0.971		mg/L	1.000	0.0000925	97.1	90-110			
Calcium	13.3		"	10.00	4.24	91.0	90-110			
Iron	12.7		"	5.000	8.10	92.4	90-110			
Magnesium	18.1		"	10.00	8.84	92.4	90-110			
Potassium	10.6		"	10.00	1.08	94.9	90-110			
Sodium	39.3		"	10.00	30.5	87.7	90-110			M6

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944138 - EPA 200.2 ICP										
Post Spike (0944138-PS2)		**Source: 09J1106-11**		Prepared & Analyzed: 11/10/2009						
Beryllium	0.985		mg/L	1.000	-0.0000511	98.5	90-110			
Calcium	11.5		"	10.00	1.98	95.7	90-110			
Iron	7.38		"	5.000	2.40	99.6	90-110			
Magnesium	11.0		"	10.00	1.01	100	90-110			
Potassium	9.80		"	10.00	0.112	96.9	90-110			
Sodium	10.7		"	10.00	2.02	87.0	90-110			
Batch M9J1404 - 0942048										
Instrument Blank (M9J1404-IBL1)				Prepared & Analyzed: 10/14/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Manganese	ND	0.0050	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
Batch M9J2302 - 0943049										
Instrument Blank (M9J2302-IBL1)				Prepared & Analyzed: 10/19/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Manganese	ND	0.0050	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch M9K0307 - 0942130										
Instrument Blank (M9K0307-IBL1)				Prepared & Analyzed: 10/28/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Manganese	ND	0.0050	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
Batch M9K0604 - 0944138										
Instrument Blank (M9K0604-IBL1)				Prepared & Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Manganese	ND	0.0050	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							
Batch M9K0902 - 0943178										
Instrument Blank (M9K0902-IBL1)				Prepared & Analyzed: 11/04/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Manganese	ND	0.0050	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Blank (0942052-BLK1)				Prepared & Analyzed: 10/13/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Blank (0942052-BLK1)				Prepared & Analyzed: 10/13/2009						
trans-1,3-Dichloropropene	ND	1.0	ug/L							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.4*		*"*	*25.00*		*85.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.5*		*"*	*25.00*		*85.9*	*80-120*			
Surrogate: Toluene-d8	*23.6*		*"*	*25.00*		*94.3*	*75-120*			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Blank (0942052-BLK1)				Prepared & Analyzed: 10/13/2009						
Surrogate: 4-Bromofluorobenzene	*23.1*		*ug/L*	*25.00*		*92.3*	*60-149*			
LCS (0942052-BS1)				Prepared & Analyzed: 10/13/2009						
Dichlorodifluoromethane	34.2	1.0	ug/L	20.00		171	27-127			L2
Chloromethane	22.6	1.0	"	20.00		113	62.5-141			
Vinyl chloride	25.5	1.0	"	20.00		127	65.3-143			
Bromomethane	22.8	1.0	"	20.00		114	56-180			
Chloroethane	24.0	1.0	"	20.00		120	62.3-161			
Trichlorofluoromethane	25.0	1.0	"	20.00		125	35-157			
Acrolein	74.7	5.0	"	100.0		74.7	26.6-169			
1,1-Dichloroethene	19.7	1.0	"	20.00		98.4	64.6-138			
Acetone	112	5.0	"	100.0		112	35-159			
Iodomethane	18.7	1.0	"	20.00		93.6	70-130			
Carbon disulfide	18.5	1.0	"	20.00		92.4	48-142			
Allyl Chloride (3-Chloropropylene)	17.5	1.0	"	20.00		87.6	70-130			
Acetonitrile	8.81	5.0	"	20.00		44.0	70-130			#
Methylene Chloride	17.4	1.0	"	20.00		87.2	64.7-139			
Methyl-tert-Butyl Ether	17.2	1.0	"	20.00		86.0	34-133			
trans-1,2-Dichloroethene	19.8	1.0	"	20.00		99.0	75.1-127			
Acrylonitrile	21.5	5.0	"	20.00		108	67.2-148			
1,1-Dichloroethane	19.9	1.0	"	20.00		99.7	72.2-135			
Chloroprene	19.9	1.0	"	20.00		99.4	70-130			
Vinyl acetate	23.4	1.0	"	20.00		117	70-154			
2,2-Dichloropropane	17.9	1.0	"	20.00		89.6	37-129			
cis-1,2-Dichloroethene	20.4	1.0	"	20.00		102	72-126			
2-Butanone (MEK)	112	5.0	"	100.0		112	45-128			
Propionitrile (Ethyl Cyanide)	22.5	5.0	"	20.00		113	70-130			
Methacrylonitrile	20.7	5.0	"	20.00		104	70-130			
Chloroform	20.1	1.0	"	20.00		101	76.1-135			
Bromochloromethane	22.0	1.0	"	20.00		110	73-126			
1,1,1-Trichloroethane	19.3	1.0	"	20.00		96.3	67.1-139			
1,1-Dichloropropene	18.7	1.0	"	20.00		93.5	70-130			
Carbon Tetrachloride	19.3	1.0	"	20.00		96.5	63.3-142			
Benzene	19.1	1.0	"	20.00		95.5	72-132			
1,2-Dichloroethane	21.9	1.0	"	20.00		110	72.9-139			
Trichloroethene	18.4	1.0	"	20.00		91.8	73.7-130			
1,2-Dichloropropane	19.9	1.0	"	20.00		99.6	71.3-137			
Bromodichloromethane	21.4	1.0	"	20.00		107	74.5-136			
Methyl Methacrylate	21.5	1.0	"	20.00		108	70-130			
Dibromomethane	18.5	1.0	"	20.00		92.6	66-125			
2-Chloroethyl Vinyl Ether	18.0	1.0	"	20.00		90.0	42.5-161			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
LCS (0942052-BS1)				Prepared & Analyzed: 10/13/2009						
Methyl Isobutyl Ketone	111	5.0	ug/L	100.0		111	41-143			
cis-1,3-Dichloropropene	19.8	1.0	"	20.00		98.8	74.6-124			
Toluene	18.1	1.0	"	20.00		90.6	72.4-132			
trans-1,3-Dichloropropene	19.1	1.0	"	20.00		95.5	72.1-124			
Ethyl Methacrylate	19.7	1.0	"	20.00		98.6	70-130			
1,1,2-Trichloroethane	19.4	1.0	"	20.00		97.1	75.6-140			
2-Hexanone (MBK)	110	5.0	"	100.0		110	43-147			
1,2-Dibromoethane	19.5	1.0	"	20.00		97.4	70-130			
Tetrachloroethene	16.3	1.0	"	20.00		81.6	69.9-125			
1,3-Dichloropropane	22.2	1.0	"	20.00		111	70-130			
Dibromochloromethane	22.1	1.0	"	20.00		110	69.9-134			
Chlorobenzene	19.7	1.0	"	20.00		98.4	67.3-133			
1,1,1,2-Tetrachloroethane	20.7	1.0	"	20.00		103	76-123			
Ethylbenzene	19.7	1.0	"	20.00		98.6	70.6-131			
m,p-Xylenes	39.4	2.0	"	40.00		98.4	71-123			
o-Xylene	19.1	1.0	"	20.00		95.6	80-119			
Styrene	19.0	1.0	"	20.00		94.8	79-117			
Bromoform	20.6	1.0	"	20.00		103	68.8-130			
Isopropylbenzene (Cumene)	19.7	1.0	"	20.00		98.6	70-130			
1,1,2,2-Tetrachloroethane	22.8	1.0	"	20.00		114	69.1-143			
1,2,3-Trichloropropane	23.1	1.0	"	20.00		116	70-130			
Bromobenzene	22.2	1.0	"	20.00		111	70-130			
Propylbenzene	20.3	1.0	"	20.00		102	70-130			
2-Chlorotoluene	20.6	1.0	"	20.00		103	70-130			
1,3,5-Trimethylbenzene	19.4	1.0	"	20.00		97.2	70-130			
4-Chlorotoluene	21.2	1.0	"	20.00		106	70-130			
tert-Butylbenzene	18.8	1.0	"	20.00		94.0	70-130			
1,2,4-Trimethylbenzene	20.4	1.0	"	20.00		102	70-130			
sec-Butylbenzene	19.0	1.0	"	20.00		95.0	70-130			
4-Isopropyltoluene	19.4	1.0	"	20.00		97.1	70-130			
1,3-Dichlorobenzene	19.5	1.0	"	20.00		97.7	74-125			
1,4-Dichlorobenzene	19.6	1.0	"	20.00		98.0	75-122			
trans-1,4-Dichloro-2-butene	24.7	1.0	"	20.00		124	70-130			
Butylbenzene	20.8	1.0	"	20.00		104	70-130			
1,2-Dichlorobenzene	19.9	1.0	"	20.00		99.7	74-124			
1,2-Dibromo-3-chloropropane	19.5	1.0	"	20.00		97.4	70-130			
1,2,4-Trichlorobenzene	20.2	1.0	"	20.00		101	45-134			
Hexachlorobutadiene	15.2	1.0	"	20.00		76.0	33-154			
Naphthalene	19.2	1.0	"	20.00		96.0	22-148			
1,2,3-Trichlorobenzene	18.8	1.0	"	20.00		94.0	70-130			
Surrogate: Dibromofluoromethane	*21.0*		*"*	*25.00*		*84.1*	*80-120*			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
LCS (0942052-BS1)				Prepared & Analyzed: 10/13/2009						
Surrogate: 1,2-Dichloroethane-d4	*20.8*		*ug/L*	*25.00*		*83.2*	*80-120*			
Surrogate: Toluene-d8	*23.3*		*"*	*25.00*		*93.2*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*22.3*		*"*	*25.00*		*89.3*	*60-149*			
Matrix Spike (0942052-MS1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
Dichlorodifluoromethane	33.2	1.0	ug/L	20.00	ND	166				
Chloromethane	21.1	1.0	"	20.00	ND	106				
Vinyl chloride	26.1	1.0	"	20.00	ND	131				
Bromomethane	23.2	1.0	"	20.00	ND	116				
Chloroethane	23.7	1.0	"	20.00	ND	118				
Trichlorofluoromethane	27.4	1.0	"	20.00	ND	137				
Acrolein	75.5	5.0	"	100.0	ND	75.5				
1,1-Dichloroethene	21.4	1.0	"	20.00	ND	107	18.7-178		22.3	
Acetone	91.7	5.0	"	100.0	ND	91.7				
Iodomethane	18.4	1.0	"	20.00	ND	91.8				
Carbon disulfide	19.4	1.0	"	20.00	ND	96.8				
Allyl Chloride (3-Chloropropylene)	17.3	1.0	"	20.00	ND	86.4				
Acetonitrile	11.8	5.0	"	20.00	ND	59.2				
Methylene Chloride	16.1	1.0	"	20.00	ND	80.4				
Methyl-tert-Butyl Ether	14.0	1.0	"	20.00	ND	69.8				
trans-1,2-Dichloroethene	20.1	1.0	"	20.00	ND	100				
Acrylonitrile	18.1	5.0	"	20.00	ND	90.4				
1,1-Dichloroethane	19.4	1.0	"	20.00	ND	97.2				
Chloroprene	21.1	1.0	"	20.00	ND	105				
Vinyl acetate	19.8	1.0	"	20.00	ND	98.9				
2,2-Dichloropropane	16.9	1.0	"	20.00	ND	84.5				
cis-1,2-Dichloroethene	19.1	1.0	"	20.00	ND	95.4				
2-Butanone (MEK)	95.7	5.0	"	100.0	ND	95.7				
Propionitrile (Ethyl Cyanide)	19.0	5.0	"	20.00	ND	95.1				
Methacrylonitrile	18.4	5.0	"	20.00	ND	91.8				
Chloroform	19.3	1.0	"	20.00	ND	96.3				
Bromochloromethane	19.9	1.0	"	20.00	ND	99.6				
1,1,1-Trichloroethane	19.2	1.0	"	20.00	ND	96.0				
1,1-Dichloropropene	20.0	1.0	"	20.00	ND	99.9				
Carbon Tetrachloride	20.7	1.0	"	20.00	ND	104				
Benzene	18.2	1.0	"	20.00	ND	91.2	65.6-159		15.1	
1,2-Dichloroethane	19.8	1.0	"	20.00	ND	99.0				
Trichloroethene	18.4	1.0	"	20.00	ND	91.8	71-158		15.2	
1,2-Dichloropropane	18.3	1.0	"	20.00	ND	91.5				
Bromodichloromethane	19.8	1.0	"	20.00	ND	99.0				
Methyl Methacrylate	18.4	1.0	"	20.00	ND	92.2				
Dibromomethane	16.1	1.0	"	20.00	ND	80.7				

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Matrix Spike (0942052-MS1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	20.00	ND					U
Methyl Isobutyl Ketone	96.7	5.0	"	100.0	ND	96.7				
cis-1,3-Dichloropropene	17.7	1.0	"	20.00	ND	88.6				
Toluene	17.8	1.0	"	20.00	ND	88.8	60.8-171		17.1	
trans-1,3-Dichloropropene	16.9	1.0	"	20.00	ND	84.7				
Ethyl Methacrylate	17.4	1.0	"	20.00	ND	86.8				
1,1,2-Trichloroethane	17.1	1.0	"	20.00	ND	85.3				
2-Hexanone (MBK)	95.4	5.0	"	100.0	ND	95.4				
1,2-Dibromoethane	17.2	1.0	"	20.00	ND	86.2				
Tetrachloroethene	16.4	1.0	"	20.00	ND	82.2				
1,3-Dichloropropane	19.8	1.0	"	20.00	ND	99.1				
Dibromochloromethane	19.9	1.0	"	20.00	ND	99.7				
Chlorobenzene	18.5	1.0	"	20.00	ND	92.7	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	19.1	1.0	"	20.00	ND	95.4				
Ethylbenzene	19.3	1.0	"	20.00	ND	96.3				
m,p-Xylenes	37.8	2.0	"	40.00	ND	94.5				
o-Xylene	18.4	1.0	"	20.00	ND	92.2				
Styrene	17.7	1.0	"	20.00	ND	88.7				
Bromoform	18.6	1.0	"	20.00	ND	92.8				
Isopropylbenzene (Cumene)	20.2	1.0	"	20.00	ND	101				
1,1,2,2-Tetrachloroethane	20.3	1.0	"	20.00	ND	102				
1,2,3-Trichloropropane	20.4	1.0	"	20.00	ND	102				
Bromobenzene	20.2	1.0	"	20.00	ND	101				
Propylbenzene	20.4	1.0	"	20.00	ND	102				
2-Chlorotoluene	19.7	1.0	"	20.00	ND	98.6				
1,3,5-Trimethylbenzene	18.5	1.0	"	20.00	ND	92.6				
4-Chlorotoluene	19.5	1.0	"	20.00	ND	97.4				
tert-Butylbenzene	18.9	1.0	"	20.00	ND	94.3				
1,2,4-Trimethylbenzene	17.8	1.0	"	20.00	ND	88.8				
sec-Butylbenzene	19.5	1.0	"	20.00	ND	97.7				
4-Isopropyltoluene	19.0	1.0	"	20.00	ND	94.8				
1,3-Dichlorobenzene	17.6	1.0	"	20.00	ND	88.1				
1,4-Dichlorobenzene	17.7	1.0	"	20.00	ND	88.4				
trans-1,4-Dichloro-2-butene	22.4	1.0	"	20.00	ND	112				
Butylbenzene	18.8	1.0	"	20.00	ND	93.8				
1,2-Dichlorobenzene	17.9	1.0	"	20.00	ND	89.4				
1,2-Dibromo-3-chloropropane	16.3	1.0	"	20.00	ND	81.6				
1,2,4-Trichlorobenzene	13.9	1.0	"	20.00	ND	69.3				
Hexachlorobutadiene	17.3	1.0	"	20.00	ND	86.7				
Naphthalene	11.9	1.0	"	20.00	ND	59.4				
1,2,3-Trichlorobenzene	12.8	1.0	"	20.00	ND	64.1				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Matrix Spike (0942052-MS1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
Surrogate: Dibromofluoromethane	*21.4*		*ug/L*	*25.00*		*85.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*85.0*	*80-120*			
Surrogate: Toluene-d8	*23.5*		*"*	*25.00*		*94.0*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*22.6*		*"*	*25.00*		*90.2*	*60-149*			
Matrix Spike Dup (0942052-MSD1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
Dichlorodifluoromethane	30.8	1.0	ug/L	20.00	ND	154		7.38		
Chloromethane	19.7	1.0	"	20.00	ND	98.4		7.06		
Vinyl chloride	24.3	1.0	"	20.00	ND	122		7.13		
Bromomethane	22.1	1.0	"	20.00	ND	111		4.76		
Chloroethane	20.2	1.0	"	20.00	ND	101		15.7		
Trichlorofluoromethane	26.0	1.0	"	20.00	ND	130		5.28		
Acrolein	78.9	5.0	"	100.0	ND	78.9		4.35		
1,1-Dichloroethene	19.8	1.0	"	20.00	ND	98.8	18.7-178	8.16	22.3	
Acetone	98.0	5.0	"	100.0	ND	98.0		6.69		
Iodomethane	21.5	1.0	"	20.00	ND	107		15.6		
Carbon disulfide	18.3	1.0	"	20.00	ND	91.6		5.57		
Allyl Chloride (3-Chloropropylene)	16.7	1.0	"	20.00	ND	83.6		3.35		
Acetonitrile	13.6	5.0	"	20.00	ND	67.8		13.5		
Methylene Chloride	15.5	1.0	"	20.00	ND	77.4		3.93		
Methyl-tert-Butyl Ether	14.1	1.0	"	20.00	ND	70.6		1.14		
trans-1,2-Dichloroethene	18.5	1.0	"	20.00	ND	92.6		8.24		
Acrylonitrile	18.7	5.0	"	20.00	ND	93.4		3.21		
1,1-Dichloroethane	18.0	1.0	"	20.00	ND	90.2		7.58		
Chloroprene	19.6	1.0	"	20.00	ND	97.8		7.43		
Vinyl acetate	19.6	1.0	"	20.00	ND	98.0		0.863		
2,2-Dichloropropane	15.6	1.0	"	20.00	ND	78.2		7.68		
cis-1,2-Dichloroethene	18.1	1.0	"	20.00	ND	90.4		5.43		
2-Butanone (MEK)	99.3	5.0	"	100.0	ND	99.3		3.62		
Propionitrile (Ethyl Cyanide)	20.1	5.0	"	20.00	ND	101		5.72		
Methacrylonitrile	19.3	5.0	"	20.00	ND	96.3		4.78		
Chloroform	18.6	1.0	"	20.00	ND	92.8		3.65		
Bromochloromethane	19.6	1.0	"	20.00	ND	98.2		1.31		
1,1,1-Trichloroethane	17.8	1.0	"	20.00	ND	88.8		7.74		
1,1-Dichloropropene	18.4	1.0	"	20.00	ND	92.0		8.23		
Carbon Tetrachloride	19.3	1.0	"	20.00	ND	96.7		6.79		
Benzene	17.4	1.0	"	20.00	ND	86.8	65.6-159	5.00	15.1	
1,2-Dichloroethane	19.1	1.0	"	20.00	ND	95.6		3.55		
Trichloroethene	17.2	1.0	"	20.00	ND	86.2	71-158	6.35	15.2	
1,2-Dichloropropane	17.8	1.0	"	20.00	ND	89.2		2.55		
Bromodichloromethane	19.2	1.0	"	20.00	ND	96.2		2.97		
Methyl Methacrylate	18.9	1.0	"	20.00	ND	94.4		2.31		

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Matrix Spike Dup (0942052-MSD1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
Dibromomethane	16.1	1.0	ug/L	20.00	ND	80.4		0.310		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	98.8	5.0	"	100.0	ND	98.8		2.20		
cis-1,3-Dichloropropene	17.0	1.0	"	20.00	ND	85.0		4.09		
Toluene	16.8	1.0	"	20.00	ND	84.0	60.8-171	5.61	17.1	
trans-1,3-Dichloropropene	16.5	1.0	"	20.00	ND	82.4		2.69		
Ethyl Methacrylate	17.2	1.0	"	20.00	ND	86.0		0.868		
1,1,2-Trichloroethane	17.0	1.0	"	20.00	ND	85.1		0.235		
2-Hexanone (MBK)	98.5	5.0	"	100.0	ND	98.5		3.29		
1,2-Dibromoethane	17.2	1.0	"	20.00	ND	86.0		0.348		
Tetrachloroethene	15.4	1.0	"	20.00	ND	77.2		6.27		
1,3-Dichloropropane	19.5	1.0	"	20.00	ND	97.3		1.83		
Dibromochloromethane	19.5	1.0	"	20.00	ND	97.4		2.39		
Chlorobenzene	17.7	1.0	"	20.00	ND	88.6	76.5-147	4.58	13.6	
1,1,1,2-Tetrachloroethane	18.5	1.0	"	20.00	ND	92.3		3.25		
Ethylbenzene	18.3	1.0	"	20.00	ND	91.7		4.89		
m,p-Xylenes	35.8	2.0	"	40.00	ND	89.5		5.41		
o-Xylene	17.5	1.0	"	20.00	ND	87.6		5.17		
Styrene	17.0	1.0	"	20.00	ND	85.0		4.20		
Bromoform	18.0	1.0	"	20.00	ND	90.2		2.95		
Isopropylbenzene (Cumene)	18.7	1.0	"	20.00	ND	93.4		7.67		
1,1,2,2-Tetrachloroethane	20.7	1.0	"	20.00	ND	104		1.85		
1,2,3-Trichloropropane	20.3	1.0	"	20.00	ND	102		0.491		
Bromobenzene	19.6	1.0	"	20.00	ND	97.8		3.52		
Propylbenzene	19.3	1.0	"	20.00	ND	96.3		5.50		
2-Chlorotoluene	18.9	1.0	"	20.00	ND	94.7		4.09		
1,3,5-Trimethylbenzene	17.0	1.0	"	20.00	ND	84.9		8.68		
4-Chlorotoluene	18.8	1.0	"	20.00	ND	93.8		3.87		
tert-Butylbenzene	17.7	1.0	"	20.00	ND	88.5		6.35		
1,2,4-Trimethylbenzene	16.0	1.0	"	20.00	ND	79.8		10.7		
sec-Butylbenzene	18.2	1.0	"	20.00	ND	90.9		7.21		
4-Isopropyltoluene	16.9	1.0	"	20.00	ND	84.6		11.3		
1,3-Dichlorobenzene	17.1	1.0	"	20.00	ND	85.7		2.76		
1,4-Dichlorobenzene	16.9	1.0	"	20.00	ND	84.6		4.34		
trans-1,4-Dichloro-2-butene	22.0	1.0	"	20.00	ND	110		1.62		
Butylbenzene	16.2	1.0	"	20.00	ND	81.1		14.5		
1,2-Dichlorobenzene	17.5	1.0	"	20.00	ND	87.5		2.20		
1,2-Dibromo-3-chloropropane	17.6	1.0	"	20.00	ND	88.2		7.66		
1,2,4-Trichlorobenzene	14.1	1.0	"	20.00	ND	70.6		1.79		
Hexachlorobutadiene	16.6	1.0	"	20.00	ND	82.8		4.54		
Naphthalene	14.2	1.0	"	20.00	ND	71.0		17.7		

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942052 - EPA 5030B										
Matrix Spike Dup (0942052-MSD1)	**Source: 09J0523-03**			Prepared & Analyzed: 10/13/2009						
1,2,3-Trichlorobenzene	13.3	1.0	ug/L	20.00	ND	66.5		3.68		
Surrogate: Dibromofluoromethane	*21.1*		*"*	*25.00*		*84.3*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*"*	*25.00*		*84.7*	*80-120*			
Surrogate: Toluene-d8	*23.8*		*"*	*25.00*		*95.0*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*22.4*		*"*	*25.00*		*89.4*	*60-149*			
Batch 0942098 - EPA 5030B										
Blank (0942098-BLK1)				Prepared & Analyzed: 10/14/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Blank (0942098-BLK1)				Prepared & Analyzed: 10/14/2009						
1,2-Dichloropropane	ND	1.0	ug/L							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Blank (0942098-BLK1)				Prepared & Analyzed: 10/14/2009						
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.4*		"	*25.00*		*85.5*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.3*		"	*25.00*		*89.2*	*80-120*			
Surrogate: Toluene-d8	*23.9*		"	*25.00*		*95.8*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.0*		"	*25.00*		*92.1*	*60-149*			
LCS (0942098-BS1)				Prepared & Analyzed: 10/14/2009						
Dichlorodifluoromethane	28.4	1.0	ug/L	20.00		142	27-127			L2
Chloromethane	20.3	1.0	"	20.00		101	62.5-141			
Vinyl chloride	23.8	1.0	"	20.00		119	65.3-143			
Bromomethane	16.3	1.0	"	20.00		81.5	56-180			
Chloroethane	21.0	1.0	"	20.00		105	62.3-161			
Trichlorofluoromethane	24.3	1.0	"	20.00		122	35-157			
Acrolein	80.4	5.0	"	100.0		80.4	26.6-169			
1,1-Dichloroethene	21.4	1.0	"	20.00		107	64.6-138			
Acetone	112	5.0	"	100.0		112	35-159			
Iodomethane	17.6	1.0	"	20.00		87.8	70-130			
Carbon disulfide	19.8	1.0	"	20.00		99.2	48-142			
Allyl Chloride (3-Chloropropylene)	18.5	1.0	"	20.00		92.4	70-130			
Acetonitrile	15.0	5.0	"	20.00		75.1	70-130			
Methylene Chloride	18.0	1.0	"	20.00		90.1	64.7-139			
Methyl-tert-Butyl Ether	16.6	1.0	"	20.00		83.0	34-133			
trans-1,2-Dichloroethene	21.5	1.0	"	20.00		108	75.1-127			
Acrylonitrile	22.0	5.0	"	20.00		110	67.2-148			
1,1-Dichloroethane	21.9	1.0	"	20.00		110	72.2-135			
Chloroprene	22.1	1.0	"	20.00		111	70-130			
Vinyl acetate	23.4	1.0	"	20.00		117	70-154			
2,2-Dichloropropane	17.5	1.0	"	20.00		87.6	37-129			
cis-1,2-Dichloroethene	21.2	1.0	"	20.00		106	72-126			
2-Butanone (MEK)	114	5.0	"	100.0		114	45-128			
Propionitrile (Ethyl Cyanide)	22.1	5.0	"	20.00		110	70-130			
Methacrylonitrile	22.2	5.0	"	20.00		111	70-130			
Chloroform	21.5	1.0	"	20.00		107	76.1-135			
Bromochloromethane	23.6	1.0	"	20.00		118	73-126			
1,1,1-Trichloroethane	19.7	1.0	"	20.00		98.7	67.1-139			
1,1-Dichloropropene	20.0	1.0	"	20.00		100	70-130			
Carbon Tetrachloride	20.7	1.0	"	20.00		103	63.3-142			
Benzene	20.2	1.0	"	20.00		101	72-132			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
LCS (0942098-BS1)				Prepared & Analyzed: 10/14/2009						
1,2-Dichloroethane	23.0	1.0	ug/L	20.00		115	72.9-139			
Trichloroethene	19.3	1.0	"	20.00		96.6	73.7-130			
1,2-Dichloropropane	21.0	1.0	"	20.00		105	71.3-137			
Bromodichloromethane	22.5	1.0	"	20.00		113	74.5-136			
Methyl Methacrylate	22.4	1.0	"	20.00		112	70-130			
Dibromomethane	17.9	1.0	"	20.00		89.3	66-125			
2-Chloroethyl Vinyl Ether	17.5	1.0	"	20.00		87.4	42.5-161			
Methyl Isobutyl Ketone	117	5.0	"	100.0		117	41-143			
cis-1,3-Dichloropropene	20.0	1.0	"	20.00		99.8	74.6-124			
Toluene	19.0	1.0	"	20.00		94.8	72.4-132			
trans-1,3-Dichloropropene	19.3	1.0	"	20.00		96.4	72.1-124			
Ethyl Methacrylate	19.5	1.0	"	20.00		97.6	70-130			
1,1,2-Trichloroethane	19.4	1.0	"	20.00		97.2	75.6-140			
2-Hexanone (MBK)	113	5.0	"	100.0		113	43-147			
1,2-Dibromoethane	19.5	1.0	"	20.00		97.4	70-130			
Tetrachloroethene	17.5	1.0	"	20.00		87.4	69.9-125			
1,3-Dichloropropane	22.6	1.0	"	20.00		113	70-130			
Dibromochloromethane	22.1	1.0	"	20.00		111	69.9-134			
Chlorobenzene	20.2	1.0	"	20.00		101	67.3-133			
1,1,1,2-Tetrachloroethane	21.0	1.0	"	20.00		105	76-123			
Ethylbenzene	20.7	1.0	"	20.00		104	70.6-131			
m,p-Xylenes	41.5	2.0	"	40.00		104	71-123			
o-Xylene	20.1	1.0	"	20.00		100	80-119			
Styrene	19.3	1.0	"	20.00		96.3	79-117			
Bromoform	20.0	1.0	"	20.00		99.9	68.8-130			
Isopropylbenzene (Cumene)	20.9	1.0	"	20.00		105	70-130			
1,1,2,2-Tetrachloroethane	23.2	1.0	"	20.00		116	69.1-143			
1,2,3-Trichloropropane	23.2	1.0	"	20.00		116	70-130			
Bromobenzene	23.2	1.0	"	20.00		116	70-130			
Propylbenzene	21.6	1.0	"	20.00		108	70-130			
2-Chlorotoluene	22.1	1.0	"	20.00		111	70-130			
1,3,5-Trimethylbenzene	20.7	1.0	"	20.00		104	70-130			
4-Chlorotoluene	22.1	1.0	"	20.00		111	70-130			
tert-Butylbenzene	19.5	1.0	"	20.00		97.3	70-130			
1,2,4-Trimethylbenzene	21.6	1.0	"	20.00		108	70-130			
sec-Butylbenzene	19.9	1.0	"	20.00		99.6	70-130			
4-Isopropyltoluene	20.1	1.0	"	20.00		100	70-130			
1,3-Dichlorobenzene	19.4	1.0	"	20.00		97.0	74-125			
1,4-Dichlorobenzene	19.5	1.0	"	20.00		97.6	75-122			
trans-1,4-Dichloro-2-butene	26.4	1.0	"	20.00		132	70-130			L2
Butylbenzene	22.5	1.0	"	20.00		112	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
LCS (0942098-BS1)				Prepared & Analyzed: 10/14/2009						
1,2-Dichlorobenzene	19.8	1.0	ug/L	20.00		99.2	74-124			
1,2-Dibromo-3-chloropropane	18.4	1.0	"	20.00		92.1	70-130			
1,2,4-Trichlorobenzene	20.3	1.0	"	20.00		102	45-134			
Hexachlorobutadiene	14.2	1.0	"	20.00		71.1	33-154			
Naphthalene	20.4	1.0	"	20.00		102	22-148			
1,2,3-Trichlorobenzene	19.2	1.0	"	20.00		96.2	70-130			
Surrogate: Dibromofluoromethane	*21.1*		*"*	*25.00*		*84.4*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.8*		*"*	*25.00*		*87.4*	*80-120*			
Surrogate: Toluene-d8	*23.8*		*"*	*25.00*		*95.3*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.4*		*"*	*25.00*		*93.7*	*60-149*			
Matrix Spike (0942098-MS1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
Dichlorodifluoromethane	34.1	1.0	ug/L	20.00	ND	171				
Chloromethane	21.9	1.0	"	20.00	ND	109				
Vinyl chloride	27.7	1.0	"	20.00	ND	138				
Bromomethane	21.6	1.0	"	20.00	ND	108				
Chloroethane	26.4	1.0	"	20.00	ND	132				
Trichlorofluoromethane	28.5	1.0	"	20.00	ND	143				
Acrolein	71.0	5.0	"	100.0	ND	71.0				
1,1-Dichloroethene	25.0	1.0	"	20.00	ND	125	18.7-178		22.3	
Acetone	107	5.0	"	100.0	ND	107				
Iodomethane	18.2	1.0	"	20.00	ND	91.0				
Carbon disulfide	22.2	1.0	"	20.00	ND	111				
Allyl Chloride (3-Chloropropylene)	19.8	1.0	"	20.00	ND	99.2				
Acetonitrile	14.5	5.0	"	20.00	ND	72.4				
Methylene Chloride	19.3	1.0	"	20.00	ND	96.5				
Methyl-tert-Butyl Ether	15.8	1.0	"	20.00	ND	79.2				
trans-1,2-Dichloroethene	23.3	1.0	"	20.00	ND	116				
Acrylonitrile	20.8	5.0	"	20.00	ND	104				
1,1-Dichloroethane	22.9	1.0	"	20.00	ND	115				
Chloroprene	24.9	1.0	"	20.00	ND	124				
Vinyl acetate	22.7	1.0	"	20.00	ND	114				
2,2-Dichloropropane	18.5	1.0	"	20.00	ND	92.6				
cis-1,2-Dichloroethene	22.3	1.0	"	20.00	ND	111				
2-Butanone (MEK)	109	5.0	"	100.0	ND	109				
Propionitrile (Ethyl Cyanide)	21.7	5.0	"	20.00	ND	109				
Methacrylonitrile	22.0	5.0	"	20.00	ND	110				
Chloroform	23.3	1.0	"	20.00	0.980	112				
Bromochloromethane	23.9	1.0	"	20.00	ND	119				
1,1,1-Trichloroethane	22.0	1.0	"	20.00	ND	110				
1,1-Dichloropropene	23.1	1.0	"	20.00	ND	115				
Carbon Tetrachloride	24.2	1.0	"	20.00	ND	121				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Matrix Spike (0942098-MS1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
Benzene	21.2	1.0	ug/L	20.00	ND	106	65.6-159		15.1	
1,2-Dichloroethane	23.2	1.0	"	20.00	ND	116				
Trichloroethene	20.7	1.0	"	20.00	ND	104	71-158		15.2	
1,2-Dichloropropane	21.2	1.0	"	20.00	ND	106				
Bromodichloromethane	23.0	1.0	"	20.00	ND	115				
Methyl Methacrylate	21.8	1.0	"	20.00	ND	109				
Dibromomethane	17.7	1.0	"	20.00	ND	88.6				
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	113	5.0	"	100.0	ND	113				
cis-1,3-Dichloropropene	20.4	1.0	"	20.00	ND	102				
Toluene	20.4	1.0	"	20.00	ND	102	60.8-171		17.1	
trans-1,3-Dichloropropene	19.1	1.0	"	20.00	ND	95.6				
Ethyl Methacrylate	19.6	1.0	"	20.00	ND	98.2				
1,1,2-Trichloroethane	19.5	1.0	"	20.00	ND	97.3				
2-Hexanone (MBK)	110	5.0	"	100.0	ND	110				
1,2-Dibromoethane	19.4	1.0	"	20.00	ND	97.2				
Tetrachloroethene	18.3	1.0	"	20.00	ND	91.4				
1,3-Dichloropropane	23.2	1.0	"	20.00	ND	116				
Dibromochloromethane	22.4	1.0	"	20.00	ND	112				
Chlorobenzene	21.1	1.0	"	20.00	ND	106	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	21.9	1.0	"	20.00	ND	110				
Ethylbenzene	22.6	1.0	"	20.00	ND	113				
m,p-Xylenes	44.5	2.0	"	40.00	ND	111				
o-Xylene	21.3	1.0	"	20.00	ND	106				
Styrene	20.3	1.0	"	20.00	ND	101				
Bromoform	20.4	1.0	"	20.00	ND	102				
Isopropylbenzene (Cumene)	23.4	1.0	"	20.00	ND	117				
1,1,2,2-Tetrachloroethane	23.7	1.0	"	20.00	ND	119				
1,2,3-Trichloropropane	23.4	1.0	"	20.00	ND	117				
Bromobenzene	24.2	1.0	"	20.00	ND	121				
Propylbenzene	24.4	1.0	"	20.00	ND	122				
2-Chlorotoluene	23.7	1.0	"	20.00	ND	118				
1,3,5-Trimethylbenzene	22.6	1.0	"	20.00	ND	113				
4-Chlorotoluene	23.1	1.0	"	20.00	ND	116				
tert-Butylbenzene	22.0	1.0	"	20.00	ND	110				
1,2,4-Trimethylbenzene	22.8	1.0	"	20.00	ND	114				
sec-Butylbenzene	22.5	1.0	"	20.00	ND	112				
4-Isopropyltoluene	21.7	1.0	"	20.00	ND	109				
1,3-Dichlorobenzene	20.1	1.0	"	20.00	ND	100				
1,4-Dichlorobenzene	19.8	1.0	"	20.00	ND	98.8				
trans-1,4-Dichloro-2-butene	26.3	1.0	"	20.00	ND	132				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Matrix Spike (0942098-MS1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
Butylbenzene	25.2	1.0	ug/L	20.00	ND	126				
1,2-Dichlorobenzene	20.2	1.0	"	20.00	ND	101				
1,2-Dibromo-3-chloropropane	17.8	1.0	"	20.00	ND	89.2				
1,2,4-Trichlorobenzene	20.6	1.0	"	20.00	ND	103				
Hexachlorobutadiene	16.0	1.0	"	20.00	ND	80.2				
Naphthalene	20.9	1.0	"	20.00	ND	104				
1,2,3-Trichlorobenzene	19.6	1.0	"	20.00	ND	98.2				
Surrogate: Dibromofluoromethane	*21.4*		*"*	*25.00*		*85.5*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.1*		*"*	*25.00*		*88.2*	*80-120*			
Surrogate: Toluene-d8	*24.1*		*"*	*25.00*		*96.4*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.6*		*"*	*25.00*		*94.5*	*60-149*			
Matrix Spike Dup (0942098-MSD1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
Dichlorodifluoromethane	32.7	1.0	ug/L	20.00	ND	164		4.28		
Chloromethane	20.4	1.0	"	20.00	ND	102		7.00		
Vinyl chloride	26.6	1.0	"	20.00	ND	133		4.09		
Bromomethane	23.4	1.0	"	20.00	ND	117		7.73		
Chloroethane	24.5	1.0	"	20.00	ND	122		7.44		
Trichlorofluoromethane	27.3	1.0	"	20.00	ND	136		4.52		
Acrolein	73.6	5.0	"	100.0	ND	73.6		3.57		
1,1-Dichloroethene	23.5	1.0	"	20.00	ND	117	18.7-178	6.40	22.3	
Acetone	109	5.0	"	100.0	ND	109		1.04		
Iodomethane	17.5	1.0	"	20.00	ND	87.6		3.75		
Carbon disulfide	20.9	1.0	"	20.00	ND	104		6.18		
Allyl Chloride (3-Chloropropylene)	18.8	1.0	"	20.00	ND	94.2		5.17		
Acetonitrile	13.6	5.0	"	20.00	ND	68.0		6.26		
Methylene Chloride	16.9	1.0	"	20.00	ND	84.3		13.5		
Methyl-tert-Butyl Ether	15.6	1.0	"	20.00	ND	78.0		1.46		
trans-1,2-Dichloroethene	22.4	1.0	"	20.00	ND	112		4.12		
Acrylonitrile	21.0	5.0	"	20.00	ND	105		0.812		
1,1-Dichloroethane	22.2	1.0	"	20.00	ND	111		3.24		
Chloroprene	23.8	1.0	"	20.00	ND	119		4.19		
Vinyl acetate	22.9	1.0	"	20.00	ND	114		0.877		
2,2-Dichloropropane	17.6	1.0	"	20.00	ND	88.0		5.15		
cis-1,2-Dichloroethene	21.9	1.0	"	20.00	ND	109		1.90		
2-Butanone (MEK)	111	5.0	"	100.0	ND	111		2.31		
Propionitrile (Ethyl Cyanide)	22.1	5.0	"	20.00	ND	111		1.73		
Methacrylonitrile	21.7	5.0	"	20.00	ND	108		1.51		
Chloroform	22.4	1.0	"	20.00	0.980	107		3.80		
Bromochloromethane	23.2	1.0	"	20.00	ND	116		3.15		
1,1,1-Trichloroethane	21.2	1.0	"	20.00	ND	106		4.02		
1,1-Dichloropropene	22.1	1.0	"	20.00	ND	110		4.52		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Matrix Spike Dup (0942098-MSD1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
Carbon Tetrachloride	23.4	1.0	ug/L	20.00	ND	117		3.35		
Benzene	20.5	1.0	"	20.00	ND	102	65.6-159	3.50	15.1	
1,2-Dichloroethane	22.9	1.0	"	20.00	ND	114		1.22		
Trichloroethene	20.0	1.0	"	20.00	ND	100	71-158	3.34	15.2	
1,2-Dichloropropane	20.9	1.0	"	20.00	ND	104		1.62		
Bromodichloromethane	22.3	1.0	"	20.00	ND	112		2.87		
Methyl Methacrylate	21.6	1.0	"	20.00	ND	108		0.874		
Dibromomethane	17.5	1.0	"	20.00	ND	87.6		1.25		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	114	5.0	"	100.0	ND	114		1.01		
cis-1,3-Dichloropropene	19.6	1.0	"	20.00	ND	98.2		3.65		
Toluene	19.7	1.0	"	20.00	ND	98.6	60.8-171	3.14	17.1	
trans-1,3-Dichloropropene	18.8	1.0	"	20.00	ND	93.8		1.90		
Ethyl Methacrylate	19.4	1.0	"	20.00	ND	97.2		0.972		
1,1,2-Trichloroethane	19.2	1.0	"	20.00	ND	96.2		1.19		
2-Hexanone (MBK)	112	5.0	"	100.0	ND	112		1.87		
1,2-Dibromoethane	19.3	1.0	"	20.00	ND	96.4		0.826		
Tetrachloroethene	17.5	1.0	"	20.00	ND	87.4		4.42		
1,3-Dichloropropane	22.6	1.0	"	20.00	ND	113		2.31		
Dibromochloromethane	22.2	1.0	"	20.00	ND	111		0.940		
Chlorobenzene	20.6	1.0	"	20.00	ND	103	76.5-147	2.49	13.6	
1,1,1,2-Tetrachloroethane	21.0	1.0	"	20.00	ND	105		4.19		
Ethylbenzene	21.7	1.0	"	20.00	ND	109		3.88		
m,p-Xylenes	42.9	2.0	"	40.00	ND	107		3.68		
o-Xylene	20.8	1.0	"	20.00	ND	104		2.57		
Styrene	19.8	1.0	"	20.00	ND	98.8		2.70		
Bromoform	20.5	1.0	"	20.00	ND	102		0.637		
Isopropylbenzene (Cumene)	22.7	1.0	"	20.00	ND	113		3.13		
1,1,2,2-Tetrachloroethane	23.4	1.0	"	20.00	ND	117		1.49		
1,2,3-Trichloropropane	22.8	1.0	"	20.00	ND	114		2.82		
Bromobenzene	23.3	1.0	"	20.00	ND	117		3.83		
Propylbenzene	23.1	1.0	"	20.00	ND	116		5.39		
2-Chlorotoluene	22.6	1.0	"	20.00	ND	113		4.49		
1,3,5-Trimethylbenzene	20.7	1.0	"	20.00	ND	104		8.64		
4-Chlorotoluene	22.2	1.0	"	20.00	ND	111		3.93		
tert-Butylbenzene	21.0	1.0	"	20.00	ND	105		5.07		
1,2,4-Trimethylbenzene	20.4	1.0	"	20.00	ND	102		11.3		
sec-Butylbenzene	21.7	1.0	"	20.00	ND	108		3.49		
4-Isopropyltoluene	20.8	1.0	"	20.00	ND	104		4.43		
1,3-Dichlorobenzene	19.7	1.0	"	20.00	ND	98.3		2.01		
1,4-Dichlorobenzene	19.4	1.0	"	20.00	ND	96.9		1.94		

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942098 - EPA 5030B										
Matrix Spike Dup (0942098-MSD1)	**Source: 09J0585-01**			Prepared & Analyzed: 10/14/2009						
trans-1,4-Dichloro-2-butene	25.5	1.0	ug/L	20.00	ND	128		3.12		
Butylbenzene	21.7	1.0	"	20.00	ND	108		14.9		
1,2-Dichlorobenzene	19.8	1.0	"	20.00	ND	99.0		1.85		
1,2-Dibromo-3-chloropropane	19.2	1.0	"	20.00	ND	95.8		7.13		
1,2,4-Trichlorobenzene	16.7	1.0	"	20.00	ND	83.7		20.4		
Hexachlorobutadiene	18.4	1.0	"	20.00	ND	91.9		13.6		
Naphthalene	16.0	1.0	"	20.00	ND	80.1		26.2		
1,2,3-Trichlorobenzene	16.3	1.0	"	20.00	ND	81.4		18.6		
Surrogate: Dibromofluoromethane	*21.4*		*"*	*25.00*		*85.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.0*		*"*	*25.00*		*87.9*	*80-120*			
Surrogate: Toluene-d8	*24.1*		*"*	*25.00*		*96.4*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.4*		*"*	*25.00*		*93.6*	*60-149*			
Batch 0942156 - EPA 5030B										
Blank (0942156-BLK1)				Prepared & Analyzed: 10/16/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Blank (0942156-BLK1)				Prepared & Analyzed: 10/16/2009						
Bromochloromethane	ND	1.0	ug/L							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Blank (0942156-BLK1)				Prepared & Analyzed: 10/16/2009						
4-Isopropyltoluene	ND	1.0	ug/L							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*21.0*		"	*25.00*		*83.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.5*		"	*25.00*		*82.1*	*80-120*			
Surrogate: Toluene-d8	*23.3*		"	*25.00*		*93.0*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.5*		"	*25.00*		*94.2*	*60-149*			
LCS (0942156-BS1)				Prepared & Analyzed: 10/16/2009						
Dichlorodifluoromethane	29.5	1.0	ug/L	20.00		147	27-127			L2
Chloromethane	19.7	1.0	"	20.00		98.5	62.5-141			
Vinyl chloride	23.8	1.0	"	20.00		119	65.3-143			
Bromomethane	21.7	1.0	"	20.00		108	56-180			
Chloroethane	20.7	1.0	"	20.00		104	62.3-161			
Trichlorofluoromethane	24.3	1.0	"	20.00		121	35-157			
Acrolein	69.0	5.0	"	100.0		69.0	26.6-169			
1,1-Dichloroethene	21.4	1.0	"	20.00		107	64.6-138			
Acetone	112	5.0	"	100.0		112	35-159			
Iodomethane	19.8	1.0	"	20.00		99.2	70-130			
Carbon disulfide	19.8	1.0	"	20.00		99.1	48-142			
Allyl Chloride (3-Chloropropylene)	19.5	1.0	"	20.00		97.4	70-130			
Acetonitrile	15.5	5.0	"	20.00		77.5	70-130			
Methylene Chloride	18.6	1.0	"	20.00		92.8	64.7-139			
Methyl-tert-Butyl Ether	17.5	1.0	"	20.00		87.4	34-133			
trans-1,2-Dichloroethene	21.6	1.0	"	20.00		108	75.1-127			
Acrylonitrile	21.1	5.0	"	20.00		106	67.2-148			
1,1-Dichloroethane	22.1	1.0	"	20.00		111	72.2-135			
Chloroprene	22.4	1.0	"	20.00		112	70-130			
Vinyl acetate	22.6	1.0	"	20.00		113	70-154			
2,2-Dichloropropane	18.2	1.0	"	20.00		91.2	37-129			
cis-1,2-Dichloroethene	21.7	1.0	"	20.00		109	72-126			
2-Butanone (MEK)	109	5.0	"	100.0		109	45-128			
Propionitrile (Ethyl Cyanide)	22.1	5.0	"	20.00		111	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
LCS (0942156-BS1)				Prepared & Analyzed: 10/16/2009						
Methacrylonitrile	21.4	5.0	ug/L	20.00		107	70-130			
Chloroform	22.1	1.0	"	20.00		111	76.1-135			
Bromochloromethane	23.2	1.0	"	20.00		116	73-126			
1,1,1-Trichloroethane	20.5	1.0	"	20.00		102	67.1-139			
1,1-Dichloropropene	20.8	1.0	"	20.00		104	70-130			
Carbon Tetrachloride	21.0	1.0	"	20.00		105	63.3-142			
Benzene	21.0	1.0	"	20.00		105	72-132			
1,2-Dichloroethane	23.3	1.0	"	20.00		117	72.9-139			
Trichloroethene	20.4	1.0	"	20.00		102	73.7-130			
1,2-Dichloropropane	21.5	1.0	"	20.00		108	71.3-137			
Bromodichloromethane	22.9	1.0	"	20.00		115	74.5-136			
Methyl Methacrylate	21.6	1.0	"	20.00		108	70-130			
Dibromomethane	19.4	1.0	"	20.00		97.0	66-125			
2-Chloroethyl Vinyl Ether	19.0	1.0	"	20.00		95.1	42.5-161			
Methyl Isobutyl Ketone	110	5.0	"	100.0		110	41-143			
cis-1,3-Dichloropropene	20.7	1.0	"	20.00		104	74.6-124			
Toluene	20.2	1.0	"	20.00		101	72.4-132			
trans-1,3-Dichloropropene	19.9	1.0	"	20.00		99.7	72.1-124			
Ethyl Methacrylate	20.2	1.0	"	20.00		101	70-130			
1,1,2-Trichloroethane	20.3	1.0	"	20.00		102	75.6-140			
2-Hexanone (MBK)	107	5.0	"	100.0		107	43-147			
1,2-Dibromoethane	20.0	1.0	"	20.00		99.9	70-130			
Tetrachloroethene	18.7	1.0	"	20.00		93.6	69.9-125			
1,3-Dichloropropane	23.3	1.0	"	20.00		117	70-130			
Dibromochloromethane	22.8	1.0	"	20.00		114	69.9-134			
Chlorobenzene	21.1	1.0	"	20.00		106	67.3-133			
1,1,1,2-Tetrachloroethane	21.9	1.0	"	20.00		109	76-123			
Ethylbenzene	21.3	1.0	"	20.00		107	70.6-131			
m,p-Xylenes	42.5	2.0	"	40.00		106	71-123			
o-Xylene	21.0	1.0	"	20.00		105	80-119			
Styrene	20.8	1.0	"	20.00		104	79-117			
Bromoform	21.2	1.0	"	20.00		106	68.8-130			
Isopropylbenzene (Cumene)	21.5	1.0	"	20.00		107	70-130			
1,1,2,2-Tetrachloroethane	22.6	1.0	"	20.00		113	69.1-143			
1,2,3-Trichloropropane	23.2	1.0	"	20.00		116	70-130			
Bromobenzene	23.5	1.0	"	20.00		118	70-130			
Propylbenzene	22.1	1.0	"	20.00		111	70-130			
2-Chlorotoluene	22.5	1.0	"	20.00		112	70-130			
1,3,5-Trimethylbenzene	21.3	1.0	"	20.00		107	70-130			
4-Chlorotoluene	22.5	1.0	"	20.00		113	70-130			
tert-Butylbenzene	20.3	1.0	"	20.00		102	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
LCS (0942156-BS1)				Prepared & Analyzed: 10/16/2009						
1,2,4-Trimethylbenzene	21.3	1.0	ug/L	20.00		106	70-130			
sec-Butylbenzene	20.5	1.0	"	20.00		103	70-130			
4-Isopropyltoluene	20.5	1.0	"	20.00		102	70-130			
1,3-Dichlorobenzene	20.6	1.0	"	20.00		103	74-125			
1,4-Dichlorobenzene	20.8	1.0	"	20.00		104	75-122			
trans-1,4-Dichloro-2-butene	24.2	1.0	"	20.00		121	70-130			
Butylbenzene	21.4	1.0	"	20.00		107	70-130			
1,2-Dichlorobenzene	21.1	1.0	"	20.00		105	74-124			
1,2-Dibromo-3-chloropropane	19.1	1.0	"	20.00		95.5	70-130			
1,2,4-Trichlorobenzene	19.2	1.0	"	20.00		96.2	45-134			
Hexachlorobutadiene	16.2	1.0	"	20.00		80.8	33-154			
Naphthalene	16.3	1.0	"	20.00		81.3	22-148			
1,2,3-Trichlorobenzene	17.7	1.0	"	20.00		88.3	70-130			
Surrogate: Dibromofluoromethane	*20.6*		"	*25.00*		*82.3*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.7*		"	*25.00*		*82.6*	*80-120*			
Surrogate: Toluene-d8	*23.4*		"	*25.00*		*93.7*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.3*		"	*25.00*		*93.4*	*60-149*			
Matrix Spike (0942156-MS1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
Dichlorodifluoromethane	33.5	1.0	ug/L	20.00	ND	167				
Chloromethane	20.8	1.0	"	20.00	ND	104				
Vinyl chloride	27.5	1.0	"	20.00	ND	138				
Bromomethane	20.5	1.0	"	20.00	ND	102				
Chloroethane	25.8	1.0	"	20.00	ND	129				
Trichlorofluoromethane	28.2	1.0	"	20.00	ND	141				
Acrolein	78.0	5.0	"	100.0	ND	78.0				
1,1-Dichloroethene	21.7	1.0	"	20.00	ND	109	18.7-178		22.3	
Acetone	98.7	5.0	"	100.0	ND	98.7				
Iodomethane	17.5	1.0	"	20.00	ND	87.6				
Carbon disulfide	19.5	1.0	"	20.00	ND	97.6				
Allyl Chloride (3-Chloropropylene)	17.4	1.0	"	20.00	ND	87.0				
Acetonitrile	15.8	5.0	"	20.00	ND	78.8				
Methylene Chloride	15.8	1.0	"	20.00	ND	79.2				
Methyl-tert-Butyl Ether	14.0	1.0	"	20.00	ND	70.0				
trans-1,2-Dichloroethene	20.4	1.0	"	20.00	ND	102				
Acrylonitrile	18.7	5.0	"	20.00	ND	93.4				
1,1-Dichloroethane	20.0	1.0	"	20.00	ND	100				
Chloroprene	22.0	1.0	"	20.00	ND	110				
Vinyl acetate	19.6	1.0	"	20.00	ND	98.2				
2,2-Dichloropropane	16.3	1.0	"	20.00	ND	81.5				
cis-1,2-Dichloroethene	19.5	1.0	"	20.00	ND	97.4				
2-Butanone (MEK)	104	5.0	"	100.0	ND	104				

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Matrix Spike (0942156-MS1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
Propionitrile (Ethyl Cyanide)	19.8	5.0	ug/L	20.00	ND	99.0				
Methacrylonitrile	19.8	5.0	"	20.00	ND	98.8				
Chloroform	19.8	1.0	"	20.00	ND	99.2				
Bromochloromethane	20.9	1.0	"	20.00	ND	104				
1,1,1-Trichloroethane	19.5	1.0	"	20.00	ND	97.4				
1,1-Dichloropropene	20.6	1.0	"	20.00	ND	103				
Carbon Tetrachloride	21.3	1.0	"	20.00	ND	106				
Benzene	18.9	1.0	"	20.00	ND	94.4	65.6-159		15.1	
1,2-Dichloroethane	20.6	1.0	"	20.00	ND	103				
Trichloroethene	18.4	1.0	"	20.00	ND	92.2	71-158		15.2	
1,2-Dichloropropane	18.8	1.0	"	20.00	ND	94.1				
Bromodichloromethane	20.1	1.0	"	20.00	ND	101				
Methyl Methacrylate	19.2	1.0	"	20.00	ND	96.0				
Dibromomethane	15.9	1.0	"	20.00	ND	79.5				
2-Chloroethyl Vinyl Ether	1.34	1.0	"	20.00	ND	6.70				
Methyl Isobutyl Ketone	99.8	5.0	"	100.0	ND	99.8				
cis-1,3-Dichloropropene	17.9	1.0	"	20.00	ND	89.4				
Toluene	18.7	1.0	"	20.00	ND	93.6	60.8-171		17.1	
trans-1,3-Dichloropropene	16.5	1.0	"	20.00	ND	82.6				
Ethyl Methacrylate	17.0	1.0	"	20.00	ND	85.2				
1,1,2-Trichloroethane	17.3	1.0	"	20.00	ND	86.4				
2-Hexanone (MBK)	98.1	5.0	"	100.0	ND	98.1				
1,2-Dibromoethane	17.3	1.0	"	20.00	ND	86.6				
Tetrachloroethene	16.4	1.0	"	20.00	1.23	75.8				
1,3-Dichloropropane	19.9	1.0	"	20.00	ND	99.5				
Dibromochloromethane	19.6	1.0	"	20.00	ND	98.2				
Chlorobenzene	18.6	1.0	"	20.00	ND	93.0	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	18.7	1.0	"	20.00	ND	93.4				
Ethylbenzene	19.8	1.0	"	20.00	ND	99.0				
m,p-Xylenes	39.7	2.0	"	40.00	ND	99.2				
o-Xylene	19.2	1.0	"	20.00	ND	96.1				
Styrene	18.0	1.0	"	20.00	ND	90.0				
Bromoform	17.8	1.0	"	20.00	ND	89.2				
Isopropylbenzene (Cumene)	20.7	1.0	"	20.00	ND	103				
1,1,2,2-Tetrachloroethane	20.5	1.0	"	20.00	ND	102				
1,2,3-Trichloropropane	20.3	1.0	"	20.00	ND	101				
Bromobenzene	21.1	1.0	"	20.00	ND	105				
Propylbenzene	21.9	1.0	"	20.00	ND	110				
2-Chlorotoluene	20.8	1.0	"	20.00	ND	104				
1,3,5-Trimethylbenzene	20.2	1.0	"	20.00	ND	101				
4-Chlorotoluene	20.5	1.0	"	20.00	ND	102				

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Matrix Spike (0942156-MS1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
tert-Butylbenzene	20.1	1.0	ug/L	20.00	ND	100				
1,2,4-Trimethylbenzene	20.2	1.0	"	20.00	ND	101				
sec-Butylbenzene	21.1	1.0	"	20.00	ND	105				
4-Isopropyltoluene	20.6	1.0	"	20.00	ND	103				
1,3-Dichlorobenzene	18.2	1.0	"	20.00	ND	90.8				
1,4-Dichlorobenzene	18.0	1.0	"	20.00	ND	90.2				
trans-1,4-Dichloro-2-butene	22.2	1.0	"	20.00	ND	111				
Butylbenzene	24.2	1.0	"	20.00	ND	121				
1,2-Dichlorobenzene	17.9	1.0	"	20.00	ND	89.7				
1,2-Dibromo-3-chloropropane	16.0	1.0	"	20.00	ND	80.0				
1,2,4-Trichlorobenzene	18.3	1.0	"	20.00	ND	91.6				
Hexachlorobutadiene	20.6	1.0	"	20.00	ND	103				
Naphthalene	16.4	1.0	"	20.00	ND	81.8				
1,2,3-Trichlorobenzene	17.2	1.0	"	20.00	ND	86.0				
Surrogate: Dibromofluoromethane	*21.1*		*"*	*25.00*		*84.4*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.3*		*"*	*25.00*		*85.1*	*80-120*			
Surrogate: Toluene-d8	*23.5*		*"*	*25.00*		*93.9*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*"*	*25.00*		*95.2*	*60-149*			
Matrix Spike Dup (0942156-MSD1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
Dichlorodifluoromethane	31.7	1.0	ug/L	20.00	ND	159		5.40		
Chloromethane	20.1	1.0	"	20.00	ND	100		3.57		
Vinyl chloride	25.8	1.0	"	20.00	ND	129		6.53		
Bromomethane	22.9	1.0	"	20.00	ND	114		11.3		
Chloroethane	24.9	1.0	"	20.00	ND	124		3.75		
Trichlorofluoromethane	26.6	1.0	"	20.00	ND	133		5.65		
Acrolein	81.7	5.0	"	100.0	ND	81.7		4.57		
1,1-Dichloroethene	20.6	1.0	"	20.00	ND	103	18.7-178	5.29	22.3	
Acetone	93.3	5.0	"	100.0	ND	93.3		5.58		
Iodomethane	17.5	1.0	"	20.00	ND	87.3		0.400		
Carbon disulfide	18.2	1.0	"	20.00	ND	91.2		6.73		
Allyl Chloride (3-Chloropropylene)	16.2	1.0	"	20.00	ND	81.2		6.90		
Acetonitrile	17.4	5.0	"	20.00	ND	86.8		9.66		
Methylene Chloride	16.3	1.0	"	20.00	ND	81.7		3.11		
Methyl-tert-Butyl Ether	14.0	1.0	"	20.00	ND	69.8		0.358		
trans-1,2-Dichloroethene	19.6	1.0	"	20.00	ND	97.8		4.06		
Acrylonitrile	18.3	5.0	"	20.00	ND	91.4		2.16		
1,1-Dichloroethane	19.4	1.0	"	20.00	ND	97.2		3.09		
Chloroprene	20.7	1.0	"	20.00	ND	104		6.22		
Vinyl acetate	19.2	1.0	"	20.00	ND	96.2		2.11		
2,2-Dichloropropane	15.5	1.0	"	20.00	ND	77.4		5.10		
cis-1,2-Dichloroethene	18.8	1.0	"	20.00	ND	94.2		3.39		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Matrix Spike Dup (0942156-MSD1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
2-Butanone (MEK)	103	5.0	ug/L	100.0	ND	103		1.10		
Propionitrile (Ethyl Cyanide)	18.9	5.0	"	20.00	ND	94.5		4.70		
Methacrylonitrile	18.8	5.0	"	20.00	ND	93.8		5.30		
Chloroform	19.0	1.0	"	20.00	ND	95.0		4.33		
Bromochloromethane	20.1	1.0	"	20.00	ND	101		3.80		
1,1,1-Trichloroethane	18.4	1.0	"	20.00	ND	92.0		5.65		
1,1-Dichloropropene	19.4	1.0	"	20.00	ND	97.2		5.55		
Carbon Tetrachloride	20.1	1.0	"	20.00	ND	101		5.51		
Benzene	18.1	1.0	"	20.00	ND	90.3	65.6-159	4.39	15.1	
1,2-Dichloroethane	20.2	1.0	"	20.00	ND	101		2.25		
Trichloroethene	17.7	1.0	"	20.00	ND	88.6	71-158	3.93	15.2	
1,2-Dichloropropane	18.3	1.0	"	20.00	ND	91.6		2.75		
Bromodichloromethane	19.8	1.0	"	20.00	ND	99.1		1.60		
Methyl Methacrylate	18.6	1.0	"	20.00	ND	93.2		2.85		
Dibromomethane	15.4	1.0	"	20.00	ND	76.8		3.52		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	98.6	5.0	"	100.0	ND	98.6		1.19		
cis-1,3-Dichloropropene	17.4	1.0	"	20.00	ND	87.1		2.55		
Toluene	17.9	1.0	"	20.00	ND	89.6	60.8-171	4.48	17.1	
trans-1,3-Dichloropropene	16.3	1.0	"	20.00	ND	81.4		1.34		
Ethyl Methacrylate	16.9	1.0	"	20.00	ND	84.4		0.885		
1,1,2-Trichloroethane	17.2	1.0	"	20.00	ND	86.2		0.290		
2-Hexanone (MBK)	95.0	5.0	"	100.0	ND	95.0		3.20		
1,2-Dibromoethane	17.0	1.0	"	20.00	ND	85.1		1.69		
Tetrachloroethene	15.8	1.0	"	20.00	1.23	73.0		3.48		
1,3-Dichloropropane	19.6	1.0	"	20.00	ND	98.2		1.37		
Dibromochloromethane	19.3	1.0	"	20.00	ND	96.4		1.80		
Chlorobenzene	18.2	1.0	"	20.00	ND	90.8	76.5-147	2.50	13.6	
1,1,1,2-Tetrachloroethane	18.4	1.0	"	20.00	ND	92.2		1.40		
Ethylbenzene	19.1	1.0	"	20.00	ND	95.6		3.49		
m,p-Xylenes	38.0	2.0	"	40.00	ND	94.9		4.35		
o-Xylene	18.5	1.0	"	20.00	ND	92.4		3.98		
Styrene	17.5	1.0	"	20.00	ND	87.4		3.04		
Bromoform	17.8	1.0	"	20.00	ND	89.0		0.168		
Isopropylbenzene (Cumene)	20.2	1.0	"	20.00	ND	101		2.20		
1,1,2,2-Tetrachloroethane	20.4	1.0	"	20.00	ND	102		0.392		
1,2,3-Trichloropropane	20.7	1.0	"	20.00	ND	103		1.90		
Bromobenzene	20.9	1.0	"	20.00	ND	104		0.906		
Propylbenzene	21.2	1.0	"	20.00	ND	106		3.48		
2-Chlorotoluene	20.4	1.0	"	20.00	ND	102		2.04		
1,3,5-Trimethylbenzene	19.7	1.0	"	20.00	ND	98.6		2.55		

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942156 - EPA 5030B										
Matrix Spike Dup (0942156-MSD1)	**Source: 09J0715-01**			Prepared & Analyzed: 10/16/2009						
4-Chlorotoluene	20.0	1.0	ug/L	20.00	ND	99.8		2.62		
tert-Butylbenzene	19.2	1.0	"	20.00	ND	96.1		4.48		
1,2,4-Trimethylbenzene	20.1	1.0	"	20.00	ND	101		0.149		
sec-Butylbenzene	19.9	1.0	"	20.00	ND	99.7		5.61		
4-Isopropyltoluene	19.8	1.0	"	20.00	ND	99.2		3.81		
1,3-Dichlorobenzene	17.6	1.0	"	20.00	ND	88.0		3.24		
1,4-Dichlorobenzene	17.8	1.0	"	20.00	ND	88.8		1.51		
trans-1,4-Dichloro-2-butene	22.7	1.0	"	20.00	ND	114		2.58		
Butylbenzene	22.8	1.0	"	20.00	ND	114		6.17		
1,2-Dichlorobenzene	18.0	1.0	"	20.00	ND	90.0		0.278		
1,2-Dibromo-3-chloropropane	15.9	1.0	"	20.00	ND	79.6		0.627		
1,2,4-Trichlorobenzene	19.4	1.0	"	20.00	ND	97.0		5.78		
Hexachlorobutadiene	17.1	1.0	"	20.00	ND	85.6		18.3		
Naphthalene	19.6	1.0	"	20.00	ND	97.9		17.9		
1,2,3-Trichlorobenzene	18.5	1.0	"	20.00	ND	92.7		7.44		
Surrogate: Dibromofluoromethane	*20.5*		*"*	*25.00*		*82.0*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*20.9*		*"*	*25.00*		*83.8*	*80-120*			
Surrogate: Toluene-d8	*23.4*		*"*	*25.00*		*93.5*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*"*	*25.00*		*96.6*	*60-149*			
Batch 0943002 - EPA 5030B										
Blank (0943002-BLK1)				Prepared & Analyzed: 10/19/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Blank (0943002-BLK1)				Prepared & Analyzed: 10/19/2009						
Vinyl acetate	ND	1.0	ug/L							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Blank (0943002-BLK1)				Prepared & Analyzed: 10/19/2009						
Propylbenzene	ND	1.0	ug/L							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*23.9*		*"*	*25.00*		*95.5*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*23.6*		*"*	*25.00*		*94.6*	*80-120*			
Surrogate: Toluene-d8	*25.1*		*"*	*25.00*		*101*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.2*		*"*	*25.00*		*92.6*	*60-149*			
LCS (0943002-BS1)				Prepared & Analyzed: 10/19/2009						
Dichlorodifluoromethane	28.6	1.0	ug/L	20.00		143	27-127			L2
Chloromethane	18.4	1.0	"	20.00		91.8	62.5-141			
Vinyl chloride	22.5	1.0	"	20.00		113	65.3-143			
Bromomethane	13.7	1.0	"	20.00		68.3	56-180			
Chloroethane	21.6	1.0	"	20.00		108	62.3-161			
Trichlorofluoromethane	24.2	1.0	"	20.00		121	35-157			
Acrolein	63.9	5.0	"	100.0		63.9	26.6-169			
1,1-Dichloroethene	21.4	1.0	"	20.00		107	64.6-138			
Acetone	112	5.0	"	100.0		112	35-159			
Iodomethane	15.3	1.0	"	20.00		76.6	70-130			
Carbon disulfide	19.2	1.0	"	20.00		96.2	48-142			
Allyl Chloride (3-Chloropropylene)	19.0	1.0	"	20.00		95.0	70-130			
Acetonitrile	18.4	5.0	"	20.00		92.0	70-130			
Methylene Chloride	17.9	1.0	"	20.00		89.4	64.7-139			
Methyl-tert-Butyl Ether	17.8	1.0	"	20.00		89.0	34-133			
trans-1,2-Dichloroethene	21.4	1.0	"	20.00		107	75.1-127			
Acrylonitrile	21.2	5.0	"	20.00		106	67.2-148			

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
LCS (0943002-BS1)				Prepared & Analyzed: 10/19/2009						
1,1-Dichloroethane	21.4	1.0	ug/L	20.00		107	72.2-135			
Chloroprene	22.2	1.0	"	20.00		111	70-130			
Vinyl acetate	23.0	1.0	"	20.00		115	70-154			
2,2-Dichloropropane	19.5	1.0	"	20.00		97.6	37-129			
cis-1,2-Dichloroethene	21.1	1.0	"	20.00		106	72-126			
2-Butanone (MEK)	109	5.0	"	100.0		109	45-128			
Propionitrile (Ethyl Cyanide)	22.2	5.0	"	20.00		111	70-130			
Methacrylonitrile	21.0	5.0	"	20.00		105	70-130			
Chloroform	21.6	1.0	"	20.00		108	76.1-135			
Bromochloromethane	22.7	1.0	"	20.00		113	73-126			
1,1,1-Trichloroethane	20.9	1.0	"	20.00		104	67.1-139			
1,1-Dichloropropene	20.6	1.0	"	20.00		103	70-130			
Carbon Tetrachloride	21.8	1.0	"	20.00		109	63.3-142			
Benzene	20.5	1.0	"	20.00		102	72-132			
1,2-Dichloroethane	22.7	1.0	"	20.00		114	72.9-139			
Trichloroethene	20.2	1.0	"	20.00		101	73.7-130			
1,2-Dichloropropane	21.1	1.0	"	20.00		105	71.3-137			
Bromodichloromethane	22.7	1.0	"	20.00		114	74.5-136			
Methyl Methacrylate	21.6	1.0	"	20.00		108	70-130			
Dibromomethane	19.0	1.0	"	20.00		95.2	66-125			
2-Chloroethyl Vinyl Ether	18.2	1.0	"	20.00		91.2	42.5-161			
Methyl Isobutyl Ketone	110	5.0	"	100.0		110	41-143			
cis-1,3-Dichloropropene	20.8	1.0	"	20.00		104	74.6-124			
Toluene	19.6	1.0	"	20.00		98.1	72.4-132			
trans-1,3-Dichloropropene	20.0	1.0	"	20.00		100	72.1-124			
Ethyl Methacrylate	20.2	1.0	"	20.00		101	70-130			
1,1,2-Trichloroethane	20.1	1.0	"	20.00		101	75.6-140			
2-Hexanone (MBK)	107	5.0	"	100.0		107	43-147			
1,2-Dibromoethane	20.0	1.0	"	20.00		100	70-130			
Tetrachloroethene	18.5	1.0	"	20.00		92.6	69.9-125			
1,3-Dichloropropane	22.0	1.0	"	20.00		110	70-130			
Dibromochloromethane	22.2	1.0	"	20.00		111	69.9-134			
Chlorobenzene	20.2	1.0	"	20.00		101	67.3-133			
1,1,1,2-Tetrachloroethane	21.2	1.0	"	20.00		106	76-123			
Ethylbenzene	20.6	1.0	"	20.00		103	70.6-131			
m,p-Xylenes	40.9	2.0	"	40.00		102	71-123			
o-Xylene	20.1	1.0	"	20.00		101	80-119			
Styrene	19.7	1.0	"	20.00		98.6	79-117			
Bromoform	20.8	1.0	"	20.00		104	68.8-130			
Isopropylbenzene (Cumene)	20.1	1.0	"	20.00		101	70-130			
1,1,2,2-Tetrachloroethane	21.8	1.0	"	20.00		109	69.1-143			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
LCS (0943002-BS1)				Prepared & Analyzed: 10/19/2009						
1,2,3-Trichloropropane	21.9	1.0	ug/L	20.00		110	70-130			
Bromobenzene	21.9	1.0	"	20.00		109	70-130			
Propylbenzene	20.8	1.0	"	20.00		104	70-130			
2-Chlorotoluene	21.0	1.0	"	20.00		105	70-130			
1,3,5-Trimethylbenzene	20.0	1.0	"	20.00		100	70-130			
4-Chlorotoluene	20.7	1.0	"	20.00		104	70-130			
tert-Butylbenzene	19.2	1.0	"	20.00		96.2	70-130			
1,2,4-Trimethylbenzene	20.6	1.0	"	20.00		103	70-130			
sec-Butylbenzene	19.5	1.0	"	20.00		97.3	70-130			
4-Isopropyltoluene	19.6	1.0	"	20.00		98.0	70-130			
1,3-Dichlorobenzene	19.1	1.0	"	20.00		95.5	74-125			
1,4-Dichlorobenzene	19.1	1.0	"	20.00		95.3	75-122			
trans-1,4-Dichloro-2-butene	24.0	1.0	"	20.00		120	70-130			
Butylbenzene	21.6	1.0	"	20.00		108	70-130			
1,2-Dichlorobenzene	19.4	1.0	"	20.00		96.9	74-124			
1,2-Dibromo-3-chloropropane	17.7	1.0	"	20.00		88.7	70-130			
1,2,4-Trichlorobenzene	20.0	1.0	"	20.00		100	45-134			
Hexachlorobutadiene	14.6	1.0	"	20.00		73.2	33-154			
Naphthalene	19.6	1.0	"	20.00		97.8	22-148			
1,2,3-Trichlorobenzene	19.0	1.0	"	20.00		94.8	70-130			
Surrogate: Dibromofluoromethane	*23.4*		*"*	*25.00*		*93.6*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*23.4*		*"*	*25.00*		*93.5*	*80-120*			
Surrogate: Toluene-d8	*24.9*		*"*	*25.00*		*99.4*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*22.4*		*"*	*25.00*		*89.7*	*60-149*			
Matrix Spike (0943002-MS1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
Dichlorodifluoromethane	34.3	1.0	ug/L	20.00	ND	172				
Chloromethane	20.8	1.0	"	20.00	ND	104				
Vinyl chloride	28.1	1.0	"	20.00	ND	140				
Bromomethane	18.2	1.0	"	20.00	ND	90.8				
Chloroethane	26.4	1.0	"	20.00	ND	132				
Trichlorofluoromethane	29.0	1.0	"	20.00	ND	145				
Acrolein	67.6	5.0	"	100.0	ND	67.6				
1,1-Dichloroethene	23.6	1.0	"	20.00	0.490	116	18.7-178		22.3	
Acetone	107	5.0	"	100.0	ND	107				
Iodomethane	15.5	1.0	"	20.00	ND	77.4				
Carbon disulfide	20.4	1.0	"	20.00	ND	102				
Allyl Chloride (3-Chloropropylene)	18.9	1.0	"	20.00	ND	94.7				
Acetonitrile	6.06	5.0	"	20.00	ND	30.3				
Methylene Chloride	17.9	1.0	"	20.00	ND	89.7				
Methyl-tert-Butyl Ether	15.8	1.0	"	20.00	ND	78.8				
trans-1,2-Dichloroethene	22.0	1.0	"	20.00	ND	110				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Matrix Spike (0943002-MS1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
Acrylonitrile	20.6	5.0	ug/L	20.00	ND	103				
1,1-Dichloroethane	21.6	1.0	"	20.00	ND	108				
Chloroprene	23.7	1.0	"	20.00	ND	119				
Vinyl acetate	21.8	1.0	"	20.00	ND	109				
2,2-Dichloropropane	18.9	1.0	"	20.00	ND	94.6				
cis-1,2-Dichloroethene	21.4	1.0	"	20.00	ND	107				
2-Butanone (MEK)	108	5.0	"	100.0	ND	108				
Propionitrile (Ethyl Cyanide)	22.2	5.0	"	20.00	ND	111				
Methacrylonitrile	20.9	5.0	"	20.00	ND	104				
Chloroform	22.2	1.0	"	20.00	0.510	109				
Bromochloromethane	22.3	1.0	"	20.00	ND	111				
1,1,1-Trichloroethane	22.5	1.0	"	20.00	1.02	107				
1,1-Dichloropropene	22.2	1.0	"	20.00	ND	111				
Carbon Tetrachloride	23.6	1.0	"	20.00	ND	118				
Benzene	20.8	1.0	"	20.00	ND	104	65.6-159		15.1	
1,2-Dichloroethane	22.0	1.0	"	20.00	ND	110				
Trichloroethene	20.5	1.0	"	20.00	ND	103	71-158		15.2	
1,2-Dichloropropane	20.5	1.0	"	20.00	ND	102				
Bromodichloromethane	22.3	1.0	"	20.00	ND	112				
Methyl Methacrylate	21.0	1.0	"	20.00	ND	105				
Dibromomethane	18.2	1.0	"	20.00	ND	91.2				
2-Chloroethyl Vinyl Ether	1.60	1.0	"	20.00	ND	8.00				
Methyl Isobutyl Ketone	108	5.0	"	100.0	ND	108				
cis-1,3-Dichloropropene	20.0	1.0	"	20.00	ND	100				
Toluene	20.2	1.0	"	20.00	ND	101	60.8-171		17.1	
trans-1,3-Dichloropropene	19.0	1.0	"	20.00	ND	95.2				
Ethyl Methacrylate	19.3	1.0	"	20.00	ND	96.4				
1,1,2-Trichloroethane	19.7	1.0	"	20.00	ND	98.6				
2-Hexanone (MBK)	107	5.0	"	100.0	ND	107				
1,2-Dibromoethane	19.6	1.0	"	20.00	ND	98.2				
Tetrachloroethene	18.9	1.0	"	20.00	0.630	91.4				
1,3-Dichloropropane	21.0	1.0	"	20.00	ND	105				
Dibromochloromethane	21.2	1.0	"	20.00	ND	106				
Chlorobenzene	19.9	1.0	"	20.00	ND	99.7	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	20.5	1.0	"	20.00	ND	103				
Ethylbenzene	20.9	1.0	"	20.00	ND	105				
m,p-Xylenes	41.2	2.0	"	40.00	ND	103				
o-Xylene	19.8	1.0	"	20.00	ND	99.2				
Styrene	19.2	1.0	"	20.00	ND	95.8				
Bromoform	19.7	1.0	"	20.00	ND	98.6				
Isopropylbenzene (Cumene)	21.9	1.0	"	20.00	ND	109				

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Matrix Spike (0943002-MS1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
1,1,2,2-Tetrachloroethane	21.5	1.0	ug/L	20.00	ND	107				
1,2,3-Trichloropropane	21.1	1.0	"	20.00	ND	105				
Bromobenzene	21.6	1.0	"	20.00	ND	108				
Propylbenzene	22.2	1.0	"	20.00	ND	111				
2-Chlorotoluene	21.1	1.0	"	20.00	ND	106				
1,3,5-Trimethylbenzene	20.4	1.0	"	20.00	ND	102				
4-Chlorotoluene	21.0	1.0	"	20.00	ND	105				
tert-Butylbenzene	20.8	1.0	"	20.00	ND	104				
1,2,4-Trimethylbenzene	20.2	1.0	"	20.00	ND	101				
sec-Butylbenzene	21.9	1.0	"	20.00	ND	109				
4-Isopropyltoluene	21.1	1.0	"	20.00	ND	106				
1,3-Dichlorobenzene	19.0	1.0	"	20.00	ND	95.2				
1,4-Dichlorobenzene	19.0	1.0	"	20.00	ND	95.2				
trans-1,4-Dichloro-2-butene	24.0	1.0	"	20.00	ND	120				
Butylbenzene	23.0	1.0	"	20.00	ND	115				
1,2-Dichlorobenzene	19.1	1.0	"	20.00	ND	95.4				
1,2-Dibromo-3-chloropropane	17.4	1.0	"	20.00	ND	87.2				
1,2,4-Trichlorobenzene	16.6	1.0	"	20.00	ND	83.0				
Hexachlorobutadiene	20.2	1.0	"	20.00	ND	101				
Naphthalene	14.7	1.0	"	20.00	ND	73.5				
1,2,3-Trichlorobenzene	15.5	1.0	"	20.00	ND	77.6				
Surrogate: Dibromofluoromethane	*24.1*		*"*	*25.00*		*96.4*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*24.1*		*"*	*25.00*		*96.2*	*80-120*			
Surrogate: Toluene-d8	*24.6*		*"*	*25.00*		*98.5*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.2*		*"*	*25.00*		*93.0*	*60-149*			
Matrix Spike Dup (0943002-MSD1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
Dichlorodifluoromethane	32.8	1.0	ug/L	20.00	ND	164		4.59		
Chloromethane	20.1	1.0	"	20.00	ND	100		3.28		
Vinyl chloride	27.0	1.0	"	20.00	ND	135		4.11		
Bromomethane	20.6	1.0	"	20.00	ND	103		12.4		
Chloroethane	25.0	1.0	"	20.00	ND	125		5.48		
Trichlorofluoromethane	26.8	1.0	"	20.00	ND	134		8.21		
Acrolein	70.8	5.0	"	100.0	ND	70.8		4.63		
1,1-Dichloroethene	22.6	1.0	"	20.00	0.490	111	18.7-178	4.28	22.3	
Acetone	106	5.0	"	100.0	ND	106		0.714		
Iodomethane	15.5	1.0	"	20.00	ND	77.4		0.0646		
Carbon disulfide	19.4	1.0	"	20.00	ND	96.8		5.14		
Allyl Chloride (3-Chloropropylene)	18.7	1.0	"	20.00	ND	93.4		1.33		
Acetonitrile	12.7	5.0	"	20.00	ND	63.7		71.1		
Methylene Chloride	18.0	1.0	"	20.00	ND	89.8		0.167		
Methyl-tert-Butyl Ether	16.0	1.0	"	20.00	ND	80.0		1.57		

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Matrix Spike Dup (0943002-MSD1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
trans-1,2-Dichloroethene	21.4	1.0	ug/L	20.00	ND	107		2.54		
Acrylonitrile	20.6	5.0	"	20.00	ND	103		0.0971		
1,1-Dichloroethane	20.8	1.0	"	20.00	ND	104		3.92		
Chloroprene	22.6	1.0	"	20.00	ND	113		5.14		
Vinyl acetate	21.9	1.0	"	20.00	ND	110		0.411		
2,2-Dichloropropane	18.4	1.0	"	20.00	ND	92.0		2.79		
cis-1,2-Dichloroethene	21.2	1.0	"	20.00	ND	106		0.846		
2-Butanone (MEK)	111	5.0	"	100.0	ND	111		2.30		
Propionitrile (Ethyl Cyanide)	21.4	5.0	"	20.00	ND	107		3.44		
Methacrylonitrile	20.5	5.0	"	20.00	ND	103		1.69		
Chloroform	21.6	1.0	"	20.00	0.510	105		3.15		
Bromochloromethane	22.1	1.0	"	20.00	ND	111		0.630		
1,1,1-Trichloroethane	21.7	1.0	"	20.00	1.02	103		3.58		
1,1-Dichloropropene	21.2	1.0	"	20.00	ND	106		4.60		
Carbon Tetrachloride	22.2	1.0	"	20.00	ND	111		6.19		
Benzene	20.0	1.0	"	20.00	ND	100	65.6-159	3.48	15.1	
1,2-Dichloroethane	22.2	1.0	"	20.00	ND	111		1.13		
Trichloroethene	19.6	1.0	"	20.00	ND	98.2	71-158	4.43	15.2	
1,2-Dichloropropane	20.0	1.0	"	20.00	ND	100		2.27		
Bromodichloromethane	21.9	1.0	"	20.00	ND	109		2.17		
Methyl Methacrylate	21.6	1.0	"	20.00	ND	108		2.82		
Dibromomethane	17.2	1.0	"	20.00	ND	86.1		5.70		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	112	5.0	"	100.0	ND	112		3.58		
cis-1,3-Dichloropropene	19.5	1.0	"	20.00	ND	97.6		2.68		
Toluene	19.1	1.0	"	20.00	ND	95.3	60.8-171	5.56	17.1	
trans-1,3-Dichloropropene	18.9	1.0	"	20.00	ND	94.6		0.579		
Ethyl Methacrylate	19.3	1.0	"	20.00	ND	96.4		0.104		
1,1,2-Trichloroethane	18.8	1.0	"	20.00	ND	93.8		4.99		
2-Hexanone (MBK)	110	5.0	"	100.0	ND	110		2.50		
1,2-Dibromoethane	19.1	1.0	"	20.00	ND	95.4		2.84		
Tetrachloroethene	17.5	1.0	"	20.00	0.630	84.4		7.69		
1,3-Dichloropropane	21.2	1.0	"	20.00	ND	106		0.997		
Dibromochloromethane	20.6	1.0	"	20.00	ND	103		2.68		
Chlorobenzene	19.1	1.0	"	20.00	ND	95.4	76.5-147	4.36	13.6	
1,1,1,2-Tetrachloroethane	19.5	1.0	"	20.00	ND	97.4		5.15		
Ethylbenzene	19.8	1.0	"	20.00	ND	99.1		5.50		
m,p-Xylenes	39.4	2.0	"	40.00	ND	98.5		4.49		
o-Xylene	19.1	1.0	"	20.00	ND	95.6		3.59		
Styrene	18.1	1.0	"	20.00	ND	90.5		5.69		
Bromoform	19.2	1.0	"	20.00	ND	96.0		2.72		

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943002 - EPA 5030B										
Matrix Spike Dup (0943002-MSD1)	**Source: 09J0778-01**			Prepared & Analyzed: 10/19/2009						
Isopropylbenzene (Cumene)	20.6	1.0	ug/L	20.00	ND	103		6.12		
1,1,2,2-Tetrachloroethane	21.6	1.0	"	20.00	ND	108		0.464		
1,2,3-Trichloropropane	21.6	1.0	"	20.00	ND	108		2.67		
Bromobenzene	21.7	1.0	"	20.00	ND	108		0.0462		
Propylbenzene	21.2	1.0	"	20.00	ND	106		4.60		
2-Chlorotoluene	20.7	1.0	"	20.00	ND	104		1.86		
1,3,5-Trimethylbenzene	19.9	1.0	"	20.00	ND	99.4		2.34		
4-Chlorotoluene	20.5	1.0	"	20.00	ND	102		2.60		
tert-Butylbenzene	19.4	1.0	"	20.00	ND	97.1		6.67		
1,2,4-Trimethylbenzene	20.3	1.0	"	20.00	ND	101		0.494		
sec-Butylbenzene	20.1	1.0	"	20.00	ND	100		8.49		
4-Isopropyltoluene	19.4	1.0	"	20.00	ND	96.9		8.55		
1,3-Dichlorobenzene	17.8	1.0	"	20.00	ND	89.2		6.40		
1,4-Dichlorobenzene	17.8	1.0	"	20.00	ND	89.0		6.79		
trans-1,4-Dichloro-2-butene	24.7	1.0	"	20.00	ND	124		2.87		
Butylbenzene	22.2	1.0	"	20.00	ND	111		3.68		
1,2-Dichlorobenzene	18.0	1.0	"	20.00	ND	90.0		5.72		
1,2-Dibromo-3-chloropropane	17.0	1.0	"	20.00	ND	84.9		2.67		
1,2,4-Trichlorobenzene	18.7	1.0	"	20.00	ND	93.4		11.7		
Hexachlorobutadiene	16.5	1.0	"	20.00	ND	82.4		20.6		
Naphthalene	18.9	1.0	"	20.00	ND	94.3		24.8		
1,2,3-Trichlorobenzene	17.6	1.0	"	20.00	ND	87.9		12.4		
Surrogate: Dibromofluoromethane	*23.9*		*"*	*25.00*		*95.4*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*24.6*		*"*	*25.00*		*98.6*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*"*	*25.00*		*102*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.7*		*"*	*25.00*		*94.8*	*60-149*			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Blank (0944073-BLK1)				Prepared & Analyzed: 10/28/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Blank (0944073-BLK1)				Prepared & Analyzed: 10/28/2009						
trans-1,3-Dichloropropene	ND	1.0	ug/L							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*22.8*		*"*	*25.00*		*91.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.4*		*"*	*25.00*		*85.5*	*80-120*			
Surrogate: Toluene-d8	*25.1*		*"*	*25.00*		*100*	*75-120*			

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Blank (0944073-BLK1)				Prepared & Analyzed: 10/28/2009						
Surrogate: 4-Bromofluorobenzene	*24.0*		*ug/L*	*25.00*		*96.1*	*60-149*			
LCS (0944073-BS1)				Prepared & Analyzed: 10/28/2009						
Dichlorodifluoromethane	28.3	1.0	ug/L	20.00		141	27-127			L2
Chloromethane	19.0	1.0	"	20.00		95.2	62.5-141			
Vinyl chloride	22.7	1.0	"	20.00		114	65.3-143			
Bromomethane	12.2	1.0	"	20.00		60.8	56-180			
Chloroethane	21.8	1.0	"	20.00		109	62.3-161			
Trichlorofluoromethane	22.0	1.0	"	20.00		110	35-157			
Acrolein	92.2	5.0	"	100.0		92.2	26.6-169			
1,1-Dichloroethene	19.2	1.0	"	20.00		96.0	64.6-138			
Acetone	113	5.0	"	100.0		113	35-159			
Iodomethane	23.6	1.0	"	20.00		118	70-130			
Carbon disulfide	18.0	1.0	"	20.00		89.8	48-142			
Allyl Chloride (3-Chloropropylene)	18.8	1.0	"	20.00		94.2	70-130			
Acetonitrile	16.2	5.0	"	20.00		81.2	70-130			
Methylene Chloride	17.4	1.0	"	20.00		87.1	64.7-139			
Methyl-tert-Butyl Ether	18.3	1.0	"	20.00		91.3	34-133			
trans-1,2-Dichloroethene	19.7	1.0	"	20.00		98.5	75.1-127			
Acrylonitrile	20.9	5.0	"	20.00		104	67.2-148			
1,1-Dichloroethane	19.9	1.0	"	20.00		99.6	72.2-135			
Chloroprene	20.5	1.0	"	20.00		103	70-130			
Vinyl acetate	23.0	1.0	"	20.00		115	70-154			
2,2-Dichloropropane	19.0	1.0	"	20.00		95.0	37-129			
cis-1,2-Dichloroethene	20.3	1.0	"	20.00		101	72-126			
2-Butanone (MEK)	109	5.0	"	100.0		109	45-128			
Propionitrile (Ethyl Cyanide)	21.8	5.0	"	20.00		109	70-130			
Methacrylonitrile	20.5	5.0	"	20.00		103	70-130			
Chloroform	20.7	1.0	"	20.00		104	76.1-135			
Bromochloromethane	21.3	1.0	"	20.00		106	73-126			
1,1,1-Trichloroethane	19.4	1.0	"	20.00		96.8	67.1-139			
1,1-Dichloropropene	19.8	1.0	"	20.00		99.0	70-130			
Carbon Tetrachloride	20.4	1.0	"	20.00		102	63.3-142			
Benzene	19.9	1.0	"	20.00		99.5	72-132			
1,2-Dichloroethane	20.9	1.0	"	20.00		104	72.9-139			
Trichloroethene	19.7	1.0	"	20.00		98.6	73.7-130			
1,2-Dichloropropane	20.2	1.0	"	20.00		101	71.3-137			
Bromodichloromethane	21.2	1.0	"	20.00		106	74.5-136			
Methyl Methacrylate	21.2	1.0	"	20.00		106	70-130			
Dibromomethane	18.8	1.0	"	20.00		93.8	66-125			
2-Chloroethyl Vinyl Ether	18.5	1.0	"	20.00		92.4	42.5-161			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
LCS (0944073-BS1)				Prepared & Analyzed: 10/28/2009						
Methyl Isobutyl Ketone	108	5.0	ug/L	100.0		108	41-143			
cis-1,3-Dichloropropene	19.7	1.0	"	20.00		98.6	74.6-124			
Toluene	19.1	1.0	"	20.00		95.6	72.4-132			
trans-1,3-Dichloropropene	19.4	1.0	"	20.00		96.8	72.1-124			
Ethyl Methacrylate	20.3	1.0	"	20.00		102	70-130			
1,1,2-Trichloroethane	19.3	1.0	"	20.00		96.5	75.6-140			
2-Hexanone (MBK)	107	5.0	"	100.0		107	43-147			
1,2-Dibromoethane	19.6	1.0	"	20.00		98.1	70-130			
Tetrachloroethene	17.5	1.0	"	20.00		87.4	69.9-125			
1,3-Dichloropropane	22.1	1.0	"	20.00		110	70-130			
Dibromochloromethane	22.0	1.0	"	20.00		110	69.9-134			
Chlorobenzene	20.9	1.0	"	20.00		104	67.3-133			
1,1,1,2-Tetrachloroethane	21.4	1.0	"	20.00		107	76-123			
Ethylbenzene	21.0	1.0	"	20.00		105	70.6-131			
m,p-Xylenes	41.5	2.0	"	40.00		104	71-123			
o-Xylene	20.5	1.0	"	20.00		103	80-119			
Styrene	20.1	1.0	"	20.00		101	79-117			
Bromoform	21.5	1.0	"	20.00		108	68.8-130			
Isopropylbenzene (Cumene)	21.5	1.0	"	20.00		107	70-130			
1,1,2,2-Tetrachloroethane	23.7	1.0	"	20.00		118	69.1-143			
1,2,3-Trichloropropane	23.9	1.0	"	20.00		119	70-130			
Bromobenzene	22.9	1.0	"	20.00		115	70-130			
Propylbenzene	22.0	1.0	"	20.00		110	70-130			
2-Chlorotoluene	22.0	1.0	"	20.00		110	70-130			
1,3,5-Trimethylbenzene	20.6	1.0	"	20.00		103	70-130			
4-Chlorotoluene	22.0	1.0	"	20.00		110	70-130			
tert-Butylbenzene	20.5	1.0	"	20.00		103	70-130			
1,2,4-Trimethylbenzene	21.0	1.0	"	20.00		105	70-130			
sec-Butylbenzene	20.6	1.0	"	20.00		103	70-130			
4-Isopropyltoluene	20.6	1.0	"	20.00		103	70-130			
1,3-Dichlorobenzene	20.6	1.0	"	20.00		103	74-125			
1,4-Dichlorobenzene	20.6	1.0	"	20.00		103	75-122			
trans-1,4-Dichloro-2-butene	26.1	1.0	"	20.00		131	70-130			L2
Butylbenzene	22.0	1.0	"	20.00		110	70-130			
1,2-Dichlorobenzene	21.2	1.0	"	20.00		106	74-124			
1,2-Dibromo-3-chloropropane	23.0	1.0	"	20.00		115	70-130			
1,2,4-Trichlorobenzene	21.3	1.0	"	20.00		106	45-134			
Hexachlorobutadiene	18.1	1.0	"	20.00		90.4	33-154			
Naphthalene	19.4	1.0	"	20.00		97.1	22-148			
1,2,3-Trichlorobenzene	20.2	1.0	"	20.00		101	70-130			
Surrogate: Dibromofluoromethane	*22.0*		*"*	*25.00*		*88.0*	*80-120*			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
LCS (0944073-BS1)				Prepared & Analyzed: 10/28/2009						
Surrogate: 1,2-Dichloroethane-d4	*21.2*		*ug/L*	*25.00*		*84.9*	*80-120*			
Surrogate: Toluene-d8	*24.2*		*"*	*25.00*		*97.0*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*"*	*25.00*		*95.4*	*60-149*			
Matrix Spike (0944073-MS1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
Dichlorodifluoromethane	34.9	1.0	ug/L	20.00	ND	175				
Chloromethane	21.1	1.0	"	20.00	ND	106				
Vinyl chloride	27.3	1.0	"	20.00	ND	136				
Bromomethane	20.8	1.0	"	20.00	ND	104				
Chloroethane	23.0	1.0	"	20.00	ND	115				
Trichlorofluoromethane	28.1	1.0	"	20.00	ND	140				
Acrolein	93.2	5.0	"	100.0	ND	93.2				
1,1-Dichloroethene	23.4	1.0	"	20.00	ND	117	18.7-178		22.3	
Acetone	115	5.0	"	100.0	ND	115				
Iodomethane	22.0	1.0	"	20.00	ND	110				
Carbon disulfide	20.8	1.0	"	20.00	ND	104				
Allyl Chloride (3-Chloropropylene)	20.1	1.0	"	20.00	ND	100				
Acetonitrile	7.39	5.0	"	20.00	ND	37.0				
Methylene Chloride	18.8	1.0	"	20.00	ND	94.2				
Methyl-tert-Butyl Ether	18.3	1.0	"	20.00	ND	91.6				
trans-1,2-Dichloroethene	22.7	1.0	"	20.00	ND	114				
Acrylonitrile	21.9	5.0	"	20.00	ND	109				
1,1-Dichloroethane	23.1	1.0	"	20.00	0.380	114				
Chloroprene	24.9	1.0	"	20.00	ND	125				
Vinyl acetate	24.5	1.0	"	20.00	ND	122				
2,2-Dichloropropane	20.7	1.0	"	20.00	ND	104				
cis-1,2-Dichloroethene	22.9	1.0	"	20.00	ND	115				
2-Butanone (MEK)	118	5.0	"	100.0	2.40	116				
Propionitrile (Ethyl Cyanide)	22.9	5.0	"	20.00	ND	114				
Methacrylonitrile	21.9	5.0	"	20.00	ND	110				
Chloroform	23.0	1.0	"	20.00	ND	115				
Bromochloromethane	23.4	1.0	"	20.00	ND	117				
1,1,1-Trichloroethane	22.4	1.0	"	20.00	ND	112				
1,1-Dichloropropene	23.8	1.0	"	20.00	ND	119				
Carbon Tetrachloride	24.5	1.0	"	20.00	ND	123				
Benzene	21.9	1.0	"	20.00	ND	109	65.6-159		15.1	
1,2-Dichloroethane	23.1	1.0	"	20.00	ND	116				
Trichloroethene	21.7	1.0	"	20.00	ND	109	71-158		15.2	
1,2-Dichloropropane	22.0	1.0	"	20.00	ND	110				
Bromodichloromethane	23.7	1.0	"	20.00	ND	118				
Methyl Methacrylate	23.1	1.0	"	20.00	ND	115				
Dibromomethane	19.4	1.0	"	20.00	ND	97.0				

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Matrix Spike (0944073-MS1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
2-Chloroethyl Vinyl Ether	2.36	1.0	ug/L	20.00	ND	11.8				
Methyl Isobutyl Ketone	120	5.0	"	100.0	ND	120				
cis-1,3-Dichloropropene	21.7	1.0	"	20.00	ND	108				
Toluene	21.5	1.0	"	20.00	ND	108	60.8-171		17.1	
trans-1,3-Dichloropropene	21.0	1.0	"	20.00	ND	105				
Ethyl Methacrylate	21.7	1.0	"	20.00	ND	108				
1,1,2-Trichloroethane	21.2	1.0	"	20.00	ND	106				
2-Hexanone (MBK)	120	5.0	"	100.0	ND	120				
1,2-Dibromoethane	21.1	1.0	"	20.00	ND	106				
Tetrachloroethene	19.6	1.0	"	20.00	ND	98.2				
1,3-Dichloropropane	23.8	1.0	"	20.00	ND	119				
Dibromochloromethane	23.9	1.0	"	20.00	ND	119				
Chlorobenzene	22.7	1.0	"	20.00	ND	113	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	23.0	1.0	"	20.00	ND	115				
Ethylbenzene	23.8	1.0	"	20.00	ND	119				
m,p-Xylenes	47.3	2.0	"	40.00	ND	118				
o-Xylene	23.0	1.0	"	20.00	ND	115				
Styrene	22.0	1.0	"	20.00	ND	110				
Bromoform	22.5	1.0	"	20.00	ND	112				
Isopropylbenzene (Cumene)	24.7	1.0	"	20.00	ND	124				
1,1,2,2-Tetrachloroethane	25.2	1.0	"	20.00	ND	126				
1,2,3-Trichloropropane	24.4	1.0	"	20.00	ND	122				
Bromobenzene	24.9	1.0	"	20.00	ND	125				
Propylbenzene	25.8	1.0	"	20.00	ND	129				
2-Chlorotoluene	24.4	1.0	"	20.00	ND	122				
1,3,5-Trimethylbenzene	24.1	1.0	"	20.00	ND	121				
4-Chlorotoluene	24.5	1.0	"	20.00	ND	122				
tert-Butylbenzene	24.4	1.0	"	20.00	ND	122				
1,2,4-Trimethylbenzene	24.6	1.0	"	20.00	ND	123				
sec-Butylbenzene	25.6	1.0	"	20.00	ND	128				
4-Isopropyltoluene	25.3	1.0	"	20.00	ND	126				
1,3-Dichlorobenzene	22.3	1.0	"	20.00	ND	112				
1,4-Dichlorobenzene	22.1	1.0	"	20.00	ND	111				
trans-1,4-Dichloro-2-butene	28.6	1.0	"	20.00	ND	143				
Butylbenzene	30.0	1.0	"	20.00	ND	150				
1,2-Dichlorobenzene	22.2	1.0	"	20.00	ND	111				
1,2-Dibromo-3-chloropropane	22.4	1.0	"	20.00	ND	112				
1,2,4-Trichlorobenzene	26.4	1.0	"	20.00	ND	132				
Hexachlorobutadiene	26.0	1.0	"	20.00	ND	130				
Naphthalene	25.6	1.0	"	20.00	ND	128				
1,2,3-Trichlorobenzene	25.1	1.0	"	20.00	ND	125				

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Matrix Spike (0944073-MS1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
Surrogate: Dibromofluoromethane	*22.5*		*ug/L*	*25.00*		*89.8*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.0*		*"*	*25.00*		*88.2*	*80-120*			
Surrogate: Toluene-d8	*24.8*		*"*	*25.00*		*99.4*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.0*		*"*	*25.00*		*95.9*	*60-149*			
Matrix Spike Dup (0944073-MSD1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
Dichlorodifluoromethane	33.8	1.0	ug/L	20.00	ND	169		3.32		
Chloromethane	20.4	1.0	"	20.00	ND	102		3.22		
Vinyl chloride	26.5	1.0	"	20.00	ND	132		2.94		
Bromomethane	22.0	1.0	"	20.00	ND	110		6.03		
Chloroethane	22.8	1.0	"	20.00	ND	114		0.959		
Trichlorofluoromethane	26.5	1.0	"	20.00	ND	132		5.87		
Acrolein	92.8	5.0	"	100.0	ND	92.8		0.430		
1,1-Dichloroethene	22.4	1.0	"	20.00	ND	112	18.7-178	4.37	22.3	
Acetone	115	5.0	"	100.0	ND	115		0.165		
Iodomethane	21.9	1.0	"	20.00	ND	109		0.319		
Carbon disulfide	20.0	1.0	"	20.00	ND	100		4.02		
Allyl Chloride (3-Chloropropylene)	19.9	1.0	"	20.00	ND	99.4		1.05		
Acetonitrile	15.0	5.0	"	20.00	ND	74.8		67.7		
Methylene Chloride	17.5	1.0	"	20.00	ND	87.4		7.54		
Methyl-tert-Butyl Ether	18.0	1.0	"	20.00	ND	89.8		2.09		
trans-1,2-Dichloroethene	21.8	1.0	"	20.00	ND	109		4.04		
Acrylonitrile	21.7	5.0	"	20.00	ND	108		0.964		
1,1-Dichloroethane	21.8	1.0	"	20.00	0.380	107		5.84		
Chloroprene	23.4	1.0	"	20.00	ND	117		6.29		
Vinyl acetate	23.5	1.0	"	20.00	ND	117		4.21		
2,2-Dichloropropane	20.2	1.0	"	20.00	ND	101		2.49		
cis-1,2-Dichloroethene	21.9	1.0	"	20.00	ND	110		4.37		
2-Butanone (MEK)	119	5.0	"	100.0	2.40	117		0.623		
Propionitrile (Ethyl Cyanide)	23.4	5.0	"	20.00	ND	117		2.12		
Methacrylonitrile	22.2	5.0	"	20.00	ND	111		1.36		
Chloroform	22.5	1.0	"	20.00	ND	112		2.24		
Bromochloromethane	22.9	1.0	"	20.00	ND	114		2.16		
1,1,1-Trichloroethane	22.0	1.0	"	20.00	ND	110		1.62		
1,1-Dichloropropene	22.9	1.0	"	20.00	ND	114		3.98		
Carbon Tetrachloride	23.7	1.0	"	20.00	ND	119		3.32		
Benzene	21.4	1.0	"	20.00	ND	107	65.6-159	2.13	15.1	
1,2-Dichloroethane	22.5	1.0	"	20.00	ND	113		2.67		
Trichloroethene	21.4	1.0	"	20.00	ND	107	71-158	1.72	15.2	
1,2-Dichloropropane	21.7	1.0	"	20.00	ND	109		1.24		
Bromodichloromethane	23.2	1.0	"	20.00	ND	116		2.31		
Methyl Methacrylate	22.7	1.0	"	20.00	ND	114		1.44		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Matrix Spike Dup (0944073-MSD1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
Dibromomethane	19.0	1.0	ug/L	20.00	ND	95.2		1.98		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	120	5.0	"	100.0	ND	120		0.284		
cis-1,3-Dichloropropene	20.9	1.0	"	20.00	ND	105		3.52		
Toluene	21.1	1.0	"	20.00	ND	106	60.8-171	1.88	17.1	
trans-1,3-Dichloropropene	20.5	1.0	"	20.00	ND	102		2.41		
Ethyl Methacrylate	21.3	1.0	"	20.00	ND	107		1.58		
1,1,2-Trichloroethane	20.5	1.0	"	20.00	ND	102		3.17		
2-Hexanone (MBK)	117	5.0	"	100.0	ND	117		2.20		
1,2-Dibromoethane	20.2	1.0	"	20.00	ND	101		4.26		
Tetrachloroethene	18.8	1.0	"	20.00	ND	93.8		4.48		
1,3-Dichloropropane	23.8	1.0	"	20.00	ND	119		0.0420		
Dibromochloromethane	23.3	1.0	"	20.00	ND	117		2.33		
Chlorobenzene	22.0	1.0	"	20.00	ND	110	76.5-147	2.91	13.6	
1,1,1,2-Tetrachloroethane	22.8	1.0	"	20.00	ND	114		0.828		
Ethylbenzene	23.3	1.0	"	20.00	ND	116		2.21		
m,p-Xylenes	46.1	2.0	"	40.00	ND	115		2.68		
o-Xylene	22.3	1.0	"	20.00	ND	111		3.10		
Styrene	21.4	1.0	"	20.00	ND	107		2.86		
Bromoform	22.0	1.0	"	20.00	ND	110		2.11		
Isopropylbenzene (Cumene)	24.3	1.0	"	20.00	ND	122		1.67		
1,1,2,2-Tetrachloroethane	25.7	1.0	"	20.00	ND	128		1.65		
1,2,3-Trichloropropane	24.6	1.0	"	20.00	ND	123		0.612		
Bromobenzene	24.9	1.0	"	20.00	ND	125		0.0401		
Propylbenzene	25.3	1.0	"	20.00	ND	127		1.72		
2-Chlorotoluene	24.4	1.0	"	20.00	ND	122		0.0820		
1,3,5-Trimethylbenzene	23.3	1.0	"	20.00	ND	117		3.33		
4-Chlorotoluene	24.2	1.0	"	20.00	ND	121		1.11		
tert-Butylbenzene	23.1	1.0	"	20.00	ND	115		5.48		
1,2,4-Trimethylbenzene	23.6	1.0	"	20.00	ND	118		3.94		
sec-Butylbenzene	23.7	1.0	"	20.00	ND	118		7.95		
4-Isopropyltoluene	23.8	1.0	"	20.00	ND	119		6.03		
1,3-Dichlorobenzene	22.1	1.0	"	20.00	ND	110		1.08		
1,4-Dichlorobenzene	22.1	1.0	"	20.00	ND	110		0.181		
trans-1,4-Dichloro-2-butene	28.7	1.0	"	20.00	ND	144		0.524		
Butylbenzene	26.5	1.0	"	20.00	ND	133		12.4		
1,2-Dichlorobenzene	22.2	1.0	"	20.00	ND	111		0.225		
1,2-Dibromo-3-chloropropane	23.2	1.0	"	20.00	ND	116		3.73		
1,2,4-Trichlorobenzene	24.1	1.0	"	20.00	ND	121		9.10		
Hexachlorobutadiene	22.9	1.0	"	20.00	ND	115		12.6		
Naphthalene	21.7	1.0	"	20.00	ND	109		16.3		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944073 - EPA 5030B										
Matrix Spike Dup (0944073-MSD1)	**Source: 09J0523-18**			Prepared & Analyzed: 10/28/2009						
1,2,3-Trichlorobenzene	22.7	1.0	ug/L	20.00	ND	114		9.75		
Surrogate: Dibromofluoromethane	*22.3*		*"*	*25.00*		*89.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*21.8*		*"*	*25.00*		*87.3*	*80-120*			
Surrogate: Toluene-d8	*25.1*		*"*	*25.00*		*100*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*"*	*25.00*		*95.3*	*60-149*			
Batch 0944075 - EPA 5030B										
Blank (0944075-BLK1)				Prepared & Analyzed: 10/29/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U

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Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Blank (0944075-BLK1)				Prepared & Analyzed: 10/29/2009						
1,2-Dichloropropane	ND	1.0	ug/L							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U
trans-1,3-Dichloropropene	ND	1.0	"							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Blank (0944075-BLK1)				Prepared & Analyzed: 10/29/2009						
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*22.4*		"	*25.00*		*89.8*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.6*		"	*25.00*		*90.4*	*80-120*			
Surrogate: Toluene-d8	*25.4*		"	*25.00*		*102*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		"	*25.00*		*95.0*	*60-149*			
LCS (0944075-BS1)				Prepared & Analyzed: 10/29/2009						
Dichlorodifluoromethane	30.5	1.0	ug/L	20.00		153	27-127			L2
Chloromethane	19.5	1.0	"	20.00		97.6	62.5-141			
Vinyl chloride	24.3	1.0	"	20.00		122	65.3-143			
Bromomethane	16.7	1.0	"	20.00		83.4	56-180			
Chloroethane	20.9	1.0	"	20.00		105	62.3-161			
Trichlorofluoromethane	24.4	1.0	"	20.00		122	35-157			
Acrolein	83.1	5.0	"	100.0		83.1	26.6-169			
1,1-Dichloroethene	20.5	1.0	"	20.00		102	64.6-138			
Acetone	112	5.0	"	100.0		112	35-159			
Iodomethane	20.0	1.0	"	20.00		100	70-130			
Carbon disulfide	18.6	1.0	"	20.00		93.0	48-142			
Allyl Chloride (3-Chloropropylene)	18.3	1.0	"	20.00		91.4	70-130			
Acetonitrile	15.0	5.0	"	20.00		75.1	70-130			
Methylene Chloride	17.1	1.0	"	20.00		85.6	64.7-139			
Methyl-tert-Butyl Ether	17.6	1.0	"	20.00		87.8	34-133			
trans-1,2-Dichloroethene	20.3	1.0	"	20.00		102	75.1-127			
Acrylonitrile	21.5	5.0	"	20.00		107	67.2-148			
1,1-Dichloroethane	21.1	1.0	"	20.00		105	72.2-135			
Chloroprene	21.5	1.0	"	20.00		108	70-130			
Vinyl acetate	23.6	1.0	"	20.00		118	70-154			
2,2-Dichloropropane	18.4	1.0	"	20.00		92.1	37-129			
cis-1,2-Dichloroethene	21.4	1.0	"	20.00		107	72-126			
2-Butanone (MEK)	110	5.0	"	100.0		110	45-128			
Propionitrile (Ethyl Cyanide)	22.3	5.0	"	20.00		111	70-130			
Methacrylonitrile	21.9	5.0	"	20.00		110	70-130			
Chloroform	21.5	1.0	"	20.00		107	76.1-135			
Bromochloromethane	22.3	1.0	"	20.00		112	73-126			
1,1,1-Trichloroethane	20.2	1.0	"	20.00		101	67.1-139			
1,1-Dichloropropene	20.5	1.0	"	20.00		102	70-130			
Carbon Tetrachloride	21.5	1.0	"	20.00		108	63.3-142			
Benzene	20.3	1.0	"	20.00		102	72-132			

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
LCS (0944075-BS1)				Prepared & Analyzed: 10/29/2009						
1,2-Dichloroethane	22.4	1.0	ug/L	20.00		112	72.9-139			
Trichloroethene	20.5	1.0	"	20.00		103	73.7-130			
1,2-Dichloropropane	20.3	1.0	"	20.00		102	71.3-137			
Bromodichloromethane	22.2	1.0	"	20.00		111	74.5-136			
Methyl Methacrylate	22.0	1.0	"	20.00		110	70-130			
Dibromomethane	18.0	1.0	"	20.00		90.1	66-125			
2-Chloroethyl Vinyl Ether	16.2	1.0	"	20.00		80.9	42.5-161			
Methyl Isobutyl Ketone	113	5.0	"	100.0		113	41-143			
cis-1,3-Dichloropropene	20.1	1.0	"	20.00		101	74.6-124			
Toluene	19.6	1.0	"	20.00		98.0	72.4-132			
trans-1,3-Dichloropropene	19.6	1.0	"	20.00		98.0	72.1-124			
Ethyl Methacrylate	20.2	1.0	"	20.00		101	70-130			
1,1,2-Trichloroethane	19.8	1.0	"	20.00		98.8	75.6-140			
2-Hexanone (MBK)	111	5.0	"	100.0		111	43-147			
1,2-Dibromoethane	19.8	1.0	"	20.00		99.0	70-130			
Tetrachloroethene	17.4	1.0	"	20.00		86.8	69.9-125			
1,3-Dichloropropane	22.4	1.0	"	20.00		112	70-130			
Dibromochloromethane	22.0	1.0	"	20.00		110	69.9-134			
Chlorobenzene	20.5	1.0	"	20.00		103	67.3-133			
1,1,1,2-Tetrachloroethane	21.3	1.0	"	20.00		106	76-123			
Ethylbenzene	21.1	1.0	"	20.00		105	70.6-131			
m,p-Xylenes	41.9	2.0	"	40.00		105	71-123			
o-Xylene	20.6	1.0	"	20.00		103	80-119			
Styrene	19.7	1.0	"	20.00		98.6	79-117			
Bromoform	20.6	1.0	"	20.00		103	68.8-130			
Isopropylbenzene (Cumene)	21.3	1.0	"	20.00		106	70-130			
1,1,2,2-Tetrachloroethane	23.6	1.0	"	20.00		118	69.1-143			
1,2,3-Trichloropropane	23.0	1.0	"	20.00		115	70-130			
Bromobenzene	23.3	1.0	"	20.00		116	70-130			
Propylbenzene	22.3	1.0	"	20.00		111	70-130			
2-Chlorotoluene	22.4	1.0	"	20.00		112	70-130			
1,3,5-Trimethylbenzene	21.1	1.0	"	20.00		105	70-130			
4-Chlorotoluene	22.1	1.0	"	20.00		110	70-130			
tert-Butylbenzene	20.2	1.0	"	20.00		101	70-130			
1,2,4-Trimethylbenzene	21.9	1.0	"	20.00		110	70-130			
sec-Butylbenzene	20.5	1.0	"	20.00		103	70-130			
4-Isopropyltoluene	21.0	1.0	"	20.00		105	70-130			
1,3-Dichlorobenzene	20.0	1.0	"	20.00		99.8	74-125			
1,4-Dichlorobenzene	20.1	1.0	"	20.00		101	75-122			
trans-1,4-Dichloro-2-butene	26.7	1.0	"	20.00		134	70-130			L2
Butylbenzene	24.0	1.0	"	20.00		120	70-130			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
LCS (0944075-BS1)				Prepared & Analyzed: 10/29/2009						
1,2-Dichlorobenzene	20.5	1.0	ug/L	20.00		102	74-124			
1,2-Dibromo-3-chloropropane	20.8	1.0	"	20.00		104	70-130			
1,2,4-Trichlorobenzene	23.6	1.0	"	20.00		118	45-134			
Hexachlorobutadiene	17.0	1.0	"	20.00		85.2	33-154			
Naphthalene	25.2	1.0	"	20.00		126	22-148			
1,2,3-Trichlorobenzene	23.0	1.0	"	20.00		115	70-130			
Surrogate: Dibromofluoromethane	*22.6*		*"*	*25.00*		*90.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.8*		*"*	*25.00*		*91.2*	*80-120*			
Surrogate: Toluene-d8	*25.0*		*"*	*25.00*		*99.9*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*"*	*25.00*		*96.4*	*60-149*			
Matrix Spike (0944075-MS1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
Dichlorodifluoromethane	36.9	1.0	ug/L	20.00	ND	184				
Chloromethane	23.4	1.0	"	20.00	ND	117				
Vinyl chloride	30.0	1.0	"	20.00	ND	150				
Bromomethane	13.0	1.0	"	20.00	ND	64.9				
Chloroethane	28.6	1.0	"	20.00	ND	143				
Trichlorofluoromethane	30.0	1.0	"	20.00	ND	150				
Acrolein	81.6	5.0	"	100.0	ND	81.6				
1,1-Dichloroethene	23.7	1.0	"	20.00	ND	118	18.7-178		22.3	
Acetone	127	5.0	"	100.0	ND	127				
Iodomethane	23.5	1.0	"	20.00	ND	117				
Carbon disulfide	21.8	1.0	"	20.00	ND	109				
Allyl Chloride (3-Chloropropylene)	20.2	1.0	"	20.00	ND	101				
Acetonitrile	18.5	5.0	"	20.00	ND	92.7				
Methylene Chloride	20.3	1.0	"	20.00	ND	102				
Methyl-tert-Butyl Ether	17.8	1.0	"	20.00	ND	89.2				
trans-1,2-Dichloroethene	23.4	1.0	"	20.00	ND	117				
Acrylonitrile	23.9	5.0	"	20.00	ND	119				
1,1-Dichloroethane	24.6	1.0	"	20.00	ND	123				
Chloroprene	25.2	1.0	"	20.00	ND	126				
Vinyl acetate	26.4	1.0	"	20.00	ND	132				
2,2-Dichloropropane	19.6	1.0	"	20.00	ND	97.8				
cis-1,2-Dichloroethene	23.6	1.0	"	20.00	0.480	116				
2-Butanone (MEK)	129	5.0	"	100.0	ND	129				
Propionitrile (Ethyl Cyanide)	24.4	5.0	"	20.00	ND	122				
Methacrylonitrile	23.9	5.0	"	20.00	ND	119				
Chloroform	23.4	1.0	"	20.00	ND	117				
Bromochloromethane	25.1	1.0	"	20.00	ND	126				
1,1,1-Trichloroethane	22.9	1.0	"	20.00	ND	114				
1,1-Dichloropropene	23.4	1.0	"	20.00	ND	117				
Carbon Tetrachloride	24.5	1.0	"	20.00	ND	122				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Matrix Spike (0944075-MS1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
Benzene	27.4	1.0	ug/L	20.00	5.42	110	65.6-159		15.1	
1,2-Dichloroethane	24.3	1.0	"	20.00	ND	121				
Trichloroethene	22.0	1.0	"	20.00	ND	110	71-158		15.2	
1,2-Dichloropropane	22.6	1.0	"	20.00	ND	113				
Bromodichloromethane	24.3	1.0	"	20.00	ND	121				
Methyl Methacrylate	24.9	1.0	"	20.00	ND	125				
Dibromomethane	18.8	1.0	"	20.00	ND	94.0				
2-Chloroethyl Vinyl Ether	0.440	1.0	"	20.00	ND	2.20				U
Methyl Isobutyl Ketone	133	5.0	"	100.0	ND	133				
cis-1,3-Dichloropropene	21.1	1.0	"	20.00	ND	105				
Toluene	21.6	1.0	"	20.00	ND	108	60.8-171		17.1	
trans-1,3-Dichloropropene	20.3	1.0	"	20.00	ND	102				
Ethyl Methacrylate	21.8	1.0	"	20.00	ND	109				
1,1,2-Trichloroethane	21.0	1.0	"	20.00	ND	105				
2-Hexanone (MBK)	131	5.0	"	100.0	ND	131				
1,2-Dibromoethane	20.6	1.0	"	20.00	ND	103				
Tetrachloroethene	17.9	1.0	"	20.00	ND	89.3				
1,3-Dichloropropane	24.2	1.0	"	20.00	ND	121				
Dibromochloromethane	23.3	1.0	"	20.00	ND	117				
Chlorobenzene	21.8	1.0	"	20.00	ND	109	76.5-147		13.6	
1,1,1,2-Tetrachloroethane	22.6	1.0	"	20.00	ND	113				
Ethylbenzene	23.4	1.0	"	20.00	ND	117				
m,p-Xylenes	46.2	2.0	"	40.00	ND	116				
o-Xylene	22.4	1.0	"	20.00	ND	112				
Styrene	21.0	1.0	"	20.00	ND	105				
Bromoform	21.8	1.0	"	20.00	ND	109				
Isopropylbenzene (Cumene)	24.1	1.0	"	20.00	ND	121				
1,1,2,2-Tetrachloroethane	26.8	1.0	"	20.00	ND	134				
1,2,3-Trichloropropane	25.5	1.0	"	20.00	ND	128				
Bromobenzene	24.9	1.0	"	20.00	ND	124				
Propylbenzene	25.2	1.0	"	20.00	ND	126				
2-Chlorotoluene	24.2	1.0	"	20.00	ND	121				
1,3,5-Trimethylbenzene	21.4	1.0	"	20.00	ND	107				
4-Chlorotoluene	24.2	1.0	"	20.00	ND	121				
tert-Butylbenzene	22.9	1.0	"	20.00	ND	114				
1,2,4-Trimethylbenzene	19.6	1.0	"	20.00	ND	97.8				
sec-Butylbenzene	24.0	1.0	"	20.00	ND	120				
4-Isopropyltoluene	21.8	1.0	"	20.00	ND	109				
1,3-Dichlorobenzene	21.1	1.0	"	20.00	ND	106				
1,4-Dichlorobenzene	21.0	1.0	"	20.00	ND	105				
trans-1,4-Dichloro-2-butene	29.4	1.0	"	20.00	ND	147				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Matrix Spike (0944075-MS1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
Butylbenzene	21.6	1.0	ug/L	20.00	ND	108				
1,2-Dichlorobenzene	21.5	1.0	"	20.00	ND	108				
1,2-Dibromo-3-chloropropane	23.8	1.0	"	20.00	ND	119				
1,2,4-Trichlorobenzene	16.9	1.0	"	20.00	ND	84.7				
Hexachlorobutadiene	23.1	1.0	"	20.00	ND	115				
Naphthalene	17.9	1.0	"	20.00	ND	89.7				
1,2,3-Trichlorobenzene	16.2	1.0	"	20.00	ND	81.0				
Surrogate: Dibromofluoromethane	*23.3*		"	*25.00*		*93.2*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*23.4*		"	*25.00*		*93.5*	*80-120*			
Surrogate: Toluene-d8	*25.0*		"	*25.00*		*100*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		"	*25.00*		*96.9*	*60-149*			
Matrix Spike Dup (0944075-MSD1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
Dichlorodifluoromethane	35.0	1.0	ug/L	20.00	ND	175		5.32		
Chloromethane	21.6	1.0	"	20.00	ND	108		7.82		
Vinyl chloride	27.8	1.0	"	20.00	ND	139		7.51		
Bromomethane	13.8	1.0	"	20.00	ND	69.2		6.41		
Chloroethane	23.4	1.0	"	20.00	ND	117		19.8		
Trichlorofluoromethane	27.3	1.0	"	20.00	ND	137		9.35		
Acrolein	78.7	5.0	"	100.0	ND	78.7		3.63		
1,1-Dichloroethene	21.8	1.0	"	20.00	ND	109	18.7-178	8.21	22.3	
Acetone	128	5.0	"	100.0	ND	128		0.802		
Iodomethane	22.3	1.0	"	20.00	ND	112		4.98		
Carbon disulfide	20.5	1.0	"	20.00	ND	103		6.05		
Allyl Chloride (3-Chloropropylene)	18.9	1.0	"	20.00	ND	94.6		6.45		
Acetonitrile	18.2	5.0	"	20.00	ND	91.0		1.80		
Methylene Chloride	19.2	1.0	"	20.00	ND	96.2		5.41		
Methyl-tert-Butyl Ether	17.8	1.0	"	20.00	ND	88.8		0.337		
trans-1,2-Dichloroethene	21.8	1.0	"	20.00	ND	109		7.05		
Acrylonitrile	23.0	5.0	"	20.00	ND	115		3.62		
1,1-Dichloroethane	23.1	1.0	"	20.00	ND	116		6.20		
Chloroprene	23.2	1.0	"	20.00	ND	116		8.51		
Vinyl acetate	25.8	1.0	"	20.00	ND	129		2.41		
2,2-Dichloropropane	18.1	1.0	"	20.00	ND	90.6		7.64		
cis-1,2-Dichloroethene	22.4	1.0	"	20.00	0.480	110		5.31		
2-Butanone (MEK)	128	5.0	"	100.0	ND	128		0.800		
Propionitrile (Ethyl Cyanide)	24.8	5.0	"	20.00	ND	124		1.79		
Methacrylonitrile	24.4	5.0	"	20.00	ND	122		2.32		
Chloroform	22.5	1.0	"	20.00	ND	112		4.01		
Bromochloromethane	24.3	1.0	"	20.00	ND	122		3.28		
1,1,1-Trichloroethane	21.4	1.0	"	20.00	ND	107		6.50		
1,1-Dichloropropene	22.0	1.0	"	20.00	ND	110		6.30		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Matrix Spike Dup (0944075-MSD1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
Carbon Tetrachloride	23.2	1.0	ug/L	20.00	ND	116		5.50		
Benzene	26.1	1.0	"	20.00	5.42	104	65.6-159	4.86	15.1	
1,2-Dichloroethane	23.7	1.0	"	20.00	ND	119		2.29		
Trichloroethene	20.7	1.0	"	20.00	ND	104	71-158	6.18	15.2	
1,2-Dichloropropane	21.8	1.0	"	20.00	ND	109		3.51		
Bromodichloromethane	23.3	1.0	"	20.00	ND	117		4.04		
Methyl Methacrylate	24.8	1.0	"	20.00	ND	124		0.523		
Dibromomethane	18.2	1.0	"	20.00	ND	91.0		3.24		
2-Chloroethyl Vinyl Ether	ND	1.0	"	20.00	ND					U
Methyl Isobutyl Ketone	132	5.0	"	100.0	ND	132		0.943		
cis-1,3-Dichloropropene	20.5	1.0	"	20.00	ND	102		2.89		
Toluene	20.5	1.0	"	20.00	ND	103	60.8-171	5.08	17.1	
trans-1,3-Dichloropropene	20.2	1.0	"	20.00	ND	101		0.790		
Ethyl Methacrylate	21.6	1.0	"	20.00	ND	108		1.20		
1,1,2-Trichloroethane	20.5	1.0	"	20.00	ND	103		2.03		
2-Hexanone (MBK)	130	5.0	"	100.0	ND	130		1.40		
1,2-Dibromoethane	20.5	1.0	"	20.00	ND	102		0.876		
Tetrachloroethene	17.0	1.0	"	20.00	ND	84.9		5.05		
1,3-Dichloropropane	23.7	1.0	"	20.00	ND	118		2.13		
Dibromochloromethane	23.2	1.0	"	20.00	ND	116		0.430		
Chlorobenzene	21.0	1.0	"	20.00	ND	105	76.5-147	3.79	13.6	
1,1,1,2-Tetrachloroethane	22.4	1.0	"	20.00	ND	112		0.846		
Ethylbenzene	22.4	1.0	"	20.00	ND	112		4.02		
m,p-Xylenes	44.7	2.0	"	40.00	ND	112		3.39		
o-Xylene	21.2	1.0	"	20.00	ND	106		5.09		
Styrene	20.0	1.0	"	20.00	ND	99.8		5.13		
Bromoform	21.2	1.0	"	20.00	ND	106		2.80		
Isopropylbenzene (Cumene)	21.9	1.0	"	20.00	ND	110		9.42		
1,1,2,2-Tetrachloroethane	25.7	1.0	"	20.00	ND	128		4.04		
1,2,3-Trichloropropane	24.2	1.0	"	20.00	ND	121		5.22		
Bromobenzene	23.9	1.0	"	20.00	ND	120		4.02		
Propylbenzene	23.4	1.0	"	20.00	ND	117		7.52		
2-Chlorotoluene	22.6	1.0	"	20.00	ND	113		7.09		
1,3,5-Trimethylbenzene	21.2	1.0	"	20.00	ND	106		0.705		
4-Chlorotoluene	22.6	1.0	"	20.00	ND	113		6.89		
tert-Butylbenzene	21.1	1.0	"	20.00	ND	106		8.05		
1,2,4-Trimethylbenzene	21.9	1.0	"	20.00	ND	109		11.2		
sec-Butylbenzene	22.2	1.0	"	20.00	ND	111		7.78		
4-Isopropyltoluene	21.7	1.0	"	20.00	ND	109		0.460		
1,3-Dichlorobenzene	20.0	1.0	"	20.00	ND	100		5.50		
1,4-Dichlorobenzene	19.9	1.0	"	20.00	ND	99.3		5.72		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944075 - EPA 5030B										
Matrix Spike Dup (0944075-MSD1)	**Source: 09J0523-31**			Prepared & Analyzed: 10/29/2009						
trans-1,4-Dichloro-2-butene	27.3	1.0	ug/L	20.00	ND	136		7.31		
Butylbenzene	25.3	1.0	"	20.00	ND	126		15.7		
1,2-Dichlorobenzene	20.3	1.0	"	20.00	ND	101		5.98		
1,2-Dibromo-3-chloropropane	22.4	1.0	"	20.00	ND	112		5.88		
1,2,4-Trichlorobenzene	22.0	1.0	"	20.00	ND	110		26.1		
Hexachlorobutadiene	21.6	1.0	"	20.00	ND	108		6.58		
Naphthalene	22.9	1.0	"	20.00	ND	114		24.3		
1,2,3-Trichlorobenzene	20.9	1.0	"	20.00	ND	105		25.6		
Surrogate: Dibromofluoromethane	*23.0*		*"*	*25.00*		*92.1*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*23.7*		*"*	*25.00*		*95.0*	*80-120*			
Surrogate: Toluene-d8	*25.6*		*"*	*25.00*		*103*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*"*	*25.00*		*96.8*	*60-149*			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
Blank (0942162-BLK1)				Prepared: 10/15/2009 Analyzed: 10/19/2009						
N-Nitrosodimethylamine	ND	5.0	ug/L							U
Pyridine	ND	5.0	"							U
Aniline	ND	5.0	"							U
Bis(2-Chloroethyl)ether	ND	5.0	"							U
Phenol	ND	5.0	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	5.0	"							U
1,3-Dichlorobenzene	ND	5.0	"							U
1,4-Dichlorobenzene	ND	5.0	"							U
1,2-Dichlorobenzene	ND	5.0	"							U
Pentachloroethane	ND	5.0	"							U
Bis(2-chloroisopropyl)ether	ND	5.0	"							U
2-Methylphenol	ND	5.0	"							U
Hexachloroethane	ND	5.0	"							U
4-Methylphenol, 3-Methylphenol	ND	5.0	"							U
Nitrobenzene	ND	5.0	"							U
Isophorone	ND	5.0	"							U
2-Nitrophenol	ND	5.0	"							U
2,4-Dimethylphenol	ND	5.0	"							U
bis(2-Chloroethoxy)methane	ND	5.0	"							U
2,4-Dichlorophenol	ND	5.0	"							U
1,2,4-Trichlorobenzene	ND	5.0	"							U
Naphthalene	ND	5.0	"							U
Hexachlorobutadiene	ND	5.0	"							U
4-Chloro-3-methylphenol	ND	5.0	"							U
2-Methylnaphthalene	ND	5.0	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	5.0	"							U
2,4,5-Trichlorophenol	ND	5.0	"							U
2-Chloronaphthalene	ND	5.0	"							U
Acenaphthylene	ND	5.0	"							U
Dimethylphthalate	ND	5.0	"							U
2,6-Dinitrotoluene	ND	5.0	"							U
Acenaphthene	ND	5.0	"							U
2,4-Dinitrophenol	ND	10	"							U
Dibenzofuran	ND	5.0	"							U
2,4-Dinitrotoluene	ND	5.0	"							U
4-Nitrophenol	ND	10	"							U
Fluorene	ND	5.0	"							U
4-Chlorophenyl-phenylether	ND	5.0	"							U
Diethylphthalate	ND	5.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
Blank (0942162-BLK1)				Prepared: 10/15/2009 Analyzed: 10/19/2009						
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L							U
4-Bromophenyl-phenylether	ND	5.0	"							U
Hexachlorobenzene	ND	5.0	"							U
Pentachlorophenol	ND	10	"							U
Phenanthrene	ND	5.0	"							U
Anthracene	ND	5.0	"							U
Di-n-butylphthalate	ND	5.0	"							U
Fluoranthene	ND	5.0	"							U
Pyrene	ND	5.0	"							U
Butylbenzylphthalate	ND	5.0	"							U
3,3´-Dichlorobenzidine	ND	5.0	"							U
Benz(a)anthracene	ND	5.0	"							U
Chrysene	ND	5.0	"							U
Bis(2-Ethylhexyl)phthalate	ND	5.0	"							U
Di-n-octylphthalate	ND	5.0	"							U
Benzo[b]fluoranthene	ND	5.0	"							U
Benzo[k]fluoranthene	ND	5.0	"							U
Benzo[a]pyrene	ND	5.0	"							U
Indeno[1,2,3-cd]pyrene	ND	5.0	"							U
Dibenz[a,h]anthracene	ND	5.0	"							U
Benzo[g,h,i]perylene	ND	5.0	"							U
Surrogate: 2-Fluorophenol	*34.2*		*"*	*75.00*		*45.7*	*0.974-78.2*			
Surrogate: Phenol-d5	*22.8*		*"*	*75.00*		*30.3*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*33.8*		*"*	*50.00*		*67.5*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*38.5*		*"*	*50.00*		*77.0*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*52.9*		*"*	*75.00*		*70.6*	*12.5-139*			
Surrogate: Terphenyl-d14	*39.9*		*"*	*50.00*		*79.7*	*16.6-136*			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
LCS (0942162-BS1)				Prepared: 10/15/2009 Analyzed: 10/19/2009						
N-Nitrosodimethylamine	30.0	5.0	ug/L	50.00		59.9				
Pyridine	27.3	5.0	"	50.00		54.5				
Aniline	45.3	5.0	"	50.00		90.7				
Bis(2-Chloroethyl)ether	38.2	5.0	"	50.00		76.4				
Phenol	19.6	5.0	"	50.00		39.3	11-113			
2-Chlorophenol	39.6	5.0	"	50.00		79.2	13-109			
1,4-Dichlorobenzene	37.1	5.0	"	50.00		74.2	34-111			
Bis(2-chloroisopropyl)ether	38.8	5.0	"	50.00		77.5				
2-Methylphenol	36.7	5.0	"	50.00		73.4				
Hexachloroethane	37.7	5.0	"	50.00		75.5				
4-Methylphenol, 3-Methylphenol	35.6	5.0	"	50.00		71.2				
Nitrobenzene	35.0	5.0	"	50.00		69.9				
Isophorone	37.4	5.0	"	50.00		74.9				
2-Nitrophenol	41.0	5.0	"	50.00		82.0				
2,4-Dimethylphenol	37.8	5.0	"	50.00		75.7	0-200			
bis(2-Chloroethoxy)methane	38.1	5.0	"	50.00		76.3				
2,4-Dichlorophenol	42.4	5.0	"	50.00		84.8	0-200			
1,2,4-Trichlorobenzene	37.7	5.0	"	50.00		75.4	23-126			
Naphthalene	37.9	5.0	"	50.00		75.7				
Hexachlorobutadiene	35.8	5.0	"	50.00		71.5				
4-Chloro-3-methylphenol	44.1	5.0	"	50.00		88.1	16-127			
2-Methylnaphthalene	37.9	5.0	"	50.00		75.8				
Hexachlorocyclopentadiene	35.9	10	"	50.00		71.7				
2,4,6-Trichlorophenol	42.8	5.0	"	50.00		85.6	0-200			
2,4,5-Trichlorophenol	45.1	5.0	"	50.00		90.2				
2-Chloronaphthalene	41.3	5.0	"	50.00		82.5				
Acenaphthylene	41.3	5.0	"	50.00		82.7				
Dimethylphthalate	42.6	5.0	"	50.00		85.3				
2,6-Dinitrotoluene	42.6	5.0	"	50.00		85.2	0-200			
Acenaphthene	41.7	5.0	"	50.00		83.4	36-123			
2,4-Dinitrophenol	44.1	10	"	50.00		88.2	0-200			
Dibenzofuran	42.7	5.0	"	50.00		85.3				
2,4-Dinitrotoluene	44.4	5.0	"	50.00		88.8	24-123			
4-Nitrophenol	21.3	10	"	50.00		42.6	0.5-121			
Fluorene	42.0	5.0	"	50.00		84.0				
4-Chlorophenyl-phenylether	42.1	5.0	"	50.00		84.1				
Diethylphthalate	43.4	5.0	"	50.00		86.8				
4,6-Dinitro-2-methylphenol	37.3	5.0	"	50.00		74.6				
4-Bromophenyl-phenylether	37.2	5.0	"	50.00		74.4				
Hexachlorobenzene	36.4	5.0	"	50.00		72.8				
Pentachlorophenol	45.2	10	"	50.00		90.4	12-103			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
LCS (0942162-BS1)				Prepared: 10/15/2009 Analyzed: 10/19/2009						
Phenanthrene	36.5	5.0	ug/L	50.00		73.0				
Anthracene	36.3	5.0	"	50.00		72.6				
Di-n-butylphthalate	38.2	5.0	"	50.00		76.4				
Fluoranthene	36.7	5.0	"	50.00		73.4				
Pyrene	40.1	5.0	"	50.00		80.2	31-121			
Butylbenzylphthalate	41.6	5.0	"	50.00		83.2				
3,3´-Dichlorobenzidine	83.8	5.0	"	50.00		168				
Benz(a)anthracene	39.6	5.0	"	50.00		79.3				
Chrysene	40.2	5.0	"	50.00		80.3				
Bis(2-Ethylhexyl)phthalate	39.9	5.0	"	50.00		79.9				
Di-n-octylphthalate	44.2	5.0	"	50.00		88.4				
Benzo[b]fluoranthene	37.7	5.0	"	50.00		75.4				
Benzo[k]fluoranthene	43.5	5.0	"	50.00		87.0				
Benzo[a]pyrene	39.7	5.0	"	50.00		79.4				
Indeno[1,2,3-cd]pyrene	25.8	5.0	"	50.00		51.6				
Dibenz[a,h]anthracene	26.3	5.0	"	50.00		52.7				
Benzo[g,h,i]perylene	23.5	5.0	"	50.00		46.9				
Surrogate: 2-Fluorophenol	*40.3*		"	*75.00*		*53.8*	*0.974-78.2*			
Surrogate: Phenol-d5	*28.8*		"	*75.00*		*38.4*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*37.2*		"	*50.00*		*74.3*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*38.9*		"	*50.00*		*77.8*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*61.2*		"	*75.00*		*81.6*	*12.5-139*			
Surrogate: Terphenyl-d14	*39.0*		"	*50.00*		*78.0*	*16.6-136*			
Matrix Spike (0942162-MS1)	**Source: 09J0523-13**			Prepared: 10/15/2009 Analyzed: 10/20/2009						
N-Nitrosodimethylamine	15.1	5.6	ug/L	55.56	ND	27.2				D
Pyridine	ND	5.6	"	55.56	ND					U, D
Aniline	27.1	5.6	"	55.56	ND	48.8				D
Bis(2-Chloroethyl)ether	23.2	5.6	"	55.56	ND	41.7				D
Phenol	15.8	5.6	"	55.56	ND	28.5	12-110		42	D
2-Chlorophenol	27.3	5.6	"	55.56	ND	49.2	27-123		40	D
1,4-Dichlorobenzene	24.2	5.6	"	55.56	ND	43.6	36-97		28	D
Bis(2-chloroisopropyl)ether	25.6	5.6	"	55.56	ND	46.1				D
2-Methylphenol	26.3	5.6	"	55.56	ND	47.4				D
Hexachloroethane	23.8	5.6	"	55.56	ND	42.9				D
4-Methylphenol, 3-Methylphenol	26.6	5.6	"	55.56	ND	47.9				D
Nitrobenzene	25.0	5.6	"	55.56	ND	45.0				D
Isophorone	27.2	5.6	"	55.56	ND	48.9				D
2-Nitrophenol	30.0	5.6	"	55.56	ND	53.9				D
2,4-Dimethylphenol	30.7	5.6	"	55.56	ND	55.3				D
bis(2-Chloroethoxy)methane	26.4	5.6	"	55.56	ND	47.6				D
2,4-Dichlorophenol	30.8	5.6	"	55.56	ND	55.5				D

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
Matrix Spike (0942162-MS1)	**Source: 09J0523-13**			Prepared: 10/15/2009 Analyzed: 10/20/2009						
1,2,4-Trichlorobenzene	26.0	5.6	ug/L	55.56	ND	46.9	39-98		28	D
Naphthalene	28.4	5.6	"	55.56	ND	51.2				D
Hexachlorobutadiene	24.6	5.6	"	55.56	ND	44.2				D
4-Chloro-3-methylphenol	39.8	5.6	"	55.56	ND	71.6	23-97			D
2-Methylnaphthalene	30.7	5.6	"	55.56	ND	55.3				D
Hexachlorocyclopentadiene	23.8	11	"	55.56	ND	42.9				D
2,4,6-Trichlorophenol	37.6	5.6	"	55.56	ND	67.6				D
2,4,5-Trichlorophenol	45.1	5.6	"	55.56	ND	81.2				D
2-Chloronaphthalene	31.8	5.6	"	55.56	ND	57.2				D
Acenaphthylene	34.8	5.6	"	55.56	ND	62.7				D
Dimethylphthalate	41.0	5.6	"	55.56	ND	73.8				D
2,6-Dinitrotoluene	41.1	5.6	"	55.56	ND	74.0				D
Acenaphthene	34.6	5.6	"	55.56	ND	62.3	46-118		31	D
2,4-Dinitrophenol	52.2	11	"	55.56	ND	94.0				D
Dibenzofuran	37.1	5.6	"	55.56	ND	66.8				D
2,4-Dinitrotoluene	44.7	5.6	"	55.56	ND	80.5	24-96		38	D
4-Nitrophenol	34.6	11	"	55.56	ND	62.4	10-80		50	D
Fluorene	39.7	5.6	"	55.56	ND	71.4				D
4-Chlorophenyl-phenylether	38.0	5.6	"	55.56	ND	68.4				D
Diethylphthalate	43.1	5.6	"	55.56	ND	77.5				D
4,6-Dinitro-2-methylphenol	42.0	5.6	"	55.56	ND	75.5				D
4-Bromophenyl-phenylether	36.5	5.6	"	55.56	ND	65.7				D
Hexachlorobenzene	35.6	5.6	"	55.56	ND	64.1				D
Pentachlorophenol	56.7	11	"	55.56	ND	102	9-103		50	D
Phenanthrene	38.2	5.6	"	55.56	ND	68.8				D
Anthracene	37.6	5.6	"	55.56	ND	67.7				D
Di-n-butylphthalate	39.6	5.6	"	55.56	ND	71.3				D
Fluoranthene	38.5	5.6	"	55.56	ND	69.3				D
Pyrene	55.4	5.6	"	55.56	ND	99.8	26-127		31	D
Butylbenzylphthalate	50.5	5.6	"	55.56	ND	90.8				D
3,3´-Dichlorobenzidine	ND	5.6	"	55.56	ND					U, D
Benz(a)anthracene	41.9	5.6	"	55.56	ND	75.4				D
Chrysene	42.1	5.6	"	55.56	ND	75.8				D
Bis(2-Ethylhexyl)phthalate	70.2	5.6	"	55.56	31.0	70.7				D
Di-n-octylphthalate	117	5.6	"	55.56	ND	211				E3, M3, D
Benzo[b]fluoranthene	47.0	5.6	"	55.56	ND	84.5				E3, D
Benzo[k]fluoranthene	63.3	5.6	"	55.56	ND	114				E3, D
Benzo[a]pyrene	44.8	5.6	"	55.56	ND	80.6				E3, D
Indeno[1,2,3-cd]pyrene	24.6	5.6	"	55.56	ND	44.4				E3, D
Dibenz[a,h]anthracene	25.1	5.6	"	55.56	ND	45.2				E3, D
Benzo[g,h,i]perylene	23.8	5.6	"	55.56	ND	42.9				E3, D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
Matrix Spike (0942162-MS1)	**Source: 09J0523-13**			Prepared: 10/15/2009 Analyzed: 10/20/2009						
Surrogate: 2-Fluorophenol	*28.6*		*ug/L*	*83.33*		*34.3*	*0.974-78.2*			
Surrogate: Phenol-d5	*19.9*		*"*	*83.33*		*23.9*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*24.9*		*"*	*55.56*		*44.8*	*15.3-131*			*S4*
Surrogate: 2-Fluorobiphenyl	*29.9*		*"*	*55.56*		*53.9*	*3.75-142*			*S4*
Surrogate: 2,4,6-Tribromophenol	*65.2*		*"*	*83.33*		*78.2*	*12.5-139*			
Surrogate: Terphenyl-d14	*51.3*		*"*	*55.56*		*92.3*	*16.6-136*			*S1*
Matrix Spike Dup (0942162-MSD1)	**Source: 09J0523-13**			Prepared: 10/15/2009 Analyzed: 10/20/2009						
N-Nitrosodimethylamine	27.2	5.5	ug/L	54.95	ND	49.4		57.0		D
Pyridine	25.5	5.5	"	54.95	ND	46.4				D
Aniline	41.1	5.5	"	54.95	ND	74.8		41.0		D
Bis(2-Chloroethyl)ether	31.0	5.5	"	54.95	ND	56.5		29.0		D
Phenol	20.1	5.5	"	54.95	ND	36.6	12-110	24.0	42	D
2-Chlorophenol	35.4	5.5	"	54.95	ND	64.5	27-123	25.8	40	D
1,4-Dichlorobenzene	30.6	5.5	"	54.95	ND	55.6	36-97	23.1	28	D
Bis(2-chloroisopropyl)ether	33.1	5.5	"	54.95	ND	60.2		25.5		D
2-Methylphenol	34.6	5.5	"	54.95	ND	63.0		27.2		D
Hexachloroethane	31.3	5.5	"	54.95	ND	57.0		27.3		D
4-Methylphenol, 3-Methylphenol	35.7	5.5	"	54.95	ND	64.9		29.1		D
Nitrobenzene	30.9	5.5	"	54.95	ND	56.2		21.1		D
Isophorone	36.5	5.5	"	54.95	ND	66.4		29.3		D
2-Nitrophenol	38.2	5.5	"	54.95	ND	69.4		24.0		D
2,4-Dimethylphenol	39.5	5.5	"	54.95	ND	71.9		25.0		D
bis(2-Chloroethoxy)methane	33.6	5.5	"	54.95	ND	61.1		23.8		D
2,4-Dichlorophenol	41.2	5.5	"	54.95	ND	75.0		28.8		D
1,2,4-Trichlorobenzene	33.1	5.5	"	54.95	ND	60.2	39-98	23.9	28	D
Naphthalene	36.9	5.5	"	54.95	ND	67.2		26.0		D
Hexachlorobutadiene	32.5	5.5	"	54.95	ND	59.1		27.8		D
4-Chloro-3-methylphenol	44.6	5.5	"	54.95	ND	81.1	23-97	11.4		D
2-Methylnaphthalene	36.6	5.5	"	54.95	ND	66.6		17.5		D
Hexachlorocyclopentadiene	32.4	11	"	54.95	ND	59.0		30.5		D
2,4,6-Trichlorophenol	44.7	5.5	"	54.95	ND	81.3		17.3		D
2,4,5-Trichlorophenol	49.3	5.5	"	54.95	ND	89.7		8.89		D
2-Chloronaphthalene	40.0	5.5	"	54.95	ND	72.8		22.9		D
Acenaphthylene	41.4	5.5	"	54.95	ND	75.3		17.2		D
Dimethylphthalate	44.4	5.5	"	54.95	ND	80.8		7.90		D
2,6-Dinitrotoluene	44.2	5.5	"	54.95	ND	80.4		7.21		D
Acenaphthene	41.9	5.5	"	54.95	ND	76.2	46-118	19.0	31	D
2,4-Dinitrophenol	54.2	11	"	54.95	ND	98.7		3.78		D
Dibenzofuran	44.0	5.5	"	54.95	ND	80.2		17.1		D
2,4-Dinitrotoluene	46.8	5.5	"	54.95	ND	85.1	24-96	4.45	38	D
4-Nitrophenol	34.6	11	"	54.95	ND	62.9	10-80	0.179	50	D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0942162 - EPA 3520C										
Matrix Spike Dup (0942162-MSD1)	**Source: 09J0523-13**			Prepared: 10/15/2009 Analyzed: 10/20/2009						
Fluorene	44.2	5.5	ug/L	54.95	ND	80.4		10.8		D
4-Chlorophenyl-phenylether	43.2	5.5	"	54.95	ND	78.5		12.7		D
Diethylphthalate	44.9	5.5	"	54.95	ND	81.7		4.20		D
4,6-Dinitro-2-methylphenol	41.5	5.5	"	54.95	ND	75.5		1.10		D
4-Bromophenyl-phenylether	39.3	5.5	"	54.95	ND	71.6		7.37		D
Hexachlorobenzene	38.2	5.5	"	54.95	ND	69.6		7.16		D
Pentachlorophenol	57.9	11	"	54.95	ND	105	9-103	1.94	50	M3, D
Phenanthrene	38.6	5.5	"	54.95	ND	70.2		0.939		D
Anthracene	38.5	5.5	"	54.95	ND	70.0		2.26		D
Di-n-butylphthalate	39.1	5.5	"	54.95	ND	71.1		1.44		D
Fluoranthene	38.7	5.5	"	54.95	ND	70.4		0.412		D
Pyrene	56.1	5.5	"	54.95	ND	102	26-127	1.25	31	D
Butylbenzylphthalate	51.5	5.5	"	54.95	ND	93.7		2.00		D
3,3´-Dichlorobenzidine	ND	5.5	"	54.95	ND					U, D
Benz(a)anthracene	41.3	5.5	"	54.95	ND	75.1		1.48		D
Chrysene	40.8	5.5	"	54.95	ND	74.2		3.24		D
Bis(2-Ethylhexyl)phthalate	78.7	5.5	"	54.95	31.0	86.8		11.3		D
Di-n-octylphthalate	122	5.5	"	54.95	ND	222		3.93		E3, M3, D
Benzo[b]fluoranthene	47.4	5.5	"	54.95	ND	86.3		1.00		E3, D
Benzo[k]fluoranthene	63.4	5.5	"	54.95	ND	115		0.150		E3, D
Benzo[a]pyrene	44.0	5.5	"	54.95	ND	80.0		1.80		E3, D
Indeno[1,2,3-cd]pyrene	26.3	5.5	"	54.95	ND	47.9		6.49		E3, D
Dibenz[a,h]anthracene	26.2	5.5	"	54.95	ND	47.6		4.16		E3, D
Benzo[g,h,i]perylene	26.9	5.5	"	54.95	ND	48.9		12.1		E3, D
Surrogate: 2-Fluorophenol	*39.0*		"	*82.42*		*47.3*	*0.974-78.2*			
Surrogate: Phenol-d5	*29.5*		"	*82.42*		*35.8*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*33.7*		"	*54.95*		*61.3*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*39.3*		"	*54.95*		*71.5*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*67.9*		"	*82.42*		*82.3*	*12.5-139*			
Surrogate: Terphenyl-d14	*52.9*		"	*54.95*		*96.3*	*16.6-136*			*S1*

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
Blank (0943108-BLK1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
N-Nitrosodimethylamine	ND	5.0	ug/L							U
Pyridine	ND	5.0	"							U
Aniline	ND	5.0	"							U
Bis(2-Chloroethyl)ether	ND	5.0	"							U
Phenol	ND	5.0	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	5.0	"							U
1,3-Dichlorobenzene	ND	5.0	"							U
1,4-Dichlorobenzene	ND	5.0	"							U
1,2-Dichlorobenzene	ND	5.0	"							U
Pentachloroethane	ND	5.0	"							U
Bis(2-chloroisopropyl)ether	ND	5.0	"							U
2-Methylphenol	ND	5.0	"							U
Hexachloroethane	ND	5.0	"							U
4-Methylphenol, 3-Methylphenol	ND	5.0	"							U
Nitrobenzene	ND	5.0	"							U
Isophorone	ND	5.0	"							U
2-Nitrophenol	ND	5.0	"							U
2,4-Dimethylphenol	ND	5.0	"							U
bis(2-Chloroethoxy)methane	ND	5.0	"							U
2,4-Dichlorophenol	ND	5.0	"							U
1,2,4-Trichlorobenzene	ND	5.0	"							U
Naphthalene	ND	5.0	"							U
Hexachlorobutadiene	ND	5.0	"							U
4-Chloro-3-methylphenol	ND	5.0	"							U
2-Methylnaphthalene	ND	5.0	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	5.0	"							U
2,4,5-Trichlorophenol	ND	5.0	"							U
2-Chloronaphthalene	ND	5.0	"							U
Acenaphthylene	ND	5.0	"							U
Dimethylphthalate	ND	5.0	"							U
2,6-Dinitrotoluene	ND	5.0	"							U
Acenaphthene	ND	5.0	"							U
2,4-Dinitrophenol	ND	10	"							U
Dibenzofuran	ND	5.0	"							U
2,4-Dinitrotoluene	ND	5.0	"							U
4-Nitrophenol	ND	10	"							U
Fluorene	ND	5.0	"							U
4-Chlorophenyl-phenylether	ND	5.0	"							U
Diethylphthalate	ND	5.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
Blank (0943108-BLK1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L							U
4-Bromophenyl-phenylether	ND	5.0	"							U
Hexachlorobenzene	ND	5.0	"							U
Pentachlorophenol	ND	10	"							U
Phenanthrene	ND	5.0	"							U
Anthracene	ND	5.0	"							U
Di-n-butylphthalate	ND	5.0	"							U
Fluoranthene	ND	5.0	"							U
Pyrene	ND	5.0	"							U
Butylbenzylphthalate	ND	5.0	"							U
3,3´-Dichlorobenzidine	ND	5.0	"							U
Benz(a)anthracene	ND	5.0	"							U
Chrysene	ND	5.0	"							U
Bis(2-Ethylhexyl)phthalate	ND	5.0	"							U
Di-n-octylphthalate	ND	5.0	"							U
Benzo[b]fluoranthene	ND	5.0	"							U
Benzo[k]fluoranthene	ND	5.0	"							U
Benzo[a]pyrene	ND	5.0	"							U
Indeno[1,2,3-cd]pyrene	ND	5.0	"							U
Dibenz[a,h]anthracene	ND	5.0	"							U
Benzo[g,h,i]perylene	ND	5.0	"							U
Surrogate: 2-Fluorophenol	*36.1*		"	*75.00*		*48.1*	*0.974-78.2*			
Surrogate: Phenol-d5	*23.4*		"	*75.00*		*31.2*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*41.1*		"	*50.00*		*82.2*	*15.3-131*			*S1*
Surrogate: 2-Fluorobiphenyl	*45.8*		"	*50.00*		*91.6*	*3.75-142*			*S1*
Surrogate: 2,4,6-Tribromophenol	*66.1*		"	*75.00*		*88.2*	*12.5-139*			
Surrogate: Terphenyl-d14	*57.6*		"	*50.00*		*115*	*16.6-136*			*S1*

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
LCS (0943108-BS1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
N-Nitrosodimethylamine	31.0	5.0	ug/L	50.00		61.9				
Pyridine	24.2	5.0	"	50.00		48.4				
Aniline	44.0	5.0	"	50.00		88.1				
Bis(2-Chloroethyl)ether	41.2	5.0	"	50.00		82.3				
Phenol	19.9	5.0	"	50.00		39.8	11-113			
2-Chlorophenol	40.1	5.0	"	50.00		80.2	13-109			
1,4-Dichlorobenzene	38.9	5.0	"	50.00		77.7	34-111			
Bis(2-chloroisopropyl)ether	42.4	5.0	"	50.00		84.8				
2-Methylphenol	35.4	5.0	"	50.00		70.8				
Hexachloroethane	39.4	5.0	"	50.00		78.7				
4-Methylphenol, 3-Methylphenol	34.6	5.0	"	50.00		69.2				
Nitrobenzene	38.1	5.0	"	50.00		76.2				
Isophorone	42.9	5.0	"	50.00		85.8				
2-Nitrophenol	46.7	5.0	"	50.00		93.5				
2,4-Dimethylphenol	40.9	5.0	"	50.00		81.7	0-200			
bis(2-Chloroethoxy)methane	42.2	5.0	"	50.00		84.5				
2,4-Dichlorophenol	45.2	5.0	"	50.00		90.4	0-200			
1,2,4-Trichlorobenzene	41.8	5.0	"	50.00		83.6	23-126			
Naphthalene	42.6	5.0	"	50.00		85.3				
Hexachlorobutadiene	39.1	5.0	"	50.00		78.2				
4-Chloro-3-methylphenol	46.0	5.0	"	50.00		92.0	16-127			
2-Methylnaphthalene	34.5	5.0	"	50.00		68.9				
Hexachlorocyclopentadiene	35.6	10	"	50.00		71.3				
2,4,6-Trichlorophenol	49.0	5.0	"	50.00		98.1	0-200			
2,4,5-Trichlorophenol	50.9	5.0	"	50.00		102				
2-Chloronaphthalene	47.6	5.0	"	50.00		95.3				
Acenaphthylene	48.0	5.0	"	50.00		95.9				
Dimethylphthalate	49.6	5.0	"	50.00		99.2				
2,6-Dinitrotoluene	49.5	5.0	"	50.00		98.9	0-200			
Acenaphthene	48.1	5.0	"	50.00		96.2	36-123			
2,4-Dinitrophenol	38.0	10	"	50.00		76.0	0-200			
Dibenzofuran	50.4	5.0	"	50.00		101				
2,4-Dinitrotoluene	51.4	5.0	"	50.00		103	24-123			
4-Nitrophenol	17.7	10	"	50.00		35.4	0.5-121			
Fluorene	48.9	5.0	"	50.00		97.8				
4-Chlorophenyl-phenylether	48.5	5.0	"	50.00		96.9				
Diethylphthalate	50.3	5.0	"	50.00		101				
4,6-Dinitro-2-methylphenol	38.5	5.0	"	50.00		77.0				
4-Bromophenyl-phenylether	43.8	5.0	"	50.00		87.6				
Hexachlorobenzene	41.6	5.0	"	50.00		83.2				
Pentachlorophenol	41.4	10	"	50.00		82.8	12-103			

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
LCS (0943108-BS1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
Phenanthrene	42.6	5.0	ug/L	50.00		85.1				
Anthracene	42.3	5.0	"	50.00		84.7				
Di-n-butylphthalate	44.2	5.0	"	50.00		88.4				
Fluoranthene	41.8	5.0	"	50.00		83.6				
Pyrene	54.5	5.0	"	50.00		109	31-121			
Butylbenzylphthalate	51.9	5.0	"	50.00		104				
3,3´-Dichlorobenzidine	59.5	5.0	"	50.00		119				
Benz(a)anthracene	46.3	5.0	"	50.00		92.6				
Chrysene	44.8	5.0	"	50.00		89.6				
Bis(2-Ethylhexyl)phthalate	50.2	5.0	"	50.00		100				
Di-n-octylphthalate	101	5.0	"	50.00		201				L2
Benzo[b]fluoranthene	49.8	5.0	"	50.00		99.6				
Benzo[k]fluoranthene	66.2	5.0	"	50.00		132				
Benzo[a]pyrene	48.2	5.0	"	50.00		96.3				
Indeno[1,2,3-cd]pyrene	25.8	5.0	"	50.00		51.6				
Dibenz[a,h]anthracene	22.9	5.0	"	50.00		45.7				
Benzo[g,h,i]perylene	24.2	5.0	"	50.00		48.4				
Surrogate: 2-Fluorophenol	*42.0*		*"*	*75.00*		*56.0*	*0.974-78.2*			
Surrogate: Phenol-d5	*31.4*		*"*	*75.00*		*41.9*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*44.6*		*"*	*50.00*		*89.2*	*15.3-131*			*S1*
Surrogate: 2-Fluorobiphenyl	*49.4*		*"*	*50.00*		*98.8*	*3.75-142*			*S1*
Surrogate: 2,4,6-Tribromophenol	*74.9*		*"*	*75.00*		*99.9*	*12.5-139*			*S1*
Surrogate: Terphenyl-d14	*59.3*		*"*	*50.00*		*119*	*16.6-136*			*S1*
LCS Dup (0943108-BSD1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
N-Nitrosodimethylamine	30.2	5.0	ug/L	50.00		60.4		2.55		
Pyridine	24.8	5.0	"	50.00		49.6		2.41		
Aniline	46.6	5.0	"	50.00		93.2		5.63		
Bis(2-Chloroethyl)ether	40.3	5.0	"	50.00		80.5		2.21		
Phenol	18.7	5.0	"	50.00		37.4	11-113	6.17		
2-Chlorophenol	39.8	5.0	"	50.00		79.7	13-109	0.626		
1,4-Dichlorobenzene	39.7	5.0	"	50.00		79.3	34-111	2.01		
Bis(2-chloroisopropyl)ether	42.2	5.0	"	50.00		84.4		0.496		
2-Methylphenol	35.1	5.0	"	50.00		70.2		0.766		
Hexachloroethane	39.4	5.0	"	50.00		78.9		0.203		
4-Methylphenol, 3-Methylphenol	33.4	5.0	"	50.00		66.8		3.56		
Nitrobenzene	38.0	5.0	"	50.00		76.1		0.210		
Isophorone	41.1	5.0	"	50.00		82.3		4.21		
2-Nitrophenol	45.6	5.0	"	50.00		91.2		2.43		
2,4-Dimethylphenol	40.5	5.0	"	50.00		81.0	0-200	0.934		
bis(2-Chloroethoxy)methane	41.5	5.0	"	50.00		83.0		1.77		
2,4-Dichlorophenol	44.9	5.0	"	50.00		89.8	0-200	0.622		

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
LCS Dup (0943108-BSD1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
1,2,4-Trichlorobenzene	41.3	5.0	ug/L	50.00		82.6	23-126	1.23		
Naphthalene	42.1	5.0	"	50.00		84.2		1.25		
Hexachlorobutadiene	39.2	5.0	"	50.00		78.4		0.255		
4-Chloro-3-methylphenol	44.5	5.0	"	50.00		88.9	16-127	3.40		
2-Methylnaphthalene	40.1	5.0	"	50.00		80.2		15.2		
Hexachlorocyclopentadiene	35.4	10	"	50.00		70.9		0.619		
2,4,6-Trichlorophenol	48.2	5.0	"	50.00		96.4	0-200	1.69		
2,4,5-Trichlorophenol	49.9	5.0	"	50.00		99.7		1.99		
2-Chloronaphthalene	47.3	5.0	"	50.00		94.6		0.716		
Acenaphthylene	47.7	5.0	"	50.00		95.4		0.606		
Dimethylphthalate	48.8	5.0	"	50.00		97.6		1.69		
2,6-Dinitrotoluene	48.6	5.0	"	50.00		97.2	0-200	1.73		
Acenaphthene	48.0	5.0	"	50.00		96.0	36-123	0.250		
2,4-Dinitrophenol	34.1	10	"	50.00		68.3	0-200	10.8		
Dibenzofuran	49.8	5.0	"	50.00		99.5		1.20		
2,4-Dinitrotoluene	49.6	5.0	"	50.00		99.3	24-123	3.47		
4-Nitrophenol	14.4	10	"	50.00		28.7	0.5-121	20.8		
Fluorene	48.3	5.0	"	50.00		96.7		1.19		
4-Chlorophenyl-phenylether	48.2	5.0	"	50.00		96.4		0.559		
Diethylphthalate	48.8	5.0	"	50.00		97.7		2.91		
4,6-Dinitro-2-methylphenol	36.8	5.0	"	50.00		73.6		4.52		
4-Bromophenyl-phenylether	43.7	5.0	"	50.00		87.4		0.206		
Hexachlorobenzene	41.7	5.0	"	50.00		83.5		0.288		
Pentachlorophenol	39.7	10	"	50.00		79.4	12-103	4.19		
Phenanthrene	42.2	5.0	"	50.00		84.3		0.991		
Anthracene	41.3	5.0	"	50.00		82.5		2.58		
Di-n-butylphthalate	43.6	5.0	"	50.00		87.3		1.28		
Fluoranthene	41.5	5.0	"	50.00		82.9		0.840		
Pyrene	54.7	5.0	"	50.00		109	31-121	0.385		
Butylbenzylphthalate	51.0	5.0	"	50.00		102		1.87		
3,3´-Dichlorobenzidine	55.6	5.0	"	50.00		111		6.72		
Benz(a)anthracene	44.7	5.0	"	50.00		89.5		3.47		
Chrysene	43.9	5.0	"	50.00		87.8		2.01		
Bis(2-Ethylhexyl)phthalate	48.8	5.0	"	50.00		97.7		2.81		
Di-n-octylphthalate	101	5.0	"	50.00		202		0.654		L2
Benzo[b]fluoranthene	50.0	5.0	"	50.00		100		0.421		
Benzo[k]fluoranthene	67.6	5.0	"	50.00		135		1.96		
Benzo[a]pyrene	47.4	5.0	"	50.00		94.7		1.70		
Indeno[1,2,3-cd]pyrene	22.6	5.0	"	50.00		45.3		13.0		
Dibenz[a,h]anthracene	21.6	5.0	"	50.00		43.1		5.90		
Benzo[g,h,i]perylene	21.0	5.0	"	50.00		42.0		14.0		

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0943108 - EPA 625										
LCS Dup (0943108-BSD1)				Prepared: 10/19/2009 Analyzed: 10/21/2009						
Surrogate: 2-Fluorophenol	*41.8*		*ug/L*	*75.00*		*55.7*	*0.974-78.2*			
Surrogate: Phenol-d5	*30.5*		*"*	*75.00*		*40.6*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*42.9*		*"*	*50.00*		*85.8*	*15.3-131*			*S1*
Surrogate: 2-Fluorobiphenyl	*49.2*		*"*	*50.00*		*98.3*	*3.75-142*			*S1*
Surrogate: 2,4,6-Tribromophenol	*74.9*		*"*	*75.00*		*99.9*	*12.5-139*			*S1*
Surrogate: Terphenyl-d14	*59.7*		*"*	*50.00*		*119*	*16.6-136*			*S1*
Batch 0944041 - EPA 625										
Blank (0944041-BLK1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
N-Nitrosodimethylamine	ND	5.0	ug/L							U
Pyridine	ND	5.0	"							U
Aniline	ND	5.0	"							U
Bis(2-Chloroethyl)ether	ND	5.0	"							U
Phenol	ND	5.0	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	5.0	"							U
1,3-Dichlorobenzene	ND	5.0	"							U
1,4-Dichlorobenzene	ND	5.0	"							U
1,2-Dichlorobenzene	ND	5.0	"							U
Pentachloroethane	ND	5.0	"							U
Bis(2-chloroisopropyl)ether	ND	5.0	"							U
2-Methylphenol	ND	5.0	"							U
Hexachloroethane	ND	5.0	"							U
4-Methylphenol, 3-Methylphenol	ND	5.0	"							U
Nitrobenzene	ND	5.0	"							U
Isophorone	ND	5.0	"							U
2-Nitrophenol	ND	5.0	"							U
2,4-Dimethylphenol	ND	5.0	"							U
bis(2-Chloroethoxy)methane	ND	5.0	"							U
2,4-Dichlorophenol	ND	5.0	"							U
1,2,4-Trichlorobenzene	ND	5.0	"							U
Naphthalene	ND	5.0	"							U
Hexachlorobutadiene	ND	5.0	"							U
4-Chloro-3-methylphenol	ND	5.0	"							U
2-Methylnaphthalene	ND	5.0	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	5.0	"							U
2,4,5-Trichlorophenol	ND	5.0	"							U
2-Chloronaphthalene	ND	5.0	"							U
Acenaphthylene	ND	5.0	"							U
Dimethylphthalate	ND	5.0	"							U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
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Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944041 - EPA 625										
Blank (0944041-BLK1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
2,6-Dinitrotoluene	ND	5.0	ug/L							U
Acenaphthene	ND	5.0	"							U
2,4-Dinitrophenol	ND	10	"							U
Dibenzofuran	ND	5.0	"							U
2,4-Dinitrotoluene	ND	5.0	"							U
4-Nitrophenol	ND	10	"							U
Fluorene	ND	5.0	"							U
4-Chlorophenyl-phenylether	ND	5.0	"							U
Diethylphthalate	ND	5.0	"							U
4,6-Dinitro-2-methylphenol	ND	5.0	"							U
4-Bromophenyl-phenylether	ND	5.0	"							U
Hexachlorobenzene	ND	5.0	"							U
Pentachlorophenol	ND	10	"							U
Phenanthrene	ND	5.0	"							U
Anthracene	ND	5.0	"							U
Di-n-butylphthalate	ND	5.0	"							U
Fluoranthene	ND	5.0	"							U
Pyrene	ND	5.0	"							U
Butylbenzylphthalate	ND	5.0	"							U
3,3´-Dichlorobenzidine	ND	5.0	"							U
Benz(a)anthracene	ND	5.0	"							U
Chrysene	ND	5.0	"							U
Bis(2-Ethylhexyl)phthalate	ND	5.0	"							U
Di-n-octylphthalate	ND	5.0	"							U
Benzo[b]fluoranthene	ND	5.0	"							U
Benzo[k]fluoranthene	ND	5.0	"							U
Benzo[a]pyrene	ND	5.0	"							U
Indeno[1,2,3-cd]pyrene	ND	5.0	"							U
Dibenz[a,h]anthracene	ND	5.0	"							U
Benzo[g,h,i]perylene	ND	5.0	"							U
Surrogate: 2-Fluorophenol	*0.00*		*"*	*75.00*			*0.974-78.2*			*S4, U*
Surrogate: Phenol-d5	*0.00*		*"*	*75.00*			*0-57.5*			*S4, U*
Surrogate: Nitrobenzene-d5	*0.00*		*"*	*50.00*			*15.3-131*			*S4, U*
Surrogate: 2-Fluorobiphenyl	*0.00*		*"*	*50.00*			*3.75-142*			*S4, U*
Surrogate: 2,4,6-Tribromophenol	*0.00*		*"*	*75.00*			*12.5-139*			*S4, U*
Surrogate: Terphenyl-d14	*0.00*		*"*	*50.00*			*16.6-136*			*S4, U*

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944041 - EPA 625										
LCS (0944041-BS1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
N-Nitrosodimethylamine	26.2	5.0	ug/L	50.00		52.3				
Pyridine	21.1	5.0	"	50.00		42.2				
Aniline	38.2	5.0	"	50.00		76.4				
Bis(2-Chloroethyl)ether	36.3	5.0	"	50.00		72.6				
Phenol	17.2	5.0	"	50.00		34.3	11-113			
2-Chlorophenol	35.2	5.0	"	50.00		70.4	13-109			
1,4-Dichlorobenzene	33.5	5.0	"	50.00		66.9	34-111			
Bis(2-chloroisopropyl)ether	37.4	5.0	"	50.00		74.8				
2-Methylphenol	30.8	5.0	"	50.00		61.5				
Hexachloroethane	32.2	5.0	"	50.00		64.4				
4-Methylphenol, 3-Methylphenol	30.2	5.0	"	50.00		60.4				
Nitrobenzene	33.6	5.0	"	50.00		67.3				
Isophorone	35.8	5.0	"	50.00		71.7				
2-Nitrophenol	40.2	5.0	"	50.00		80.4				
2,4-Dimethylphenol	35.2	5.0	"	50.00		70.5	0-200			
bis(2-Chloroethoxy)methane	37.0	5.0	"	50.00		74.0				
2,4-Dichlorophenol	39.1	5.0	"	50.00		78.1	0-200			
1,2,4-Trichlorobenzene	35.7	5.0	"	50.00		71.4	23-126			
Naphthalene	37.5	5.0	"	50.00		75.0				
Hexachlorobutadiene	32.9	5.0	"	50.00		65.7				
4-Chloro-3-methylphenol	41.3	5.0	"	50.00		82.5	16-127			
2-Methylnaphthalene	37.3	5.0	"	50.00		74.7				
Hexachlorocyclopentadiene	25.1	10	"	50.00		50.2				
2,4,6-Trichlorophenol	43.4	5.0	"	50.00		86.8	0-200			
2,4,5-Trichlorophenol	45.8	5.0	"	50.00		91.6				
2-Chloronaphthalene	42.9	5.0	"	50.00		85.8				
Acenaphthylene	43.3	5.0	"	50.00		86.5				
Dimethylphthalate	46.6	5.0	"	50.00		93.2				
2,6-Dinitrotoluene	46.6	5.0	"	50.00		93.3	0-200			
Acenaphthene	43.5	5.0	"	50.00		86.9	36-123			
2,4-Dinitrophenol	38.4	10	"	50.00		76.9	0-200			
Dibenzofuran	45.4	5.0	"	50.00		90.7				
2,4-Dinitrotoluene	49.8	5.0	"	50.00		99.7	24-123			
4-Nitrophenol	17.8	10	"	50.00		35.6	0.5-121			
Fluorene	45.0	5.0	"	50.00		89.9				
4-Chlorophenyl-phenylether	44.4	5.0	"	50.00		88.8				
Diethylphthalate	49.2	5.0	"	50.00		98.4				
4,6-Dinitro-2-methylphenol	36.6	5.0	"	50.00		73.2				
4-Bromophenyl-phenylether	41.5	5.0	"	50.00		83.0				
Hexachlorobenzene	41.0	5.0	"	50.00		82.0				
Pentachlorophenol	42.6	10	"	50.00		85.3	12-103			

The results in this report apply to the samples analyzed in accordance wit

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944041 - EPA 625										
LCS (0944041-BS1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
Phenanthrene	41.4	5.0	ug/L	50.00		82.8				
Anthracene	41.1	5.0	"	50.00		82.2				
Di-n-butylphthalate	44.5	5.0	"	50.00		89.0				
Fluoranthene	42.9	5.0	"	50.00		85.8				
Pyrene	62.9	5.0	"	50.00		126	31-121			L2
Butylbenzylphthalate	59.9	5.0	"	50.00		120				
3,3´-Dichlorobenzidine	56.4	5.0	"	50.00		113				
Benz(a)anthracene	45.5	5.0	"	50.00		91.0				
Chrysene	45.2	5.0	"	50.00		90.4				
Bis(2-Ethylhexyl)phthalate	54.6	5.0	"	50.00		109				
Di-n-octylphthalate	120	5.0	"	50.00		241				L2
Benzo[b]fluoranthene	50.0	5.0	"	50.00		100				
Benzo[k]fluoranthene	71.7	5.0	"	50.00		143				
Benzo[a]pyrene	48.0	5.0	"	50.00		95.9				
Indeno[1,2,3-cd]pyrene	21.9	5.0	"	50.00		43.9				
Dibenz[a,h]anthracene	21.2	5.0	"	50.00		42.5				
Benzo[g,h,i]perylene	24.0	5.0	"	50.00		47.9				
Surrogate: 2-Fluorophenol	*33.0*		*"*	*75.00*		*44.0*	*0.974-78.2*			
Surrogate: Phenol-d5	*25.1*		*"*	*75.00*		*33.4*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*34.7*		*"*	*50.00*		*69.5*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*38.3*		*"*	*50.00*		*76.6*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*68.9*		*"*	*75.00*		*91.9*	*12.5-139*			
Surrogate: Terphenyl-d14	*57.8*		*"*	*50.00*		*116*	*16.6-136*			*S1*
LCS Dup (0944041-BSD1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
N-Nitrosodimethylamine	25.2	5.0	ug/L	50.00		50.3		3.90		
Pyridine	12.7	5.0	"	50.00		25.4		49.7		
Aniline	31.8	5.0	"	50.00		63.6		18.4		
Bis(2-Chloroethyl)ether	34.0	5.0	"	50.00		68.1		6.46		
Phenol	15.1	5.0	"	50.00		30.3	11-113	12.6		
2-Chlorophenol	32.9	5.0	"	50.00		65.7	13-109	6.90		
1,4-Dichlorobenzene	33.2	5.0	"	50.00		66.4	34-111	0.810		
Bis(2-chloroisopropyl)ether	35.9	5.0	"	50.00		71.9		4.06		
2-Methylphenol	29.0	5.0	"	50.00		57.9		6.03		
Hexachloroethane	32.1	5.0	"	50.00		64.2		0.218		
4-Methylphenol, 3-Methylphenol	28.7	5.0	"	50.00		57.3		5.27		
Nitrobenzene	32.3	5.0	"	50.00		64.7		3.97		
Isophorone	34.2	5.0	"	50.00		68.3		4.83		
2-Nitrophenol	37.9	5.0	"	50.00		75.9		5.81		
2,4-Dimethylphenol	34.0	5.0	"	50.00		68.1	0-200	3.43		
bis(2-Chloroethoxy)methane	35.3	5.0	"	50.00		70.5		4.76		
2,4-Dichlorophenol	38.3	5.0	"	50.00		76.5	0-200	2.04		

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944041 - EPA 625										
LCS Dup (0944041-BSD1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
1,2,4-Trichlorobenzene	34.2	5.0	ug/L	50.00		68.5	23-126	4.18		
Naphthalene	35.8	5.0	"	50.00		71.5		4.72		
Hexachlorobutadiene	32.0	5.0	"	50.00		64.0		2.68		
4-Chloro-3-methylphenol	40.1	5.0	"	50.00		80.2	16-127	2.88		
2-Methylnaphthalene	36.4	5.0	"	50.00		72.8		2.58		
Hexachlorocyclopentadiene	21.1	10	"	50.00		42.2		17.5		
2,4,6-Trichlorophenol	41.3	5.0	"	50.00		82.7	0-200	4.82		
2,4,5-Trichlorophenol	45.9	5.0	"	50.00		91.9		0.327		
2-Chloronaphthalene	40.8	5.0	"	50.00		81.6		5.02		
Acenaphthylene	42.0	5.0	"	50.00		83.9		3.07		
Dimethylphthalate	44.3	5.0	"	50.00		88.5		5.09		
2,6-Dinitrotoluene	44.2	5.0	"	50.00		88.4	0-200	5.42		
Acenaphthene	42.0	5.0	"	50.00		84.1	36-123	3.32		
2,4-Dinitrophenol	21.6	10	"	50.00		43.1	0-200	56.3		
Dibenzofuran	44.0	5.0	"	50.00		88.0		3.04		
2,4-Dinitrotoluene	46.6	5.0	"	50.00		93.2	24-123	6.76		
4-Nitrophenol	41.0	10	"	50.00		82.0	0.5-121	78.9		
Fluorene	43.2	5.0	"	50.00		86.3		4.06		
4-Chlorophenyl-phenylether	43.1	5.0	"	50.00		86.2		2.97		
Diethylphthalate	46.7	5.0	"	50.00		93.4		5.13		
4,6-Dinitro-2-methylphenol	33.4	5.0	"	50.00		66.9		9.05		
4-Bromophenyl-phenylether	39.7	5.0	"	50.00		79.5		4.31		
Hexachlorobenzene	39.6	5.0	"	50.00		79.2		3.50		
Pentachlorophenol	37.6	10	"	50.00		75.3	12-103	12.5		
Phenanthrene	39.7	5.0	"	50.00		79.3		4.24		
Anthracene	39.3	5.0	"	50.00		78.6		4.48		
Di-n-butylphthalate	42.7	5.0	"	50.00		85.3		4.22		
Fluoranthene	39.8	5.0	"	50.00		79.5		7.60		
Pyrene	59.4	5.0	"	50.00		119	31-121	5.74		
Butylbenzylphthalate	54.2	5.0	"	50.00		108		9.85		
3,3´-Dichlorobenzidine	48.8	5.0	"	50.00		97.5		14.5		
Benz(a)anthracene	41.6	5.0	"	50.00		83.2		8.95		
Chrysene	42.0	5.0	"	50.00		84.1		7.29		
Bis(2-Ethylhexyl)phthalate	50.2	5.0	"	50.00		100		8.40		
Di-n-octylphthalate	115	5.0	"	50.00		230		4.81		L2
Benzo[b]fluoranthene	46.1	5.0	"	50.00		92.3		8.05		
Benzo[k]fluoranthene	66.5	5.0	"	50.00		133		7.45		
Benzo[a]pyrene	45.5	5.0	"	50.00		91.1		5.16		
Indeno[1,2,3-cd]pyrene	20.8	5.0	"	50.00		41.6		5.34		
Dibenz[a,h]anthracene	21.5	5.0	"	50.00		43.1		1.36		
Benzo[g,h,i]perylene	24.3	5.0	"	50.00		48.6		1.45		

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0944041 - EPA 625										
LCS Dup (0944041-BSD1)				Prepared: 10/22/2009 Analyzed: 10/27/2009						
Surrogate: 2-Fluorophenol	*59.0*		*ug/L*	*150.0*		*39.3*	*0.974-78.2*			
Surrogate: Phenol-d5	*37.3*		*"*	*150.0*		*24.9*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*62.5*		*"*	*100.0*		*62.5*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*66.4*		*"*	*100.0*		*66.4*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*122*		*"*	*150.0*		*81.2*	*12.5-139*			
Surrogate: Terphenyl-d14	*98.9*		*"*	*100.0*		*98.9*	*16.6-136*			*S1*
Batch 0945105 - EPA 625										
Blank (0945105-BLK1)				Prepared: 10/28/2009 Analyzed: 11/04/2009						
N-Nitrosodimethylamine	ND	5.0	ug/L							U
Pyridine	ND	5.0	"							U
Aniline	ND	5.0	"							U
Bis(2-Chloroethyl)ether	ND	5.0	"							U
Phenol	ND	5.0	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	5.0	"							U
1,3-Dichlorobenzene	ND	5.0	"							U
1,4-Dichlorobenzene	ND	5.0	"							U
1,2-Dichlorobenzene	ND	5.0	"							U
Pentachloroethane	ND	5.0	"							U
Bis(2-chloroisopropyl)ether	ND	5.0	"							U
2-Methylphenol	ND	5.0	"							U
Hexachloroethane	ND	5.0	"							U
4-Methylphenol, 3-Methylphenol	ND	5.0	"							U
Nitrobenzene	ND	5.0	"							U
Isophorone	ND	5.0	"							U
2-Nitrophenol	ND	5.0	"							U
2,4-Dimethylphenol	ND	5.0	"							U
bis(2-Chloroethoxy)methane	ND	5.0	"							U
2,4-Dichlorophenol	ND	5.0	"							U
1,2,4-Trichlorobenzene	ND	5.0	"							U
Naphthalene	ND	5.0	"							U
Hexachlorobutadiene	ND	5.0	"							U
4-Chloro-3-methylphenol	ND	5.0	"							U
2-Methylnaphthalene	ND	5.0	"							U
Hexachlorocyclopentadiene	ND	10	"							U
2,4,6-Trichlorophenol	ND	5.0	"							U
2,4,5-Trichlorophenol	ND	5.0	"							U
2-Chloronaphthalene	ND	5.0	"							U
Acenaphthylene	ND	5.0	"							U
Dimethylphthalate	ND	5.0	"							U

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Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
Blank (0945105-BLK1)				Prepared: 10/28/2009 Analyzed: 11/04/2009						
2,6-Dinitrotoluene	ND	5.0	ug/L							U
Acenaphthene	ND	5.0	"							U
2,4-Dinitrophenol	ND	10	"							U
Dibenzofuran	ND	5.0	"							U
2,4-Dinitrotoluene	ND	5.0	"							U
4-Nitrophenol	ND	10	"							U
Fluorene	ND	5.0	"							U
4-Chlorophenyl-phenylether	ND	5.0	"							U
Diethylphthalate	ND	5.0	"							U
4,6-Dinitro-2-methylphenol	ND	5.0	"							U
4-Bromophenyl-phenylether	ND	5.0	"							U
Hexachlorobenzene	ND	5.0	"							U
Pentachlorophenol	ND	10	"							U
Phenanthrene	ND	5.0	"							U
Anthracene	ND	5.0	"							U
Di-n-butylphthalate	ND	5.0	"							U
Fluoranthene	ND	5.0	"							U
Pyrene	ND	5.0	"							U
Butylbenzylphthalate	ND	5.0	"							U
3,3´-Dichlorobenzidine	ND	5.0	"							U
Benz(a)anthracene	ND	5.0	"							U
Chrysene	ND	5.0	"							U
Bis(2-Ethylhexyl)phthalate	ND	5.0	"							U
Di-n-octylphthalate	ND	5.0	"							U
Benzo[b]fluoranthene	ND	5.0	"							U
Benzo[k]fluoranthene	ND	5.0	"							U
Benzo[a]pyrene	ND	5.0	"							U
Indeno[1,2,3-cd]pyrene	ND	5.0	"							U
Dibenz[a,h]anthracene	ND	5.0	"							U
Benzo[g,h,i]perylene	ND	5.0	"							U
Surrogate: 2-Fluorophenol	*35.2*		*"*	*75.00*		*47.0*	*0.974-78.2*			
Surrogate: Phenol-d5	*24.9*		*"*	*75.00*		*33.2*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*40.9*		*"*	*50.00*		*81.8*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*38.4*		*"*	*50.00*		*76.9*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*63.5*		*"*	*75.00*		*84.7*	*12.5-139*			
Surrogate: Terphenyl-d14	*42.2*		*"*	*50.00*		*84.5*	*16.6-136*			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
LCS (0945105-BS1)				Prepared: 10/28/2009 Analyzed: 11/04/2009						
N-Nitrosodimethylamine	25.1	5.0	ug/L	50.00		50.2				
Pyridine	16.0	5.0	"	50.00		32.0				
Aniline	37.7	5.0	"	50.00		75.3				
Bis(2-Chloroethyl)ether	38.2	5.0	"	50.00		76.3				
Phenol	19.3	5.0	"	50.00		38.5	11-113			
2-Chlorophenol	39.7	5.0	"	50.00		79.4	13-109			
1,4-Dichlorobenzene	35.9	5.0	"	50.00		71.8	34-111			
Bis(2-chloroisopropyl)ether	39.8	5.0	"	50.00		79.5				
2-Methylphenol	36.7	5.0	"	50.00		73.3				
Hexachloroethane	34.9	5.0	"	50.00		69.7				
4-Methylphenol, 3-Methylphenol	34.3	5.0	"	50.00		68.6				
Nitrobenzene	38.8	5.0	"	50.00		77.5				
Isophorone	40.1	5.0	"	50.00		80.2				
2-Nitrophenol	41.9	5.0	"	50.00		83.7				
2,4-Dimethylphenol	41.6	5.0	"	50.00		83.2	0-200			
bis(2-Chloroethoxy)methane	41.8	5.0	"	50.00		83.7				
2,4-Dichlorophenol	45.5	5.0	"	50.00		90.9	0-200			
1,2,4-Trichlorobenzene	39.4	5.0	"	50.00		78.7	23-126			
Naphthalene	39.4	5.0	"	50.00		78.9				
Hexachlorobutadiene	37.4	5.0	"	50.00		74.8				
4-Chloro-3-methylphenol	45.9	5.0	"	50.00		91.7	16-127			
2-Methylnaphthalene	40.1	5.0	"	50.00		80.2				
Hexachlorocyclopentadiene	40.5	10	"	50.00		81.1				
2,4,6-Trichlorophenol	44.6	5.0	"	50.00		89.1	0-200			
2,4,5-Trichlorophenol	48.5	5.0	"	50.00		97.0				
2-Chloronaphthalene	41.9	5.0	"	50.00		83.7				
Acenaphthylene	42.4	5.0	"	50.00		84.9				
Dimethylphthalate	43.8	5.0	"	50.00		87.6				
2,6-Dinitrotoluene	44.2	5.0	"	50.00		88.5	0-200			
Acenaphthene	41.6	5.0	"	50.00		83.2	36-123			
2,4-Dinitrophenol	40.9	10	"	50.00		81.7	0-200			
Dibenzofuran	43.9	5.0	"	50.00		87.7				
2,4-Dinitrotoluene	46.2	5.0	"	50.00		92.5	24-123			
4-Nitrophenol	25.8	10	"	50.00		51.7	0.5-121			
Fluorene	42.5	5.0	"	50.00		84.9				
4-Chlorophenyl-phenylether	43.1	5.0	"	50.00		86.2				
Diethylphthalate	45.5	5.0	"	50.00		90.9				
4,6-Dinitro-2-methylphenol	46.9	5.0	"	50.00		93.8				
4-Bromophenyl-phenylether	44.6	5.0	"	50.00		89.2				
Hexachlorobenzene	42.5	5.0	"	50.00		84.9				
Pentachlorophenol	47.5	10	"	50.00		95.1	12-103			

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Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
LCS (0945105-BS1)				Prepared: 10/28/2009 Analyzed: 11/04/2009						
Phenanthrene	44.5	5.0	ug/L	50.00		89.0				
Anthracene	44.9	5.0	"	50.00		89.8				
Di-n-butylphthalate	45.4	5.0	"	50.00		90.8				
Fluoranthene	44.6	5.0	"	50.00		89.1				
Pyrene	43.2	5.0	"	50.00		86.5	31-121			
Butylbenzylphthalate	43.6	5.0	"	50.00		87.3				
3,3´-Dichlorobenzidine	106	5.0	"	50.00		212				L2
Benz(a)anthracene	47.1	5.0	"	50.00		94.2				
Chrysene	44.5	5.0	"	50.00		89.1				
Bis(2-Ethylhexyl)phthalate	44.6	5.0	"	50.00		89.3				
Di-n-octylphthalate	52.0	5.0	"	50.00		104				
Benzo[b]fluoranthene	44.1	5.0	"	50.00		88.3				
Benzo[k]fluoranthene	45.6	5.0	"	50.00		91.1				
Benzo[a]pyrene	47.8	5.0	"	50.00		95.6				
Indeno[1,2,3-cd]pyrene	35.3	5.0	"	50.00		70.5				
Dibenz[a,h]anthracene	35.8	5.0	"	50.00		71.6				
Benzo[g,h,i]perylene	35.0	5.0	"	50.00		70.0				
Surrogate: 2-Fluorophenol	*39.5*		"	*75.00*		*52.7*	*0.974-78.2*			
Surrogate: Phenol-d5	*26.0*		"	*75.00*		*34.7*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*41.4*		"	*50.00*		*82.9*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*38.8*		"	*50.00*		*77.6*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*72.0*		"	*75.00*		*96.1*	*12.5-139*			
Surrogate: Terphenyl-d14	*43.5*		"	*50.00*		*87.0*	*16.6-136*			
Matrix Spike (0945105-MS1)	**Source: 09J0523-30**			Prepared: 10/28/2009 Analyzed: 11/04/2009						
N-Nitrosodimethylamine	16.4	5.3	ug/L	52.63	ND	31.2				D
Pyridine	6.00	5.3	"	52.63	ND	11.4				D
Aniline	26.7	5.3	"	52.63	ND	50.8				D
Bis(2-Chloroethyl)ether	22.4	5.3	"	52.63	ND	42.5				D
Phenol	13.9	5.3	"	52.63	ND	26.5	12-110		42	D
2-Chlorophenol	25.8	5.3	"	52.63	ND	49.1	27-123		40	D
1,4-Dichlorobenzene	22.6	5.3	"	52.63	ND	43.0	36-97		28	D
Bis(2-chloroisopropyl)ether	25.0	5.3	"	52.63	ND	47.5				D
2-Methylphenol	25.4	5.3	"	52.63	ND	48.3				D
Hexachloroethane	21.8	5.3	"	52.63	ND	41.4				D
4-Methylphenol, 3-Methylphenol	24.8	5.3	"	52.63	ND	47.2				D
Nitrobenzene	25.1	5.3	"	52.63	ND	47.7				D
Isophorone	27.0	5.3	"	52.63	ND	51.3				D
2-Nitrophenol	26.1	5.3	"	52.63	ND	49.6				D
2,4-Dimethylphenol	30.7	5.3	"	52.63	ND	58.4				D
bis(2-Chloroethoxy)methane	28.0	5.3	"	52.63	ND	53.3				D
2,4-Dichlorophenol	31.7	5.3	"	52.63	ND	60.2				D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
Matrix Spike (0945105-MS1)	**Source: 09J0523-30**			Prepared: 10/28/2009 Analyzed: 11/04/2009						
1,2,4-Trichlorobenzene	25.8	5.3	ug/L	52.63	ND	49.0	39-98		28	D
Naphthalene	29.2	5.3	"	52.63	ND	55.5				D
Hexachlorobutadiene	24.1	5.3	"	52.63	ND	45.7				D
4-Chloro-3-methylphenol	41.1	5.3	"	52.63	ND	78.0	23-97			D
2-Methylnaphthalene	28.9	5.3	"	52.63	ND	55.0				D
Hexachlorocyclopentadiene	19.3	11	"	52.63	ND	36.8				D
2,4,6-Trichlorophenol	31.5	5.3	"	52.63	ND	59.8				D
2,4,5-Trichlorophenol	34.3	5.3	"	52.63	ND	65.1				D
2-Chloronaphthalene	29.2	5.3	"	52.63	ND	55.5				D
Acenaphthylene	31.1	5.3	"	52.63	ND	59.0				D
Dimethylphthalate	31.5	5.3	"	52.63	ND	59.8				D
2,6-Dinitrotoluene	32.5	5.3	"	52.63	ND	61.8				D
Acenaphthene	30.4	5.3	"	52.63	ND	57.8	46-118		31	D
2,4-Dinitrophenol	30.7	11	"	52.63	ND	58.3				D
Dibenzofuran	32.3	5.3	"	52.63	ND	61.3				D
2,4-Dinitrotoluene	34.3	5.3	"	52.63	ND	65.2	24-96		38	D
4-Nitrophenol	22.8	11	"	52.63	ND	43.4	10-80		50	D
Fluorene	32.9	5.3	"	52.63	ND	62.4				D
4-Chlorophenyl-phenylether	32.4	5.3	"	52.63	ND	61.6				D
Diethylphthalate	33.1	5.3	"	52.63	ND	62.9				D
4,6-Dinitro-2-methylphenol	36.1	5.3	"	52.63	ND	68.6				D
4-Bromophenyl-phenylether	33.5	5.3	"	52.63	ND	63.7				D
Hexachlorobenzene	31.8	5.3	"	52.63	ND	60.4				D
Pentachlorophenol	45.1	11	"	52.63	ND	85.6	9-103		50	D
Phenanthrene	34.0	5.3	"	52.63	ND	64.6				D
Anthracene	34.5	5.3	"	52.63	ND	65.5				D
Di-n-butylphthalate	34.7	5.3	"	52.63	8.47	49.7				D
Fluoranthene	34.0	5.3	"	52.63	ND	64.7				D
Pyrene	33.2	5.3	"	52.63	ND	63.1	26-127		31	D
Butylbenzylphthalate	34.1	5.3	"	52.63	ND	64.7				D
3,3´-Dichlorobenzidine	ND	5.3	"	52.63	ND					U, D
Benz(a)anthracene	33.6	5.3	"	52.63	ND	63.9				D
Chrysene	32.6	5.3	"	52.63	ND	62.0				D
Bis(2-Ethylhexyl)phthalate	36.5	5.3	"	52.63	ND	69.4				D
Di-n-octylphthalate	61.4	5.3	"	52.63	ND	117				D
Benzo[b]fluoranthene	36.1	5.3	"	52.63	ND	68.5				D
Benzo[k]fluoranthene	43.5	5.3	"	52.63	ND	82.7				D
Benzo[a]pyrene	36.7	5.3	"	52.63	ND	69.7				D
Indeno[1,2,3-cd]pyrene	21.2	5.3	"	52.63	ND	40.2				D
Dibenz[a,h]anthracene	20.7	5.3	"	52.63	ND	39.4				D
Benzo[g,h,i]perylene	16.6	5.3	"	52.63	ND	31.5				D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
Matrix Spike (0945105-MS1)	**Source: 09J0523-30**			Prepared: 10/28/2009 Analyzed: 11/04/2009						
Surrogate: 2-Fluorophenol	*24.8*		*ug/L*	*78.95*		*31.4*	*0.974-78.2*			
Surrogate: Phenol-d5	*18.8*		*"*	*78.95*		*23.9*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*26.6*		*"*	*52.63*		*50.5*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*28.1*		*"*	*52.63*		*53.4*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*55.2*		*"*	*78.95*		*69.9*	*12.5-139*			
Surrogate: Terphenyl-d14	*33.7*		*"*	*52.63*		*64.0*	*16.6-136*			
Matrix Spike Dup (0945105-MSD1)	**Source: 09J0523-30**			Prepared: 10/28/2009 Analyzed: 11/04/2009						
N-Nitrosodimethylamine	19.4	5.3	ug/L	52.63	ND	36.9		16.8		D
Pyridine	13.2	5.3	"	52.63	ND	25.1		74.9		D
Aniline	31.5	5.3	"	52.63	ND	59.8		16.3		D
Bis(2-Chloroethyl)ether	28.2	5.3	"	52.63	ND	53.6		23.0		D
Phenol	14.5	5.3	"	52.63	ND	27.6	12-110	4.07	42	D
2-Chlorophenol	31.6	5.3	"	52.63	ND	60.1	27-123	20.2	40	D
1,4-Dichlorobenzene	28.6	5.3	"	52.63	ND	54.4	36-97	23.3	28	D
Bis(2-chloroisopropyl)ether	30.7	5.3	"	52.63	ND	58.3		20.5		D
2-Methylphenol	28.8	5.3	"	52.63	ND	54.7		12.5		D
Hexachloroethane	27.1	5.3	"	52.63	ND	51.5		21.7		D
4-Methylphenol, 3-Methylphenol	27.8	5.3	"	52.63	ND	52.8		11.2		D
Nitrobenzene	30.1	5.3	"	52.63	ND	57.2		18.1		D
Isophorone	31.4	5.3	"	52.63	ND	59.7		15.1		D
2-Nitrophenol	26.4	5.3	"	52.63	ND	50.2		1.04		D
2,4-Dimethylphenol	34.6	5.3	"	52.63	ND	65.7		11.8		D
bis(2-Chloroethoxy)methane	32.6	5.3	"	52.63	ND	62.0		15.1		D
2,4-Dichlorophenol	37.5	5.3	"	52.63	ND	71.3		17.0		D
1,2,4-Trichlorobenzene	30.5	5.3	"	52.63	ND	58.0	39-98	16.8	28	D
Naphthalene	31.4	5.3	"	52.63	ND	59.7		7.25		D
Hexachlorobutadiene	29.1	5.3	"	52.63	ND	55.2		18.7		D
4-Chloro-3-methylphenol	51.3	5.3	"	52.63	ND	97.5	23-97	22.2		#, D
2-Methylnaphthalene	32.4	5.3	"	52.63	ND	61.6		11.4		D
Hexachlorocyclopentadiene	25.3	11	"	52.63	ND	48.1		26.8		D
2,4,6-Trichlorophenol	39.2	5.3	"	52.63	ND	74.5		21.9		D
2,4,5-Trichlorophenol	41.8	5.3	"	52.63	ND	79.4		19.8		D
2-Chloronaphthalene	35.1	5.3	"	52.63	ND	66.8		18.4		D
Acenaphthylene	36.9	5.3	"	52.63	ND	70.1		17.1		D
Dimethylphthalate	39.1	5.3	"	52.63	ND	74.2		21.5		D
2,6-Dinitrotoluene	42.0	5.3	"	52.63	ND	79.8		25.5		D
Acenaphthene	36.2	5.3	"	52.63	ND	68.7	46-118	17.2	31	D
2,4-Dinitrophenol	26.7	11	"	52.63	ND	50.7		13.8		D
Dibenzofuran	38.6	5.3	"	52.63	ND	73.3		17.7		D
2,4-Dinitrotoluene	43.8	5.3	"	52.63	ND	83.3	24-96	24.4	38	D
4-Nitrophenol	29.0	11	"	52.63	ND	55.1	10-80	23.7	50	D

The results in this report apply to the samples analyzed in accordance wit

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0945105 - EPA 625										
Matrix Spike Dup (0945105-MSD1)	**Source: 09J0523-30**			Prepared: 10/28/2009 Analyzed: 11/04/2009						
Fluorene	38.9	5.3	ug/L	52.63	ND	73.9		16.8		D
4-Chlorophenyl-phenylether	39.0	5.3	"	52.63	ND	74.2		18.5		D
Diethylphthalate	42.6	5.3	"	52.63	ND	80.9		25.0		D
4,6-Dinitro-2-methylphenol	39.8	5.3	"	52.63	ND	75.6		9.71		D
4-Bromophenyl-phenylether	41.2	5.3	"	52.63	ND	78.2		20.5		D
Hexachlorobenzene	39.8	5.3	"	52.63	ND	75.7		22.5		D
Pentachlorophenol	53.5	11	"	52.63	ND	102	9-103	17.2	50	D
Phenanthrene	41.3	5.3	"	52.63	ND	78.5		19.5		D
Anthracene	42.6	5.3	"	52.63	ND	80.9		21.1		D
Di-n-butylphthalate	49.3	5.3	"	52.63	8.47	77.5		34.8		D
Fluoranthene	43.6	5.3	"	52.63	ND	82.9		24.7		D
Pyrene	42.6	5.3	"	52.63	ND	80.9	26-127	24.8	31	D
Butylbenzylphthalate	42.9	5.3	"	52.63	ND	81.5		23.0		D
3,3´-Dichlorobenzidine	ND	5.3	"	52.63	ND					U, D
Benz(a)anthracene	42.6	5.3	"	52.63	ND	80.9		23.4		D
Chrysene	41.6	5.3	"	52.63	ND	79.0		24.2		D
Bis(2-Ethylhexyl)phthalate	70.0	5.3	"	52.63	ND	133		62.8		D
Di-n-octylphthalate	85.2	5.3	"	52.63	ND	162		32.5		D
Benzo[b]fluoranthene	47.6	5.3	"	52.63	ND	90.4		27.6		D
Benzo[k]fluoranthene	57.2	5.3	"	52.63	ND	109		27.2		D
Benzo[a]pyrene	47.7	5.3	"	52.63	ND	90.6		26.0		D
Indeno[1,2,3-cd]pyrene	22.9	5.3	"	52.63	ND	43.6		7.97		D
Dibenz[a,h]anthracene	21.3	5.3	"	52.63	ND	40.4		2.66		D
Benzo[g,h,i]perylene	18.3	5.3	"	52.63	ND	34.9		10.1		D
Surrogate: 2-Fluorophenol	*30.3*		"	*78.95*		*38.4*	*0.974-78.2*			
Surrogate: Phenol-d5	*20.9*		"	*78.95*		*26.5*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*32.2*		"	*52.63*		*61.2*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*32.8*		"	*52.63*		*62.4*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*71.4*		"	*78.95*		*90.5*	*12.5-139*			
Surrogate: Terphenyl-d14	*44.3*		"	*52.63*		*84.2*	*16.6-136*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09J0523
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:12
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Notes and Definitions

U	Sample concentration is less than the MDL.
S4	Surrogate recovery was below laboratory acceptance limits. Reported data is estimated.
S1	Surrogate recovery was above laboratory acceptance limits. No negative impact on the data.
M5	The matrix spike recovery was biased low, the reported result is estimated.
H1	Sample analyzed past maximum recommended holding time.
E3	Concentration estimated due to internal standard recoveries out of acceptance limits.
D	Sample Diluted
B2	Target analyte detected in method blank at or above reporting limit. Concentration found in the samples was 20 times the concentration found in the method blank.
B1	Target analyte detected in method blank at or above reporting limit.
#	QC not in acceptance limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Certifications

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.

- A2LA (Microbiology): 410.02
- A2LA (Environmental): 410.01
- A2LA (ELLAP): 410.01
- CPSC: 1115
- Maryland: 109
- Pennsylvania: 68-00339
- USDA: S-53726
- Virginia: 00152

Cooler Receipt Log

Cooler ID: Day 1 **Cooler Temp:** 3.70 °C

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:

Cooler ID: Day 2 **Cooler Temp:** 4.70 °C

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:

Cooler ID: Day 3 **Cooler Temp:** 3.30 °C

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:

Cooler ID: Day 4 **Cooler Temp:** 4.10 °C

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:

Cooler ID: Day 5 **Cooler Temp:** 3.40 °C

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:

Cooler ID: Day 6 **Cooler Temp:** 4.90 °C

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:

Cooler ID: Day 7 (1) **Cooler Temp:** 4.10 °C

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:

Cooler ID: Day 7 (2)

Cooler Temp: 3.90 °C

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

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 3.7 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

*Dup

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-12 S	GL-12 D	GL-13 S	GL-13 D	GL-14 S	GL-14 D 1345	GL-10 S 1225	GL-10 D 1104	GL-11 S	GL-11 D	GL-09 PZP001	GL-09 PZM016	
Volatiles (8260)	8260	2 VOA's w/HCl	2						X	X	X					
Semi-Volatiles	8270	3 amber liters Cool 4°C	3						↓	↓	↓					
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1						↓	↓	↓					
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0						↓	↓	↓					
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1						↓	↓	↓					
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1						↓	↓	↓					

Relinquished By (signature)/Date & Time: 10/12/9 1515

Received By (signature)/Date & Time: 10/12/09 1515

1.) CLP-Like QC Package
2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 4.7 °C

IR

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-12 S 1440	GL-12 D 1333	GL-13 S 1203	GL-13 D 1038	GL-14 S 0908	GL-14 D	GL-10 S	GL-10 D	GL-11 S	GL-11 D	GL-09 PZP001	GL-09 PZM016	
Volatiles (8260)	8260	2 VOA's w/HCl	2	x	x	x	x	x								
Semi-Volatiles	8270	3 amber liters Cool 4°C	3	↓	↓	↓	↓	↓								
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1	↓	↓	↓	↓	↓								
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1	↓	↓	↓	↓	↓								
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1	↓	↓	↓	↓	↓								

Relinquished By (signature)/Date & Time: 10/13/09 1550

Received By (signature)/Date & Time: 10/13/09 1550

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 3.3 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S 0914	GL-08 D 1028	GL-18 S	GL-18 D	GL-03 S 1427	GL-03 D 1326	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D	GL-16 S	GL-16 D
Volatiles (8260)	8260	2 VOA's w/HCl	2	x	x			x	x							
Semi-Volatiles	8270	3 amber liters Cool 4°C	3	↓	↓			↓	↓							
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1	↓	↓			↓	↓							
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1	↓	↓			↓	↓							
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1	↓	↓			↓	↓							

Relinquished By (signature)/Date & Time: 10/14/9 1555

Received By (signature)/Date & Time: 10/14/09 1555

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 4.1 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D 0941	GL-16 S* 1247	GL-16 D 1113
Volatiles (8260)	8260	2 VOA's w/HCl	2											X	X	X
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 10/16/9 1535

Received By (signature)/Date & Time: 10/16/09 1535

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

~~* MSD~~ Duplicate Samples taken @ GL-16 Shallow. JH 10/16/09

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 3.4 IR °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-05 S 0848	GL-05 D 1003	GL-15 S	GL-15D	GL-19 PZM003	TS01 PDM007							
Volatiles (8260)	8260	2 VOA's w/HCl	2	↓	↓											
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1	↓	↓											

Relinquished By (signature)/Date & Time:

10/21/09 1450

Received By (signature)/Date & Time:

10/21/09 1450

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 3.4IR °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

1258 1137

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D	GL-16 S	GL-16 D
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 10/21/09 1450

Received By (signature)/Date & Time: 10/21/09 1450

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 4.9 IR °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-12 S	GL-12 D	GL-13 S	GL-13 D	GL-14 S	GL-14 D	GL-10 S	GL-10 D	GL-11 S 1203	GL-11 D	GL-09 PZP001	GL-09 PZM016	
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 10/22/9 1630

Received By (signature)/Date & Time: 10/22/09 1630

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 4.9 IR °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

1028 0913

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D	GL-16 S	GL-16 D
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time:	Received By (signature)/Date & Time:
10/22/9 1630	

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0523 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.**_____ °C

Contact: Russ Becker Field Technician: _____

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-12 S	GL-12 D	GL-13 S	GL-13 D	GL-14 S	GL-14 D	GL-10 S	GL-10 D	GL-11 S	GL-11 D 1400	GL-09 PZP001 0847	GL-09 PZM016 0742	
Volatiles (8260)	8260	2 VOA's w/HCl	2													
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time: 10/26/9 1545

Received By (signature)/Date & Time: 10/29/09 1545

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Microbac Laboratories, Inc.

Baltimore Division

Work Order Number: 09J0503 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.**_____ °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-05 S	GL-05 D	GL-15 S 1250	GL-15D 1157	GL-19 PZM003 1110	TS01 PDM007 1008	Trip Blank 0640						
Volatiles (8260)	8260	2 VOA's w/HCl	2							X						
Semi-Volatiles	8270	3 amber liters Cool 4°C	3													
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1													
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0													
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1													
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1													

Relinquished By (signature)/Date & Time:

10/26/9 1545

Received By (signature)/Date & Time:

10/26/09 1545

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-10 Deep Tag: _____

Date of Purging: 10/12/9 Start Time: 1047 Finish Time: 1109 Weather: 55-60°
Date of Collection: 10/12/9 Time of Collection: 1104

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good X	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	21.10
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	22.50

Number of minutes purged	0	3	6	9	12	Sample Reading 15	18
Temperature (°C)	15.4	15.2	15.0	15.0	14.9	14.9	14.7
pH	6.99	6.67	6.56	6.54	6.53	6.54	6.53
Specific Conductance (umhos/cm)	LAB	—	—	—	—		—
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00		—
Oxidation Reduction (eH)	369.7	353.4	261.4	237.8	208.7	197.1	196.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor NO
Color Light Tan

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 12 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-10 Shallow Tag: _____

Date of Purging: 10/12/9 Start Time: 1210 Finish Time: 1225 Weather: 55-60°
Date of Collection: 10/12/9 Time of Collection: 1225

Well Status:

Good	_____	Grout	_____
Good	_____	Casing	_____
Good	X	Lock	_____
Good	_____	Obstructions	_____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	9.23
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	9.78

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	17.4	17.2	17.4	17.5	18.1	17.9
pH	3.94	4.09	3.89	3.87	4.01	4.00
Specific Conductance (umhos/cm)	LAB	—	—	—	—	—
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00
Oxidation Reduction (eH)	358.7	350.6	388.5	394.1	378.0	381.5

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor no
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 12 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-14 Deep Tag: _____

Date of Purging: 10/12/9 Start Time: 1330 Finish Time: 1345 Weather: 55-60°
Date of Collection: 10/12/9 Time of Collection: 1345

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good X	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	19.34
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	20.20

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	15.7	15.5	15.6	15.5	15.5	15.5	
pH	6.26	6.43	6.47	6.49	6.50	6.50	
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	
Oxidation Reduction (eH)	222.5	200.4	188.4	179.4	174.9	171.1	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor w/o
Color Light Greenish

Rate of Purge 110 **milliliters / minute**

Comments: 1 Set of Duplicates

Reference SOP Field-014
Readings were performed on date of sampling 10 / 12 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-14 Shallow Tag: _____

Date of Purging: 10/13/9 Start Time: 0853 Finish Time: 0908 Weather: 55 60°
Date of Collection: 10/13/9 Time of Collection: 0908

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good X	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	7.67
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	8.39

Number of minutes purged	0	3	6	9	12	Sample Reading 15	
Temperature (°C)	17.3	17.8	17.9	18.1	18.2	18.3	
pH	6.32	6.09	6.08	6.06	6.00	5.99	
Specific Conductance (umhos/cm)	LAB	LAB					
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	
Oxidation Reduction (eH)	279.6	281.1	281.8	279.9	282.4	280.1	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Cloudy

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 /13 /09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-13 Deep Tag: _____

Date of Purging: 10/13/9 Start Time: 1023 Finish Time: 1038 Weather: 55-60°
Date of Collection: 10/13/9 Time of Collection: 1038

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good X	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	18.15
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	21.10

						Sample Reading
Number of minutes purged	0	3	6	9	12	15
Temperature (°C)	16.0	15.6	15.5	15.4	15.3	15.6
pH	6.29	6.30	6.28	6.25	6.23	6.22
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00
Oxidation Reduction (eH)	223.9	220.7	216.7	213.7	211.0	206.9

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 13 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-13 Shallow Tag: _____

Date of Purging: 10/13/9 Start Time: 1148 Finish Time: 1203 Weather: 55-60°
Date of Collection: 10/13/9 Time of Collection: 1203

Well Status:

Good	_____	Grout	_____
Good	_____	Casing	_____
Good	X	Lock	_____
Good	_____	Obstructions	_____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	8.81
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	10.34

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	19.0	18.5	18.4	18.3	18.2	18.1
pH	5.52	5.49	5.45	5.44	5.40	5.39
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00
Oxidation Reduction (eH)	292.3	312.1	325.1	327.3	328.6	331.5

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor None
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 13 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-12 Deep Tag: BA-81-4617

Date of Purging: 10/13/9 Start Time: 1315 Finish Time: 1333 Weather: 60-65°
Date of Collection: 10/13/9 Time of Collection: 1333

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	12.92
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	13.91

Number of minutes purged	0	3	6	9	12	Sample Reading 15	Sample Reading 18
Temperature (°C)	21.3	19.6	19.3	19.4	19.5	18.8	18.9
pH	5.58	5.59	5.76	5.87	5.94	6.08	6.12
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	000	0.00
Oxidation Reduction (eH)	449.8	450.6	447.5	441.3	434.9	420.7	419.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor none
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments:_____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 13 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-12 Shallow Tag: BA-81-4628

Date of Purging: 10/13/9 Start Time: 1425 Finish Time: 1440 Weather: 60-65°
Date of Collection: 10/13/9 Time of Collection: 1440

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	9.18
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	12.14

Number of minutes purged	0	3	6	9	12	15 Sample Reading
Temperature (°C)	18.8	18.0	17.9	17.8	17.7	17.7
pH	4.61	4.47	4.43	4.45	4.48	4.50
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00					
Oxidation Reduction (eH)	364.7	374.5	378.9	379.4	377.9	380.1

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Very Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 13 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-08 Shallow Tag: _____

Date of Purging: 10/14/9 Start Time: 0856 Finish Time: 0914 Weather: 50-55°
Date of Collection: 10/14/09 Time of Collection: 0914

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	5.45
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	7.15

						Sample Reading	
Number of minutes purged	0	3	6	9	12	15	18
Temperature (°C)	16.1	16.5	16.6	16.6	16.7	16.8	16.9
pH	6.93	6.93	6.93	6.92	6.92	6.92	6.92
Specific Conductance (umhos/cm)	LAB	LAB					
Dissolved Oxygen (mg/l)	0.00	0.00					
Oxidation Reduction (eH)	192.8	172.6	155.9	145.9	134.4	127.6	127.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Yellowish / green

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 14 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-08 PZM036 (Deep) Tag: _____

Date of Purging: 10/14/9 Start Time: 1010 Finish Time: 1028 Weather: SO 55

Date of Collection: 10/14/9 Time of Collection: 1028

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	16.23
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	18.41

						Sample Reading	
Number of minutes purged	0	3	6	9	12	15	18
Temperature (°C)	16.8	16.5	16.3	16.1	16.1	16.0	16.0
pH	6.97	6.97	6.96	6.96	6.96	6.95	6.95
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00	0.00					
Oxidation Reduction (eH)	531.9	561.9	345.9	246.3	226.7	210.1	197.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Cloudy

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 10 / 14 / 9. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GI-03 Deep Tag: BA-81-4631

Date of Purging: 10/14/9 Start Time: 1314 Finish Time: 1326 Weather: 50-55°
Date of Collection: 10/14/9 Time of Collection: 1326

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	13.40
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	15.81

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	17.7	17.8	17.8	17.6	17.7	
pH	7.97	8.08	8.13	8.15	8.15	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	
Oxidation Reduction (eH)	134.1	110.8	100.7	93.7	89.8	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Yes
Color yellowish

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 14 / 9 . (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-03 Shallow Tag: BA-81-4629

Date of Purging: 10/14/9 Start Time: 1414 Finish Time: 1429 Weather: 50-55°
Date of Collection: 10/14/9 Time of Collection: 1429

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	6.82
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	8.29

	0	3	6	9	12	15 (Sample Reading)	
Number of minutes purged							
Temperature (°C)	17.1	18.1	18.1	18.3	18.3	18.2	
pH	10.54	10.65	10.88	11.20	11.29	11.32	
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	
Oxidation Reduction (eH)	37.6	46.2	48.7	47.7	47.2	41.6	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Yes
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments:_____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 14 / 09. (Tech - JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-20 PZM004 Tag: _____

Date of Purging: 10/16/9 Start Time: 0923 Finish Time: 0941 Weather: 45-50° Lt. Rain
Date of Collection: 10/16/9 Time of Collection: 0941

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good X	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	12.28
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	14.62

Number of minutes purged	0	3	6	9	12	15	Sample Reading 18
Temperature (°C)	12.1	13.2	14.2	14.5	14.6	14.6	14.5
pH	9.72	9.93	10.27	10.38	10.44	10.45	10.44
Specific Conductance (umhos/cm)	643						
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oxidation Reduction (eH)	105.2	64.1	19.0	6.0	0.3	-0.3	-1.1

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 16 / 9 . (Tech - JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-16 Deep Tag: _____

Date of Purging: 10/16/9 Start Time: 1056 Finish Time: 1113 Weather: 40-45° Lt. Rain
Date of Collection: 10/16/9 Time of Collection: 1113

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	20.44
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	23.10

Number of minutes purged	0	3	6	9	12	15	Sample Reading 18
Temperature (°C)	12.4	12.6	12.6	13.1	14.5	14.5	14.6
pH	12.60	12.47	12.36	11.40	10.35	8.10	7.99
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oxidation Reduction (eH)	60.9	73.4	84.9	91.5	105.5	90.5	87.9

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 16 /09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-16 Shallow Tag: _____

Date of Purging: 10/16/9 Start Time: 1232 Finish Time: 1247 Weather: 40-45° Lt Rain
Date of Collection: 10/16/9 Time of Collection: 1247

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	17.62
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	19.47

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	14.3	14.5	14.7	14.8	15.0	15.0	
pH	456	4.32	4.21	4.17	4.16	4.16	
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00						
Oxidation Reduction (eH)	500.7	498.6	498.2	501.3	504.2	504.8	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: * Duplicate Samples taken

Reference SOP Field-014
Readings were performed on date of sampling 10 / 16 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-05 Shallow Tag: _____

Date of Purging: 10/21/9 Start Time: 0836 Finish Time: 0848 Weather: 45-50°

Date of Collection: 10/21/9 Time of Collection: 0848

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	22.41
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	25.63

Number of minutes purged	0	3	6	9	12	Sample Reading
Temperature (°C)	15.3	15.2	15.2	15.4	15.5	
pH	5.95	5.45	5.27	5.17	5.12	
Specific Conductance (umhos/cm)	LAB				LAB	
Dissolved Oxygen (mg/l)	0.00				0.00	
Oxidation Reduction (eH)	506.3	507.7	500.9	497.7	496.1	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor None
Color Tan / Dirty

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 10 / 21 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-05 Deep Tag: _____

Date of Purging: 10/21/9 Start Time: 0851 Finish Time: 1003 Weather: 45-50°
Date of Collection: 10/21/9 Time of Collection: 1003

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	24.93
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	27.82

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	18.5	17.2	16.9	16.9	16.8	
pH	5.62	5.13	5.14	5.16	5.15	
Specific Conductance (umhos/cm)	LAB				LAB	
Dissolved Oxygen (mg/l)	0.00				0.00	
Oxidation Reduction (eH)	236.5	178.4	171.9	163.8	162.7	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor NONE
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 21 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-02 Deep Tag: _____

Date of Purging: 10/21/9 Start Time: 1122 Finish Time: 1137 Weather: 50-55°

Date of Collection: 10/21/9 Time of Collection: 1137

Well Status:

Good _____ Grout _____

Good _____ Casing _____

Good _____ Lock _____

Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	23.15
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	26.42

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	21.1	20.2	19.8	19.3	19.1	19.2
pH	4.37	4.83	5.14	5.40	5.50	5.54
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	325.6	303.4	277.8	244.2	226.7	221.9

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor None

Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 10 / 21 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-02 Shallow Tag: _____

Date of Purging: 10/21/9 Start Time: 1246 Finish Time: 1258 Weather: 55-60°
Date of Collection: 10/21/9 Time of Collection: 1258

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	21.18
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	23.10

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	20.9	20.6	20.1	20.0	20.0	
pH	6.75	6.80	6.83	6.83	6.82	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00					
Oxidation Reduction (eH)	141.7	123.2	108.4	105.9	104.7	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 21 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-17 Deep Tag: _____

Date of Purging: 10/22/09 Start Time: 0858 Finish Time: 0913 Weather: 45-50
Date of Collection: 10/22/09 Time of Collection: 0913

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	21.07
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	24.12

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	15.8	15.5	16.0	16.1	16.1	16.0	
pH	7.06	7.16	7.18	7.20	7.21	7.20	
Specific Conductance (umhos/cm)	LAB						
Dissolved Oxygen (mg/l)	0.00						
Oxidation Reduction (eH)	207.3	148.4	116.8	105.5	98.7	97.0	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear
Some Sediment

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 22 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-17 Shallow Tag: _____

Date of Purging: 10/22/9 Start Time: 1016 Finish Time: 1028 Weather: 45-50°
Date of Collection: 10/22/9 Time of Collection: 1028

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	13.67
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	15.94

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	18.3	18.5	18.4	18.4	18.3	
pH	9.39	9.70	9.84	9.93	9.96	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00					
Oxidation Reduction (eH)	-113.9	-107.4	-127.9	-152.9	-147.9	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Redish Brown

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 22 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**

Well **I.D.**: GL-11 Shallow Tag: _____

Date of Purging: 10/22/9 Start Time: 1151 Finish Time: 1203 Weather: 50-55

Date of Collection: 10/22/9 Time of Collection: 1203

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	8.89
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	12.04

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	19.6	19.1	19.0	18.9	18.8	
pH	4.03	4.00	4.01	4.00	3.99	
Specific Conductance (umhos/cm)	LATB					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	134.9	145.8	186.5	198.1	200.4	

Purging Equipment

Peristaltic Pump ✓

Bladder Pump _____

Well Observation

Odor None

Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014

Readings were performed on date of sampling 10 / 22 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-09 PZMO16 Tag: BA-81-4632

Date of Purging: 10/26/09 Start Time: 0730 Finish Time: 0742 Weather: 40-45°
Date of Collection: 10/26/09 Time of Collection: 0742

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	17.17
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	20.45

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	13.7	12.6	12.4	14.7	14.6	
pH	5.92	5.93	5.93	5.90	5.89	
Specific Conductance (umhos/cm)	643					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	347.6	190.7	187.4	181.2	177.3	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Yes
Color Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech –)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-09 PZP001 Tag: _____

Date of Purging: 10/26/9 Start Time: 0830 Finish Time: 0842 Weather: 40-45
Date of Collection: 10/26/9 Time of Collection: 0842

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	PVC
Depth Measurements Performed (PVC/Metal)	2
Depth to Water from Top of Casing (0.01 ft.) prior to purging	6.47
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	10.22

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	9.9	14.3	14.3	14.4	14.3	
pH	12.26	11.01	10.50	10.44	10.41	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)	0.00					
Oxidation Reduction (eH)	-91.5	-104.2	-150.4	-155.4	-161.2	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Greenish

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: TS01 PDM 007 Tag: _____

Date of Purging: 10/26/9 Start Time: 0956 Finish Time: 1008 Weather: 45-50°
Date of Collection: 10/26/9 Time of Collection: 1008

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	14.25
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	18.10

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	14.5	14.7	14.7	14.7	14.7	
pH	10.37	10.87	10.91	11.04	11.05	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	72.6	65.4	30.4	29.7	28.4	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-19 PZM003 Tag: _____

Date of Purging: 10/26/9 Start Time: 1055 Finish Time: 1110 Weather: 40-45°
Date of Collection: 10/26/9 Time of Collection: 1110

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	17.64
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	19.91

Number of minutes purged	0	3	6	9	12	15 Sample Reading
Temperature (°C)	17.9	17.1	16.5	15.9	15.7	15.6
pH	10.64	10.67	10.71	10.73	10.74	10.70
Specific Conductance (umhos/cm)						
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	104.2	81.9	60.4	55.7	56.9	55.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear

Rate of Purge 110 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-15 Deep Tag: _____

Date of Purging: 10/26/9 Start Time: 1145 Finish Time: 1157 Weather: 45-50°
Date of Collection: 10/26/9 Time of Collection: 1157

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	15.47
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	18.17

	0	3	6	9	12	Sample Reading
Number of minutes purged						
Temperature (°C)	18.9	16.4	15.7	15.5	15.4	
pH	10.94	11.03	11.07	11.10	11.15	
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	89.4	62.9	41.3	39.7	36.4	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Mostly Clear Yellowish Tint

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech –)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-15 Shallow Tag: _____

Date of Purging: 10/26/9 Start Time: 1235 Finish Time: 1250 Weather: 45-50°
Date of Collection: 10/26/9 Time of Collection: 1250

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	8.70
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	11.23

Number of minutes purged	0	3	6	9	12	15	Sample Reading
Temperature (°C)	13.7	13.9	14.1	14.6	14.8	15.1	
pH	7.16	7.24	7.37	7.41	7.43	7.45	
Specific Conductance (umhos/cm)	CAB						
Dissolved Oxygen (mg/l)							
Oxidation Reduction (eH)	159.1	160.1	178.6	187.4	196.1	197.6	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Very Slight
Color Cloudy Yellowish

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-11 Deep Tag: _____

Date of Purging: 10/26/9 Start Time: 1345 Finish Time: 1400 Weather: 45-50°
Date of Collection: 10/26/9 Time of Collection: 1400

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	16.94
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	19.42

Number of minutes purged	0	3	6	9	12	Sample Reading 15
Temperature (°C)	14.3	15.4	16.1	16.3	16.4	16.4
pH	10.14	9.74	9.32	9.24	9.19	9.17
Specific Conductance (umhos/cm)	LAB					
Dissolved Oxygen (mg/l)						
Oxidation Reduction (eH)	-394.1	-241.3	-152.4	-129.9	-121.5	-119.4

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Slight
Color Cloudy

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 10 / 26 / 09. (Tech – JH)

HQN:groundisg.doc.white

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Number of Coolers Received: 1
Client: Spuerstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/12/19 1515
Work Order #: _____

Shipper: ☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact: YES / NO / NA
Containers Intact: YES / NO
Sample Received on Ice or refrigerated: YES / NO
Temperature: _____ °C or
Infrared (IR)Temperature: 3.7 °C

Radiation Scan: ☒ Negative or _____ mR/hr
Chain of Custody Present with shipment: YES / NO
Sample Bottle IDs agree with COC: YES / NO
Preservation requirements met: YES / NO / Not Checked
Correct Number of Containers / Sample Volume: YES / No (If No, contact client immediately)
Headspace in container: YES / NO / NA
Type of Sample: Water Soil Wipes Oil Filter Solid Sludge Food Other _____

***Container Type / Quantity*:**

A - ___ Unpreserved ___ H2SO4 4 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 4 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 12 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 4 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 8 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___NaTHIO ___NaTHIO/EDTA**(Checked at time of Analysis)**
J- ____ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Number of Coolers Received: 1
Client: Severstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/13/9 1550
Work Order #

Shipper:	☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact:	YES / NO / NA
Containers Intact:	YES / NO
Sample Received on Ice or refrigerated:	YES / NO Temperature: _____°C or Infrared (IR)Temperature: 4.7 °C
Radiation Scan:	Negative or _____ mR/hr
Chain of Custody Present with shipment:	YES / NO
Sample Bottle IDs agree with COC:	YES / NO
Preservation requirements met:	YES / NO / Not Checked
Correct Number of Containers / Sample Volume:	YES / No (If No, contact client immediately)
Headspace in container:	YES / NO / NA
Type of Sample:	Water Soil Wipes Oil Filter Solid Sludge Food Other _____

***Container Type / Quantity*:**

A - ___ Unpreserved ___ H2SO4 5 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 5 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 15 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 5 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 10 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___NaTHIO ___NaTHIO/EDTA**(Checked at time of Analysis)**
J- ____ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies:_____

Contact information / Summary of Actions:

Date / Time:_____ Contact:_____ Contact By:_____
Comments:_____

Number of Coolers Received: 1
Client: Seversta1 Landfill
Form Completed By: JH

Receipt Date / Time: 10/14/9 1555
Work Order #

Shipper: ☑ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact: (YES) / NO / NA
Containers Intact: (YES) / NO
Sample Received on Ice or refrigerated: (YES) / NO
Temperature: _____ °C or
Infrared (IR)Temperature: 3.3 °C

Radiation Scan: ~~Negative~~ or _____ mR/hr
Chain of Custody Present with shipment: (YES) / NO
Sample Bottle IDs agree with COC: (YES) / NO
Preservation requirements met: (YES) / NO / Not Checked
Correct Number of Containers / Sample Volume: (YES) / No (If No. contact client immediately)
Headspace in container: (YES) / NO / NA
Type of Sample: ~~Water~~ Soil Wipes Oil Filter Solid Sludge Food Other

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 4 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
B - ___ Unpreserved 4 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
D - 12 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
H - 4 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
V- ___ Unpreserved 8 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA**(Checked at time of Analysis)**
J- ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other( )

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____

Number of Coolers Received: 1
Client: Severstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/16/19 1535
Work Order #: _____

Shipper: ☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact: (YES) / NO / NA
Containers Intact: (YES) / NO
Sample Received on Ice or refrigerated: (YES) / NO
Temperature: _____ °C or
Infrared (IR)Temperature: 4.1 °C

Radiation Scan: ☒ Negative or _____ mR/hr
Chain of Custody Present with shipment: (YES) / NO
Sample Bottle IDs agree with COC: (YES) / NO
Preservation requirements met: (YES) / NO / Not Checked
Correct Number of Containers / Sample Volume: (YES) / No (If No, contact client immediately)
Headspace in container: (YES) / NO / NA
Type of Sample: (Water) Soil Wipes Oil Filter Solid Sludge Food Other

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 4 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 4 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 12 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 4 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 8 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA**(Checked at time of Analysis)**
J- ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____

Number of Coolers Received: 1
Client: Severstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/21/9 1450
Work Order #: _____

Shipper:	☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact:	YES / NO / NA
Containers Intact:	YES / NO
Sample Received on Ice or refrigerated:	YES / NO Temperature: _____ °C or Infrared (IR)Temperature: 3.4 °C
Radiation Scan:	☒ Negative or _____ mR/hr
Chain of Custody Present with shipment:	YES / NO
Sample Bottle IDs agree with COC:	YES / NO
Preservation requirements met:	YES / NO / Not Checked
Correct Number of Containers / Sample Volume:	YES / No (If No, contact client immediately)
Headspace in container:	YES / NO / NA
Type of Sample:	Water Soil Wipes Oil Filter Solid Sludge Food Other

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 4 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 4 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 12 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 4 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 10 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA**(Checked at time of Analysis)**
J- ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____

Number of Coolers Received: 1
Client: Severstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/22/9 1630
Work Order #_____

Shipper:	☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact:	YES / NO / NA
Containers Intact:	YES / NO
Sample Received on Ice or refrigerated:	YES / NO
	Temperature: _____ °C or
	Infrared (IR)Temperature: 4.9 °C
Radiation Scan:	☒ Negative or _____ mR/hr
Chain of Custody Present with shipment:	YES / NO
Sample Bottle IDs agree with COC:	YES / NO
Preservation requirements met:	YES / NO / Not Checked
Correct Number of Containers / Sample Volume:	YES / No (If No. contact client immediately)
Headspace in container:	YES / NO / NA
Type of Sample:	Water Soil Wipes Oil Filter Solid Sludge Food Other

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 3 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 3 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 9 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 3 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 8 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO**(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA**(Checked at time of Analysis)**
J- ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies:_____

Contact information / Summary of Actions:

Date / Time:_____ Contact:_____ Contact By:_____
Comments:_____

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Number of Coolers Received: 2
Client: Severstal Landfill
Form Completed By: JH

Receipt Date / Time: 10/26/9 1545
Work Order #: _____

Shipper:	☒ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact:	YES / NO / NA
Containers Intact:	YES / NO
Sample Received on Ice or refrigerated:	YES / NO
	Temperature: _____ °C or
	Infrared (IR) Temperature: 4.1 °C & 3.9
Radiation Scan:	☒ Negative or _____ mR/hr
Chain of Custody Present with shipment:	YES / NO
Sample Bottle IDs agree with COC:	YES / NO
Preservation requirements met:	YES / NO / Not Checked
Correct Number of Containers / Sample Volume:	YES / No (If No, contact client immediately)
Headspace in container:	YES / NO / NA
Type of Sample:	Water Soil Wipes Oil Filter Solid Sludge Food Other_____

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 7 HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved 7 H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - 21 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - 7 Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V- ___ Unpreserved 16 HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA **(Checked at time of Analysis)**
J- ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:

All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*

Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____

SEVERSTAL

09J0523

8270 QC

Data Directory: C:\msdchem\1\DATA\2009\09sep09\SEP2909\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 29SEP01.D PRIMER	100PPM PRIME	95	1.000	29 Sep 2009 7:03 pm
2) 29SEP02.D PRIMER	100PPM PRIME	95	1.000	29 Sep 2009 7:39 pm
3) 29SEP03.D PRIMER	100PPM PRIME	95	1.000	29 Sep 2009 8:16 pm
4) 29SEP04.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	29 Sep 2009 8:52 pm
5) 29SEP05.D CAL BLANK	BLANK, 10uL MF91808	1	1.000	29 Sep 2009 9:29 pm
6) 29SEP06.D 5.0 ug/mL ICal 2	50uL MI92902>1mL	2	1.000	29 Sep 2009 10:05 pm
7) 29SEP07.D 10 ug/mL ICal 3	100uL MI92902>1mL	3	1.000	29 Sep 2009 10:41 pm
8) 29SEP08.D 20 ug/mL ICal 4	200uL MI92902>1mL	4	1.000	29 Sep 2009 11:18 pm
9) 29SEP09.D 30 ug/mL ICal 5	300uL MI92902>1mL	5	1.000	29 Sep 2009 11:54 pm
10) 29SEP10.D 40 ug/mL ICal 6	400uL MI92902>1mL	6	1.000	30 Sep 2009 12:30 am
11) 29SEP11.D 50 ug/mL ICal 7	500uL MI92902>1mL	7	1.000	30 Sep 2009 1:07 am
12) 29SEP12.D 60 ug/mL ICal 8	600uL MI92902>1mL	8	1.000	30 Sep 2009 1:43 am
13) 29SEP13.D 80 ug/mL ICal 9	800uL MI92902>1mL	9	1.000	30 Sep 2009 2:20 am
14) 29SEP14.D 40 ug/mL ICV	400uL MI92905>1mL	10	1.000	30 Sep 2009 2:56 am
15) 29SEP15.D CCB	CONT CAL BLANK	1	1.000	30 Sep 2009 3:33 am

Method Path : C:\msdchem\1\METHODS\
Method File : BNASEP29.M
Title : 8270/625 BNA Calibration
Last Update : Wed Sep 30 13:33:04 2009
Response Via : Initial Calibration

Total Cpnds : 92

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	6.636	1.000	A	1	A	B
2		N-Nitrosodimethylamine	74	3.177	0.479	A	2	A	B
3	T	Pyridine	79	3.101	0.467	A	2	A	B
4	S	2-Fluorophenol	112	5.108	0.770	A	1	A	B
5		Pentachloroethane	167	6.216	0.937	A	3	A	B
6		Aniline	93	6.292	0.948	Q	1	A	B
7	T	bis(2-Chloroethyl)ether	93	6.345	0.956	A	2	A	B
8	S	Phenol-d5	99	6.467	0.975	A	2	A	B
9	M*	Phenol	94	6.485	0.977	A	2	A	B
10	M	2-Chlorophenol	128	6.485	0.977	A	1	A	B
11	T	1,3-Dichlorobenzene	146	6.578	0.991	A	2	A	B
12	M*	1,4-Dichlorobenzene	146	6.660	1.004	A	2	A	B
13	T	1,2-Dichlorobenzene	146	6.939	1.046	A	2	A	B
14	T	Benzyl alcohol	108	6.998	1.054	A	2	A	B
15	T	bis(2-chloroisopropyl)ether	45	7.126	1.074	A	1	A	B
16	T	2-Methylphenol	108	7.284	1.098	A	1	A	B
17	T	Hexachloroethane	117	7.371	1.111	A	2	A	B
18	M**	N-Nitroso-di-n-propylamine	70	7.383	1.113	A	2	A	B
19	T	4-Methylphenol,3-Methylphenol	108	7.517	1.133	A	1	A	B
20	I	Naphthalene-d8	136	8.596	1.000	A	1	A	B
21	S	Nitrobenzene-d5	82	7.552	0.879	A	2	A	B
22	T	Nitrobenzene	77	7.581	0.882	L	2	A	B
23	T	Isophorone	82	7.931	0.923	A	1	A	B
24	T	2-Nitrophenol	139	8.060	0.938	A	2	A	B
25	T	2,4-Dimethylphenol	107	8.258	0.961	A	2	A	B
26	T	bis(2-Chloroethoxy)methane	93	8.293	0.965	A	2	A	B
27	T	2,4-Dichlorophenol	162	8.526	0.992	A	2	A	B
28	M	1,2,4-Trichlorobenzene	180	8.526	0.992	A	2	A	B
29	T	Naphthalene	128	8.625	1.003	A	2	A	B
30	T	4-Chloroaniline	127	8.952	1.041	A	2	A	B
31	T	Benzoic Acid	105	8.695	1.011	L	3	A	B
32	T	Hexachlorobutadiene	225	8.888	1.034	A	2	A	B
33	M*	4-Chloro-3-methylphenol	107	9.733	1.132	A	2	A	B
34	T	2-Methylnaphthalene	142	9.716	1.130	L	1	A	B
35		1-Methylnaphthalene	142	9.885	1.150	A	2	A	B
36	I	Acenaphthene-d10	164	11.414	1.000	A	2	A	B
37	T	Hexachlorocyclopentadiene	237	10.054	0.881	Q	2	A	B
38	T	2,4,6-Trichlorophenol	196	10.299	0.902	A	2	A	B
39	T	2,4,5-Trichlorophenol	196	10.434	0.914	A	2	A	B
40	S	2-Fluorobiphenyl	172	10.346	0.906	A	1	A	B
41	T	2-Chloronaphthalene	162	10.492	0.919	A	2	A	B
42	T	2-Nitroaniline	65	10.824	0.948	A	2	A	B
43		1,4-Dinitrobenzene	75	10.994	0.963	A	2	A	B
44	T	Acenaphthylene	152	11.169	0.979	A	2	A	B
45	T	Dimethylphthalate	163	11.116	0.974	A	2	A	B
46		1,3-Dinitrobenzene	168	10.994	0.963	A	2	A	B
47		1,2-Dinitrobenzene	168	11.373	0.996	A	2	A	B
48	T	2,6-Dinitrotoluene	165	11.239	0.985	A	2	A	B
49	M*	Acenaphthene	153	11.472	1.005	A	2	A	B
50	T	3-Nitroaniline	138	10.824	0.948	A	2	A	B
51	T	2,4-Dinitrophenol	184	11.658	1.021	Q	2	A	B
52	T	Dibenzofuran	168	11.723	1.027	A	1	A	B
53		2,3,5,6-Tetrachlorophenol	232	11.996	1.051	L	2	A	B
54		2,3,4,6-Tetrachlorophenol	232	12.072	1.058	L	2	A	B

56	M**	4-Nitrophenol	139	12.060	1.057	Q	2	A	B
57	T	Fluorene	166	12.277	1.076	A	2	A	B
58	T	4-Chlorophenyl-phenylether	204	12.288	1.077	A	2	A	B
59	T	Diethylphthalate	149	12.236	1.072	A	2	A	B
60	T	1,2-Diphenylhydrazine (Azob...	77	12.539	1.099	A	2	A	B
61	T	4-Nitroaniline	138	12.627	1.106	A	2	A	B
62	I	Phenanthrene-d10	188	13.782	1.000	A	1	A	B
63	T	4,6-Dinitro-2-methylphenol	198	12.521	0.909	L	2	A	B
64	T	n-Nitrosodiphenylamine	169	12.533	0.909	Q	2	A	B
65	S	2,4,6-Tribromophenol	330	12.738	0.924	A	2	A	B
66	T	4-Bromophenyl-phenylether	248	13.058	0.948	A	2	A	B
67	T	Hexachlorobenzene	284	13.280	0.964	A	2	A	B
68	M*	Pentachlorophenol	266	13.659	0.991	Q	2	A	B
69	T	Phenanthrene	178	13.822	1.003	A	2	A	B
70	T	Anthracene	178	13.892	1.008	A	2	A	B
71	T	Carbazole	167	14.230	1.033	A	2	A	B
72	T	Di-n-butylphthalate	149	14.832	1.076	A	2	A	B
73	T	Fluoranthene	202	15.771	1.144	A	1	A	B
74	I	Chrysene-d12	240	18.681	1.000	A	2	A	B
75	M	Pyrene	202	16.167	0.865	A	2	A	B
76		Benzidine	184	16.103	0.862	Q	2	A	B
77	S	Terphenyl-d14	244	16.500	0.883	A	2	A	B
78		3,3'-Dimethylbenzidine	212	17.520	0.938	A	3	A	B
79	T	Butylbenzylphthalate	149	17.567	0.940	A	2	A	B
80		bis(2-ethylhexyl)adipate	129	17.707	0.948	A	2	A	B
81	T	3,3'-Dichlorobenzidine	252	18.716	1.002	L	2	A	B
82	T	Benzo[a]anthracene	228	18.629	0.997	A	2	A	B
83	T	Chrysene	228	18.740	1.003	A	2	A	B
84	T	bis(2-Ethylhexyl)phthalate	149	18.891	1.011	A	2	A	B
85	I	Perylene-d12	264	21.983	1.000	A	2	A	B
86	T	Di-n-octylphthalate	149	20.332	0.925	A	1	A	B
87	T	Benzo[b]fluoranthene	252	21.125	0.961	Q	2	A	B
88	T	Benzo[k]fluoranthene	252	21.189	0.964	A	2	A	B
89	T	Benzo[a]pyrene	252	21.848	0.994	A	2	A	B
90	T	Indeno[1,2,3-cd]pyrene	276	24.257	1.103	Q	1	A	B
91	T	Dibenz[a,h]anthracene	278	24.292	1.105	Q	2	A	B
92	T	Benzo[g,h,i]perylene	276	24.758	1.126	Q	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
Qual = number of qualifiers
A/H = Area or Height
R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

BASEP29.M Wed Sep 30 13:35:56 2009 MSD5

Method Path : C:\msdchem\1\METHODS\
Method File : BNASEP29.M
Title : 8270/625 BNA Calibration
Last Update : Wed Sep 30 13:33:04 2009
Response Via : Initial Calibration

Calibration Files
1 =09SEP02.D 2 =29SEP06.D 3 =29SEP07.D 4 =29SEP08.D 5 =29SEP09.D 6 =29SEP10.D 7 =29SEP11.D
8 =29SEP12.D 9 =29SEP13.D

		Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------										
2)		N-Nitrosodimet...	0.780	0.822	0.828	0.918	0.814	0.938	0.913	0.910	0.865	6.98	
3)	T	Pyridine	1.326	1.391	1.472	1.468	1.460	1.534	1.484	1.529	1.458	4.76	
4)	S	2-Fluorophenol	1.088	1.276	1.363	1.419	1.408	1.465	1.474	1.497	1.374	9.84	
5)		Pentachloroethane									0.000#	-1.00	
6)		Aniline	1.154	1.274	1.399	1.462	1.477	1.695	1.743	1.827	1.504	15.63	
7)	T	bis(2-Chloroet...	1.946	1.859	1.798	1.757	1.751	1.708	1.671	1.568	1.757	6.56	
8)	S	Phenol-d5	1.755	1.790	1.804	1.824	1.788	1.817	1.778	1.745	1.788	1.56	
9)	M*	Phenol	1.727	1.722	1.727	1.749	1.691	1.699	1.659	1.608	1.698	2.68	
10)	M	2-Chlorophenol	1.457	1.469	1.453	1.462	1.414	1.416	1.366	1.310	1.419	3.92	
11)	T	1,3-Dichlorobe...	1.679	1.685	1.645	1.619	1.596	1.598	1.586	1.558	1.621	2.79	
12)	M*	1,4-Dichlorobe...	1.756	1.751	1.712	1.702	1.682	1.671	1.636	1.613	1.690	3.00	
13)	T	1,2-Dichlorobe...	1.654	1.672	1.641	1.638	1.637	1.629	1.617	1.589	1.635	1.50	
14)	T	Benzyl alcohol	0.754	0.841	0.869	0.883	0.898	0.918	0.913	0.923	0.875	6.42	
15)	T	bis(2-chlorois...	2.887	2.886	2.835	2.803	2.764	2.736	2.680	2.602	2.774	3.60	
16)	T	2-Methylphenol	1.242	1.256	1.264	1.278	1.275	1.305	1.301	1.304	1.278	1.85	
17)	T	Hexachloroethane	0.621	0.618	0.604	0.604	0.595	0.612	0.608	0.605	0.608	1.35	
18)	M**	N-Nitroso-di-n...	1.022	1.026	1.031	1.024	1.025	1.014	1.014	1.010	1.021	0.72	
19)	T	4-Methylphenol...	1.091	1.241	1.231	1.270	1.284	1.311	1.303	1.300	1.254	5.74	
20)	I	Naphthalene-d8	----------ISTD----------										
21)	S	Nitrobenzene-d5	0.414	0.412	0.412	0.403	0.398	0.409	0.395	0.393	0.404	2.13	
22)	T	Nitrobenzene	0.478	0.478	0.401	0.378	0.371	0.383	0.366	0.362	0.402	12.04	
23)	T	Isophorone	0.780	0.783	0.799	0.786	0.800	0.791	0.744	0.711	0.774	4.00	
24)	T*	2-Nitrophenol	0.173	0.193	0.196	0.198	0.198	0.204	0.198	0.196	0.194	4.78	
25)	T	2,4-Dimethylph...	0.353	0.346	0.370	0.362	0.355	0.369	0.361	0.351	0.358	2.38	
26)	T	bis(2-Chloroet...	0.436	0.441	0.439	0.431	0.427	0.434	0.426	0.418	0.432	1.76	
27)	T*	2,4-Dichloroph...	0.252	0.252	0.272	0.276	0.279	0.286	0.282	0.273	0.272	4.77	
28)	M	1,2,4-Trichlor...	0.368	0.374	0.365	0.360	0.352	0.354	0.345	0.338	0.357	3.39	
29)	T	Naphthalene	1.085	1.061	1.029	1.020	1.023	1.023	1.000	0.976	1.027	3.25	
30)	T	4-Chloroaniline	0.203	0.191	0.162	0.164	0.177	0.189	0.180	0.166	0.179	8.31	
31)	T	Benzoic Acid		0.079	0.126	0.151	0.181	0.200	0.213	0.220	0.167	30.95	
32)	T*	Hexachlorobuta...	0.203	0.202	0.201	0.203	0.199	0.204	0.198	0.194	0.200	1.61	
33)	M*	4-Chloro-3-met...	0.256	0.274	0.285	0.286	0.289	0.289	0.290	0.278	0.281	4.15	
34)	T	2-Methylnaphth...	0.686	0.685	0.925	0.924	0.963	0.955	0.965	0.924	0.879	13.68	
35)		1-Methylnaphth...	0.758	0.724	0.702	0.690	0.695	0.683	0.685	0.658	0.699	4.29	

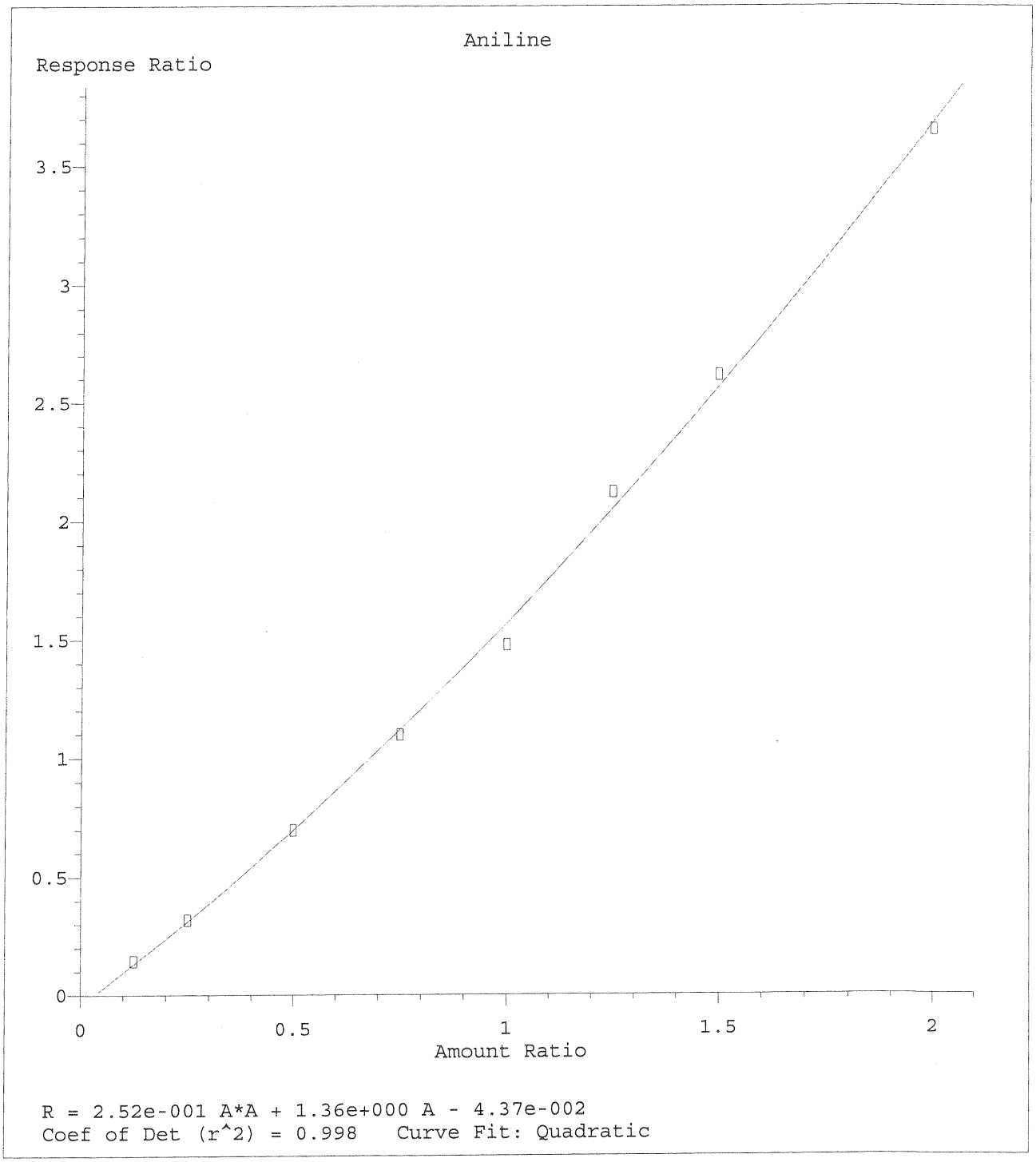
Method Path : C:\msdchem\1\METHODS\
Method File : BNASEP29.M
Title : 8270/625 BNA Calibration

36)	I	Acenaphthene-d10	----------ISTD----------									
37)	T**	Hexachlorocycl...		0.015	0.073	0.121	0.153	0.197	0.211	0.230	0.143	54.82
38)	T*	2,4,6-Trichlor...	0.325	0.339	0.357	0.361	0.365	0.374	0.373	0.379	0.359	5.19
39)	T	2,4,5-Trichlor...	0.261	0.313	0.338	0.334	0.353	0.370	0.374	0.377	0.340	11.44
40)	S	2-Fluorobiphenyl	1.530	1.555	1.557	1.472	1.479	1.472	1.452	1.455	1.497	2.93
41)	T	2-Chloronaphth...	1.190	1.159	1.120	1.081	1.066	1.091	1.071	1.075	1.107	4.12
42)	T	2-Nitroaniline	0.308	0.322	0.319	0.309	0.323	0.325	0.335	0.348	0.324	4.07
43)		1,4-Dinitroben...	0.169	0.192	0.201	0.202	0.212	0.214	0.216	0.221	0.203	8.32
44)	T	Acenaphthylene	1.955	1.941	1.909	1.819	1.811	1.799	1.769	1.685	1.836	5.04
45)	T	Dimethylphthalate	1.373	1.337	1.322	1.270	1.302	1.306	1.308	1.304	1.315	2.28
46)		1,3-Dinitroben...	0.157	0.153	0.171	0.174	0.186	0.186	0.190	0.192	0.176	8.47
47)		1,2-Dinitroben...	0.129	0.135	0.137	0.137	0.143	0.140	0.143	0.143	0.138	3.58
48)	T	2,6-Dinitrotol...	0.290	0.295	0.289	0.289	0.292	0.289	0.296	0.291	0.291	0.95
49)	M*	Acenaphthene	1.186	1.147	1.138	1.125	1.113	1.116	1.121	1.100	1.131	2.34
50)	T	3-Nitroaniline	0.342	0.354	0.353	0.347	0.359	0.368	0.388	0.399	0.364	5.59
51)	T**	2,4-Dinitrophenol		0.057	0.068	0.098	0.134	0.131	0.157	0.173	0.117	37.55
52)	T	Dibenzofuran	1.538	1.561	1.530	1.510	1.529	1.515	1.510	1.477	1.521	1.63
53)		2,3,5,6-Tetrac...	0.143	0.192	0.221	0.238	0.266	0.265	0.281	0.288	0.237	20.91
54)		2,3,4,6-Tetrac...	0.187	0.210	0.219	0.232	0.259	0.262	0.270	0.279	0.240	13.65
55)	M	2,4-Dinitrotol...	0.342	0.360	0.372	0.364	0.387	0.380	0.391	0.387	0.373	4.51
56)	M**	4-Nitrophenol		0.043	0.084	0.112	0.145	0.148	0.166	0.176	0.125	38.46
57)	T	Fluorene	1.306	1.289	1.244	1.191	1.204	1.175	1.170	1.137	1.215	4.94
58)	T	4-Chlorophenyl...	0.610	0.600	0.575	0.561	0.555	0.548	0.544	0.532	0.566	4.85
59)	T	Diethylphthalate	1.362	1.330	1.288	1.279	1.300	1.267	1.273	1.260	1.295	2.70
60)	T	1,2-Diphenylhy...	1.382	1.359	1.301	1.260	1.297	1.259	1.251	1.221	1.291	4.30
61)	T	4-Nitroaniline	0.175	0.143	0.144	0.152	0.157	0.148	0.162	0.157	0.155	6.85
62)	I	Phenanthrene-d10	----------ISTD----------									
63)	T	4,6-Dinitro-2-...	0.056	0.087	0.111	0.119	0.131	0.132	0.129	0.125	0.111	24.11
64)	T*	n-Nitrosodiphe...	0.640	0.621	0.556	0.520	0.473	0.467	0.438	0.419	0.517	15.96
65)	S	2,4,6-Tribromo...	0.092	0.097	0.106	0.103	0.112	0.112	0.111	0.113	0.106	7.36
66)	T	4-Bromophenyl-...	0.235	0.231	0.228	0.225	0.223	0.226	0.225	0.221	0.227	1.92
67)	T	Hexachlorobenzene	0.262	0.258	0.246	0.249	0.244	0.247	0.241	0.235	0.248	3.55
68)	M*	Pentachlorophenol		0.017	0.035	0.063	0.087	0.095	0.112	0.121	0.076	51.57
69)	T	Phenanthrene	1.135	1.132	1.074	1.066	1.054	1.039	1.025	0.996	1.065	4.58
70)	T	Anthracene	1.150	1.147	1.089	1.077	1.073	1.056	1.025	1.004	1.077	4.81
71)	T	Carbazole	0.853	0.832	0.831	0.865	0.910	0.911	0.914	0.926	0.880	4.46
72)	T	Di-n-butylphth...	1.433	1.413	1.356	1.338	1.315	1.272	1.241	1.176	1.318	6.56
73)	T*	Fluoranthene	1.241	1.231	1.171	1.155	1.147	1.112	1.091	1.053	1.150	5.66
74)	I	Chrysene-d12	----------ISTD----------									
75)	M	Pyrene	1.327	1.324	1.298	1.256	1.208	1.218	1.172	1.144	1.243	5.57
76)		Benzidine	0.210	0.172	0.212	0.265	0.353	0.325	0.392	0.422	0.294	31.45
77)	S	Terphenyl-d14	0.882	0.874	0.891	0.881	0.856	0.855	0.842	0.841	0.865	2.23
78)		3,3'-Dimethylb...	0.436	0.405	0.390	0.397	0.451	0.430	0.481	0.484	0.434	8.34

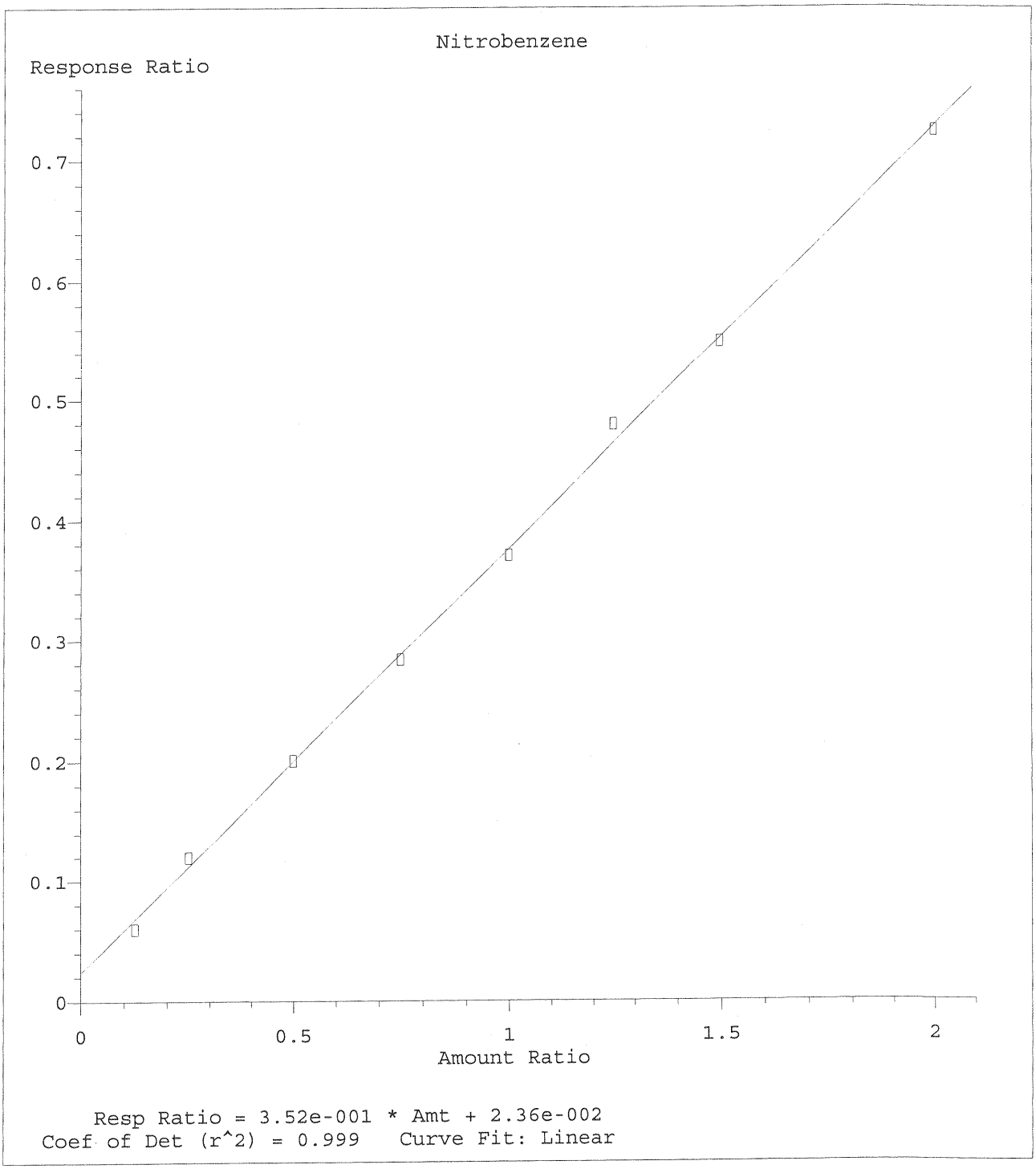
Method Path : C:\msdchem\1\METHODS\
Method File : BNASEP29.M
Title : 8270/625 BNA Calibration

79)	T	Butylbenzylpht...	0.615	0.614	0.604	0.593	0.566	0.565	0.544	0.540	0.580	5.24
80)		bis(2-ethylhex...	0.552	0.566	0.542	0.539	0.512	0.509	0.489	0.485	0.524	5.67
81)	T	3,3'-Dichlorob...	0.257	0.214	0.165	0.159	0.157	0.157	0.152	0.163	0.178	21.06
82)	T	Benzo[a]anthra...	1.155	1.143	1.134	1.136	1.129	1.129	1.131	1.109	1.133	1.17
83)	T	Chrysene	1.071	1.062	1.021	1.021	1.015	1.017	1.016	0.995	1.027	2.51
84)	T	bis(2-Ethylhex...	0.905	0.888	0.856	0.838	0.811	0.804	0.779	0.765	0.831	6.04
85)	I	Perylene-d12	----------ISTD----------									
86)	T*	Di-n-octylphth...	1.774	1.730	1.711	1.664	1.767	1.830	2.037	2.196	1.839	9.97
87)	T	Benzo[b]fluora...	1.257	1.310	1.283	1.290	1.414	1.504	1.699	1.819	1.447	14.60
88)	T	Benzo[k]fluora...	1.420	1.326	1.279	1.214	1.196	1.280	1.064	1.097	1.235	9.53
89)	T*	Benzo[a]pyrene	1.245	1.263	1.255	1.244	1.243	1.292	1.290	1.308	1.268	2.02
90)	T	Indeno[1,2,3-c...	1.084	1.118	1.028	0.944	0.837	0.816	0.702	0.697	0.903	18.27
91)	T	Dibenz[a,h]ant...	0.883	0.907	0.859	0.788	0.691	0.680	0.580	0.581	0.746	17.65
92)	T	Benzo[g,h,i]pe...	0.914	0.814	0.728	0.665	0.602	0.602	0.505	0.500	0.666	21.91

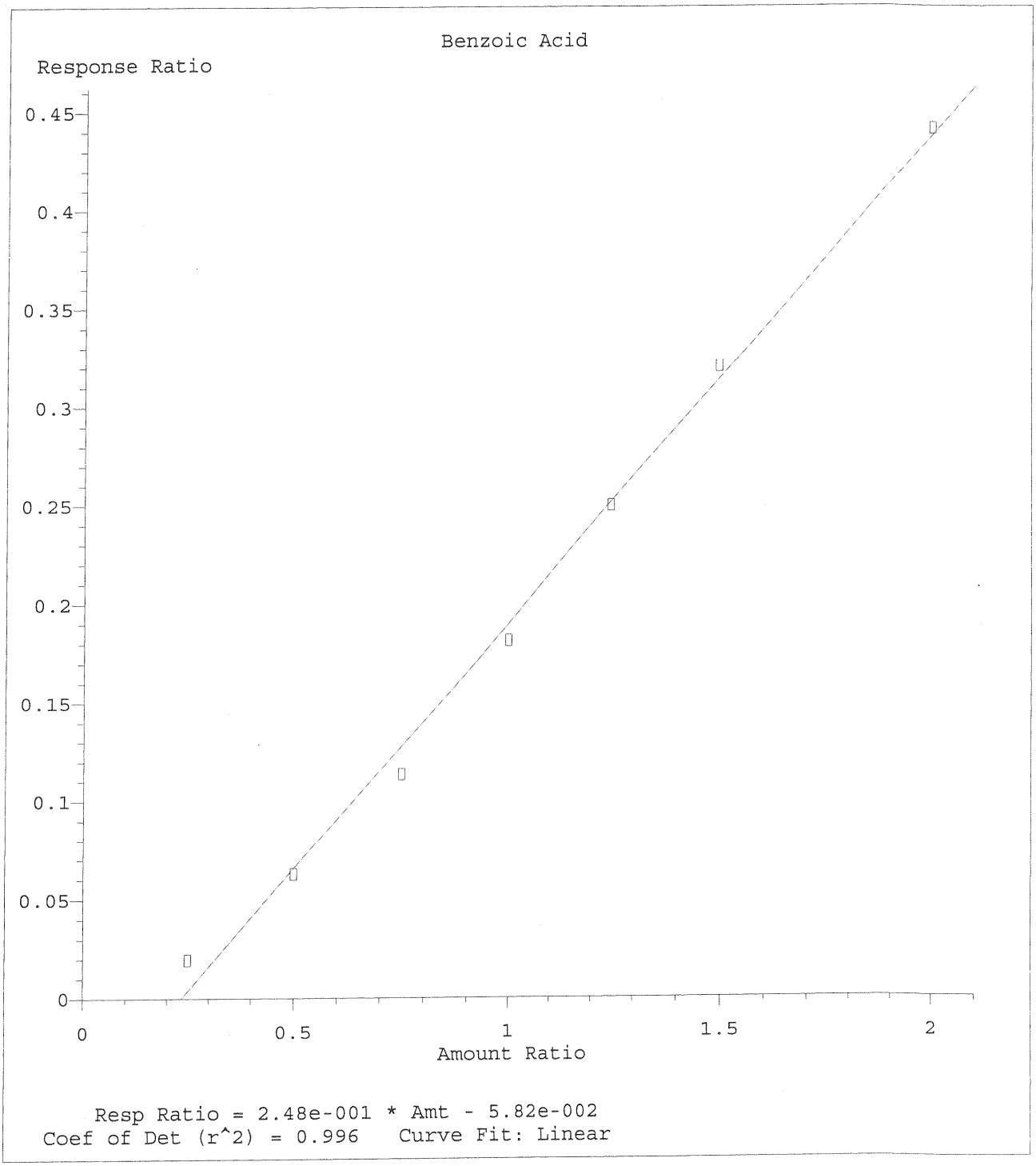
(#) = Out of Range



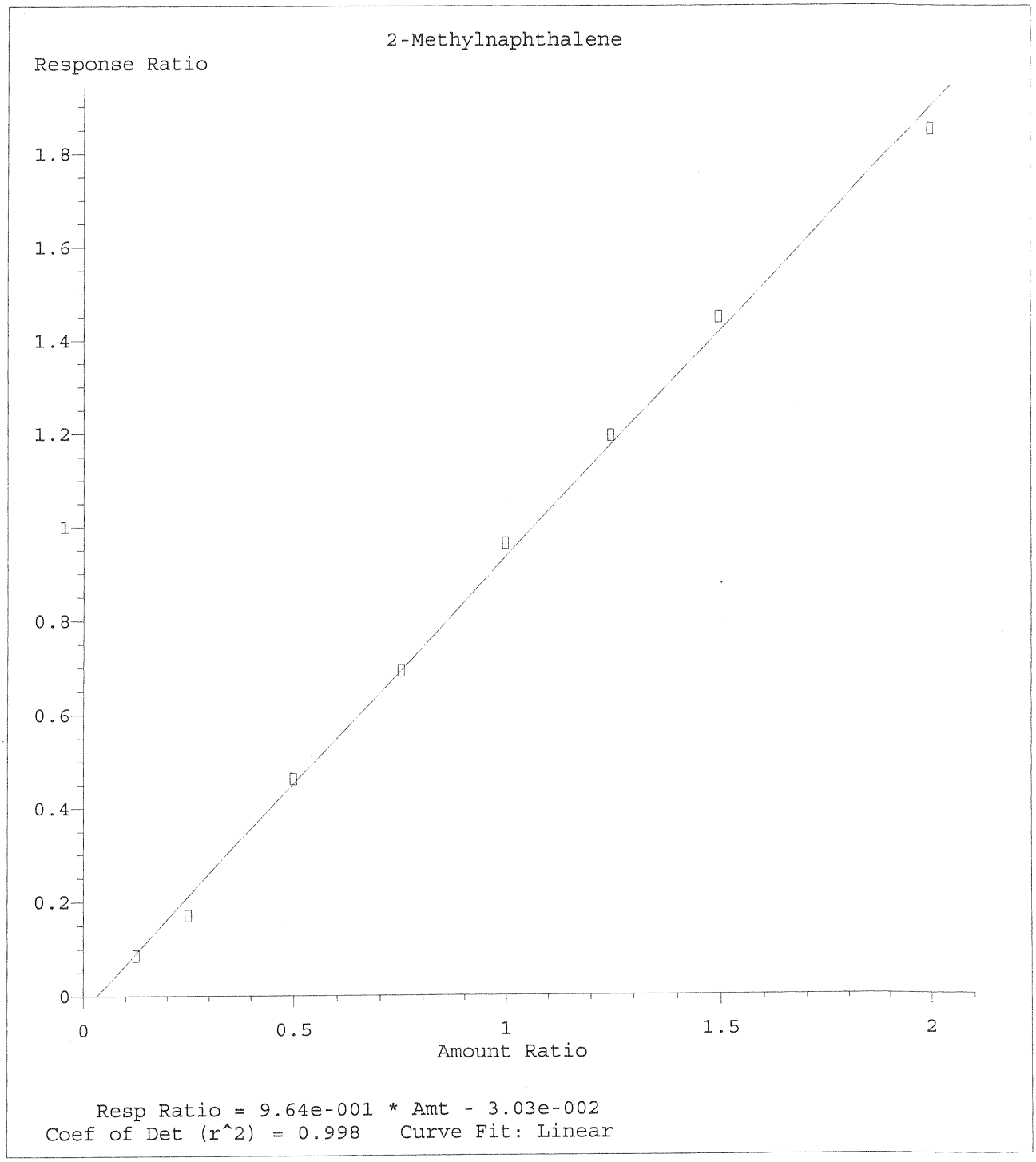
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Calibration Table Last Updated: Wed Sep 30 13:14:27 2009



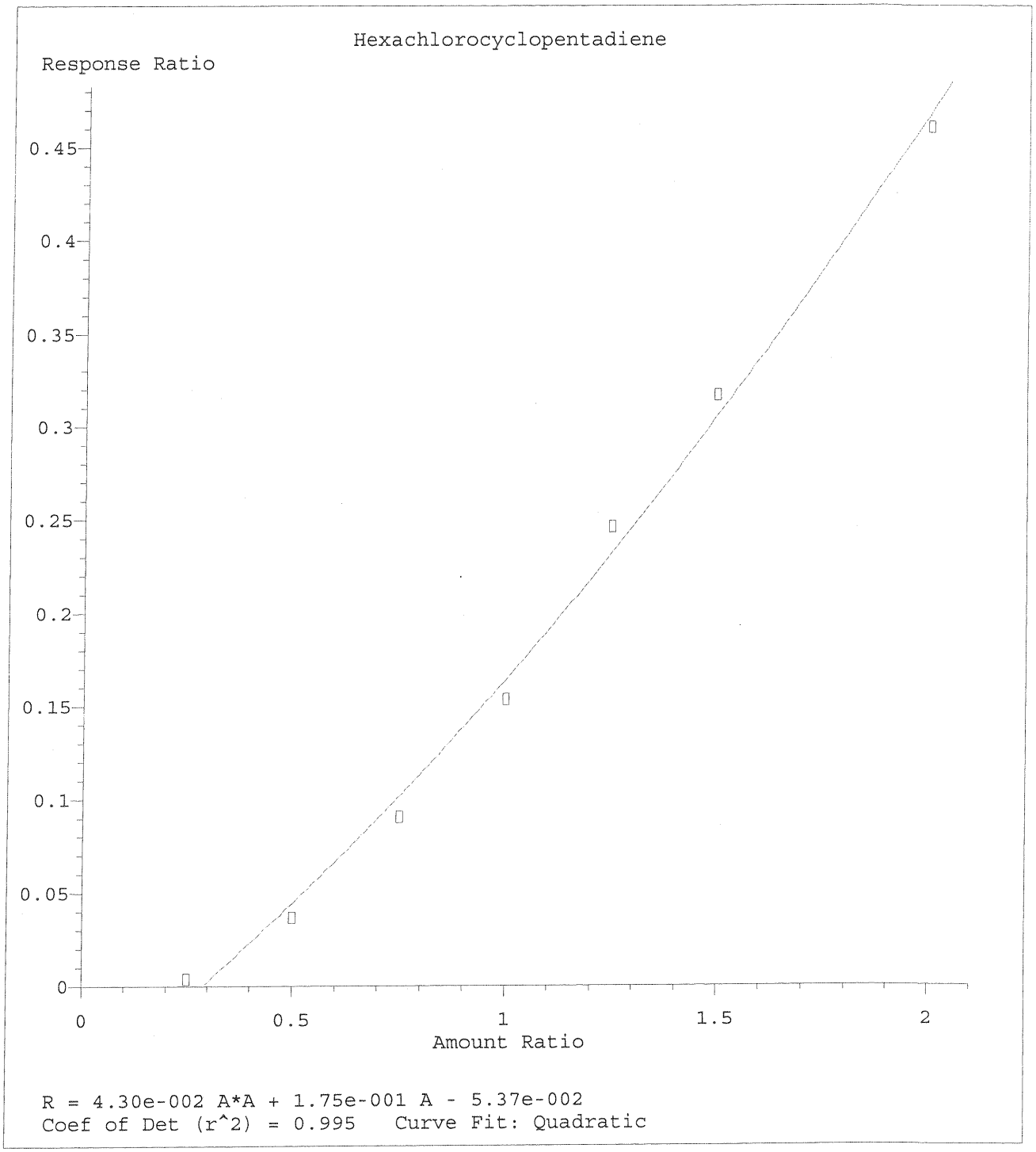
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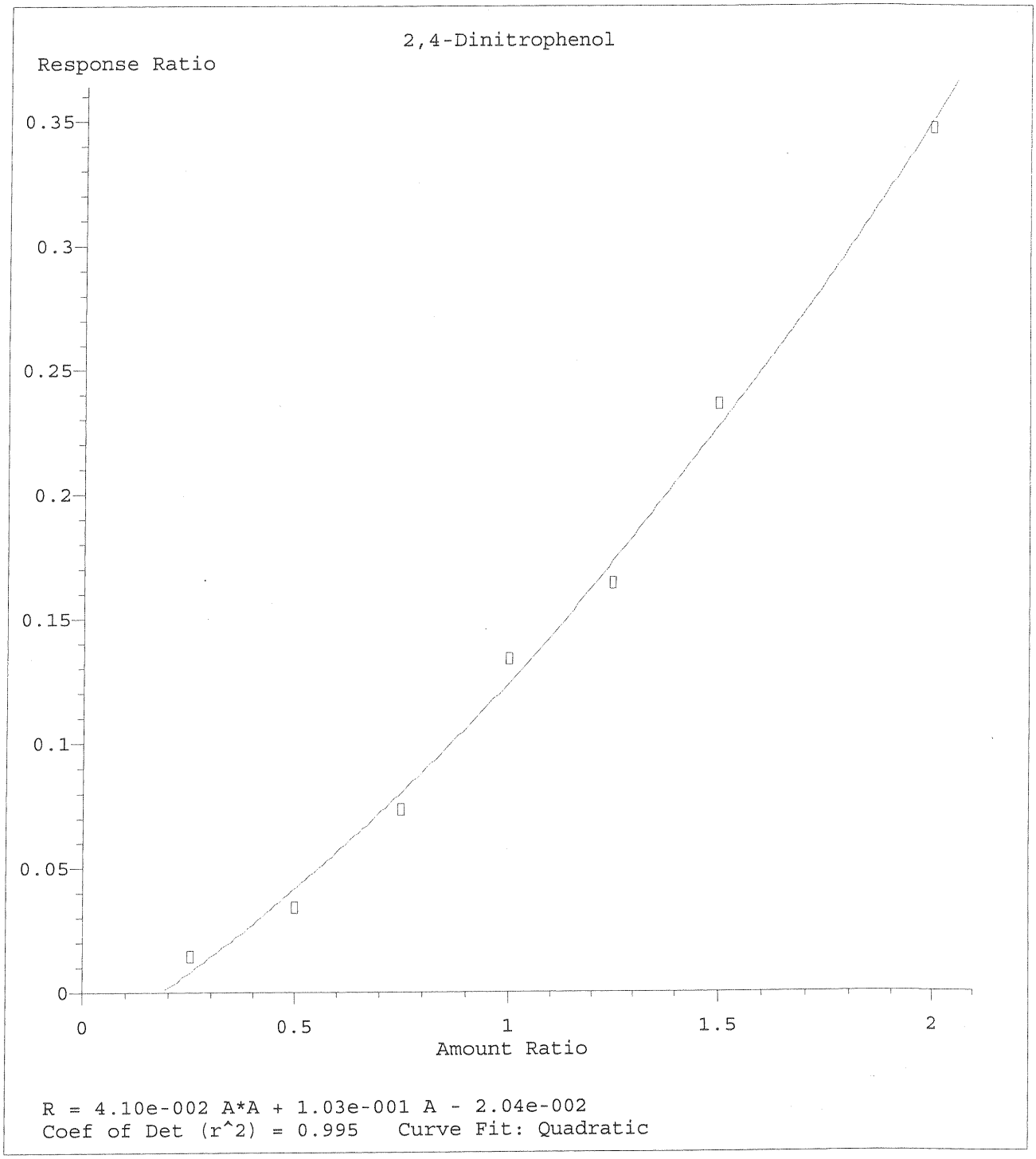
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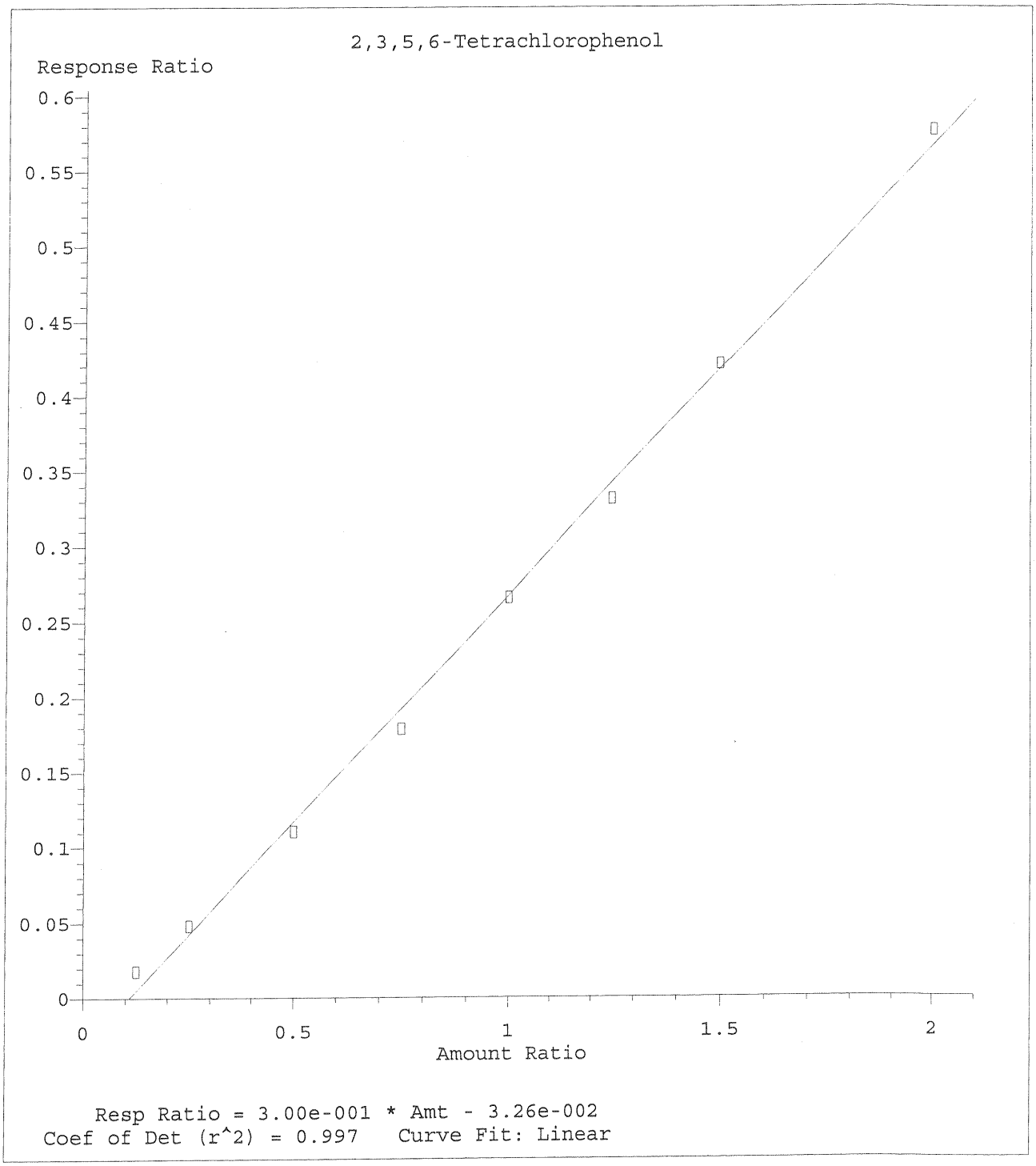
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Calibration Table Last Updated: Wed Sep 30 13:20:46 2009



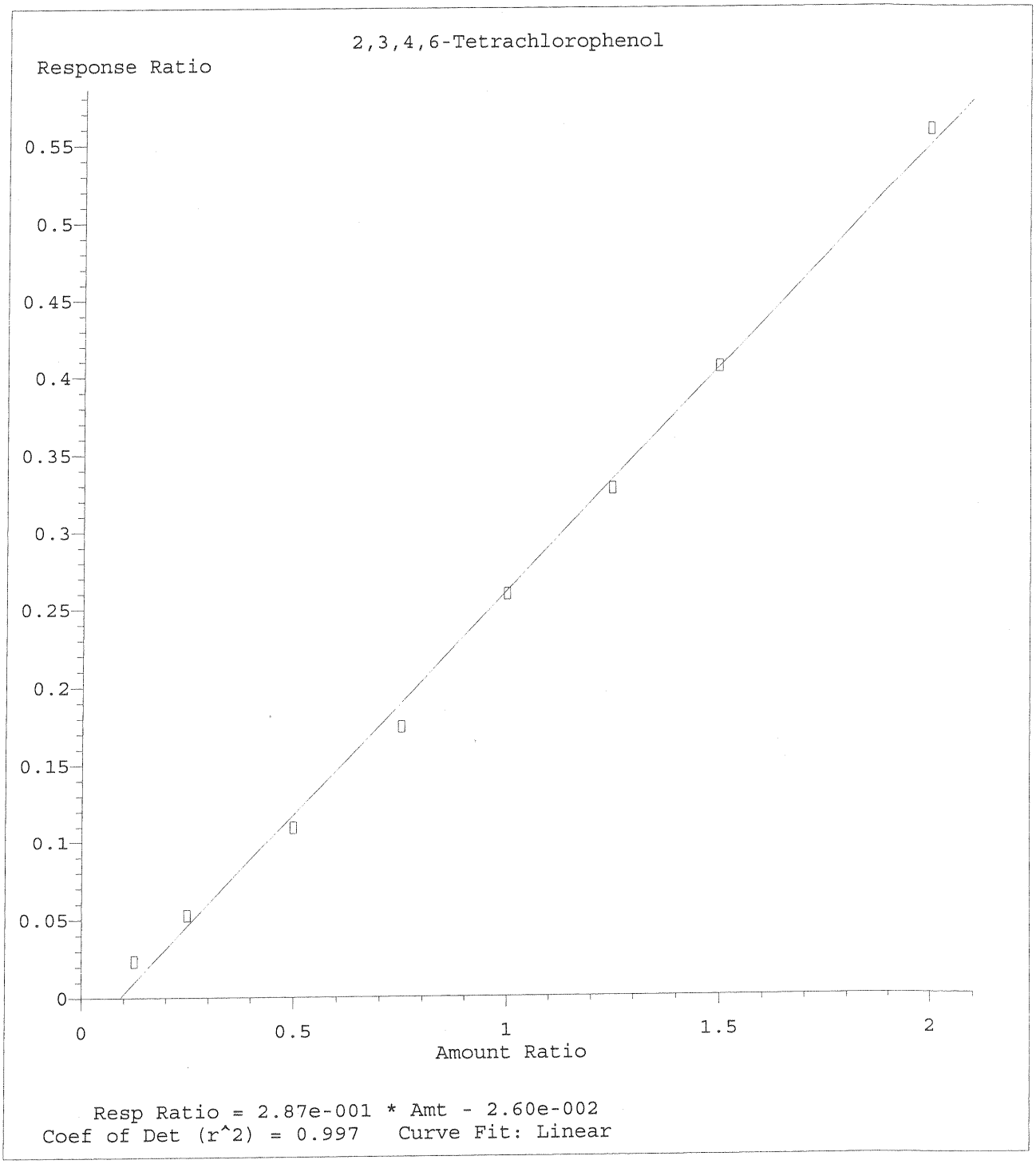
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Calibration Table Last Updated: Wed Sep 30 13:22:39 2009



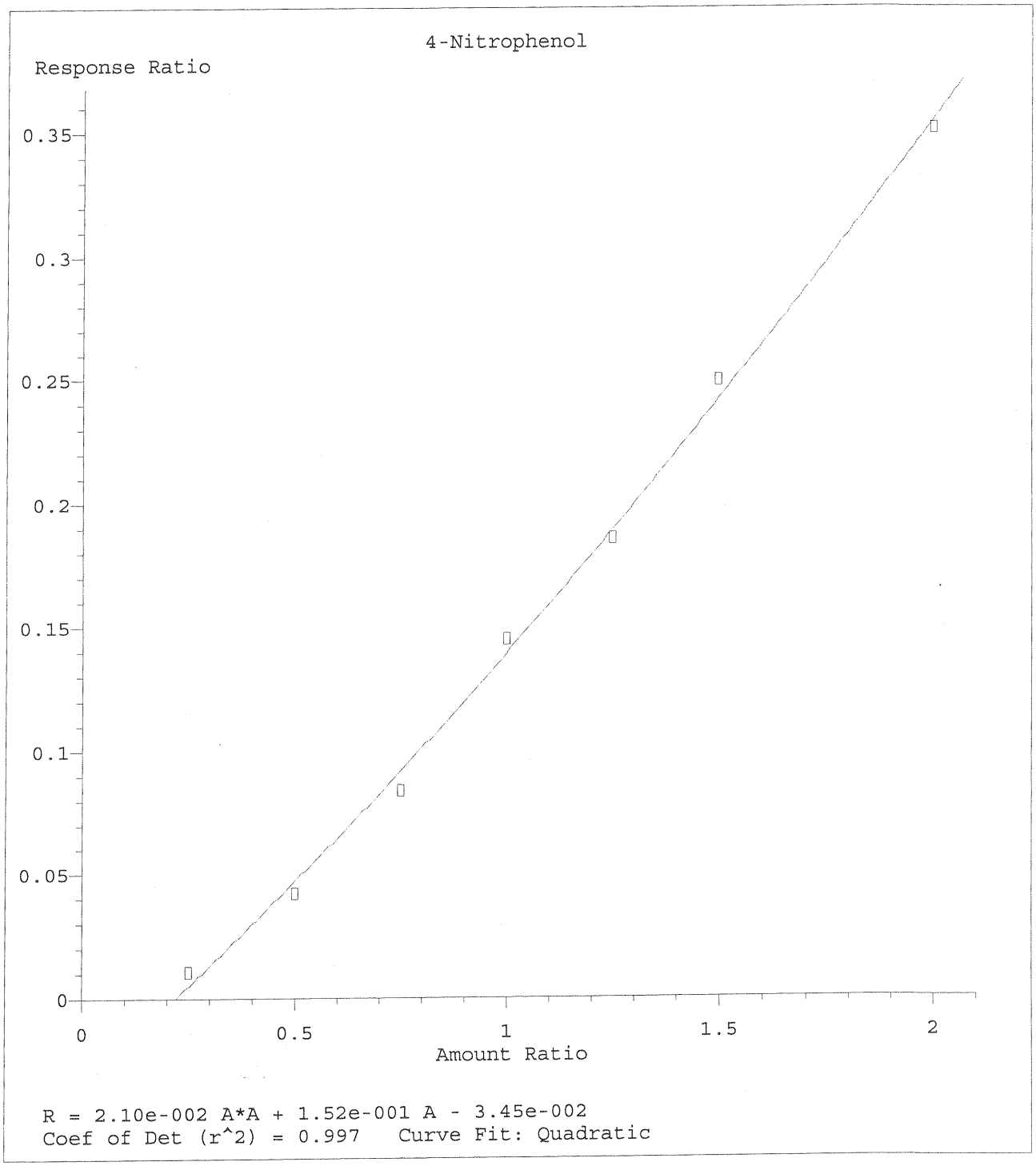
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Calibration Table Last Updated: Wed Sep 30 13:22:48 2009



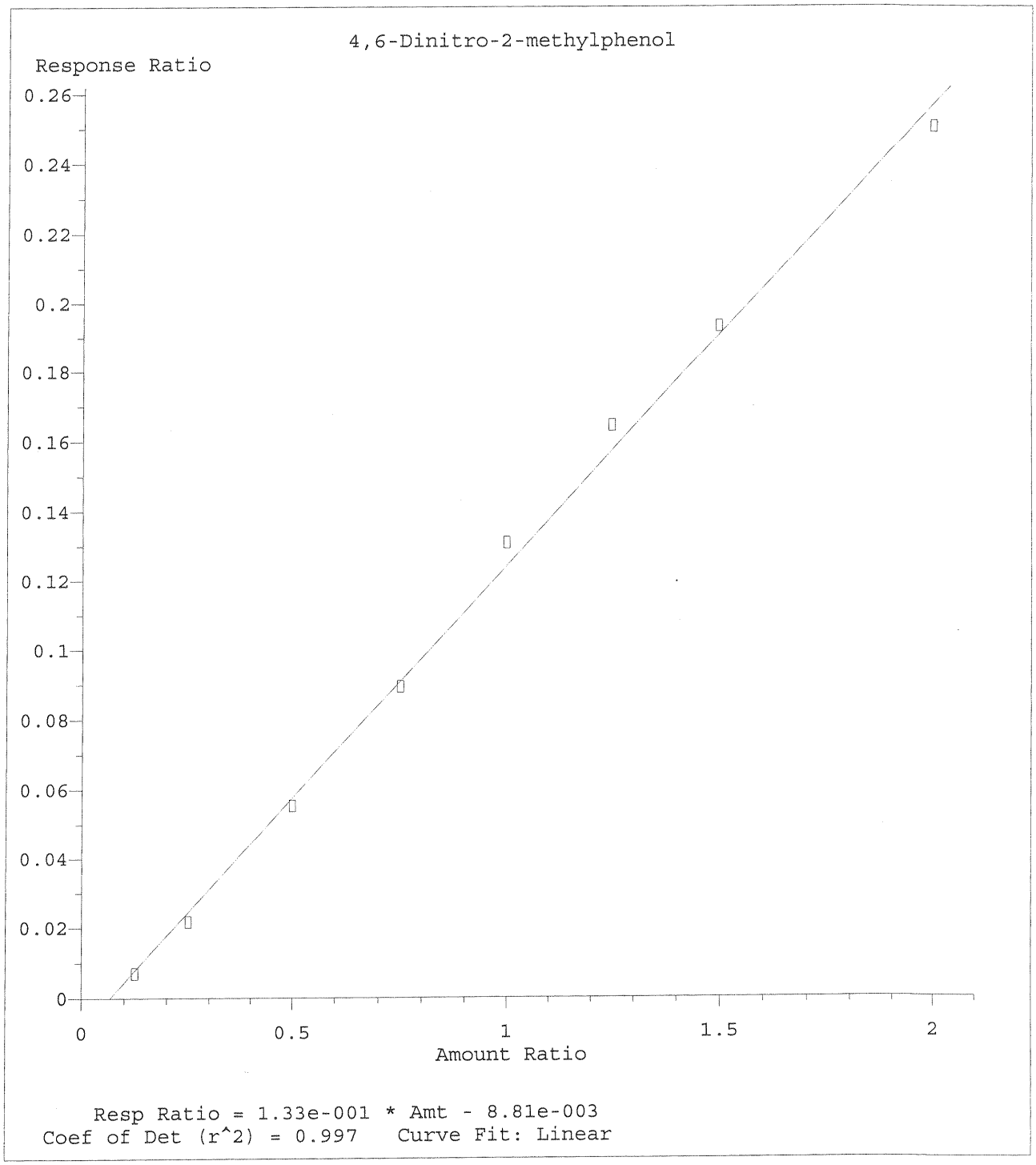
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Calibration Table Last Updated: Wed Sep 30 13:23:09 2009



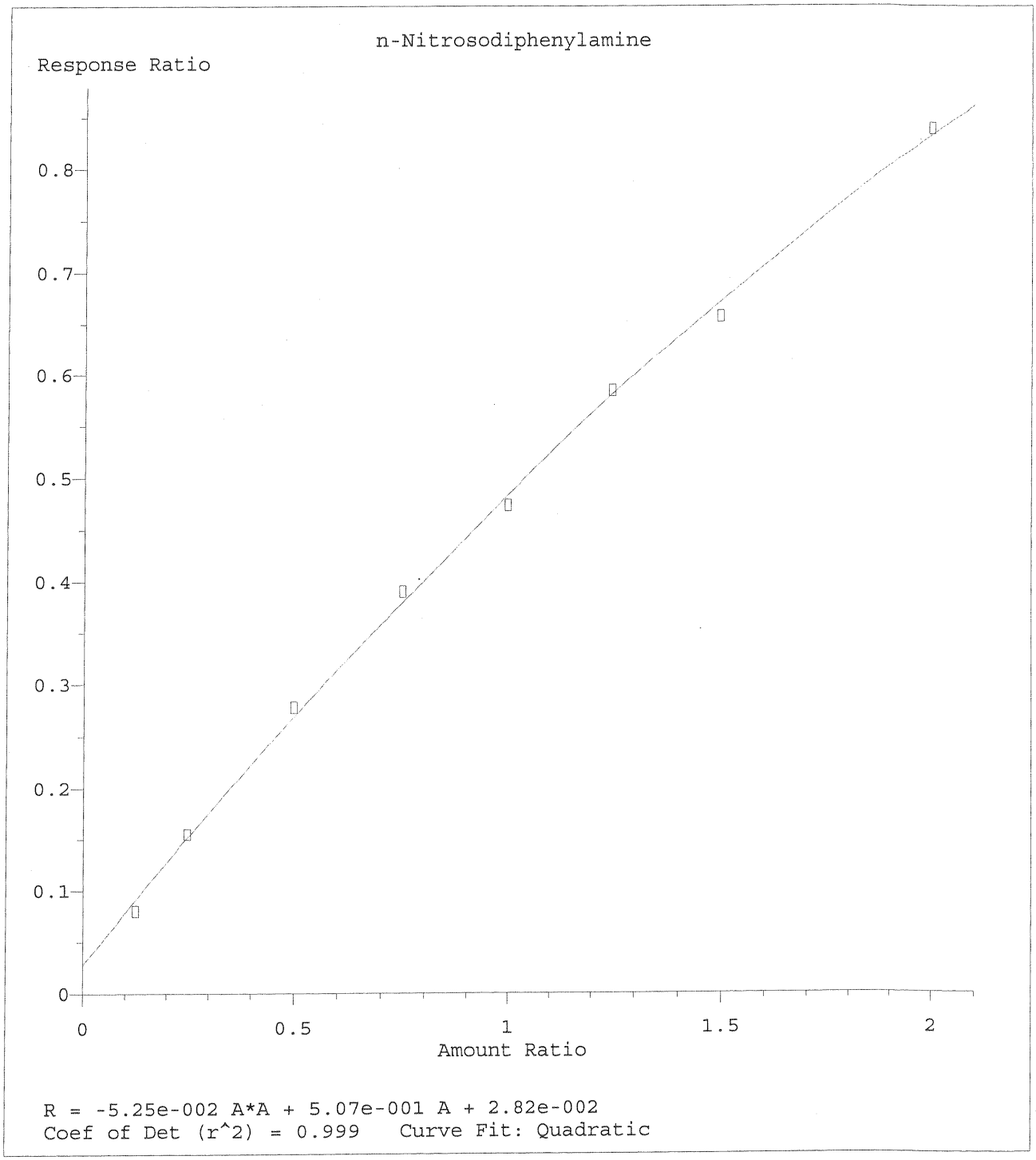
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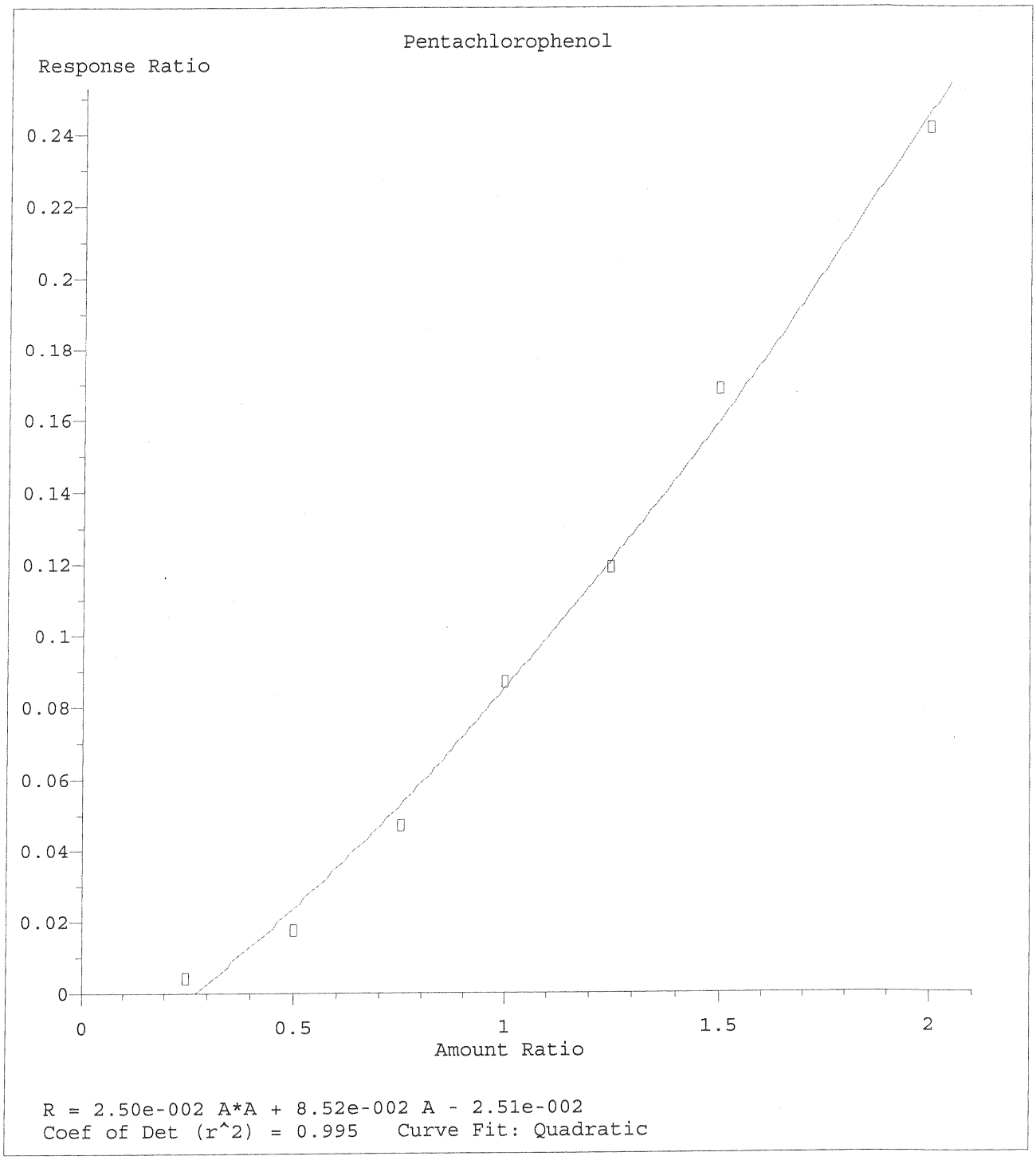
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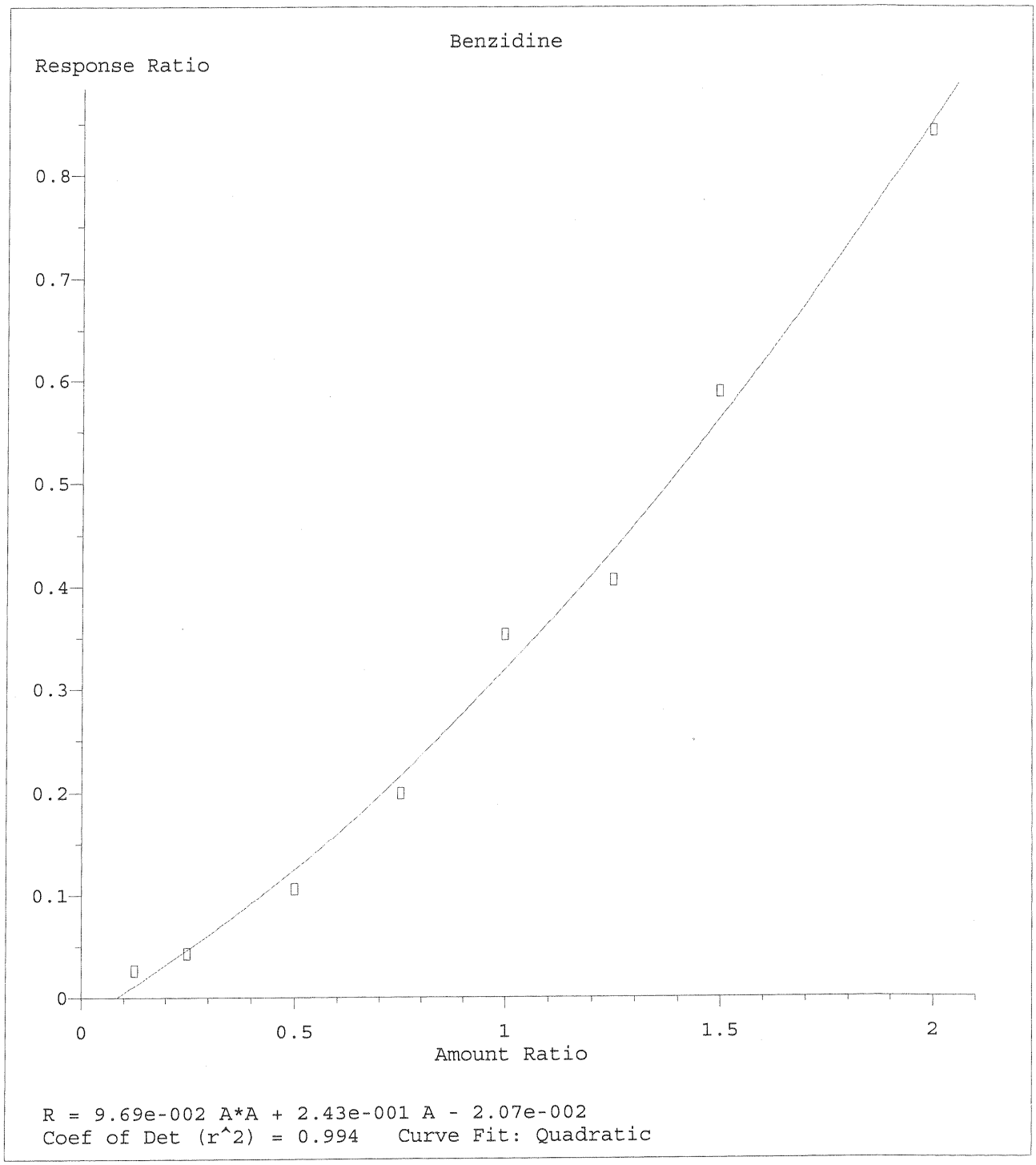
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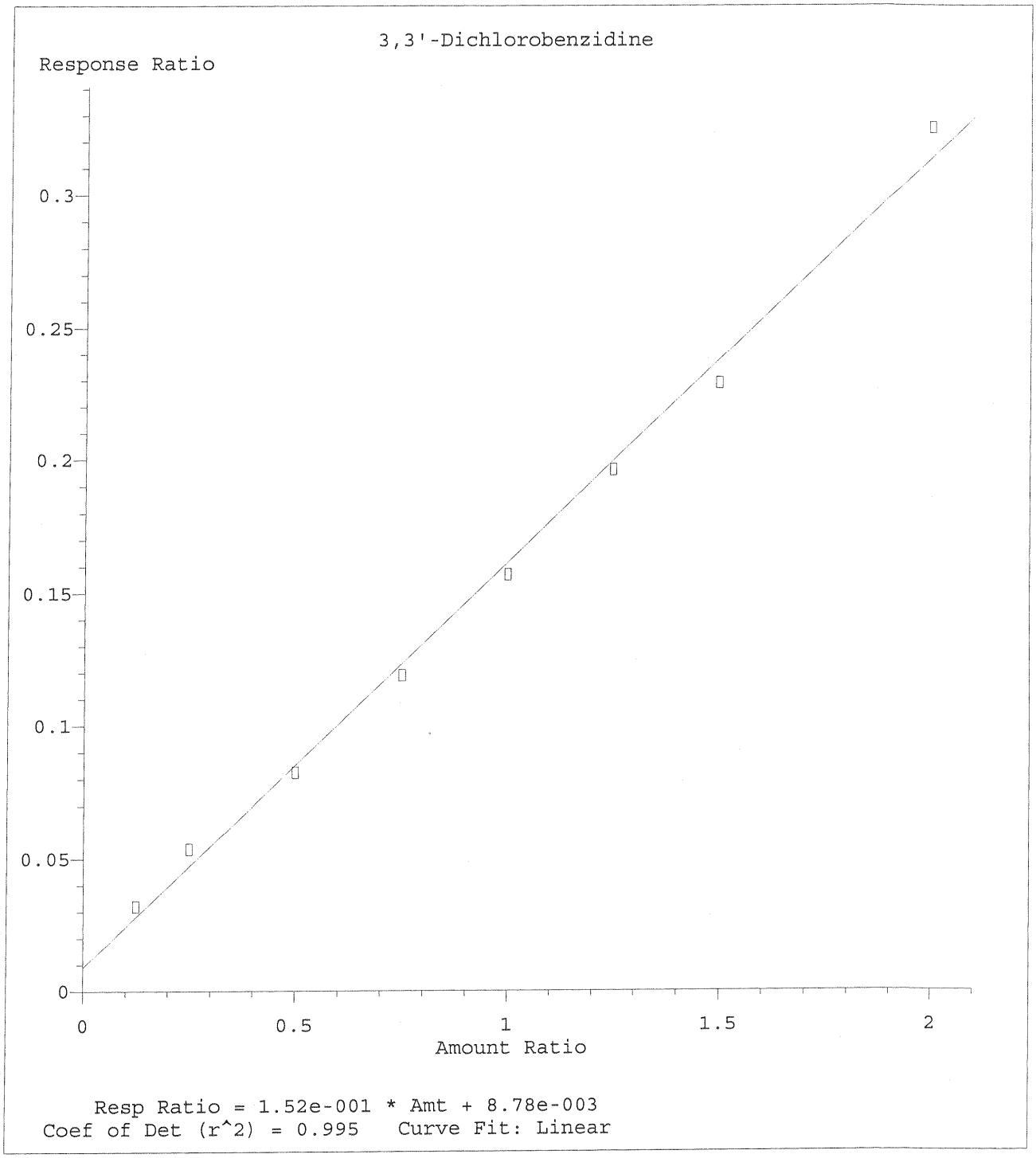
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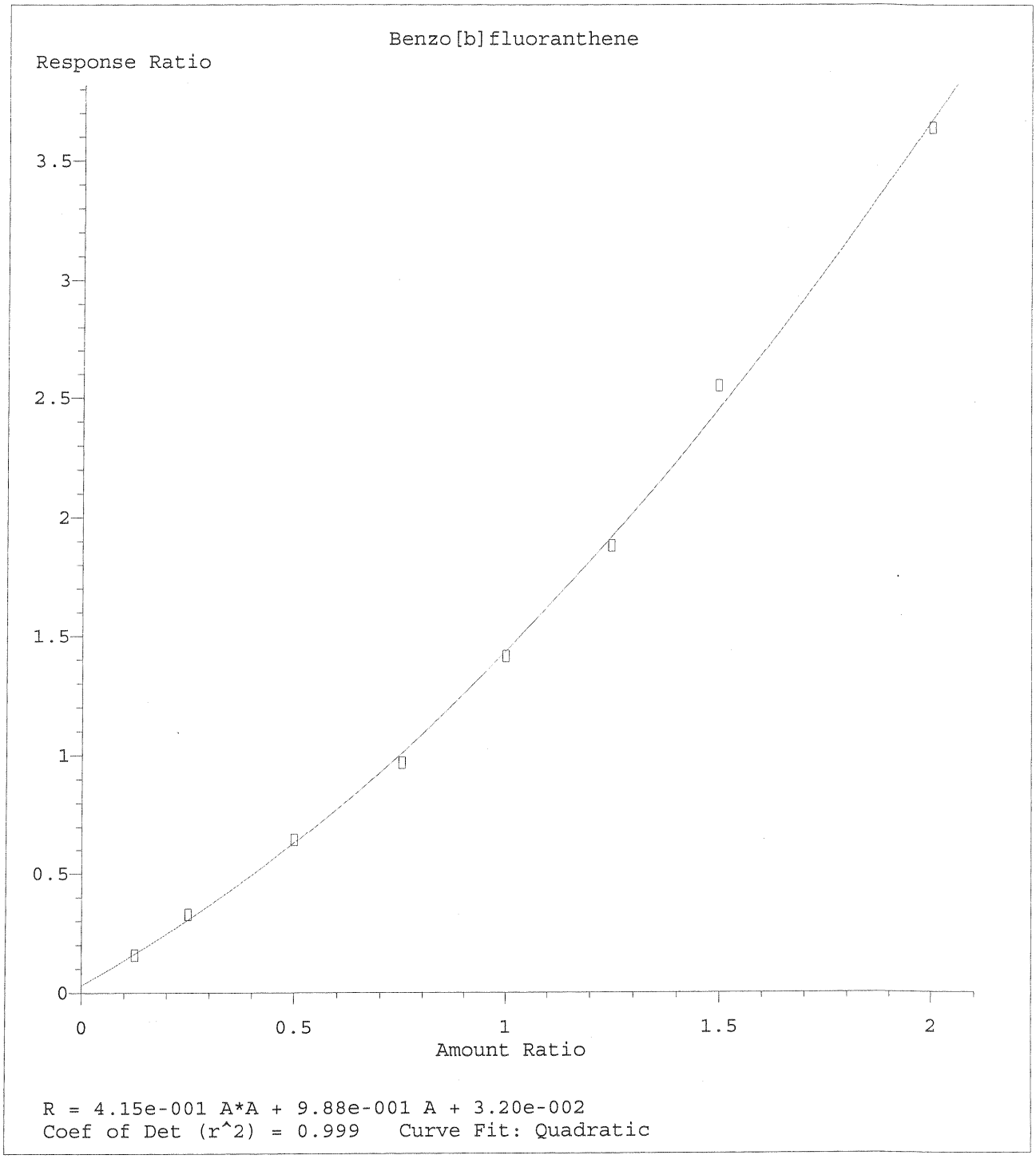
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Calibration Table Last Updated: Wed Sep 30 13:23:52 2009



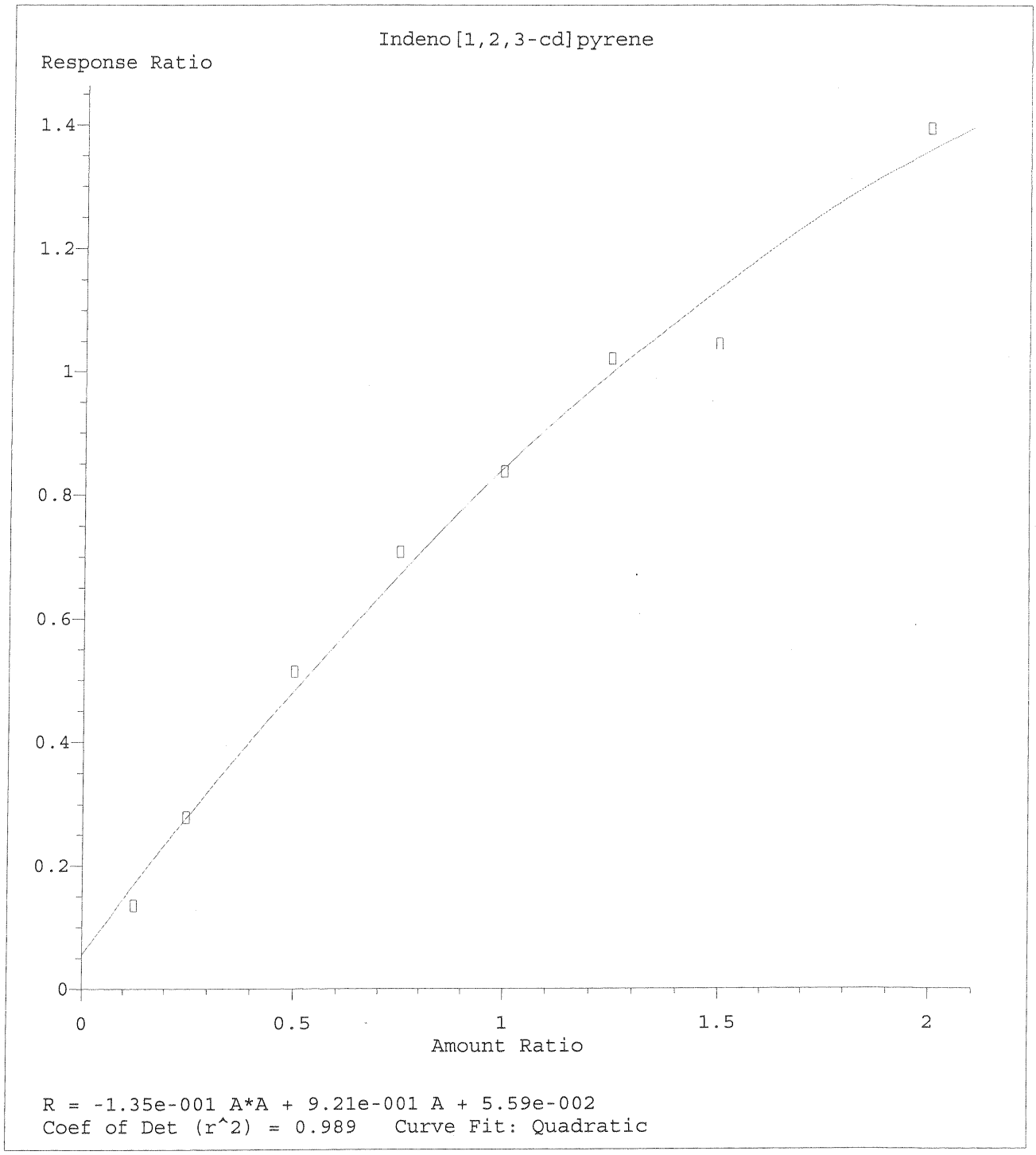
Method Name: C:\msdchem\1\METHODS\BNASEP29.M
Calibration Table Last Updated: Wed Sep 30 13:29:19 2009



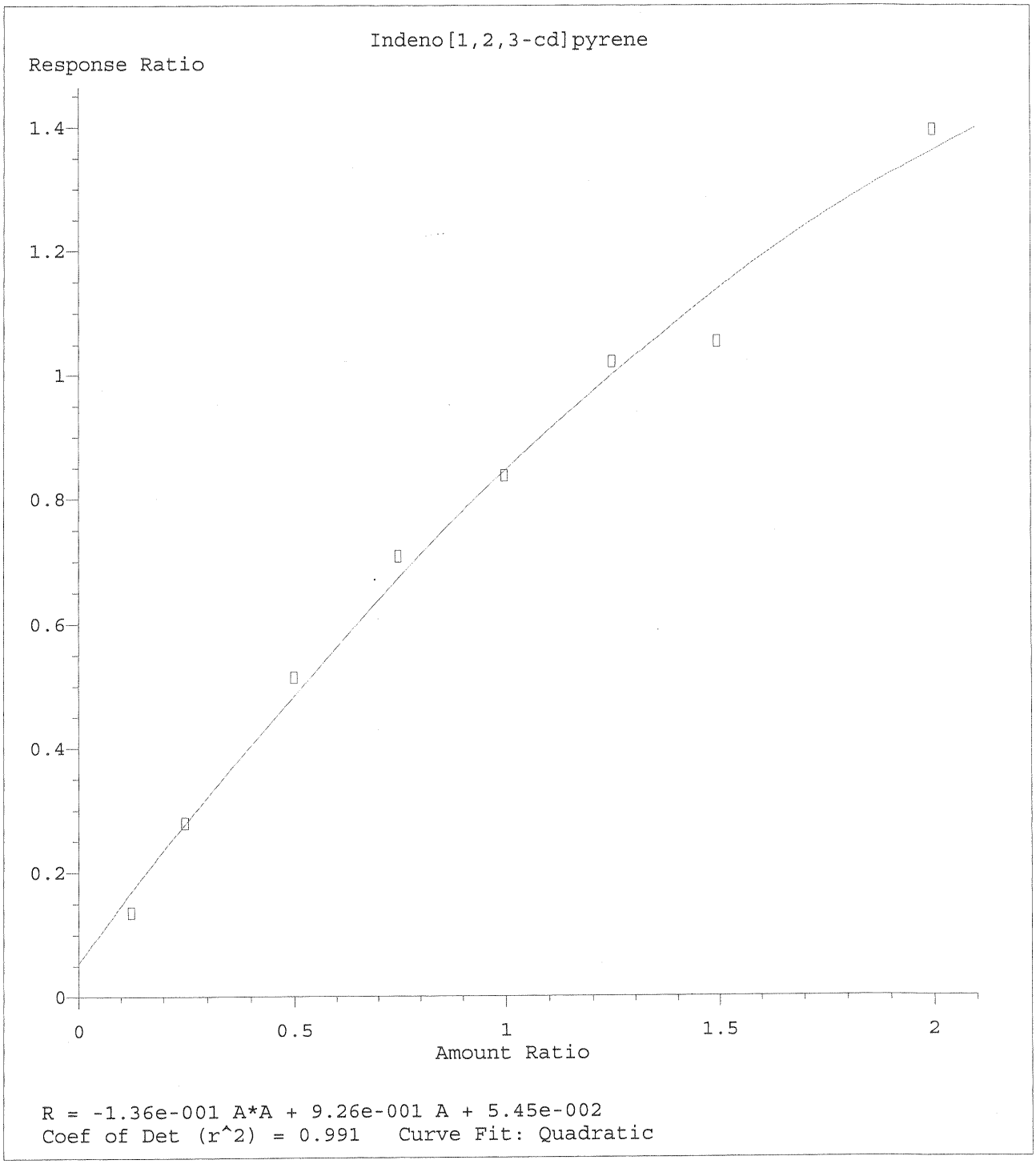
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Calibration Table Last Updated: Wed Sep 30 13:29:44 2009



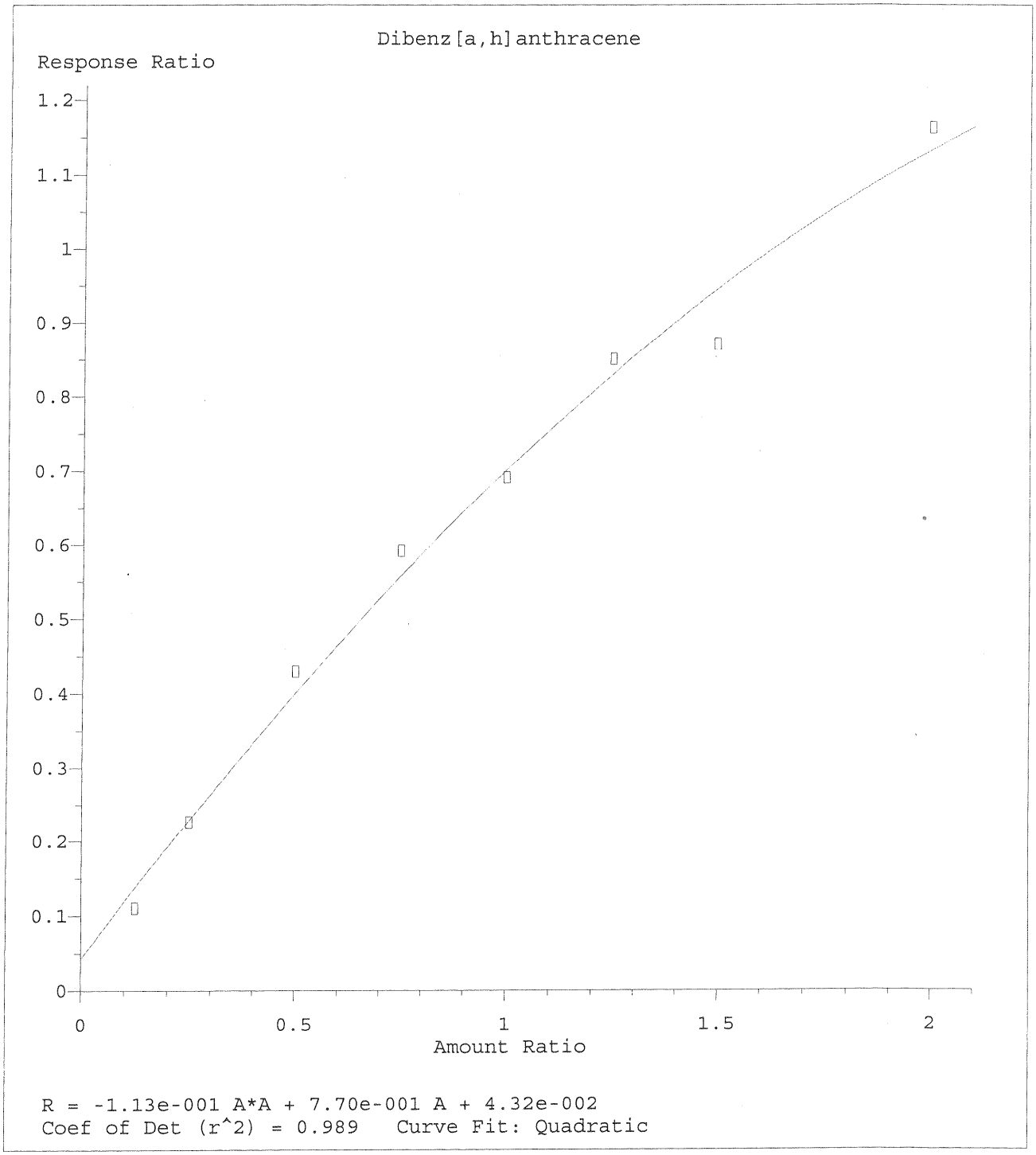
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Calibration Table Last Updated: Wed Sep 30 13:29:57 2009



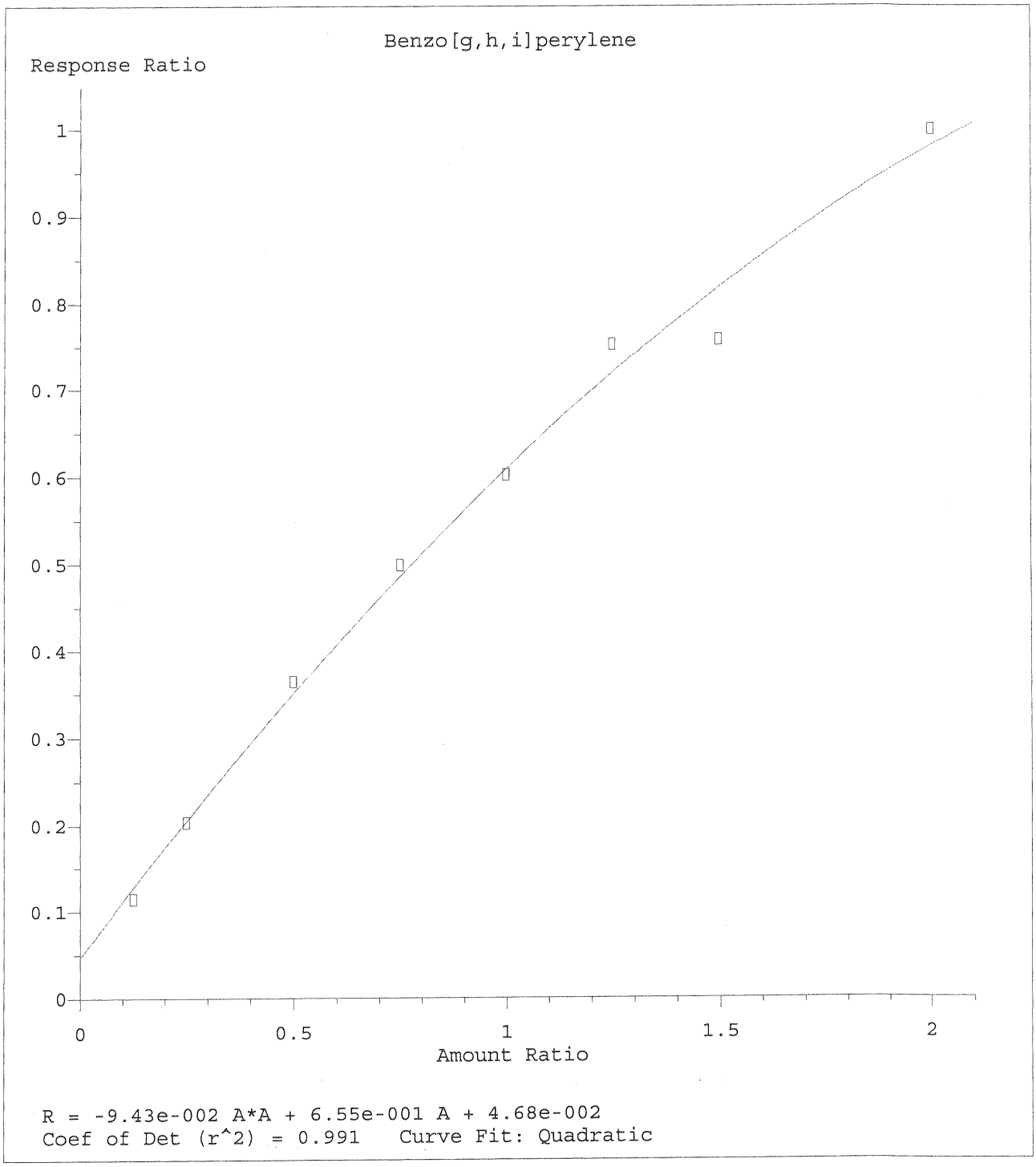
Method Name: C:\msdchem\1\METHODS\BNASEP29.M
Calibration Table Last Updated: Wed Sep 30 13:30:33 2009



Method Name: C:\msdchem\1\METHODS\BNASEP29.M
Calibration Table Last Updated: Wed Sep 30 13:33:04 2009



Method Name: C:\msdchem\1\METHODS\BNASEP29.M
Calibration Table Last Updated: Wed Sep 30 13:33:04 2009

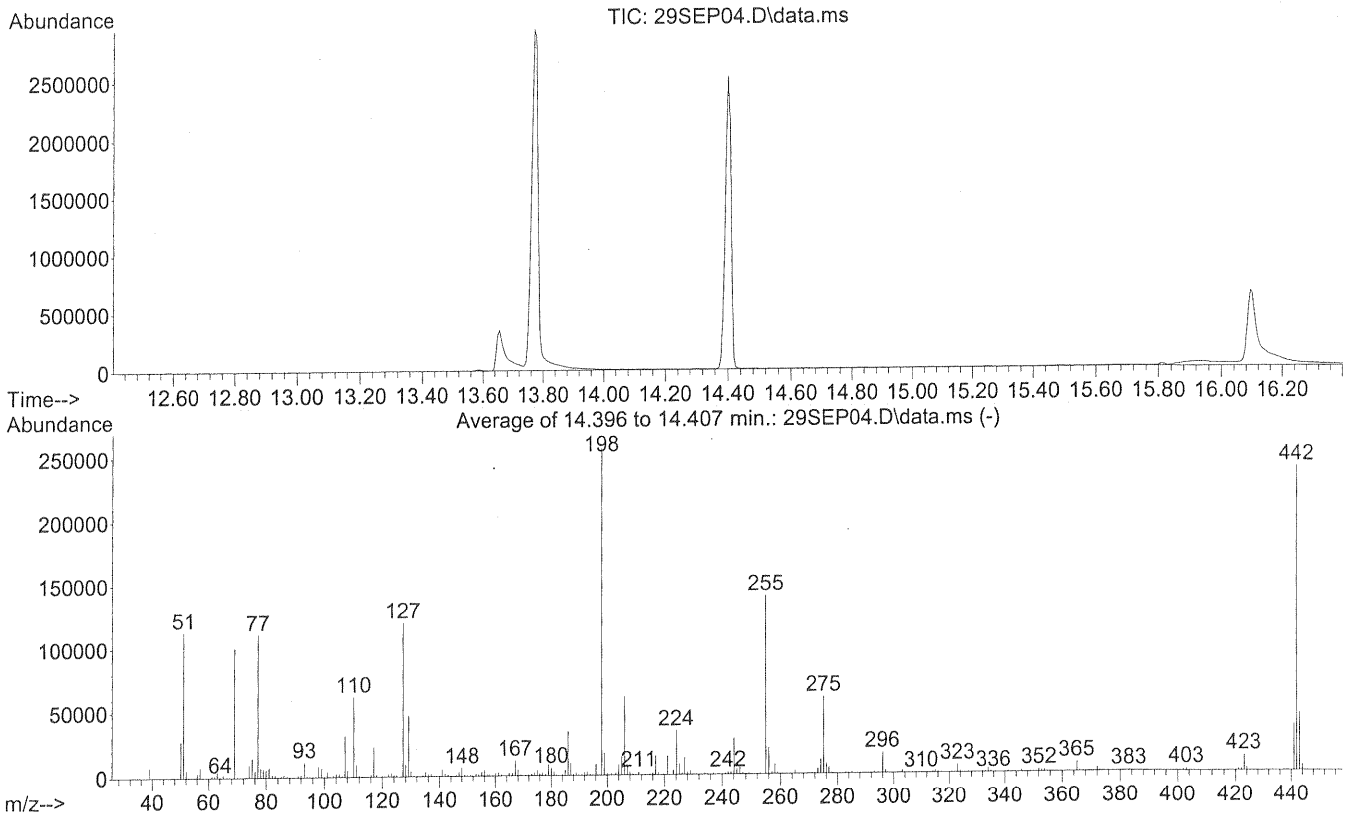


Method Name: C:\msdchem\1\METHODS\BNASEP29.M
Calibration Table Last Updated: Wed Sep 30 13:33:04 2009

Data Path : C:\msdchem\1\DATA\2009\09sep09\SEP2909\
Data File : 29SEP04.D
Acq On : 29 Sep 2009 8:52 pm
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNASEP09.M
Title : 8270/625 BNA Calibration
Last Update : Thu Sep 10 15:32:15 2009



AutoFind: Scans 1946, 1947, 1948; Background Corrected with Scan 1939

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.2	113322	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	100762	PASS
70	69	0.00	2	0.5	463	PASS
127	198	40	60	46.9	120181	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	256341	PASS
199	198	5	9	6.8	17343	PASS
275	198	10	30	23.4	59858	PASS
365	198	1	100	2.8	7293	PASS
441	443	0.01	100	78.8	35632	PASS
442	198	40	100	93.2	238954	PASS
443	442	17	23	18.9	45224	PASS

Data Path : C:\msdchem\1\DATA\2009\09sep09\SEP2909\
Data File : 29SEP14.D
Acq On : 30 Sep 2009 2:56 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 30 14:09:17 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Sep 30 13:33:04 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
2		N-Nitrosodimethylamine	0.769	0.804	-4.6	103	0.00
3	T	Pyridine	1.296	1.463	-12.9	104	0.00
4	S	2-Fluorophenol	1.221	1.342	-9.9	99	0.00
5		Pentachloroethane	0.000	0.000#	0.0	0#	-6.22#
6		Aniline	1.337	1.616	-20.9	114	0.00
7	T	bis(2-Chloroethyl)ether	1.562	1.642	-5.1	97	0.00
8	S	Phenol-d5	1.589	1.751	-10.2	102	0.00
9	M*	Phenol	1.509	1.724	-14.2	106	0.00
10	M	2-Chlorophenol	1.261	1.396	-10.7	103	0.00
11	T	1,3-Dichlorobenzene	1.441	1.648	-14.4	107	0.00
12	M*	1,4-Dichlorobenzene	1.502	1.722	-14.6	106	0.00
13	T	1,2-Dichlorobenzene	1.453	1.680	-15.6	107	0.00
14	T	Benzyl alcohol	0.778	0.920	-18.3	106	0.00
15	T	bis(2-chloroisopropyl)ether	2.466	2.701	-9.5	102	0.00
16	T	2-Methylphenol	1.136	1.306	-15.0	106	0.00
17	T	Hexachloroethane	0.541	0.607	-12.2	106	0.00
18	M**	N-Nitroso-di-n-propylamine	0.908	0.986	-8.6	100	0.00
19	T	4-Methylphenol,3-Methylphen	1.115	1.252	-12.3	101	0.00
20							
20	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00
21	S	Nitrobenzene-d5	0.359	0.348	3.1	89	0.00
22	T	Nitrobenzene	0.358	0.382	-6.7	105	0.00
23	T	Isophorone	0.688	0.778	-13.1	99	0.00
24	T*	2-Nitrophenol	0.173	0.208	-20.2	107	0.00
25	T	2,4-Dimethylphenol	0.318	0.360	-13.2	103	0.00
26	T	bis(2-Chloroethoxy)methane	0.384	0.437	-13.8	104	0.00
27	T*	2,4-Dichlorophenol	0.241	0.287	-19.1	104	0.00
28	M	1,2,4-Trichlorobenzene	0.317	0.364	-14.8	105	0.00
29	T	Naphthalene	0.913	1.047	-14.7	104	0.00
30	T	4-Chloroaniline	0.159	0.187	-17.6	107	0.01
31	T	Benzoic Acid	0.146	0.160	-9.6	89	0.00
32	T*	Hexachlorobutadiene	0.178	0.226	-27.0	115	0.00
33	M*	4-Chloro-3-methylphenol	0.250	0.291	-16.4	102	0.00
34	T	2-Methylnaphthalene	0.781	0.995	-27.4	105	0.00
35		1-Methylnaphthalene	0.622	0.651	-4.7	95	0.00
36							
36	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	0.125	0.176	-40.8#	111	0.00
38	T*	2,4,6-Trichlorophenol	0.319	0.379	-18.8	101	0.00
39	T	2,4,5-Trichlorophenol	0.302	0.368	-21.9	101	0.00
40	S	2-Fluorobiphenyl	1.330	1.298	2.4	85	0.00
41	T	2-Chloronaphthalene	0.984	1.130	-14.8	103	0.00
42	T	2-Nitroaniline	0.288	0.337	-17.0	101	0.00
43		1,4-Dinitrobenzene	0.181	0.212	-17.1	97	0.00
44	T	Acenaphthylene	1.632	1.884	-15.4	101	0.00

46		1,3-Dinitrobenzene	0.156	0.184	-17.9	96	0.00
47		1,2-Dinitrobenzene	0.123	0.143	-16.3	97	0.00
48	T	2,6-Dinitrotoluene	0.259	0.300	-15.8	99	0.00
49	M*	Acenaphthene	1.005	1.144	-13.8	99	0.00
50	T	3-Nitroaniline	0.323	0.381	-18.0	103	0.00
51	T**	2,4-Dinitrophenol	0.102	0.126	-23.5	91	0.00
52	T	Dibenzofuran	1.352	1.583	-17.1	100	0.00
53		2,3,5,6-Tetrachlorophenol	0.211	0.263	-24.6	96	0.00
54		2,3,4,6-Tetrachlorophenol	0.213	0.230	-8.0	86	0.00
55	M	2,4-Dinitrotoluene	0.332	0.394	-18.7	98	0.00
56	M**	4-Nitrophenol	0.109	0.134	-22.9	90	0.01
57	T	Fluorene	1.080	1.226	-13.5	99	0.00
58	T	4-Chlorophenyl-phenylether	0.503	0.537	-6.8	94	0.00
59	T	Diethylphthalate	1.151	1.220	-6.0	91	0.00
60	T	1,2-Diphenylhydrazine (Azob	1.148	1.310	-14.1	98	0.00
61	T	4-Nitroaniline	0.137	0.125	8.8	77	0.00
62	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00
63	T	4,6-Dinitro-2-methylphenol	0.099	0.134	-35.4#	95	0.00
64	T*	n-Nitrosodiphenylamine	0.459	0.484	-5.4	96	0.00
65	S	2,4,6-Tribromophenol	0.094	0.107	-13.8	89	0.00
66	T	4-Bromophenyl-phenylether	0.201	0.194	3.5	81	0.00
67	T	Hexachlorobenzene	0.220	0.254	-15.5	97	0.00
68	M*	Pentachlorophenol	0.066	0.098	-48.5#	105	0.00
69	T	Phenanthrene	0.947	1.077	-13.7	96	0.00
70	T	Anthracene	0.958	1.106	-15.4	96	0.00
71	T	Carbazole	0.782	0.873	-11.6	90	0.00
72	T	Di-n-butylphthalate	1.172	1.248	-6.5	89	0.00
73	T*	Fluoranthene	1.022	1.169	-14.4	95	0.00
74	I	Chrysene-d12	1.000	1.000	0.0	87	0.00
75	M	Pyrene	1.105	1.255	-13.6	91	0.00
76		Benzidine	0.261	0.150	42.5#	37	0.00
77	S	Terphenyl-d14	0.769	0.740	3.8	75	0.00
78		3,3'-Dimethylbenzidine	0.386	0.000#	100.0#	0#	-17.52#
79	T	Butylbenzylphthalate	0.516	0.627	-21.5	97	0.00
80		bis(2-ethylhexyl)adipate	0.466	0.499	-7.1	85	0.00
81	T	3,3'-Dichlorobenzidine	0.158	0.164	-3.8	91	0.00
82	T	Benzo[a]anthracene	1.007	1.176	-16.8	91	0.00
83	T	Chrysene	0.913	1.064	-16.5	91	0.00
84	T	bis(2-Ethylhexyl)phthalate	0.738	0.834	-13.0	90	0.00
85	I	Perylene-d12	1.000	1.000	0.0	83	0.00
86	T*	Di-n-octylphthalate	1.634	1.905	-16.6	89	0.00
87	T	Benzo[b]fluoranthene	1.286	1.448	-12.6	85	0.00
88	T	Benzo[k]fluoranthene	1.097	1.366	-24.5	95	0.00
89	T*	Benzo[a]pyrene	1.127	1.309	-16.1	87	0.00
90	T	Indeno[1,2,3-cd]pyrene	0.803	0.795	1.0	79	0.00
91	T	Dibenz[a,h]anthracene	0.663	0.679	-2.4	81	0.00
92	T	Benzo[g,h,i]perylene	0.592	0.549	7.3	76	0.00

See Calc. sheet

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ENASEP29.M Wed Sep 30 14:09:45 2009 MSD5

Data Path : C:\msdchem\1\DATA\2009\09sep09\SEP2909\
Data File : 29SEP14.D
Acq On : 30 Sep 2009 2:56 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 30 14:09:17 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Sep 30 13:33:04 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	104	0.00
2		N-Nitrosodimethylamine	40.000	37.141	7.1	103	0.00
3	T	Pyridine	40.000	40.143	-0.4	104	0.00
4	S	2-Fluorophenol	40.000	39.085	2.3	99	0.00
5		Pentachloroethane	40.000	0.000	100.0#	0	-6.22#
6		Aniline	40.000	41.042	-2.6	114	0.00
7	T	bis(2-Chloroethyl)ether	40.000	37.385	6.5	97	0.00
8	S	Phenol-d5	40.000	39.178	2.1	102	0.00
9	M*	Phenol	40.000	40.629	-1.6	106	0.00
10	M	2-Chlorophenol	40.000	39.356	1.6	103	0.00
11	T	1,3-Dichlorobenzene	40.000	40.685	-1.7	107	0.00
12	M*	1,4-Dichlorobenzene	40.000	40.757	-1.9	106	0.00
13	T	1,2-Dichlorobenzene	40.000	41.122	-2.8	107	0.00
14	T	Benzyl alcohol	40.000	42.038	-5.1	106	0.00
15	T	bis(2-chloroisopropyl)ether	40.000	38.944	2.6	102	0.00
16	T	2-Methylphenol	40.000	40.886	-2.2	106	0.00
17	T	Hexachloroethane	40.000	39.933	0.2	106	0.00
18	M**	N-Nitroso-di-n-propylamine	40.000	38.633	3.4	100	0.00
19	T	4-Methylphenol,3-Methylphen	40.000	39.945	0.1	101	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	101	0.00
21	S	Nitrobenzene-d5	40.000	34.421	13.9	89	0.00
22	T	Nitrobenzene	40.000	40.681	-1.7	105	0.00
23	T	Isophorone	40.000	40.185	-0.5	99	0.00
24	T*	2-Nitrophenol	40.000	42.812	-7.0	107	0.00
25	T	2,4-Dimethylphenol	40.000	40.249	-0.6	103	0.00
26	T	bis(2-Chloroethoxy)methane	40.000	40.480	-1.2	104	0.00
27	T*	2,4-Dichlorophenol	40.000	42.238	-5.6	104	0.00
28	M	1,2,4-Trichlorobenzene	40.000	40.798	-2.0	105	0.00
29	T	Naphthalene	40.000	40.782	-2.0	104	0.00
30	T	4-Chloroaniline	40.000	41.794	-4.5	107	0.01
31	T	Benzoic Acid	40.000	35.177	12.1	89	0.00
32	T*	Hexachlorobutadiene	40.000	45.197	-13.0	115	0.00
33	M*	4-Chloro-3-methylphenol	40.000	41.460	-3.7	102	0.00
34	T	2-Methylnaphthalene	40.000	42.561	-6.4	105	0.00
35		1-Methylnaphthalene	40.000	37.236	6.9	95	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	40.000	41.803	-4.5	111	0.00
38	T*	2,4,6-Trichlorophenol	40.000	42.222	-5.6	101	0.00
39	T	2,4,5-Trichlorophenol	40.000	43.226	-8.1	101	0.00
40	S	2-Fluorobiphenyl	40.000	34.705	13.2	85	0.00
41	T	2-Chloronaphthalene	40.000	40.833	-2.1	103	0.00
42	T	2-Nitroaniline	40.000	41.576	-3.9	101	0.00
43		1,4-Dinitrobenzene	40.000	41.722	-4.3	97	0.00
44	T	Acenaphthylene	40.000	41.042	-2.6	101	0.00

6		1,3-Dinitrobenzene	40.000	41.756	-4.4	96	0.00
47		1,2-Dinitrobenzene	40.000	41.459	-3.6	97	0.00
48	T	2,6-Dinitrotoluene	40.000	41.180	-2.9	99	0.00
49	M*	Acenaphthene	40.000	40.450	-1.1	99	0.00
50	T	3-Nitroaniline	40.000	41.888	-4.7	103	0.00
51	T**	2,4-Dinitrophenol	40.000	40.506	-1.3	91	0.00
52	T	Dibenzofuran	40.000	41.623	-4.1	100	0.00
53		2,3,5,6-Tetrachlorophenol	40.000	39.446	1.4	96	0.00
54		2,3,4,6-Tetrachlorophenol	40.000	35.698	10.8	86	0.00
55	M	2,4-Dinitrotoluene	40.000	42.210	-5.5	98	0.00
56	M**	4-Nitrophenol	40.000	39.068	2.3	90	0.01
57	T	Fluorene	40.000	40.388	-1.0	99	0.00
58	T	4-Chlorophenyl-phenylether	40.000	37.974	5.1	94	0.00
59	T	Diethylphthalate	40.000	37.686	5.8	91	0.00
60	T	1,2-Diphenylhydrazine (Azob	40.000	40.577	-1.4	98	0.00
61	T	4-Nitroaniline	40.000	32.312	19.2	77	0.00
62	I	Phenanthrene-d10	40.000	40.000	0.0	93	0.00
63	T	4,6-Dinitro-2-methylphenol	40.000	42.768	-6.9	95	0.00
64	T*	n-Nitrosodiphenylamine	40.000	40.163	-0.4	96	0.00
65	S	2,4,6-Tribromophenol	40.000	40.376	-0.9	89	0.00
66	T	4-Bromophenyl-phenylether	40.000	34.301	14.2	81	0.00
67	T	Hexachlorobenzene	40.000	41.003	-2.5	97	0.00
68	M*	Pentachlorophenol	40.000	43.704	-9.3	105	0.00
69	T	Phenanthrene	40.000	40.465	-1.2	96	0.00
70	T	Anthracene	40.000	41.046	-2.6	96	0.00
71	T	Carbazole	40.000	39.668	0.8	90	0.00
72	T	Di-n-butylphthalate	40.000	37.875	5.3	89	0.00
73	T*	Fluoranthene	40.000	40.645	-1.6	95	0.00
74	I	Chrysene-d12	40.000	40.000	0.0	87	0.00
75	M	Pyrene	40.000	40.365	-0.9	91	0.00
76		Benzidine	40.000	22.856	42.9#	37	0.00
77	S	Terphenyl-d14	40.000	34.207	14.5	75	0.00
78		3,3'-Dimethylbenzidine	40.000	0.000	100.0#	0	-17.52#
79	T	Butylbenzylphthalate	40.000	43.207	-8.0	97	0.00
80		bis(2-ethylhexyl)adipate	40.000	38.095	4.8	85	0.00
81	T	3,3'-Dichlorobenzidine	40.000	40.658	-1.6	91	0.00
82	T	Benzo[a]anthracene	40.000	41.492	-3.7	91	0.00
83	T	Chrysene	40.000	41.418	-3.5	91	0.00
84	T	bis(2-Ethylhexyl)phthalate	40.000	40.148	-0.4	90	0.00
85	I	Perylene-d12	40.000	40.000	0.0	83	0.00
86	T*	Di-n-octylphthalate	40.000	41.440	-3.6	89	0.00
87	T	Benzo[b]fluoranthene	40.000	40.269	-0.7	85	0.00
88	T	Benzo[k]fluoranthene	40.000	44.267	-10.7	95	0.00
89	T*	Benzo[a]pyrene	40.000	41.319	-3.3	87	0.00
90	T	Indeno[1,2,3-cd]pyrene	40.000	37.015	7.5	79	0.00
91	T	Dibenz[a,h]anthracene	40.000	38.441	3.9	81	0.00
92	T	Benzo[g,h,i]perylene	40.000	35.074	12.3	76	0.00

OK

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ASEP29.M Wed Sep 30 14:10:19 2009 MSD5

Data Directory: C:\msdchem\1\DATA\2009\11nov09\NOV0309\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 03NOV25.D No data found		0	0.000	N/A
2) 03NOV01.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 8:51 pm
3) 03NOV02.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 9:27 pm
4) 03NOV03.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 10:04 pm
5) 03NOV04.D TAILING CHK	50ng TAILING CHECK	7	1.000	3 Nov 2009 10:40 pm
6) 03NOV05.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	3 Nov 2009 11:17 pm
7) 03NOV06.D CAL BLANK	BLANK, 10uL MF91808	1	1.000	3 Nov 2009 11:53 pm
8) 03NOV07.D 1.0 ug/mL ICal 2	10uL MK90317>1mL	2	1.000	4 Nov 2009 12:30 am
9) 03NOV08.D 5.0 ug/mL ICal 2	50uL MK90317>1mL	3	1.000	4 Nov 2009 1:06 am
10) 03NOV09.D 10 ug/mL ICal 3	100uL MK90317>1mL	4	1.000	4 Nov 2009 1:42 am
11) 03NOV10.D 20 ug/mL ICal 4	200uL MK90317>1mL	5	1.000	4 Nov 2009 2:19 am
12) 03NOV11.D 30 ug/mL ICal 5	300uL MK90317>1mL	6	1.000	4 Nov 2009 2:55 am
13) 03NOV12.D 40 ug/mL ICal 6	400uL MK90317>1mL	7	1.000	4 Nov 2009 3:31 am
14) 03NOV13.D 50 ug/mL ICal 7	500uL MK90317>1mL	8	1.000	4 Nov 2009 4:08 am
15) 03NOV14.D 60 ug/mL ICal 8	600uL MK90317>1mL	9	1.000	4 Nov 2009 4:44 am
16) 03NOV15.D 80 ug/mL ICal 9	800uL MK90317>1mL	10	1.000	4 Nov 2009 5:20 am
17) 03NOV16.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	4 Nov 2009 10:51 am
18) 03NOV17.D 40 ug/mL ICV	400uL MI92905>1mL	11	1.000	4 Nov 2009 11:31 am
19) 03NOV18.D CCB	CONT CAL BLANK	1	1.000	4 Nov 2009 12:08 pm
20) 03NOV19.D [redacted]	[redacted]	B 12	1.000	4 Nov 2009 12:44 pm
21) 03NOV20.D				

Tune File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV05.D
Tune Time : 3 Nov 2009 11:17 pm

Daily Calibration File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV12.D

	(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
					509373	1952730	1142160
	(TBP)	(TPH)			(PHN)	(CRY)	(PRY)
					1922380	1751080	1393100

File	Sample	Surrogate Recovery %				Internal Standard Responses		
03NOV06.D								
	CAL BLANK	0*	1*	0*	0*	524668	2096008	1155260
		0*	0*			1600989	1652875	1270105
03NOV07.D								
	1.0 ug/mL	0*	0*	2*	2*	569611	2149005	1152302
		0*	2*			1718717	1611889	1329894
03NOV08.D								
	5.0 ug/mL	5*	6*	10*	10*	549657	2086597	1120147
		5*	10*			1776655	1629301	1380833
03NOV09.D								
	10 ug/mL I	12	13	19*	20*	531365	2060213	1118892
		12*	21*			1711342	1537600	1286871
03NOV10.D								
	20 ug/mL I	26	28	40*	42	530412	2006574	1117337
		29	43			1702178	1479863	1206262
03NOV11.D								
	30 ug/mL I	41	40	65	60	511952	1955571	1121717
		42	61			1895636	1766414	1447782
03NOV12.D								
	40 ug/mL I	57	54	86	79	509373	1952734	1142163
		56	79			1922383	1751080	1393101
03NOV13.D								
	50 ug/mL I	72	68*	107	99	509211	2001679	1145833
		71	98			1981574	1896520	1402176
03NOV14.D								
	60 ug/mL I	88*	80*	129	115	512421	2002787	1168550
		86	117			2002306	1875928	1247825
03NOV15.D								
	80 ug/mL I	120*	105*	169*	148*	496729	1965643	1149634
		112	153*			1987706	1837445	1127391

(fails) - fails 12hr time check * - fails criteria

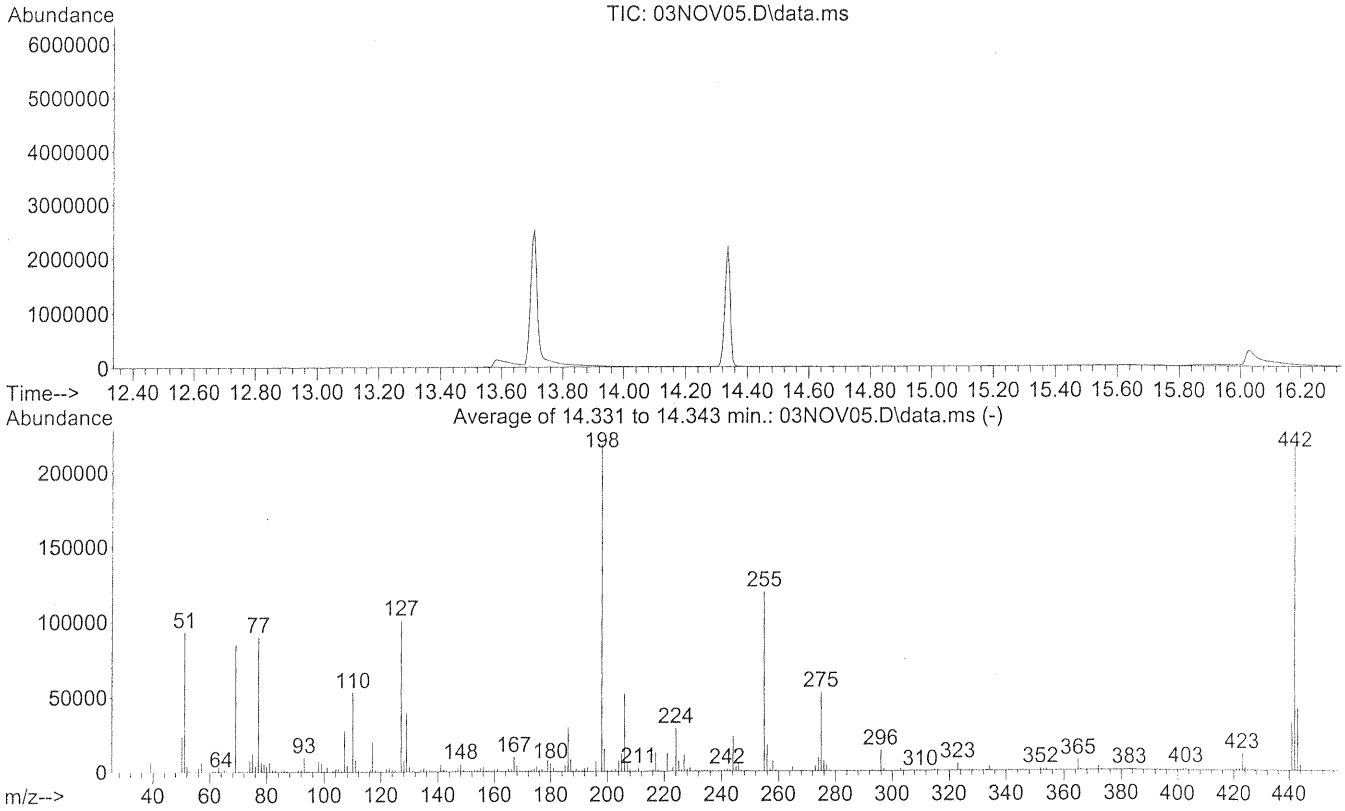
Created: Wed Nov 04 17:19:50 2009 Instrument #1

IS OK

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV05.D
Acq On : 3 Nov 2009 11:17 pm
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNASEP29A.M
Title : 8270/625 BNA Calibration
Last Update : Wed Oct 21 13:00:26 2009



AutoFind: Scans 1969, 1970, 1971; Background Corrected with Scan 1957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.6	93088	PASS
68	69	0.00	2	0.5	410	PASS
69	198	0.00	100	38.7	84536	PASS
70	69	0.00	2	0.5	443	PASS
127	198	40	60	46.0	100536	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	218368	PASS
199	198	5	9	6.8	14848	PASS
275	198	10	30	24.1	52677	PASS
365	198	1	100	3.2	6980	PASS
441	443	0.01	100	78.0	32301	PASS
442	198	40	100	99.4	216981	PASS
443	442	17	23	19.1	41402	PASS

Method Path : C:\msdchem\1\METHODS\
Method File : BNANOV03.M
Title : 8270/625 BNA Calibration
Last Update : Wed Nov 04 16:14:19 2009
Response Via : Initial Calibration

Total Cpnds : 92

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	6.585	1.000	A	1	A	B
2		N-Nitrosodimethylamine	74	3.091	0.469	A	2	A	B
3	T	Pyridine	79	3.021	0.459	A	2	A	B
4	S	2-Fluorophenol	112	4.935	0.749	A	1	A	B
5		Pentachloroethane	167	6.154	0.934	A	3	A	B
6		Aniline	93	6.211	0.943	Q	1	A	B
7	T	bis(2-Chloroethyl)ether	93	6.281	0.954	Q	2	A	B
8	S	Phenol-d5	99	6.281	0.954	L	2	A	B
9	M*	Phenol	94	6.299	0.957	L	2	A	B
10	M	2-Chlorophenol	128	6.381	0.969	A	1	A	B
11	T	1,3-Dichlorobenzene	146	6.527	0.991	A	2	A	B
12	M*	1,4-Dichlorobenzene	146	6.609	1.004	A	2	A	B
13	T	1,2-Dichlorobenzene	146	6.883	1.045	A	2	A	B
14	T	Benzyl alcohol	108	6.906	1.049	A	2	A	B
15	T	bis(2-chloroisopropyl)ether	45	7.069	1.074	A	1	A	B
16	T	2-Methylphenol	108	7.134	1.083	A	1	A	B
17	T	Hexachloroethane	117	7.320	1.112	A	2	A	B
18	M**	N-Nitroso-di-n-propylamine	70	7.320	1.112	A	2	A	B
19	T	4-Methylphenol,3-Methylphenol	108	7.378	1.120	A	1	A	B
20	I	Naphthalene-d8	136	8.539	1.000	A	1	A	B
21	S	Nitrobenzene-d5	82	7.489	0.877	A	2	A	B
22	T	Nitrobenzene	77	7.518	0.881	A	2	A	B
23	T	Isophorone	82	7.874	0.922	A	1	A	B
24	T	2-Nitrophenol	139	7.997	0.937	A	2	A	B
25	T	2,4-Dimethylphenol	107	8.148	0.954	A	2	A	B
26	T	bis(2-Chloroethoxy)methane	93	8.235	0.964	L	2	A	B
27	T	2,4-Dichlorophenol	162	8.422	0.986	A	2	A	B
28	M	1,2,4-Trichlorobenzene	180	8.475	0.992	A	2	A	B
29	T	Naphthalene	128	8.568	1.003	A	2	A	B
30	T	4-Chloroaniline	127	8.941	1.047	Q	2	A	B
31	T	Benzoic Acid	105	8.579	1.005	L	3	A	B
32	T	Hexachlorobutadiene	225	8.836	1.035	A	2	A	B
33	M*	4-Chloro-3-methylphenol	107	9.595	1.124	A	2	A	B
34	T	2-Methylnaphthalene	142	9.652	1.130	Q	1	A	B
35		1-Methylnaphthalene	142	9.828	1.151	A	2	A	B
36	I	Acenaphthene-d10	164	11.350	1.000	A	2	A	B
37	T	Hexachlorocyclopentadiene	237	9.997	0.881	Q	2	A	B
38	T	2,4,6-Trichlorophenol	196	10.207	0.899	A	2	A	B
39	T	2,4,5-Trichlorophenol	196	10.318	0.909	A	2	A	B
40	S	2-Fluorobiphenyl	172	10.283	0.906	A	1	A	B
41	T	2-Chloronaphthalene	162	10.434	0.919	A	2	A	B
42	T	2-Nitroaniline	65	10.749	0.947	A	2	A	B
43		1,4-Dinitrobenzene	75	10.930	0.963	L	2	A	B
44	T	Acenaphthylene	152	11.105	0.978	A	2	A	B
45	T	Dimethylphthalate	163	11.053	0.974	A	2	A	B
46		1,3-Dinitrobenzene	168	11.160	0.983	A	2	A	B
47		1,2-Dinitrobenzene	168	11.304	0.996	A	2	A	B
48	T	2,6-Dinitrotoluene	165	11.169	0.984	A	2	A	B
49	M*	Acenaphthene	153	11.409	1.005	A	2	A	B
50	T	3-Nitroaniline	138	10.749	0.947	A	2	A	B
51	T	2,4-Dinitrophenol	184	11.612	1.023	L	2	A	B
52	T	Dibenzofuran	168	11.659	1.027	A	1	A	B
53		2,3,5,6-Tetrachlorophenol	232	11.910	1.049	L	2	A	B
54		2,3,4,6-Tetrachlorophenol	232	11.980	1.055	Q	2	A	B

56	M**	4-Nitrophenol	139	11.939	1.052	L	2	A	B
57	T	Fluorene	166	12.214	1.076	A	2	A	B
58	T	4-Chlorophenyl-phenylether	204	12.219	1.077	A	2	A	B
59	T	Diethylphthalate	149	12.167	1.072	A	2	A	B
60	T	1,2-Diphenylhydrazine (Azob...	77	12.476	1.099	A	2	A	B
61	T	4-Nitroaniline	138	12.593	1.109	A	2	A	B
62	I	Phenanthrene-d10	188	13.713	1.000	A	1	A	B
63	T	4,6-Dinitro-2-methylphenol	198	12.458	0.909	A	2	A	B
64	T	n-Nitrosodiphenylamine	169	12.452	0.908	Q	2	A	B
65	S	2,4,6-Tribromophenol	330	12.657	0.923	A	2	A	B
66	T	4-Bromophenyl-phenylether	248	12.995	0.948	A	2	A	B
67	T	Hexachlorobenzene	284	13.217	0.964	A	2	A	B
68	M*	Pentachlorophenol	266	13.572	0.990	Q	2	A	B
69	T	Phenanthrene	178	13.753	1.003	A	2	A	B
70	T	Anthracene	178	13.823	1.008	L	2	A	B
71	T	Carbazole	167	14.156	1.032	A	2	A	B
72	T	Di-n-butylphthalate	149	14.762	1.077	A	2	A	B
73	T	Fluoranthene	202	15.696	1.145	A	1	A	B
74	I	Chrysene-d12	240	18.577	1.000	A	2	A	B
75	M	Pyrene	202	16.086	0.866	A	2	A	B
76		Benzidine	184	16.022	0.862	Q	2	A	B
77	S	Terphenyl-d14	244	16.413	0.884	A	2	A	B
78		3,3'-Dimethylbenzidine	212	17.416	0.938	A	3	A	B
79	T	Butylbenzylphthalate	149	17.475	0.941	A	2	A	B
80		bis(2-ethylhexyl)adipate	129	17.615	0.948	A	2	A	B
81	T	3,3'-Dichlorobenzidine	252	18.658	1.004	L	2	A	B
82	T	Benzo[a]anthracene	228	18.536	0.998	A	2	A	B
83	T	Chrysene	228	18.641	1.003	A	2	A	B
84	T	bis(2-Ethylhexyl)phthalate	149	18.787	1.011	A	2	A	B
85	I	Perylene-d12	264	21.867	1.000	A	2	A	B
86	T	Di-n-octylphthalate	149	20.216	0.925	A	1	A	B
87	T	Benzo[b]fluoranthene	252	21.021	0.961	L	2	A	B
88	T	Benzo[k]fluoranthene	252	21.079	0.964	A	2	A	B
89	T	Benzo[a]pyrene	252	21.738	0.994	A	2	A	B
90	T	Indeno[1,2,3-cd]pyrene	276	24.153	1.105	A	1	A	B
91	T	Dibenz[a,h]anthracene	278	24.177	1.106	A	2	A	B
92	T	Benzo[g,h,i]perylene	276	24.660	1.128	Q	2	A	B

al A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
ual = number of qualifiers
A/H = Area or Height
R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

BUANOV03.M Wed Nov 04 16:17:18 2009 MSD5

Method Path : C:\msdchem\1\METHODS\
Method File : BNANOV03.M
Title : 8270/625 BNA Calibration
Last Update : Wed Nov 04 16:14:19 2009
Response Via : Initial Calibration

Calibration Files
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8 =03NOV14.D 9 =03NOV15.D

		Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------										
2)		N-Nitrosodimet...	0.739	0.803	0.920	0.905	0.885	0.894	0.884	0.886	0.870	0.865	6.64
3)	T	Pyridine	1.461	1.429	1.511	1.631	1.556	1.652	1.635	1.650	1.602	1.570	5.40
4)	S	2-Fluorophenol	1.072	1.001	1.148	1.201	1.242	1.320	1.331	1.344	1.376	1.226	10.70
5)		Pentachloroethane	0.602	0.595	0.630	0.624	0.610	0.614	0.614	0.608	0.600	0.611	1.84
6)		Aniline		0.749	1.035	1.312	1.352	1.573	1.580	1.700	1.793	1.387	25.45
7)	T	bis(2-Chloroet...	2.507	2.010	1.732	1.673	1.596	1.542	1.545	1.477	1.411	1.721	19.89
8)	S	Phenol-d5	0.272	1.228	1.425	1.521	1.488	1.499	1.501	1.474	1.462	1.319	30.52
9)	M*	Phenol	0.296	1.318	1.657	1.721	1.676	1.681	1.664	1.637	1.616	1.474	31.01
10)	M	2-Chlorophenol	0.984	1.310	1.419	1.403	1.367	1.382	1.379	1.361	1.349	1.328	10.01
11)	T	1,3-Dichlorobe...	1.470	1.615	1.657	1.597	1.573	1.561	1.561	1.561	1.538	1.570	3.32
12)	M*	1,4-Dichlorobe...	1.716	1.632	1.692	1.632	1.617	1.586	1.593	1.573	1.546	1.621	3.40
13)	T	1,2-Dichlorobe...	1.400	1.567	1.629	1.572	1.573	1.551	1.557	1.548	1.531	1.548	3.99
14)	T	Benzyl alcohol		0.638	0.801	0.840	0.865	0.868	0.876	0.879	0.889	0.832	9.99
15)	T	bis(2-chlorois...	2.540	2.647	2.739	2.618	2.566	2.500	2.493	2.421	2.380	2.545	4.42
16)	T	2-Methylphenol	1.309	0.889	1.159	1.205	1.198	1.214	1.225	1.197	1.207	1.178	9.82
17)	T	Hexachloroethane	0.597	0.597	0.617	0.591	0.575	0.569	0.576	0.575	0.582	0.587	2.65
18)	M**	N-Nitroso-di-n...	0.727	0.941	1.008	0.978	0.967	0.952	0.951	0.933	0.924	0.931	8.65
19)	T	4-Methylphenol...	1.395	0.891	1.112	1.178	1.205	1.230	1.216	1.234	1.235	1.188	11.28
20)	I	Naphthalene-d8	----------ISTD----------										
21)	S	Nitrobenzene-d5	0.209	0.337	0.311	0.320	0.350	0.349	0.347	0.349	0.342	0.324	13.95
22)	T	Nitrobenzene	0.486	0.326	0.357	0.354	0.343	0.350	0.336	0.343	0.335	0.359	13.55
23)	T	Isophorone	0.603	0.721	0.706	0.706	0.706	0.698	0.728	0.744	0.718	0.703	5.69
24)	T*	2-Nitrophenol		0.169	0.142	0.127	0.134	0.118	0.113	0.135	0.155	0.137	13.44
25)	T	2,4-Dimethylph...		0.321	0.341	0.355	0.348	0.348	0.337	0.341	0.332	0.341	3.10
26)	T	bis(2-Chloroet...	0.209	0.335	0.362	0.404	0.403	0.402	0.396	0.394	0.386	0.366	17.30
27)	T*	2,4-Dichloroph...		0.238	0.232	0.267	0.252	0.266	0.265	0.276	0.274	0.259	6.42
28)	M	1,2,4-Trichlor...	0.299	0.353	0.362	0.360	0.354	0.347	0.343	0.345	0.338	0.345	5.50
29)	T	Naphthalene	1.025	1.037	1.028	1.019	0.986	0.979	0.954	0.950	0.928	0.990	4.02
30)	T	4-Chloroaniline		0.220	0.159	0.144	0.139	0.170	0.181	0.214	0.289	0.190	26.31
31)	T	Benzoic Acid			0.040	0.101	0.136	0.156	0.176	0.184	0.202	0.142	39.43
32)	T*	Hexachlorobuta...	0.192	0.189	0.197	0.194	0.193	0.193	0.189	0.189	0.183	0.191	2.13
33)	M*	4-Chloro-3-met...		0.208	0.261	0.287	0.295	0.301	0.296	0.296	0.290	0.279	11.21
34)	T	2-Methylnaphth...	0.457	0.848	0.916	0.791	0.749	0.739	0.702	0.695	0.667	0.729	17.68
35)		1-Methylnaphth...	0.707	0.700	0.687	0.676	0.683	0.675	0.663	0.664	0.636	0.677	3.13

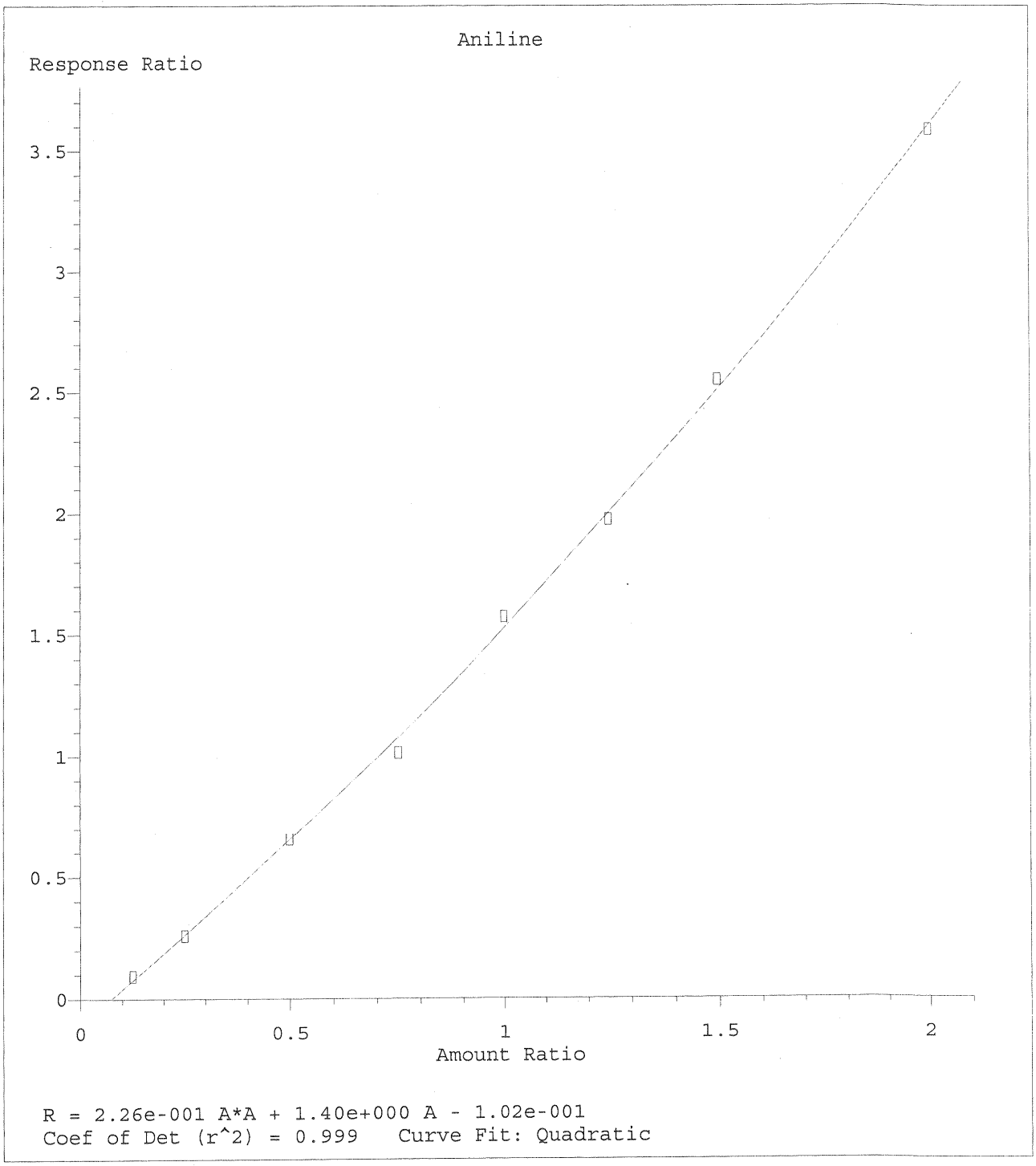
Method Path : C:\msdchem\1\METHODS\
Method File : BNANOV03.M
Title : 8270/625 BNA Calibration

36)	I	Acenaphthene-d10	----------ISTD----------										
37)	T**	Hexachlorocycl...			0.005	0.051	0.097	0.139	0.164	0.181	0.201	0.120	60.15
38)	T*	2,4,6-Trichlor...		0.298	0.327	0.345	0.345	0.347	0.355	0.352	0.350	0.340	5.54
39)	T	2,4,5-Trichlor...		0.249	0.283	0.311	0.321	0.320	0.338	0.348	0.338	0.313	10.53
40)	S	2-Fluorobiphenyl	1.454	1.274	1.314	1.365	1.305	1.285	1.293	1.248	1.210	1.306	5.39
41)	T	2-Chloronaphth...	0.946	1.030	1.108	1.104	1.074	1.044	1.062	1.048	1.039	1.051	4.56
42)	T	2-Nitroaniline		0.250	0.280	0.291	0.289	0.294	0.300	0.300	0.321	0.291	7.01
43)		1,4-Dinitroben...		0.106	0.158	0.187	0.198	0.205	0.207	0.205	0.205	0.184	19.31
44)	T	Acenaphthylene	1.736	1.898	1.900	1.831	1.776	1.728	1.699	1.608	1.462	1.737	8.05
45)	T	Dimethylphthalate	1.209	1.306	1.319	1.297	1.275	1.240	1.265	1.247	1.225	1.265	2.98
46)		1,3-Dinitroben...		0.140	0.166	0.165	0.176	0.182	0.188	0.181	0.188	0.173	9.29
47)		1,2-Dinitroben...		0.106	0.123	0.132	0.131	0.140	0.141	0.138	0.139	0.131	8.86
48)	T	2,6-Dinitrotol...		0.290	0.283	0.279	0.281	0.279	0.285	0.279	0.279	0.282	1.45
49)	M*	Acenaphthene	1.137	1.116	1.129	1.107	1.092	1.062	1.069	1.054	1.032	1.089	3.33
50)	T	3-Nitroaniline		0.257	0.324	0.330	0.332	0.349	0.354	0.356	0.378	0.335	10.74
51)	T**	2,4-Dinitrophenol			0.084	0.089	0.129	0.145	0.156	0.170	0.179	0.136	27.57
52)	T	Dibenzofuran	1.378	1.518	1.505	1.496	1.506	1.462	1.499	1.443	1.420	1.470	3.24
53)		2,3,5,6-Tetrac...		0.127	0.189	0.212	0.237	0.246	0.259	0.263	0.273	0.226	21.51
54)		2,3,4,6-Tetrac...		0.226	0.194	0.227	0.234	0.239	0.253	0.254	0.312	0.242	14.01
55)	M	2,4-Dinitrotol...		0.323	0.345	0.340	0.370	0.365	0.382	0.370	0.370	0.358	5.56
56)	M**	4-Nitrophenol			0.016	0.063	0.115	0.129	0.142	0.139	0.150	0.108	46.14
57)	T	Fluorene	1.211	1.214	1.211	1.180	1.193	1.143	1.144	1.105	1.077	1.164	4.28
58)	T	4-Chlorophenyl...	0.489	0.589	0.570	0.562	0.557	0.543	0.540	0.511	0.503	0.540	6.18
59)	T	Diethylphthalate	1.200	1.271	1.241	1.212	1.247	1.200	1.226	1.204	1.177	1.220	2.39
60)	T	1,2-Diphenylhy...	1.003	1.229	1.246	1.218	1.254	1.218	1.216	1.152	1.135	1.186	6.68
61)	T	4-Nitroaniline		0.182	0.155	0.136	0.152	0.159	0.162	0.147	0.149	0.155	8.60
62)	I	Phenanthrene-d10	----------ISTD----------										
63)	T	4,6-Dinitro-2-...		0.087	0.103	0.115	0.126	0.128	0.128	0.125	0.119	0.117	12.66
64)	T*	n-Nitrosodiphe...	0.464	0.596	0.612	0.574	0.491	0.477	0.436	0.420	0.409	0.498	15.54
65)	S	2,4,6-Tribromo...		0.079	0.087	0.108	0.104	0.105	0.107	0.108	0.106	0.100	10.84
66)	T	4-Bromophenyl-...	0.198	0.229	0.229	0.234	0.220	0.222	0.222	0.216	0.215	0.221	4.78
67)	T	Hexachlorobenzene	0.244	0.248	0.245	0.246	0.238	0.233	0.235	0.234	0.226	0.239	3.16
68)	M*	Pentachlorophenol			0.049	0.057	0.081	0.090	0.100	0.106	0.118	0.086	29.67
69)	T	Phenanthrene	0.980	1.048	1.067	1.044	1.027	1.002	0.987	0.974	0.959	1.010	3.77
70)	T	Anthracene	0.465	1.060	1.086	1.062	1.047	1.026	1.018	0.976	0.946	0.965	19.96
71)	T	Carbazole	0.847	0.698	0.770	0.785	0.895	0.895	0.888	0.848	0.820	0.827	8.05
72)	T	Di-n-butylphth...	1.180	1.249	1.304	1.255	1.264	1.215	1.204	1.179	1.117	1.219	4.59
73)	T*	Fluoranthene	0.949	1.092	1.134	1.073	1.108	1.049	1.049	1.016	0.984	1.050	5.69
74)	I	Chrysene-d12	----------ISTD----------										
75)	M	Pyrene	1.172	1.289	1.325	1.315	1.241	1.206	1.137	1.140	1.115	1.216	6.64
76)		Benzidine		0.139	0.080	0.069	0.152	0.192	0.236	0.248	0.318	0.179	47.92
77)	S	Terphenyl-d14	0.723	0.774	0.786	0.805	0.771	0.745	0.739	0.735	0.725	0.756	3.85
78)		3,3'-Dimethylb...		0.329	0.268	0.284	0.348	0.355	0.374	0.375	0.406	0.342	13.72

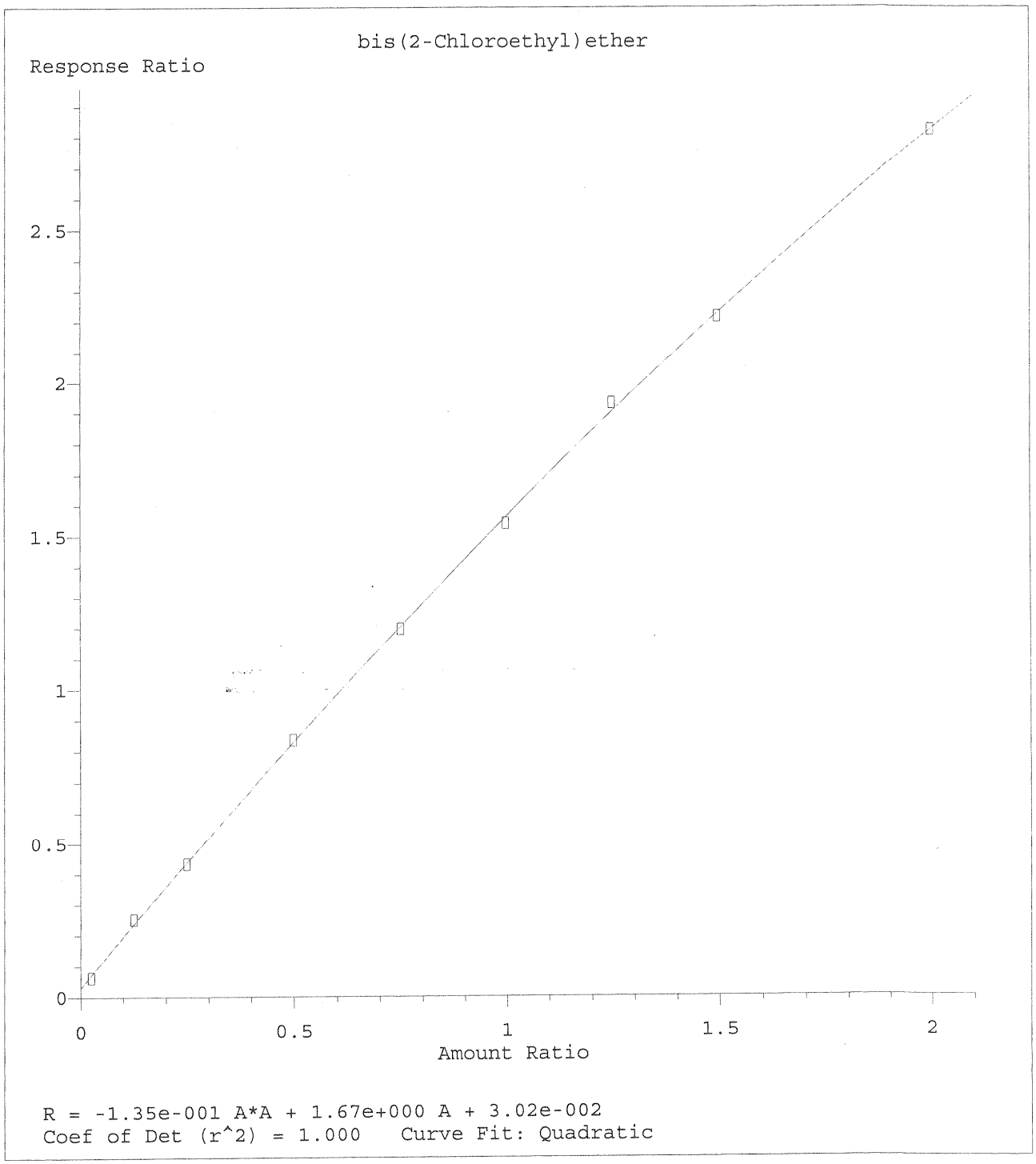
Method Path : C:\msdchem\1\METHODS\
Method File : BNANOV03.M
Title : 8270/625 BNA Calibration

79)	T	Butylbenzylpht...	0.524	0.587	0.600	0.591	0.559	0.555	0.531	0.531	0.522	0.555	5.52
80)		bis(2-ethylhex...	0.478	0.526	0.527	0.520	0.501	0.486	0.468	0.472	0.460	0.493	5.32
81)	T	3,3'-Dichlorob...		0.205	0.148	0.127	0.122	0.128	0.136	0.139	0.145	0.144	18.46
82)	T	Benzo[a]anthra...	0.986	1.026	1.037	1.056	1.078	1.085	1.053	1.074	1.059	1.051	2.92
83)	T	Chrysene	1.156	1.004	1.009	0.995	0.997	0.994	0.964	0.974	0.970	1.007	5.76
84)	T	bis(2-Ethylhex...	0.891	0.837	0.818	0.787	0.765	0.770	0.752	0.745	0.727	0.788	6.59
85)	I	Perylene-d12	----------ISTD----------										
86)	T*	Di-n-octylphth...	1.352	1.558	1.619	1.607	1.634	1.744	1.786	1.964	2.083	1.705	12.90
87)	T	Benzo[b]fluora...	0.859	1.035	1.147	1.169	1.235	1.329	1.394	1.495	1.555	1.246	17.86
88)	T	Benzo[k]fluora...	1.426	1.249	1.302	1.340	1.304	1.273	1.236	1.296	1.269	1.299	4.38
89)	T*	Benzo[a]pyrene	0.934	1.080	1.107	1.155	1.208	1.228	1.220	1.248	1.246	1.158	8.94
90)	T	Indeno[1,2,3-c...	0.905	0.903	0.998	0.954	0.919	0.856	0.808	0.735	0.666	0.860	12.41
91)	T	Dibenz[a,h]ant...	0.727	0.678	0.750	0.813	0.769	0.698	0.669	0.614	0.557	0.697	11.35
92)	T	Benzo[g,h,i]pe...	0.886	0.829	0.761	0.636	0.656	0.631	0.588	0.515	0.458	0.662	21.24

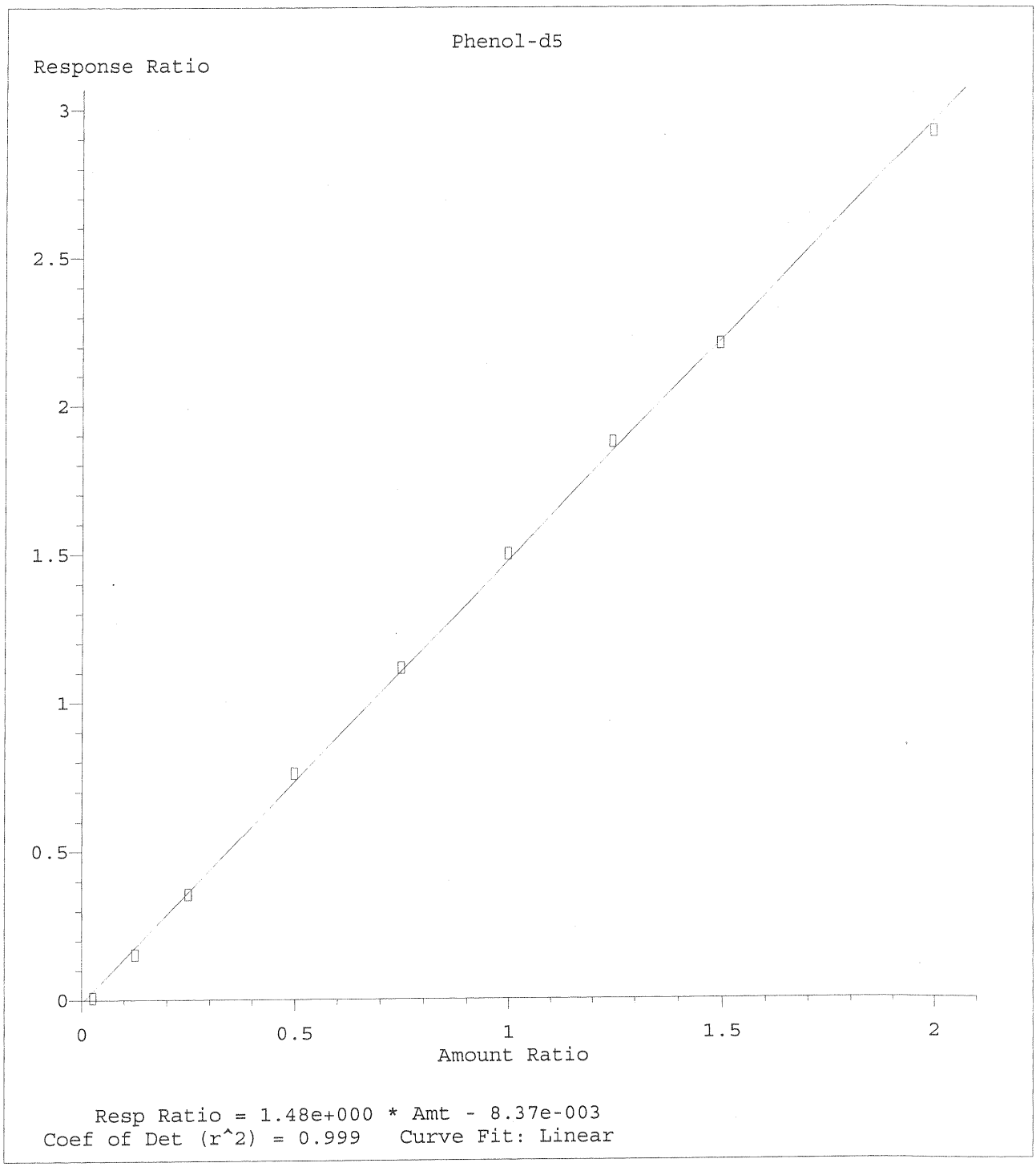
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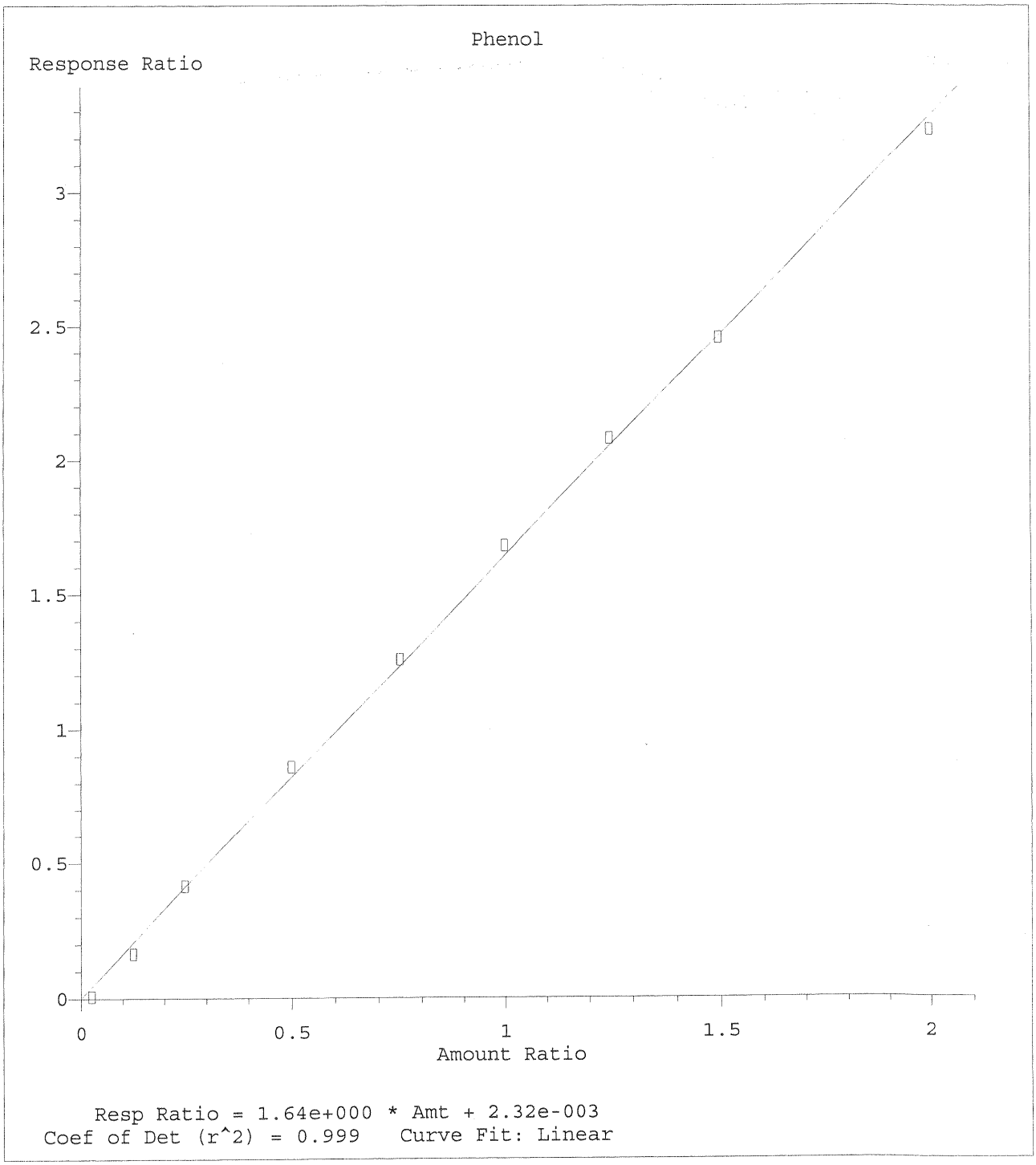
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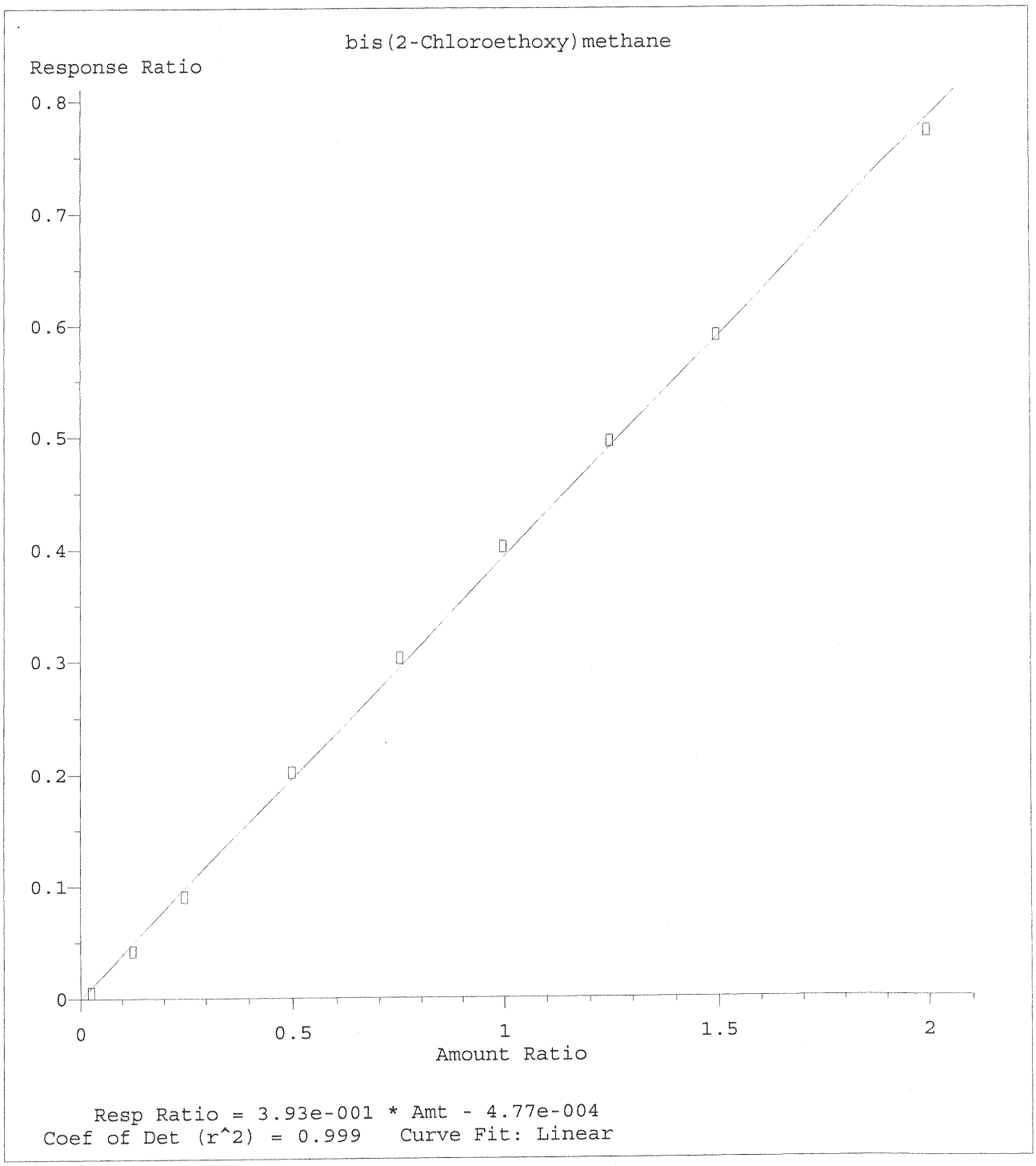
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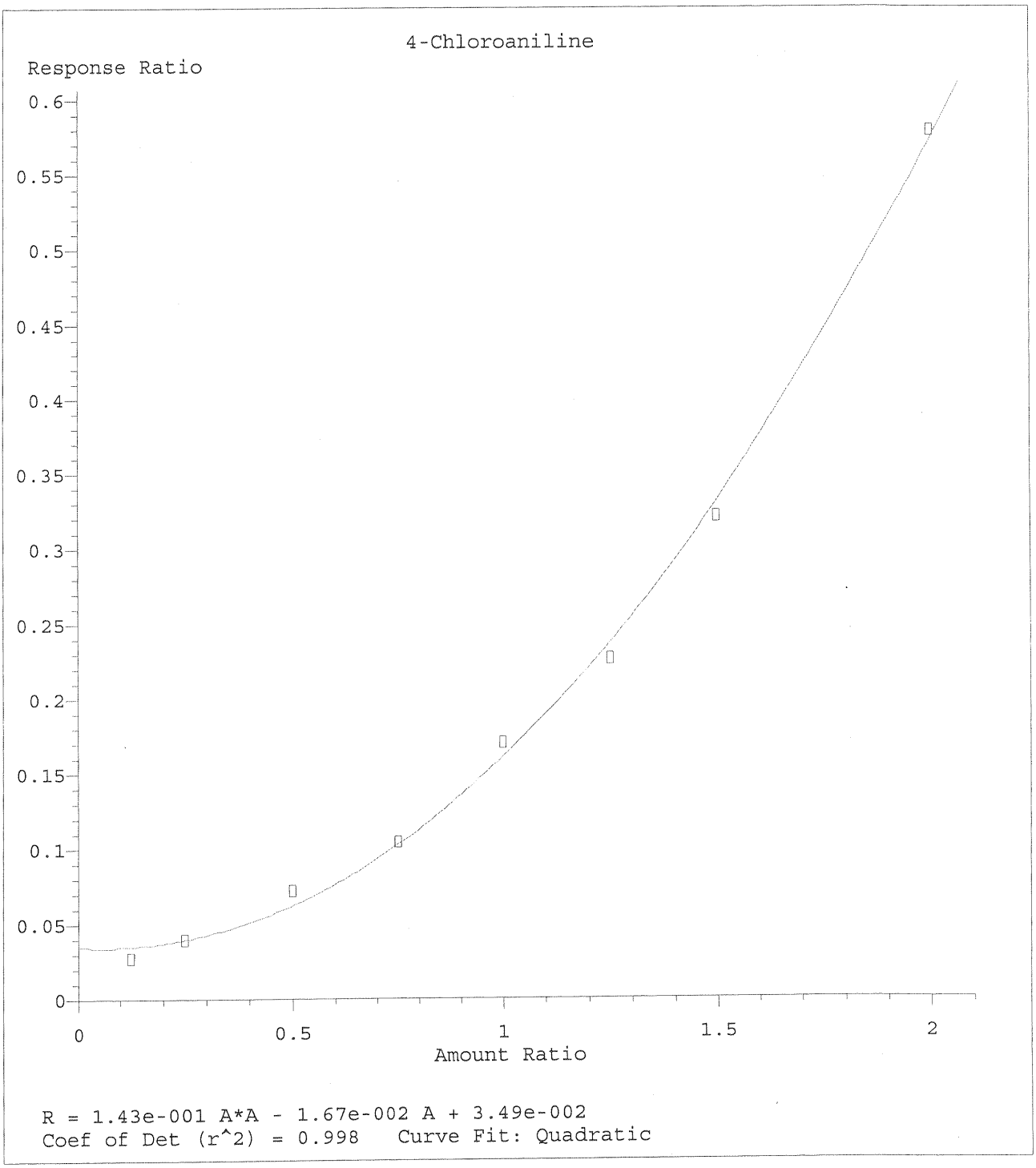
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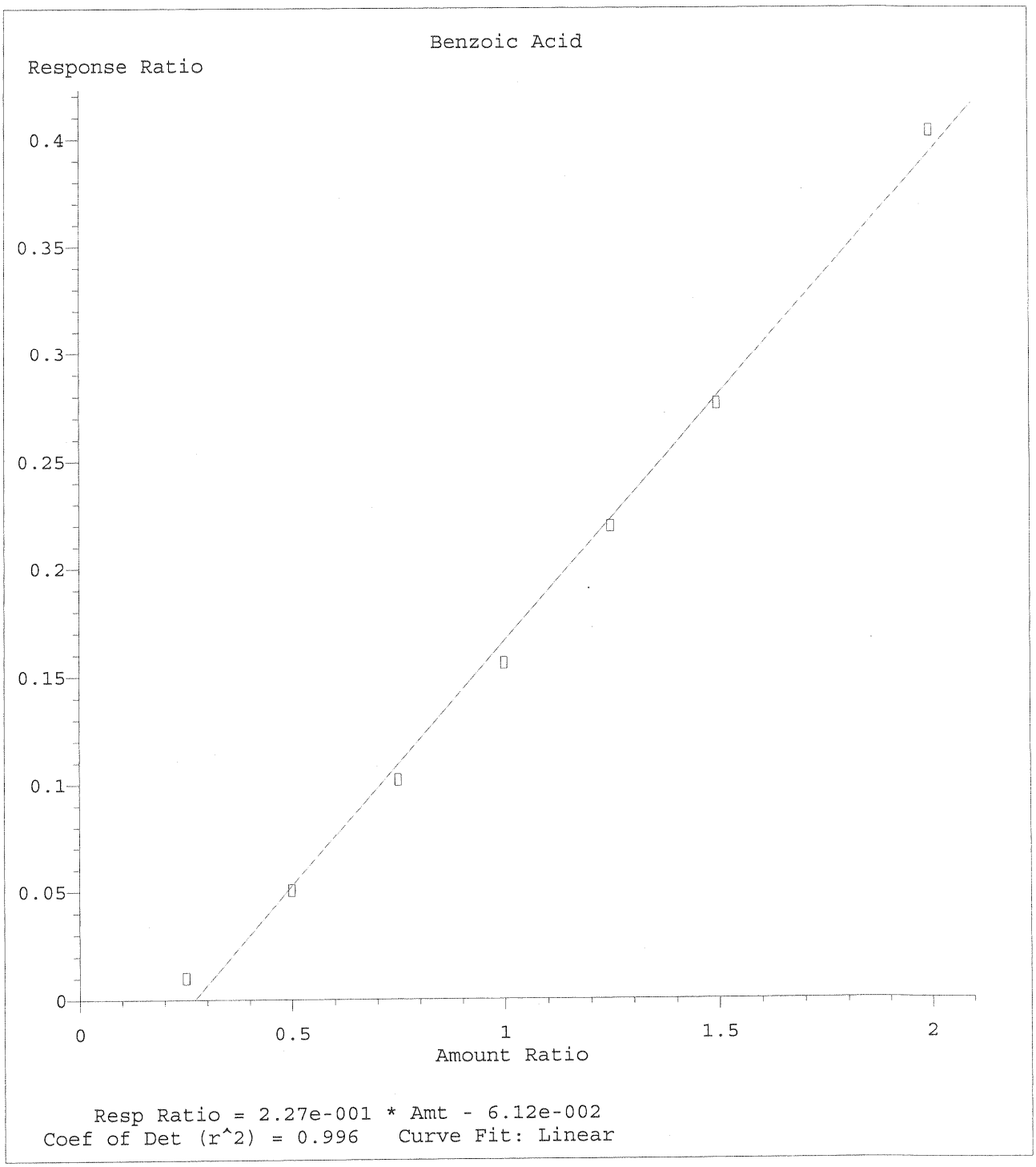
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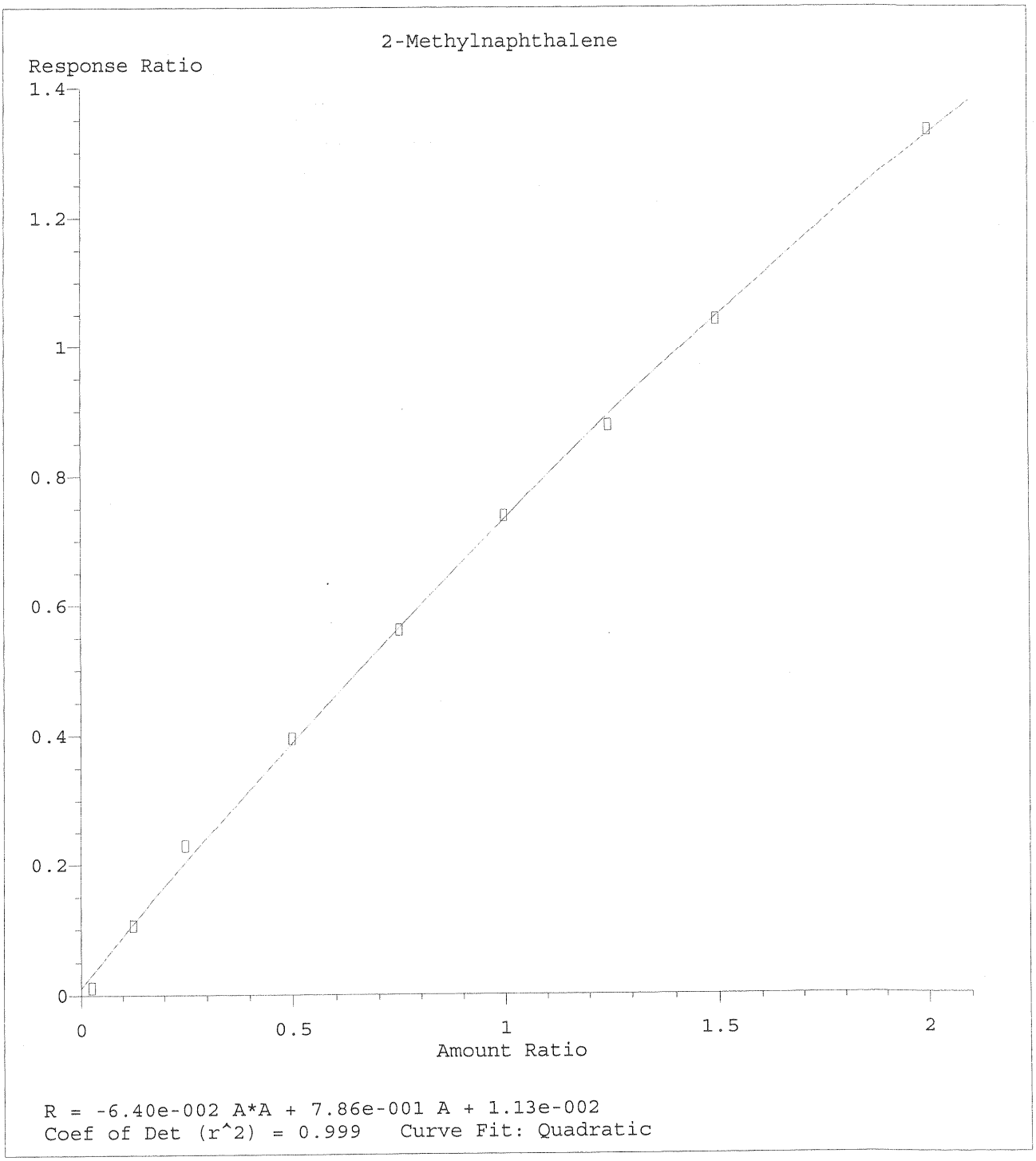
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Calibration Table Last Updated: Wed Nov 04 16:08:34 2009



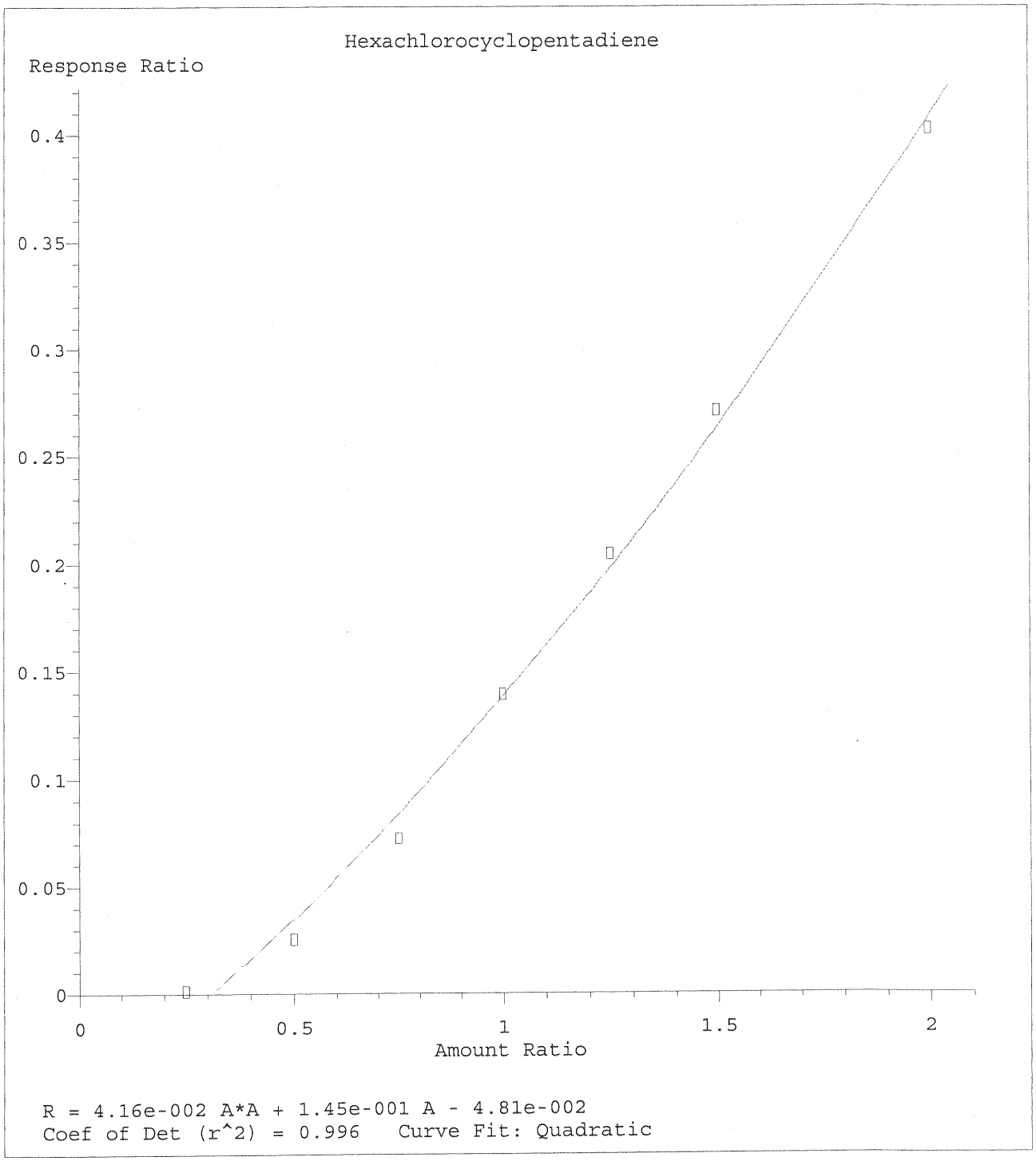
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Calibration Table Last Updated: Wed Nov 04 16:08:59 2009



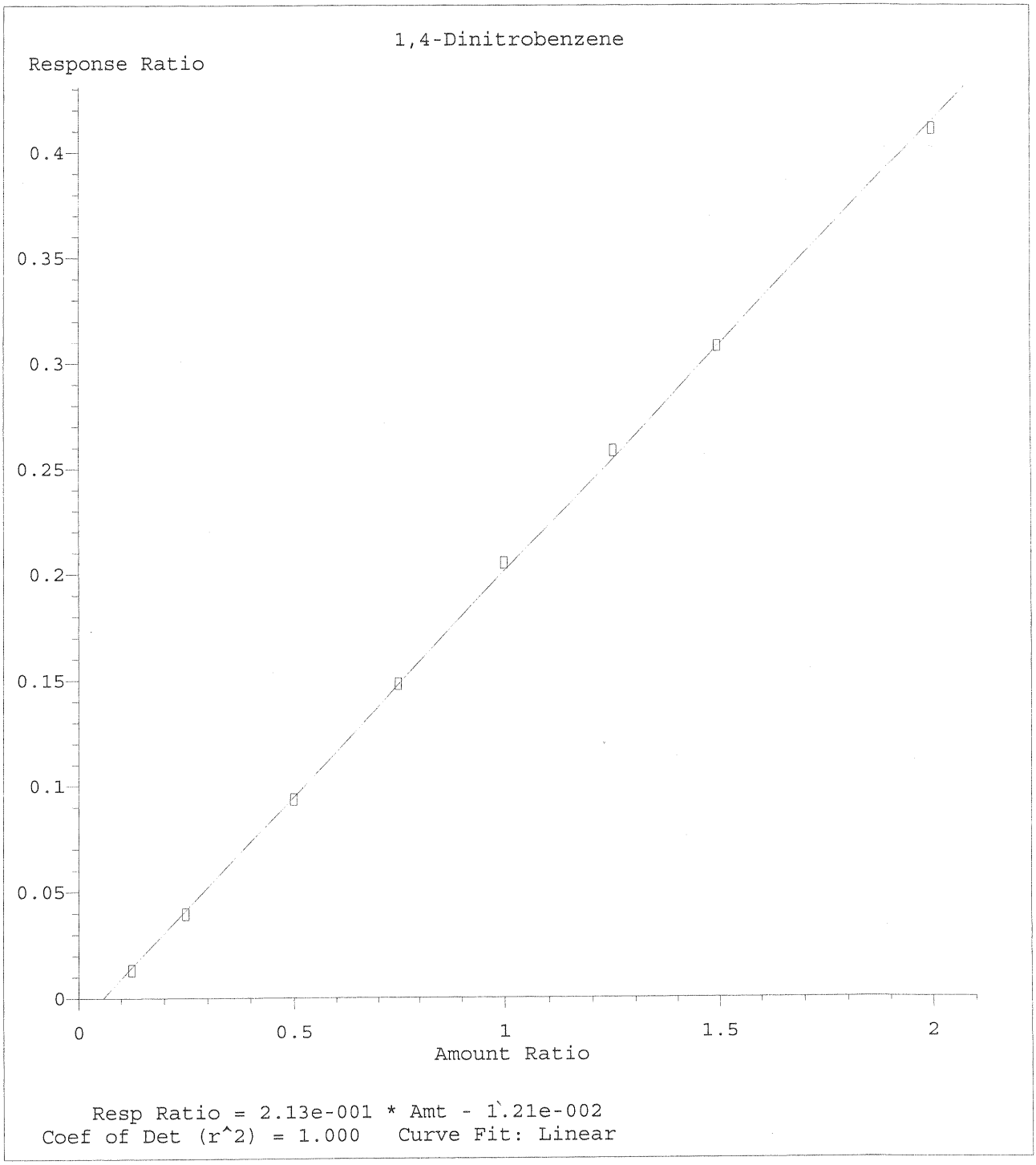
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Calibration Table Last Updated: Wed Nov 04 16:09:25 2009



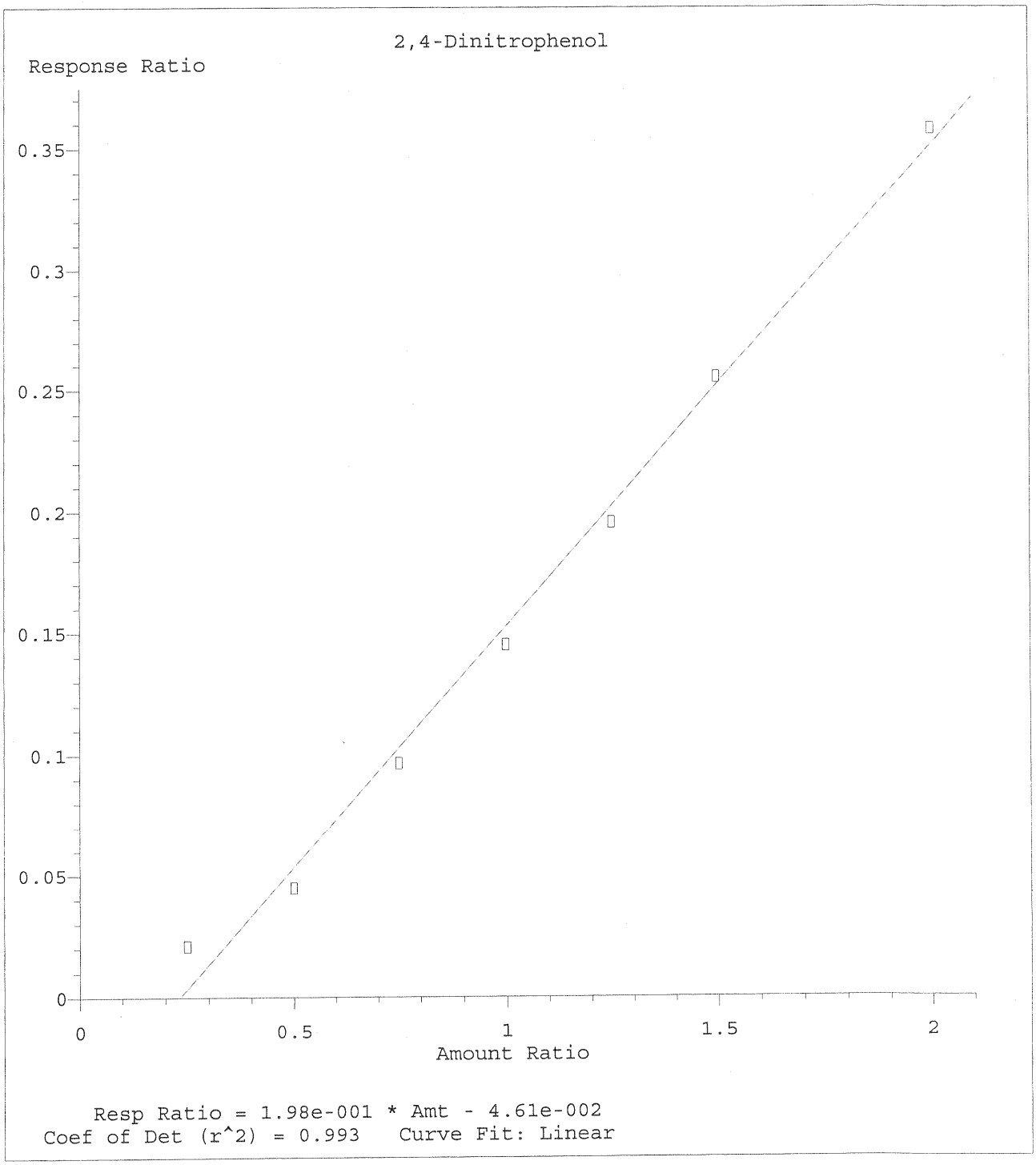
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Calibration Table Last Updated: Wed Nov 04 16:09:32 2009



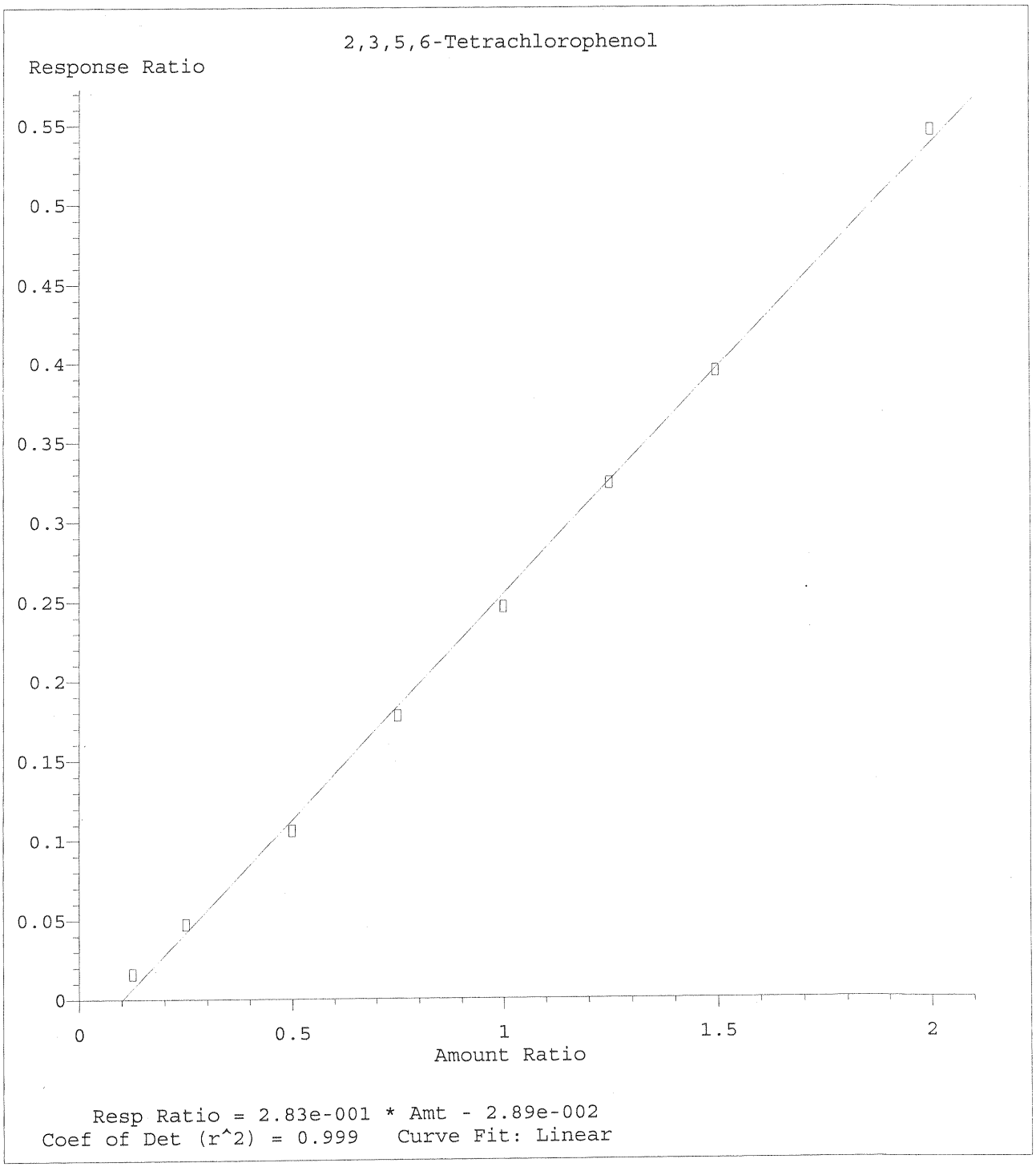
Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:09:42 2009



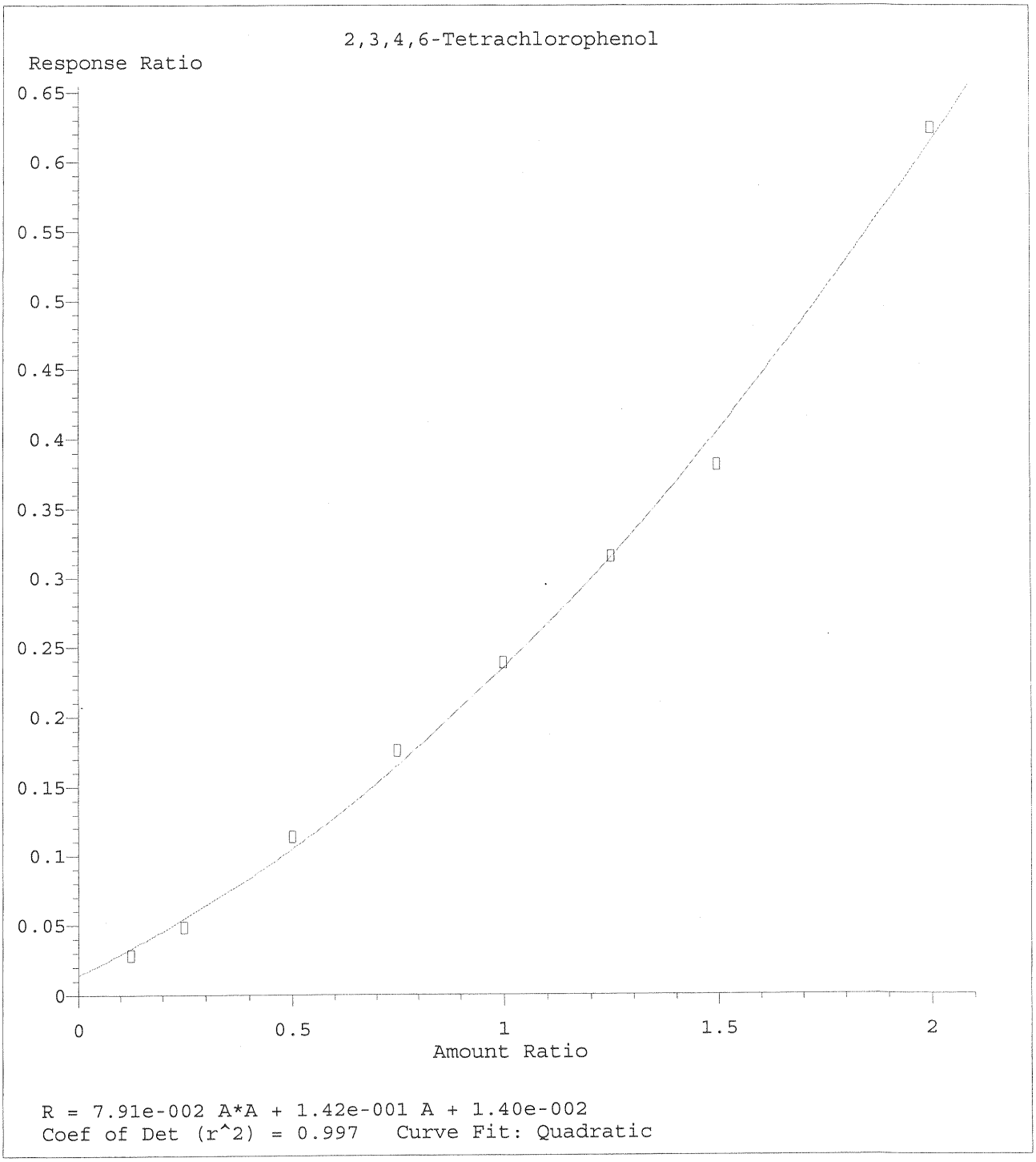
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Calibration Table Last Updated: Wed Nov 04 16:09:57 2009



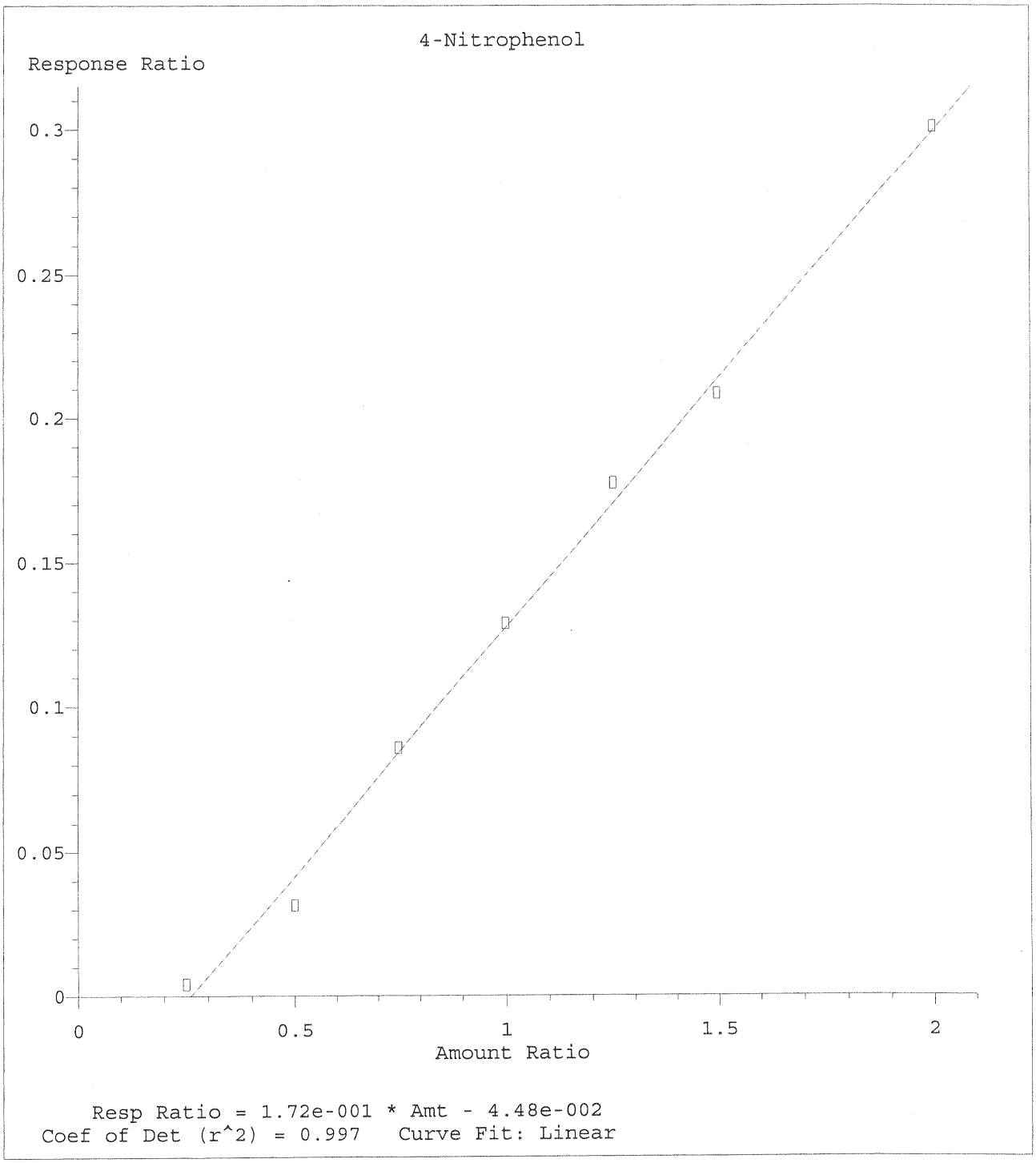
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Calibration Table Last Updated: Wed Nov 04 16:10:07 2009



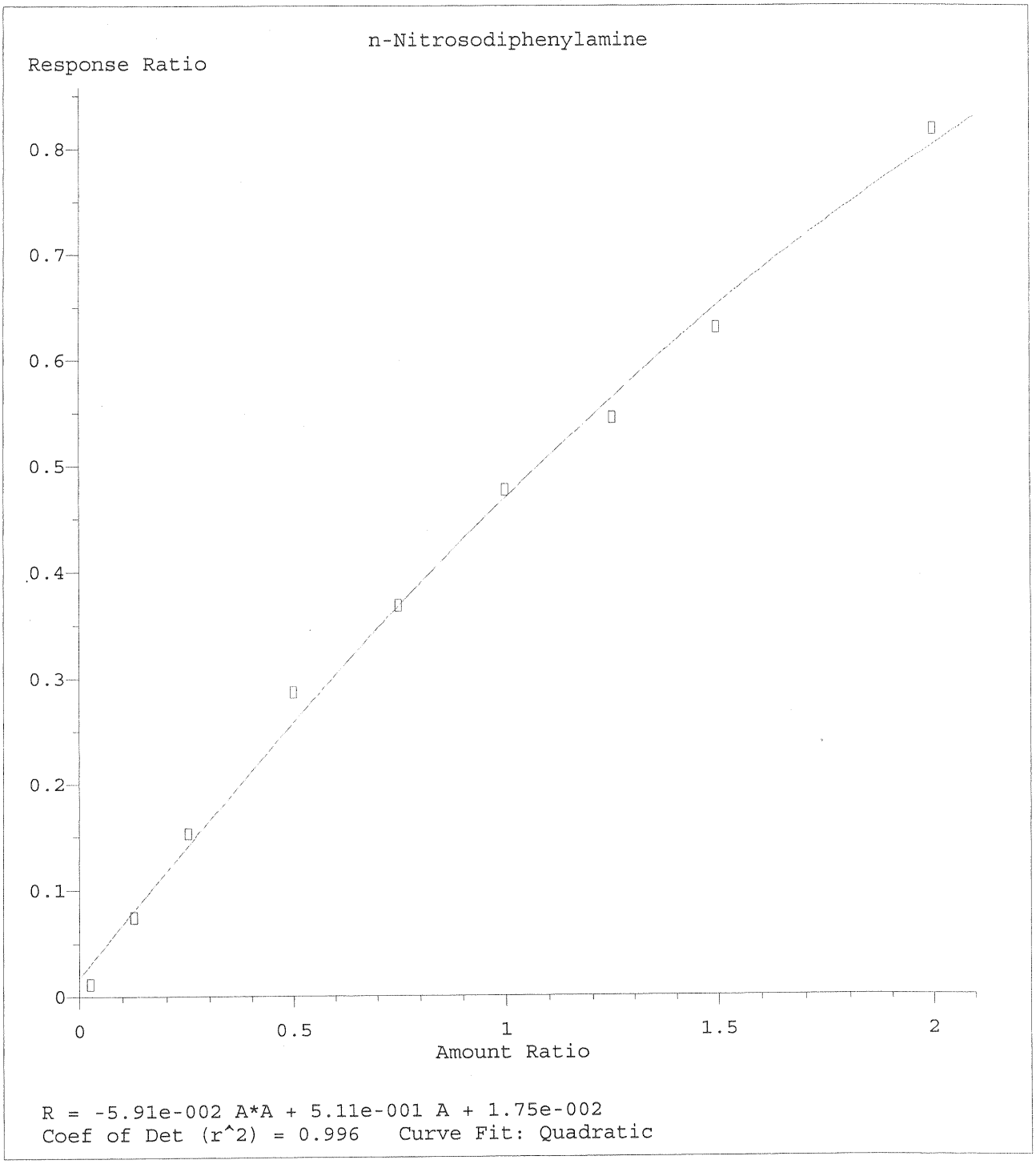
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Calibration Table Last Updated: Wed Nov 04 16:10:42 2009



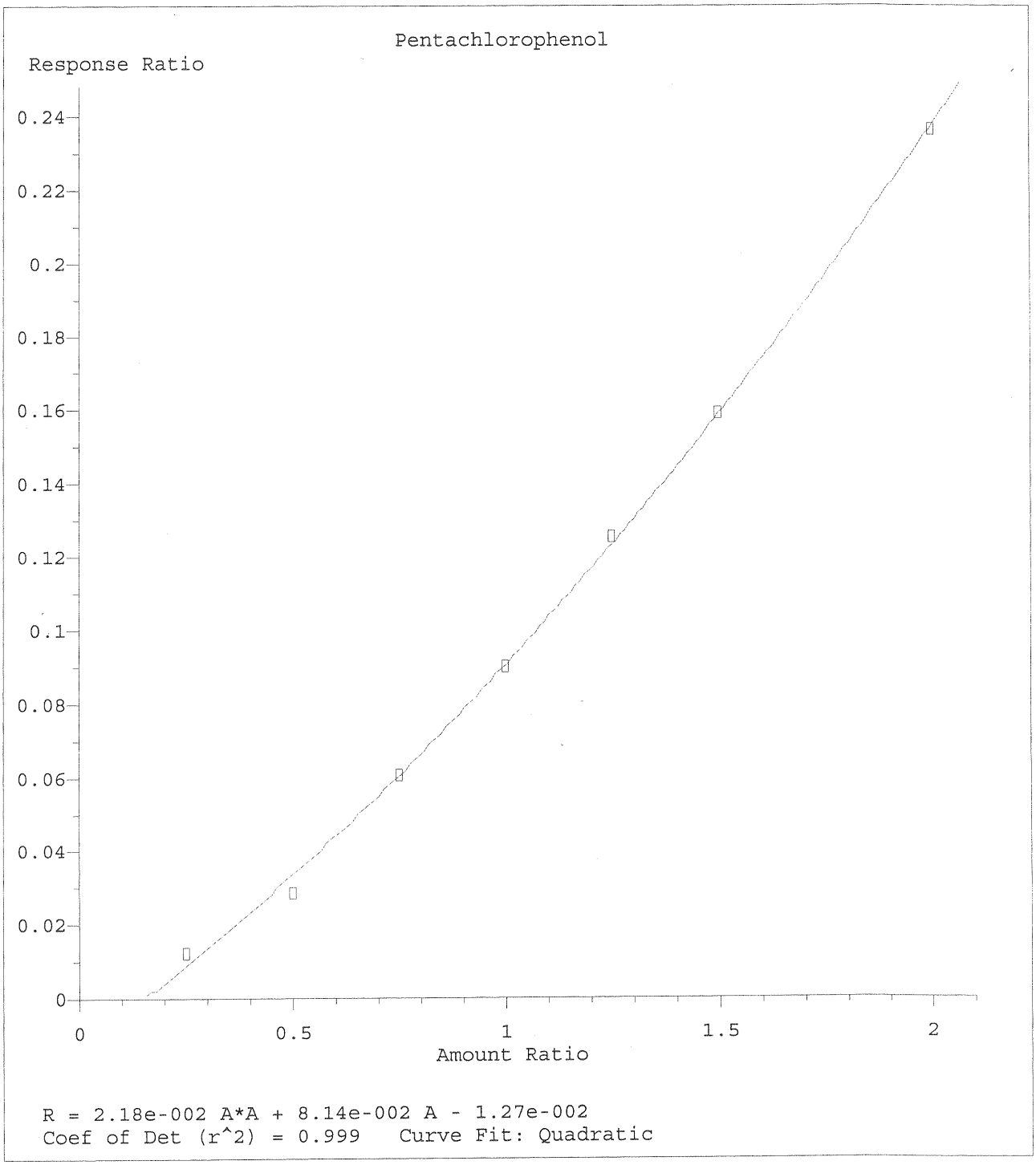
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Calibration Table Last Updated: Wed Nov 04 16:12:05 2009



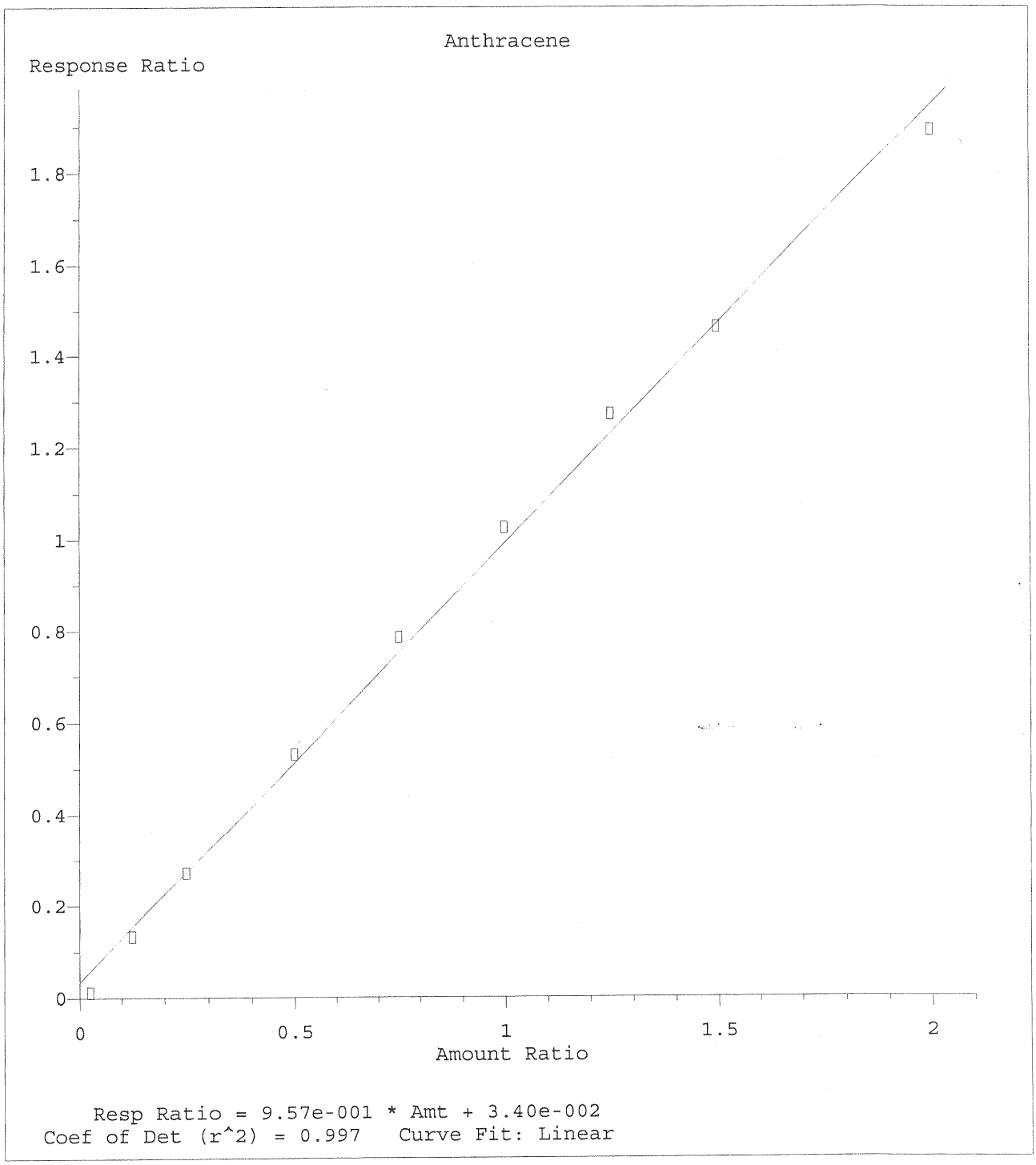
Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:12:05 2009



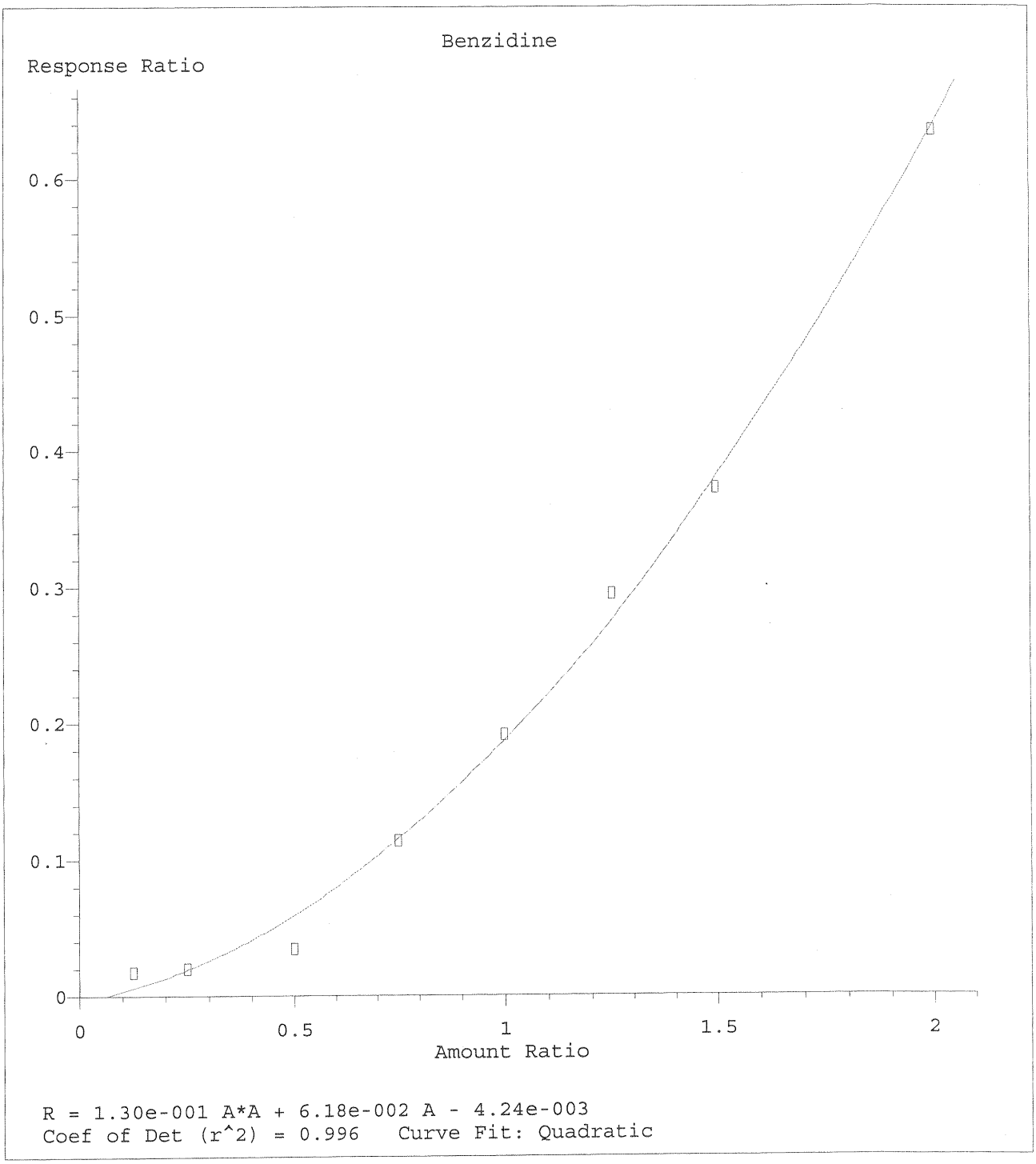
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Calibration Table Last Updated: Wed Nov 04 16:12:29 2009



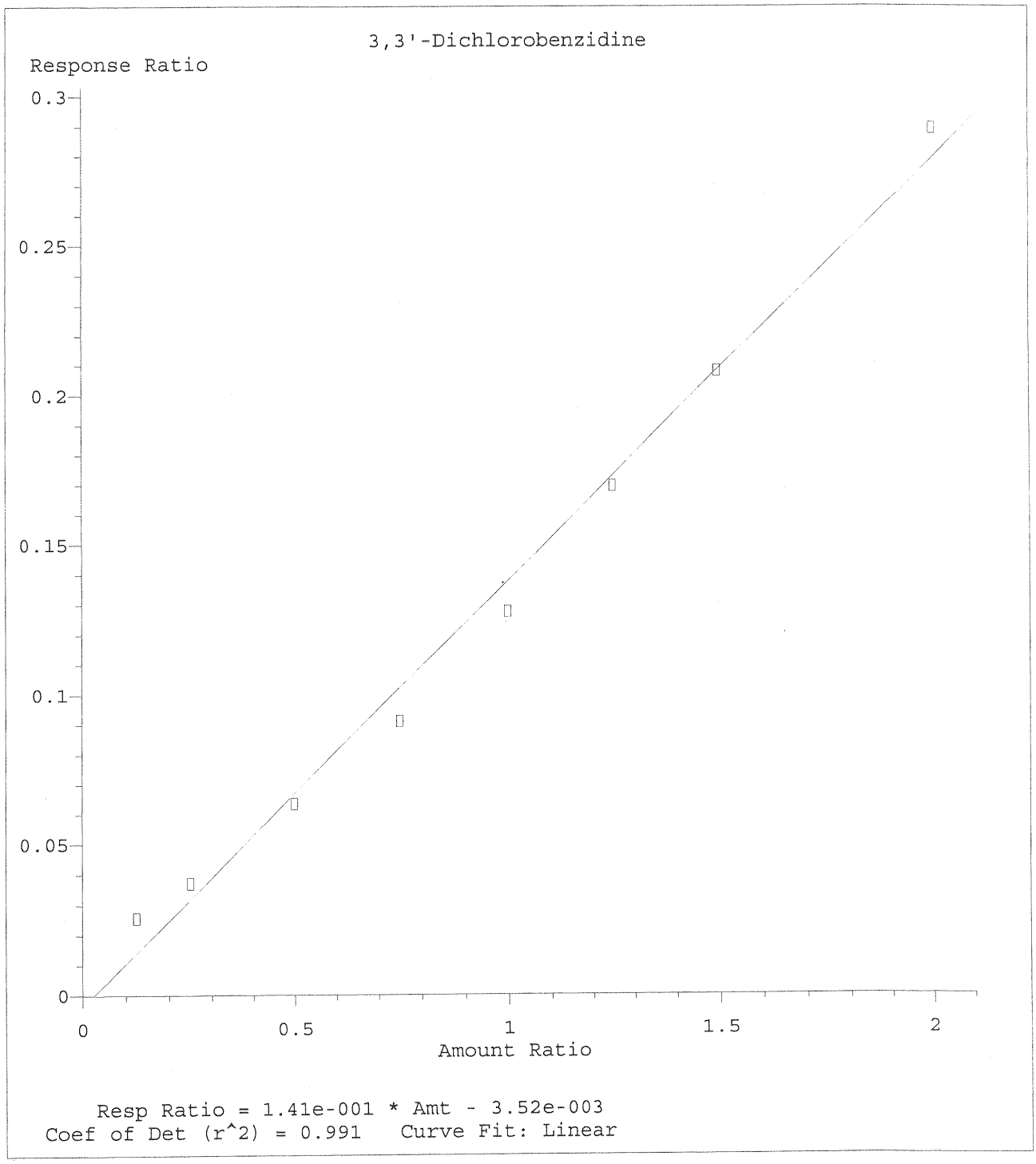
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Calibration Table Last Updated: Wed Nov 04 16:12:51 2009



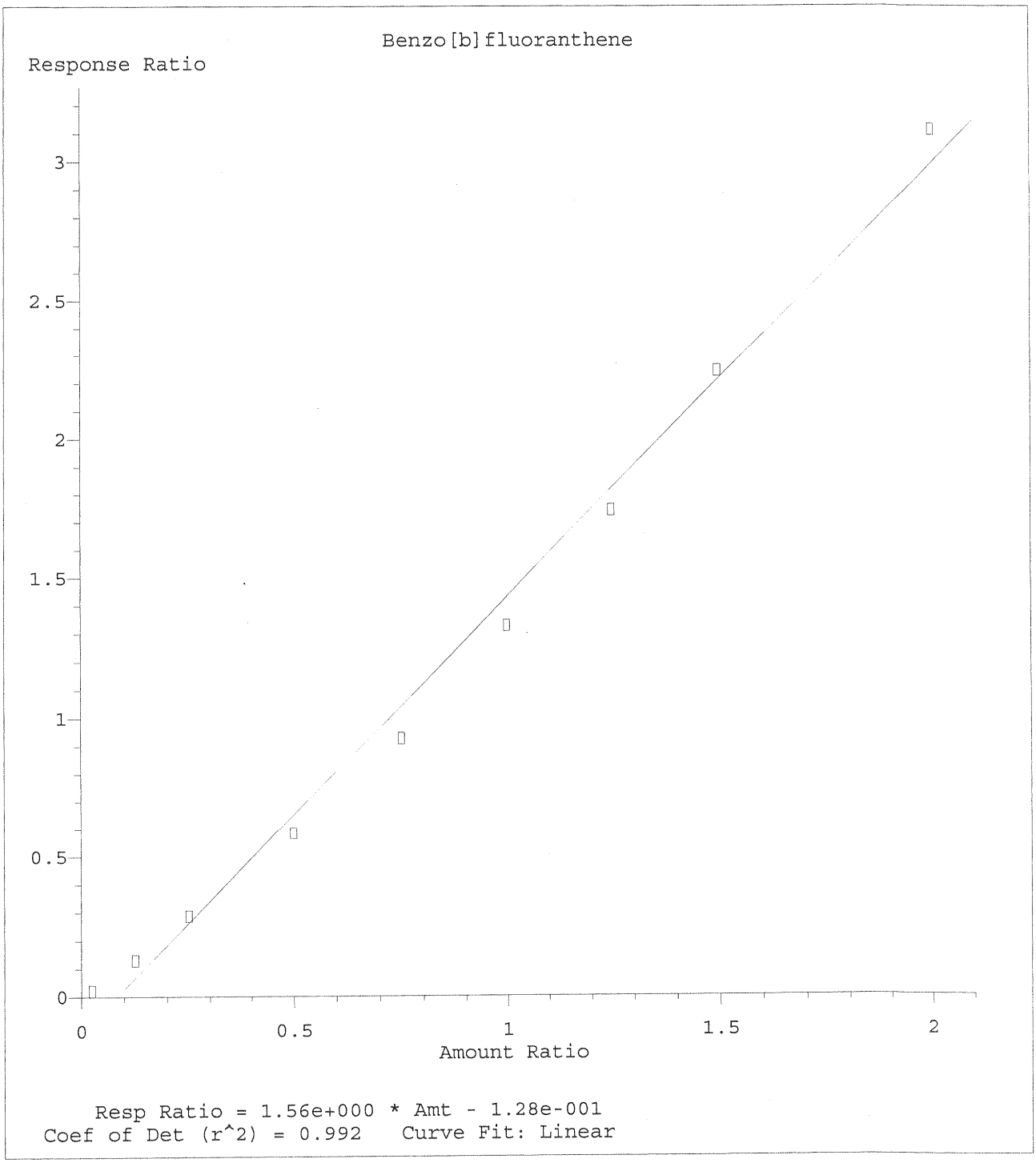
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Calibration Table Last Updated: Wed Nov 04 16:13:11 2009



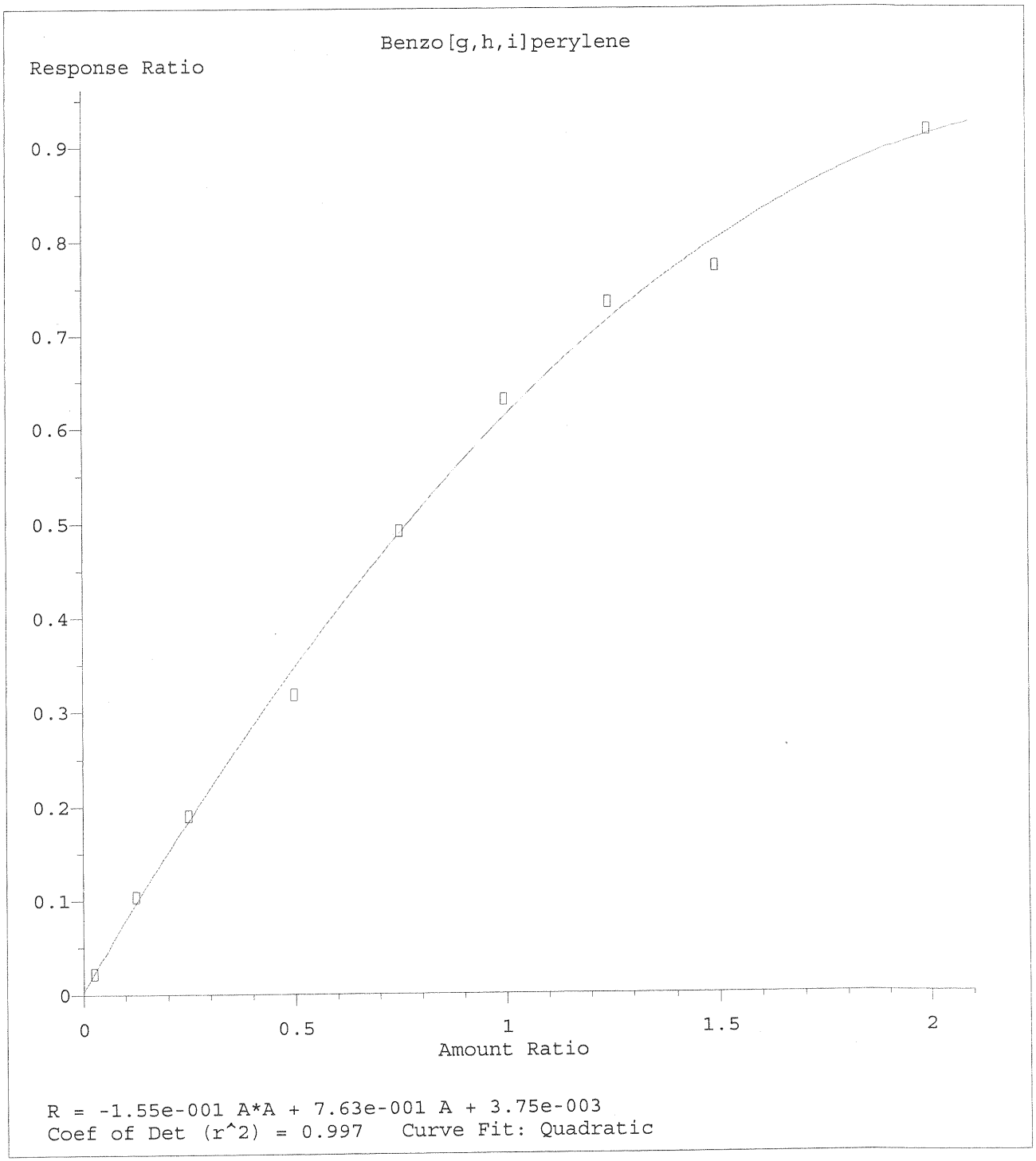
Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:13:20 2009



Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:13:37 2009



Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:13:54 2009



Method Name: C:\msdchem\1\METHODS\BNANOV03.M
Calibration Table Last Updated: Wed Nov 04 16:14:04 2009

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV17.D
Acq On : 4 Nov 2009 11:31 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 16:48:50 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2		N-Nitrosodimethylamine	0.865	0.811	6.2	88	0.00
3	T	Pyridine	1.570	1.642	-4.6	96	0.00
4	S	2-Fluorophenol	1.226	1.243	-1.4	91	0.00
5		Pentachloroethane	0.611	0.585	4.3	92	0.00
6		Aniline	1.387	1.443	-4.0	89	0.00
7	T	bis(2-Chloroethyl)ether	1.721	1.539	10.6	97	0.00
8	S	Phenol-d5	1.319	1.417	-7.4	91	0.00
9	M*	Phenol	1.474	1.582	-7.3	91	0.00
10	M	2-Chlorophenol	1.328	1.372	-3.3	96	0.00
11	T	1,3-Dichlorobenzene	1.570	1.597	-1.7	99	0.00
12	M*	1,4-Dichlorobenzene	1.621	1.616	0.3	99	0.00
13	T	1,2-Dichlorobenzene	1.548	1.588	-2.6	99	0.00
14	T	Benzyl alcohol	0.832	0.888	-6.7	99	0.00
15	T	bis(2-chloroisopropyl)ether	2.545	2.537	0.3	98	0.00
16	T	2-Methylphenol	1.178	1.220	-3.6	97	0.00
17	T	Hexachloroethane	0.587	0.575	2.0	98	0.00
18	M**	N-Nitroso-di-n-propylamine	0.931	0.925	0.6	94	0.00
19	T	4-Methylphenol,3-Methylphen	1.188	1.202	-1.2	95	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00
21	S	Nitrobenzene-d5	0.324	0.334	-3.1	93	0.00
22	T	Nitrobenzene	0.359	0.352	1.9	98	0.00
23	T	Isophorone	0.703	0.708	-0.7	99	0.00
24	T*	2-Nitrophenol	0.137	0.148	-8.0	122	0.00
25	T	2,4-Dimethylphenol	0.341	0.333	2.3	93	0.00
26	T	bis(2-Chloroethoxy)methane	0.366	0.408	-11.5	99	0.00
27	T*	2,4-Dichlorophenol	0.259	0.259	0.0	95	0.00
28	M	1,2,4-Trichlorobenzene	0.345	0.342	0.9	96	0.00
29	T	Naphthalene	0.990	1.019	-2.9	101	0.00
30	T	4-Chloroaniline	0.190	0.201	-5.8	115	-0.02
31	T	Benzoic Acid	0.142	0.143	-0.7	89	0.00
32	T*	Hexachlorobutadiene	0.191	0.212	-11.0	107	0.00
33	M*	4-Chloro-3-methylphenol	0.279	0.296	-6.1	96	0.00
34	T	2-Methylnaphthalene	0.729	0.771	-5.8	102	0.00
35		1-Methylnaphthalene	0.677	0.648	4.3	94	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	0.120	0.128	-6.7	89	0.00
38	T*	2,4,6-Trichlorophenol	0.340	0.338	0.6	95	0.00
39	T	2,4,5-Trichlorophenol	0.313	0.337	-7.7	102	0.00
40	S	2-Fluorobiphenyl	1.306	1.236	5.4	93	0.00
41	T	2-Chloronaphthalene	1.051	1.111	-5.7	103	0.00
42	T	2-Nitroaniline	0.291	0.292	-0.3	96	0.00
43		1,4-Dinitrobenzene	0.184	0.198	-7.6	94	0.00
44	T	Acenaphthylene	1.737	1.807	-4.0	101	0.00

46		1,3-Dinitrobenzene	0.173	0.182	-5.2	97	-0.04
47		1,2-Dinitrobenzene	0.131	0.133	-1.5	93	0.00
48	T	2,6-Dinitrotoluene	0.282	0.294	-4.3	102	0.00
49	M*	Acenaphthene	1.089	1.115	-2.4	102	0.00
50	T	3-Nitroaniline	0.335	0.343	-2.4	95	0.00
51	T**	2,4-Dinitrophenol	0.136	0.166	-22.1	111	0.00
52	T	Dibenzofuran	1.470	1.550	-5.4	103	0.00
53		2,3,5,6-Tetrachlorophenol	0.226	0.244	-8.0	96	0.00
54		2,3,4,6-Tetrachlorophenol	0.242	0.224	7.4	91	0.00
55	M	2,4-Dinitrotoluene	0.358	0.395	-10.3	105	0.00
56	M**	4-Nitrophenol	0.108	0.112	-3.7	84	0.00
57	T	Fluorene	1.164	1.195	-2.7	101	0.00
58	T	4-Chlorophenyl-phenylether	0.540	0.537	0.6	96	0.00
59	T	Diethylphthalate	1.220	1.213	0.6	98	0.00
60	T	1,2-Diphenylhydrazine (Azob	1.186	1.254	-5.7	100	0.00
61	T	4-Nitroaniline	0.155	0.141	9.0	86	0.01
62							
63	I	Phenanthrene-d10	1.000	1.000	0.0	99	0.00
64	T	4,6-Dinitro-2-methylphenol	0.117	0.135	-15.4	104	0.00
65	T*	n-Nitrosodiphenylamine	0.498	0.432	13.3	90	0.00
66	S	2,4,6-Tribromophenol	0.100	0.101	-1.0	95	0.00
67	T	4-Bromophenyl-phenylether	0.221	0.215	2.7	96	0.00
68	T	Hexachlorobenzene	0.239	0.244	-2.1	103	0.00
69	M*	Pentachlorophenol	0.086	0.109	-26.7	120	0.00
70	T	Phenanthrene	1.010	1.043	-3.3	103	0.00
71	T	Anthracene	0.965	1.092	-13.2	105	0.00
72	T	Carbazole	0.827	0.840	-1.6	93	0.00
73	T	Di-n-butylphthalate	1.219	1.220	-0.1	99	0.00
74	T*	Fluoranthene	1.050	1.135	-8.1	107	0.00
75	I	Chrysene-d12	1.000	1.000	0.0	103	0.00
76	M	Pyrene	1.216	1.219	-0.2	104	0.00
77		Benzidine	0.179	0.174	2.8	94	0.00
78	S	Terphenyl-d14	0.756	0.707	6.5	98	0.00
79		3,3'-Dimethylbenzidine	0.342	0.364	-6.4	106	0.00
80	T	Butylbenzylphthalate	0.555	0.564	-1.6	105	0.00
81		bis(2-ethylhexyl)adipate	0.493	0.452	8.3	96	0.00
82	T	3,3'-Dichlorobenzidine	0.144	0.172	-19.4	139	-0.04
83	T	Benzo[a]anthracene	1.051	1.122	-6.8	107	0.00
84	T	Chrysene	1.007	1.023	-1.6	106	0.00
85	T	bis(2-Ethylhexyl)phthalate	0.788	0.776	1.5	104	0.00
86							
87	I	Perylene-d12	1.000	1.000	0.0	95	0.00
88	T*	Di-n-octylphthalate	1.705	1.868	-9.6	101	0.00
89	T	Benzo[b]fluoranthene	1.246	1.391	-11.6	99	0.00
90	T	Benzo[k]fluoranthene	1.299	1.371	-5.5	102	0.00
91	T*	Benzo[a]pyrene	1.158	1.262	-9.0	97	0.00
92	T	Indeno[1,2,3-cd]pyrene	0.860	0.861	-0.1	95	0.00
93	T	Dibenz[a,h]anthracene	0.697	0.730	-4.7	99	0.00
94	T	Benzo[g,h,i]perylene	0.662	0.642	3.0	96	0.00

---

95 (#) = Out of Range SPCC's out = 0 CCC's out = 0

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97 BNANOV03.M Wed Nov 04 16:49:22 2009 MSD5

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Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV17.D
Acq On : 4 Nov 2009 11:31 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 16:48:50 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00
2		N-Nitrosodimethylamine	40.000	37.511	6.2	88	0.00
3	T	Pyridine	40.000	41.841	-4.6	96	0.00
4	S	2-Fluorophenol	40.000	40.548	-1.4	91	0.00
5		Pentachloroethane	40.000	38.299	4.3	92	0.00
6		Aniline	40.000	38.230	4.4	89	0.00
7	T	bis(2-Chloroethyl)ether	40.000	39.367	1.6	97	0.00
8	S	Phenol-d5	40.000	38.434	3.9	91	0.00
9	M*	Phenol	40.000	38.548	3.6	91	0.00
10	M	2-Chlorophenol	40.000	41.328	-3.3	96	0.00
11	T	1,3-Dichlorobenzene	40.000	40.677	-1.7	99	0.00
12	M*	1,4-Dichlorobenzene	40.000	39.894	0.3	99	0.00
13	T	1,2-Dichlorobenzene	40.000	41.044	-2.6	99	0.00
14	T	Benzyl alcohol	40.000	42.706	-6.8	99	0.00
15	T	bis(2-chloroisopropyl)ether	40.000	39.870	0.3	98	0.00
16	T	2-Methylphenol	40.000	41.416	-3.5	97	0.00
17	T	Hexachloroethane	40.000	39.243	1.9	98	0.00
18	M**	N-Nitroso-di-n-propylamine	40.000	39.730	0.7	94	0.00
19	T	4-Methylphenol,3-Methylphen	40.000	40.470	-1.2	95	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	98	0.00
21	S	Nitrobenzene-d5	40.000	41.337	-3.3	93	0.00
22	T	Nitrobenzene	40.000	39.234	1.9	98	0.00
23	T	Isophorone	40.000	40.238	-0.6	99	0.00
24	T*	2-Nitrophenol	40.000	43.416	-8.5	122	0.00
25	T	2,4-Dimethylphenol	40.000	39.123	2.2	93	0.00
26	T	bis(2-Chloroethoxy)methane	40.000	41.570	-3.9	99	0.00
27	T*	2,4-Dichlorophenol	40.000	39.972	0.1	95	0.00
28	M	1,2,4-Trichlorobenzene	40.000	39.729	0.7	96	0.00
29	T	Naphthalene	40.000	41.182	-3.0	101	0.00
30	T	4-Chloroaniline	40.000	45.545	-13.9	115	-0.02
31	T	Benzoic Acid	40.000	35.939	10.2	89	0.00
32	T*	Hexachlorobutadiene	40.000	44.336	-10.8	107	0.00
33	M*	4-Chloro-3-methylphenol	40.000	42.369	-5.9	96	0.00
34	T	2-Methylnaphthalene	40.000	42.321	-5.8	102	0.00
35		1-Methylnaphthalene	40.000	38.290	4.3	94	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	40.000	38.250	4.4	89	0.00
38	T*	2,4,6-Trichlorophenol	40.000	39.841	0.4	95	0.00
39	T	2,4,5-Trichlorophenol	40.000	42.996	-7.5	102	0.00
40	S	2-Fluorobiphenyl	40.000	37.868	5.3	93	0.00
41	T	2-Chloronaphthalene	40.000	42.317	-5.8	103	0.00
42	T	2-Nitroaniline	40.000	40.189	-0.5	96	0.00
43		1,4-Dinitrobenzene	40.000	39.354	1.6	94	0.00
44	T	Acenaphthylene	40.000	41.590	-4.0	101	0.00

35	I	Dimethylphthalate	40.000	39.223	1.9	97	0.00
36		1,3-Dinitrobenzene	40.000	42.117	-5.3	97	-0.04
37		1,2-Dinitrobenzene	40.000	40.628	-1.6	93	0.00
38	T	2,6-Dinitrotoluene	40.000	41.693	-4.2	102	0.00
39	M*	Acenaphthene	40.000	40.977	-2.4	102	0.00
40	T	3-Nitroaniline	40.000	40.942	-2.4	95	0.00
41	T**	2,4-Dinitrophenol	40.000	42.701	-6.8	111	0.00
42	T	Dibenzofuran	40.000	42.184	-5.5	103	0.00
43		2,3,5,6-Tetrachlorophenol	40.000	38.499	3.8	96	0.00
44		2,3,4,6-Tetrachlorophenol	40.000	38.563	3.6	91	0.00
45	M	2,4-Dinitrotoluene	40.000	44.107	-10.3	105	0.00
46	M**	4-Nitrophenol	40.000	36.350	9.1	84	0.00
47	T	Fluorene	40.000	41.054	-2.6	101	0.00
48	T	4-Chlorophenyl-phenylether	40.000	39.723	0.7	96	0.00
49	T	Diethylphthalate	40.000	39.769	0.6	98	0.00
50	T	1,2-Diphenylhydrazine (Azob	40.000	42.292	-5.7	100	0.00
51	T	4-Nitroaniline	40.000	36.324	9.2	86	0.01
52							
52	I	Phenanthrene-d10	40.000	40.000	0.0	99	0.00
53	T	4,6-Dinitro-2-methylphenol	40.000	46.393	-16.0	104	0.00
54	T*	n-Nitrosodiphenylamine	40.000	36.257	9.4	90	0.00
55	S	2,4,6-Tribromophenol	40.000	40.136	-0.3	95	0.00
56	T	4-Bromophenyl-phenylether	40.000	38.932	2.7	96	0.00
57	T	Hexachlorobenzene	40.000	40.886	-2.2	103	0.00
58	M*	Pentachlorophenol	40.000	45.756	-14.4	120	0.00
59	T	Phenanthrene	40.000	41.331	-3.3	103	0.00
60	T	Anthracene	40.000	44.208	-10.5	105	0.00
61	T	Carbazole	40.000	40.614	-1.5	93	0.00
62	T	Di-n-butylphthalate	40.000	40.061	-0.2	99	0.00
63	T*	Fluoranthene	40.000	43.241	-8.1	107	0.00
64							
64	I	Chrysene-d12	40.000	40.000	0.0	103	0.00
65	M	Pyrene	40.000	40.117	-0.3	104	0.00
66		Benzidine	40.000	38.326	4.2	94	0.00
67	S	Terphenyl-d14	40.000	37.401	6.5	98	0.00
68		3,3'-Dimethylbenzidine	40.000	42.488	-6.2	106	0.00
69	T	Butylbenzylphthalate	40.000	40.620	-1.5	105	0.00
70		bis(2-ethylhexyl)adipate	40.000	36.663	8.3	96	0.00
71	T	3,3'-Dichlorobenzidine	40.000	49.910	-24.8	139	-0.04
72	T	Benzo[a]anthracene	40.000	42.714	-6.8	107	0.00
73	T	Chrysene	40.000	40.640	-1.6	106	0.00
74	T	bis(2-Ethylhexyl)phthalate	40.000	39.372	1.6	104	0.00
75							
85	I	Perylene-d12	40.000	40.000	0.0	95	0.00
86	T*	Di-n-octylphthalate	40.000	43.807	-9.5	101	0.00
87	T	Benzo[b]fluoranthene	40.000	39.020	2.4	99	0.00
88	T	Benzo[k]fluoranthene	40.000	42.218	-5.5	102	0.00
89	T*	Benzo[a]pyrene	40.000	43.570	-8.9	97	0.00
90	T	Indeno[1,2,3-cd]pyrene	40.000	40.033	-0.1	95	0.00
91	T	Dibenz[a,h]anthracene	40.000	41.851	-4.6	99	0.00
92	T	Benzo[g,h,i]perylene	40.000	42.699	-6.7	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ANOV03.M Wed Nov 04 16:49:35 2009 MSD5

Injection Log

Data Directory: C:\msdchem\1\DATA\2009\10oct09\OCT1909\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 19OCT01.D CAL BLANK	BLANK, 10uL MI90302	1	1.000	19 Oct 2009 11:57 am
2) 19OCT02.D 50PPM TAIL CHK	50ng TAILING CHECK	99	1.000	19 Oct 2009 12:37 pm
3) 19OCT03.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	19 Oct 2009 1:14 pm
4) 19OCT04.D 40 ug/mL CCC	400uL MI90905>1mL	2	1.000	19 Oct 2009 1:51 pm
5) 19OCT05.D CCB	CONT CAL BLANK	1	1.000	19 Oct 2009 2:27 pm
6) 19OCT06.D [redacted]	[redacted]	3	1.000	19 Oct 2009 3:04 pm
7) 19OCT07.D [illegible]2162-BLK1	1,METHOD BLANK,BNAwx	4	1.000	19 Oct 2009 3:41 pm
8) 19OCT08.D [illegible]42162-BS1	1,50PPM LCS,BNAwx,10	5	1.000	19 Oct 2009 4:17 pm
9) 19OCT09.D 09J0523-01	1,SEVERSTAL,BNAwx,91	6	1.000	19 Oct 2009 4:54 pm
10) 19OCT10.D 09J0523-02	1,SEVERSTAL,BNAwx,92	7	1.000	19 Oct 2009 5:31 pm
11) 19OCT11.D 09J0523-03	1,SEVERSTAL,BNAwx,92	8	1.000	19 Oct 2009 6:07 pm
12) 19OCT12.D 09J0523-04	1,SEVERSTAL,BNAwx,92	9	1.000	19 Oct 2009 6:44 pm
13) 19OCT13.D 09J0523-05	1,SEVERSTAL,BNAwx,91	10	1.000	19 Oct 2009 7:21 pm
14) 19OCT14.D 09J0523-06	1,SEVERSTAL,BNAwx,91	11	1.000	19 Oct 2009 7:57 pm
15) 19OCT15.D 09J0523-07	1,SEVERSTAL,BNAwx,90	12	1.000	19 Oct 2009 8:34 pm
16) 19OCT16.D 09J0523-08	1,SEVERSTAL,BNAwx,92	13	1.000	19 Oct 2009 9:10 pm
17) 19OCT17.D 09J0523-09	1,SEVERSTAL,BNAwx,91	14	1.000	19 Oct 2009 9:47 pm
18) 19OCT18.D 09J0523-10	1,SEVERSTAL,BNAwx,95	15	1.000	19 Oct 2009 10:24 pm
19) 19OCT19.D 09J0523-11	1,SEVERSTAL,BNAwx,92	16	1.000	19 Oct 2009 11:00 pm
20) 19OCT20.D 09J0523-12	1,SEVERSTAL,BNAwx,92	17	1.000	19 Oct 2009 11:37 pm
21) 19OCT21.D				

0J0523-13 1,SEVERSTAL,BNAwx,92 18 1.000 20 Oct 2009 12:14 am

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22) 19OCT22.D
0942162-MS1 1,50PPM MS,BNAwx,900 19 1.000 20 Oct 2009 12:50 am

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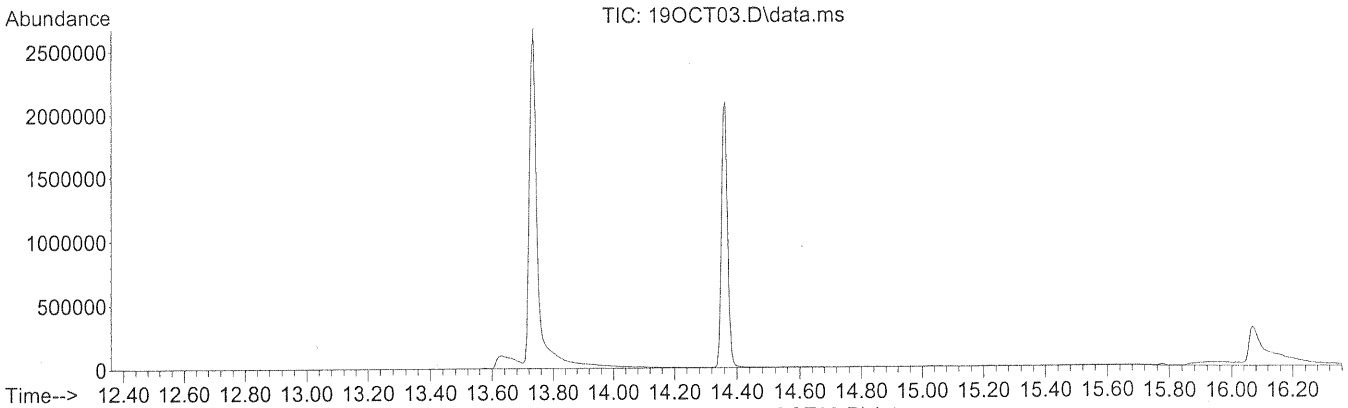
23) 19OCT23.D
0942162-MSD1 1,50PPM MSD,BNAwx,91 20 1.000 20 Oct 2009 1:27 am

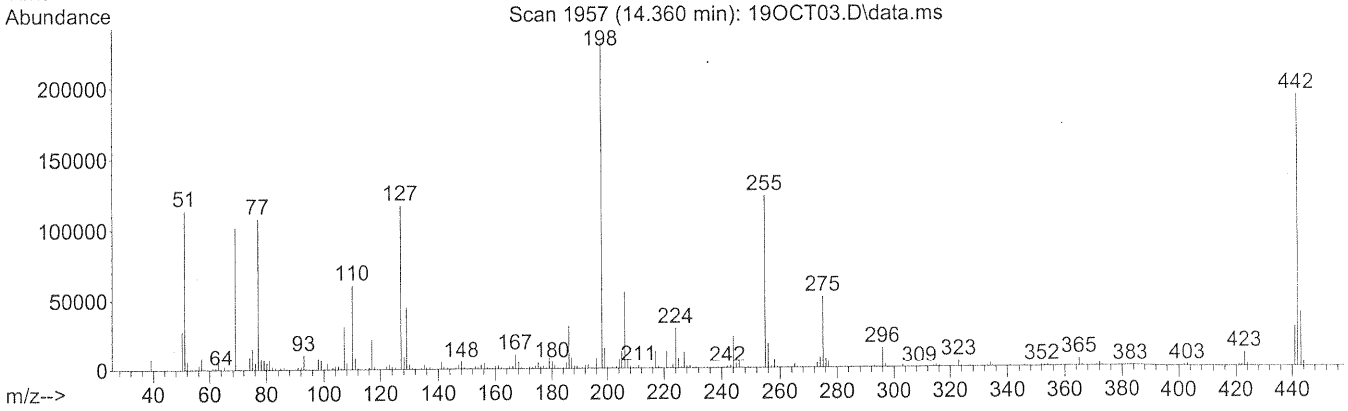
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Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT03.D
Acq On : 19 Oct 2009 1:14 pm
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNASEP29A.M
Title : 8270/625 BNA Calibration
Last Update : Mon Oct 19 11:07:20 2009





Spectrum Information: Scan 1957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.2	113912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	102176	PASS
70	69	0.00	2	0.4	411	PASS
127	198	40	60	50.6	117240	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	231744	PASS
199	198	5	9	6.6	15306	PASS
275	198	10	30	22.1	51328	PASS
365	198	1	100	2.7	6154	PASS
441	443	0.01	100	73.4	29040	PASS
442	198	40	100	83.5	193600	PASS
443	442	17	23	20.4	39568	PASS

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\10oct09\OCT1909\19OCT03.D
Tune Time : 19 Oct 2009 1:14 pm

Daily Calibration File : C:\msdchem\1\DATA\2009\10oct09\OCT1909\19OCT04.D

(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				509218	1983130	1119800

(TBP)	(TPH)	(PHN)	(CRY)	(PRY)
		1808710	1718950	1320630

File	Sample	Surrogate Recovery %				Internal Standard Responses		
19OCT04.D								
	40 ug/mL C	55	53	75	77	509218	1983133	1119804
		47	69			1808709	1718952	1320625
19OCT05.D								
	CCB	0*	0*	0*	0*	630105	2464876	1377173
		0*	0*			1979448	1942188	1552406
19OCT06.D								
	[redacted]	51	33	66	72	607665	2395026	1295941
		66	57			2041297	1904739	1503765
19OCT07.D								
	0942162-BL	46	30	68	77	541752	2141999	1175558
		71	80			1860779	1646498	1340226
19OCT08.D								
	0942162-BS	54	38	74	78	511963	2034576	1182351
		82	78			1994337	1854042	1257440
19OCT09.D								
	09J0523-01	45	31	62	69	572135	2214775	1202873
		72	77			1923746	1652267	1300644
19OCT10.D								
	09J0523-02	46	31	65	70	561228	2150397	1187759
		76	77			1843034	1678229	1288680
19OCT11.D								
	09J0523-03	49	32	65	74	590260	2270323	1214740
		75	79			1957073	1757675	1353328
19OCT12.D								
	09J0523-04	47	31	63	70	577843	2226738	1218406
		69	78			1906092	1669378	1280134
19OCT13.D								
	09J0523-05	41	28	56	65	574568	2236082	1208195
		65	72			1899550	1724551	1312897
19OCT14.D								
	09J0523-06	43	30	59	65	586667	2274289	1258939
		71	78			1982847	1817403	1366873
19OCT15.D								
	09J0523-07	42	29	56	63	587556	2309872	1249569
		69	76			2013115	1837234	1352888
19OCT16.D								
	09J0523-08	42	30	59	65	565256	2197292	1201111
		64	75			1884577	1689409	1254869
19OCT17.D								

	09J0523-09	40	28	52	57	633042	2487939	1365343
		54	58			2190447	2008934	1510445
19OCT18.D								
	09J0523-10	45	32	75	74	584678	1940772	1218168
		87	185*			2098397	716469*	186803*
19OCT19.D								
	09J0523-11	44	30	58	65	625098	2420932	1324833
		68	69			2173044	1914785	884138
19OCT20.D								
	09J0523-12	42	29	61	63	662535	2435968	1402443
		71	70			2180525	2033756	852952
19OCT21.D								
	09J0523-13	42	30	58	74	623694	2374487	1281064
		82	89			1977721	1581197	397903*
19OCT22.D								
	0942162-MS	34	24	45	54	582398	2196319	1222348
		78	92			1999274	1424710	379096*
19OCT23.D								
(fails)	0942162-MS	47	36	61	72	624931	2408926	1380740
		82	96			2297555	1601520	404642*

IS

Corresponding Data Flagged

IS

(fails) - fails 12hr time check * - fails criteria

Created: Wed Oct 21 13:34:45 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT04.D
Acq On : 19 Oct 2009 1:51 pm
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 21 13:03:40 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	-0.02
2		N-Nitrosodimethylamine	0.701	0.880	-25.5	117	-0.04
3	T	Pyridine	1.180	1.628	-38.0#	121	-0.02
4	S	2-Fluorophenol	1.112	1.282	-15.3	99	-0.11
5		Pentachloroethane	0.462	0.543	-17.5	96	-0.04
6		Aniline	1.217	1.217	0.0	89	-0.05
7	T	bis(2-Chloroethyl)ether	1.423	1.545	-8.6	96	-0.04
8	S	Phenol-d5	1.447	1.621	-12.0	98	-0.12
9	M*	Phenol	1.375	1.552	-12.9	99	-0.12
10	M	2-Chlorophenol	1.149	1.301	-13.2	99	-0.07
11	T	1,3-Dichlorobenzene	1.312	1.457	-11.1	99	-0.02
12	M*	1,4-Dichlorobenzene	1.368	1.460	-6.7	94	-0.02
13	T	1,2-Dichlorobenzene	1.323	1.451	-9.7	96	-0.03
14	T	Benzyl alcohol	0.708	0.817	-15.4	98	-0.06
15	T	bis(2-chloroisopropyl)ether	2.246	2.383	-6.1	93	-0.03
16	T	2-Methylphenol	1.035	1.147	-10.8	97	-0.10
17	T	Hexachloroethane	0.493	0.540	-9.5	98	-0.02
18	M**	N-Nitroso-di-n-propylamine	0.827	0.905	-9.4	96	-0.04
19	T	4-Methylphenol,3-Methylphen	1.015	1.140	-12.3	96	-0.09
20	I	Naphthalene-d8	1.000	1.000	0.0	91	-0.03
21	S	Nitrobenzene-d5	0.340	0.359	-5.6	98	-0.04
22	T	Nitrobenzene	0.336	0.320	4.8	93	-0.04
23	T	Isophorone	0.650	0.679	-4.5	92	-0.02
24	T*	2-Nitrophenol	0.164	0.184	-12.2	100	-0.03
25	T	2,4-Dimethylphenol	0.302	0.321	-6.3	98	-0.07
26	T	bis(2-Chloroethoxy)methane	0.363	0.370	-1.9	94	-0.03
27	T*	2,4-Dichlorophenol	0.229	0.235	-2.6	91	-0.07
28	M	1,2,4-Trichlorobenzene	0.300	0.307	-2.3	94	-0.03
29	T	Naphthalene	0.863	0.873	-1.2	92	-0.03
30	T	4-Chloroaniline	0.150	0.163	-8.7	100	0.00
31	T	Benzoic Acid	0.143	0.138	3.5	82	-0.09
32	T*	Hexachlorobutadiene	0.169	0.173	-2.4	94	-0.03
33	M*	4-Chloro-3-methylphenol	0.237	0.267	-12.7	100	-0.10
34	T	2-Methylnaphthalene	0.745	0.822	-10.3	92	-0.04
35		1-Methylnaphthalene	0.587	0.590	-0.5	92	-0.03
36	I	Acenaphthene-d10	1.000	1.000	0.0	93	-0.03
37	T**	Hexachlorocyclopentadiene	0.113	0.115	-1.8	78	-0.03
38	T*	2,4,6-Trichlorophenol	0.285	0.316	-10.9	91	-0.06
39	T	2,4,5-Trichlorophenol	0.270	0.321	-18.9	95	-0.07
40	S	2-Fluorobiphenyl	1.183	1.274	-7.7	90	-0.04
41	T	2-Chloronaphthalene	0.874	0.950	-8.7	93	-0.03
42	T	2-Nitroaniline	0.256	0.279	-9.0	90	-0.05
43		1,4-Dinitrobenzene	0.161	0.181	-12.4	89	-0.04
44	T	Acenaphthylene	1.451	1.560	-7.5	90	-0.04

45	T	Dimethylphthalate	1.040	1.107	-6.4	89	-0.05
46		1,3-Dinitrobenzene	0.140	0.158	-12.9	89	-0.04
47		1,2-Dinitrobenzene	0.110	0.120	-9.1	88	-0.05
48	T	2,6-Dinitrotoluene	0.231	0.249	-7.8	89	-0.04
49	M*	Acenaphthene	0.895	0.956	-6.8	90	-0.04
50	T	3-Nitroaniline	0.288	0.310	-7.6	90	-0.05
51	T**	2,4-Dinitrophenol	0.093	0.110	-18.3	86	-0.02
52	T	Dibenzofuran	1.204	1.318	-9.5	90	-0.04
53		2,3,5,6-Tetrachlorophenol	0.189	0.215	-13.8	84	-0.06
54		2,3,4,6-Tetrachlorophenol	0.190	0.218	-14.7	88	-0.06
55	M	2,4-Dinitrotoluene	0.295	0.320	-8.5	87	-0.04
56	M**	4-Nitrophenol	0.099	0.092	7.1	66	-0.09
57	T	Fluorene	0.960	1.016	-5.8	88	-0.04
58	T	4-Chlorophenyl-phenylether	0.447	0.478	-6.9	90	-0.04
59	T	Diethylphthalate	1.024	1.075	-5.0	87	-0.04
60	T	1,2-Diphenylhydrazine (Azob	1.021	1.084	-6.2	87	-0.04
61	T	4-Nitroaniline	0.122	0.125	-2.5	83	-0.01
62	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04
63	T	4,6-Dinitro-2-methylphenol	0.102	0.108	-5.9	81	-0.03
64	T*	n-Nitrosodiphenylamine	0.471	0.440	6.6	91	-0.05
65	S	2,4,6-Tribromophenol	0.097	0.097	0.0	85	-0.05
66	T	4-Bromophenyl-phenylether	0.207	0.198	4.3	87	-0.04
67	T	Hexachlorobenzene	0.227	0.213	6.2	85	-0.03
68	M*	Pentachlorophenol	0.070	0.078	-11.4	88	-0.05
69	T	Phenanthrene	0.974	0.909	6.7	84	-0.05
70	T	Anthracene	0.985	0.923	6.3	84	-0.05
71	T	Carbazole	0.807	0.734	9.0	79	-0.03
72	T	Di-n-butylphthalate	1.205	1.138	5.6	85	-0.04
73	T*	Fluoranthene	1.052	0.971	7.7	83	-0.05
74	I	Chrysene-d12	1.000	1.000	0.0	99	-0.06
75	M	Pyrene	1.089	1.059	2.8	82	-0.05
76		Benzidine	0.261	0.152	41.8#	40	-0.04
77	S	Terphenyl-d14	0.759	0.732	3.6	80	-0.05
78		3,3'-Dimethylbenzidine	0.382	0.305	20.2	63	-0.07
79	T	Butylbenzylphthalate	0.508	0.496	2.4	82	-0.06
80		bis(2-ethylhexyl)adipate	0.459	0.443	3.5	81	-0.06
81	T	3,3'-Dichlorobenzidine	0.155	0.125	19.4	74	0.00
82	T	Benzo[a]anthracene	0.994	0.949	4.5	78	-0.06
83	T	Chrysene	0.901	0.878	2.6	81	-0.06
84	T	bis(2-Ethylhexyl)phthalate	0.727	0.694	4.5	80	-0.06
85	I	Perylene-d12	1.000	1.000	0.0	98	-0.07
86	T*	Di-n-octylphthalate	1.633	1.600	2.0	77	-0.07
87	T	Benzo[b]fluoranthene	1.284	1.163	9.4	70	-0.07
88	T	Benzo[k]fluoranthene	1.105	1.137	-2.9	81	-0.07
89	T*	Benzo[a]pyrene	1.131	1.113	1.6	76	-0.07
90	T	Indeno[1,2,3-cd]pyrene	0.811	0.656	19.1	67	-0.07
91	T	Dibenz[a,h]anthracene	0.669	0.538	19.6	67	-0.07
92	T	Benzo[g,h,i]perylene	0.597	0.465	22.1	66	-0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BNASEP29A.M Wed Oct 21 13:04:20 2009 MSD5

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT04.D
Acq On : 19 Oct 2009 1:51 pm
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 21 13:03:40 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	93	-0.02
2		N-Nitrosodimethylamine	40.000	44.617	-11.5	117	-0.04
3	T	Pyridine	40.000	49.067	-22.7	121	-0.02
4	S	2-Fluorophenol	40.000	40.992	-2.5	99	-0.11
5		Pentachloroethane	40.000	40.310	-0.8	96	-0.04
6		Aniline	40.000	33.947	15.1	89	-0.05
7	T	bis(2-Chloroethyl)ether	40.000	38.608	3.5	96	-0.04
8	S	Phenol-d5	40.000	39.828	0.4	98	-0.12
9	M*	Phenol	40.000	40.136	-0.3	99	-0.12
10	M	2-Chlorophenol	40.000	40.248	-0.6	99	-0.07
11	T	1,3-Dichlorobenzene	40.000	39.489	1.3	99	-0.02
12	M*	1,4-Dichlorobenzene	40.000	37.924	5.2	94	-0.02
13	T	1,2-Dichlorobenzene	40.000	38.989	2.5	96	-0.03
14	T	Benzyl alcohol	40.000	41.027	-2.6	98	-0.06
15	T	bis(2-chloroisopropyl)ether	40.000	37.721	5.7	93	-0.03
16	T	2-Methylphenol	40.000	39.417	1.5	97	-0.10
17	T	Hexachloroethane	40.000	39.001	2.5	98	-0.02
18	M**	N-Nitroso-di-n-propylamine	40.000	38.933	2.7	96	-0.04
19	T	4-Methylphenol,3-Methylphen	40.000	39.933	0.2	96	-0.09
20	I	Naphthalene-d8	40.000	40.000	0.0	91	-0.03
21	S	Nitrobenzene-d5	40.000	37.550	6.1	98	-0.04
22	T	Nitrobenzene	40.000	34.094	14.8	93	-0.04
23	T	Isophorone	40.000	37.127	7.2	92	-0.02
24	T*	2-Nitrophenol	40.000	39.767	0.6	100	-0.03
25	T	2,4-Dimethylphenol	40.000	37.773	5.6	98	-0.07
26	T	bis(2-Chloroethoxy)methane	40.000	36.201	9.5	94	-0.03
27	T*	2,4-Dichlorophenol	40.000	36.518	8.7	91	-0.07
28	M	1,2,4-Trichlorobenzene	40.000	36.388	9.0	94	-0.03
29	T	Naphthalene	40.000	35.968	10.1	92	-0.03
30	T	4-Chloroaniline	40.000	38.709	3.2	100	0.00
31	T	Benzoic Acid	40.000	32.080	19.8	82	-0.09
32	T*	Hexachlorobutadiene	40.000	36.534	8.7	94	-0.03
33	M*	4-Chloro-3-methylphenol	40.000	40.139	-0.3	100	-0.10
34	T	2-Methylnaphthalene	40.000	35.448	11.4	92	-0.04
35		1-Methylnaphthalene	40.000	35.738	10.7	92	-0.03
36	I	Acenaphthene-d10	40.000	40.000	0.0	93	-0.03
37	T**	Hexachlorocyclopentadiene	40.000	33.201	17.0	78	-0.03
38	T*	2,4,6-Trichlorophenol	40.000	39.509	1.2	91	-0.06
39	T	2,4,5-Trichlorophenol	40.000	42.259	-5.6	95	-0.07
40	S	2-Fluorobiphenyl	40.000	38.298	4.3	90	-0.04
41	T	2-Chloronaphthalene	40.000	38.639	3.4	93	-0.03
42	T	2-Nitroaniline	40.000	38.745	3.1	90	-0.05
43		1,4-Dinitrobenzene	40.000	39.945	0.1	89	-0.04
44	T	Acenaphthylene	40.000	38.221	4.4	90	-0.04

45	T	Dimethylphthalate	40.000	37.856	5.4	89	-0.05
46		1,3-Dinitrobenzene	40.000	40.227	-0.6	89	-0.04
47		1,2-Dinitrobenzene	40.000	39.083	2.3	88	-0.05
48	T	2,6-Dinitrotoluene	40.000	38.335	4.2	89	-0.04
49	M*	Acenaphthene	40.000	37.997	5.0	90	-0.04
50	T	3-Nitroaniline	40.000	38.278	4.3	90	-0.05
51	T**	2,4-Dinitrophenol	40.000	38.375	4.1	86	-0.02
52	T	Dibenzofuran	40.000	38.934	2.7	90	-0.04
53		2,3,5,6-Tetrachlorophenol	40.000	36.063	9.8	84	-0.06
54		2,3,4,6-Tetrachlorophenol	40.000	37.259	6.9	88	-0.06
55	M	2,4-Dinitrotoluene	40.000	38.558	3.6	87	-0.04
56	M**	4-Nitrophenol	40.000	31.232	21.9	66	-0.09
57	T	Fluorene	40.000	37.646	5.9	88	-0.04
58	T	4-Chlorophenyl-phenylether	40.000	38.007	5.0	90	-0.04
59	T	Diethylphthalate	40.000	37.339	6.7	87	-0.04
60	T	1,2-Diphenylhydrazine (Azob	40.000	37.770	5.6	87	-0.04
61	T	4-Nitroaniline	40.000	36.330	9.2	83	-0.01
62	I	Phenanthrene-d10	40.000	40.000	0.0	105	-0.04
63	T	4,6-Dinitro-2-methylphenol	40.000	33.609	16.0	81	-0.03
64	T*	n-Nitrosodiphenylamine	40.000	34.990	12.5	91	-0.05
65	S	2,4,6-Tribromophenol	40.000	35.561	11.1	85	-0.05
66	T	4-Bromophenyl-phenylether	40.000	33.943	15.1	87	-0.04
67	T	Hexachlorobenzene	40.000	33.389	16.5	85	-0.03
68	M*	Pentachlorophenol	40.000	37.561	6.1	88	-0.05
69	T	Phenanthrene	40.000	33.190	17.0	84	-0.05
70	T	Anthracene	40.000	33.290	16.8	84	-0.05
71	T	Carbazole	40.000	32.335	19.2	79	-0.03
72	T	Di-n-butylphthalate	40.000	33.598	16.0	85	-0.04
73	T*	Fluoranthene	40.000	32.821	17.9	83	-0.05
74	I	Chrysene-d12	40.000	40.000	0.0	99	-0.06
75	M	Pyrene	40.000	34.588	13.5	82	-0.05
76		Benzidine	40.000	23.267	41.8#	40	-0.04
77	S	Terphenyl-d14	40.000	34.312	14.2	80	-0.05
78		3,3'-Dimethylbenzidine	40.000	28.366	29.1	63	-0.07
79	T	Butylbenzylphthalate	40.000	34.689	13.3	82	-0.06
80		bis(2-ethylhexyl)adipate	40.000	34.294	14.3	81	-0.06
81	T	3,3'-Dichlorobenzidine	40.000	30.427	23.9	74	0.00
82	T	Benzo[a]anthracene	40.000	33.946	15.1	78	-0.06
83	T	Chrysene	40.000	34.643	13.4	81	-0.06
84	T	bis(2-Ethylhexyl)phthalate	40.000	33.914	15.2	80	-0.06
85	I	Perylene-d12	40.000	40.000	0.0	98	-0.07
86	T*	Di-n-octylphthalate	40.000	34.841	12.9	77	-0.07
87	T	Benzo[b]fluoranthene	40.000	30.642	23.4	70	-0.07
88	T	Benzo[k]fluoranthene	40.000	36.615	8.5	81	-0.07
89	T*	Benzo[a]pyrene	40.000	34.995	12.5	76	-0.07
90	T	Indeno[1,2,3-cd]pyrene	40.000	25.912	35.2#	67	-0.07
91	T	Dibenz[a,h]anthracene	40.000	25.597	36.0#	67	-0.07
92	T	Benzo[g,h,i]perylene	40.000	25.319	36.7#	66	-0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BNASEP29A.M Wed Oct 21 13:04:37 2009 MSD5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT09.D
Acq On : 19 Oct 2009 4:54 pm
Operator : RIS
Sample : 09J0523-01
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 6 Sample Multiplier: 1

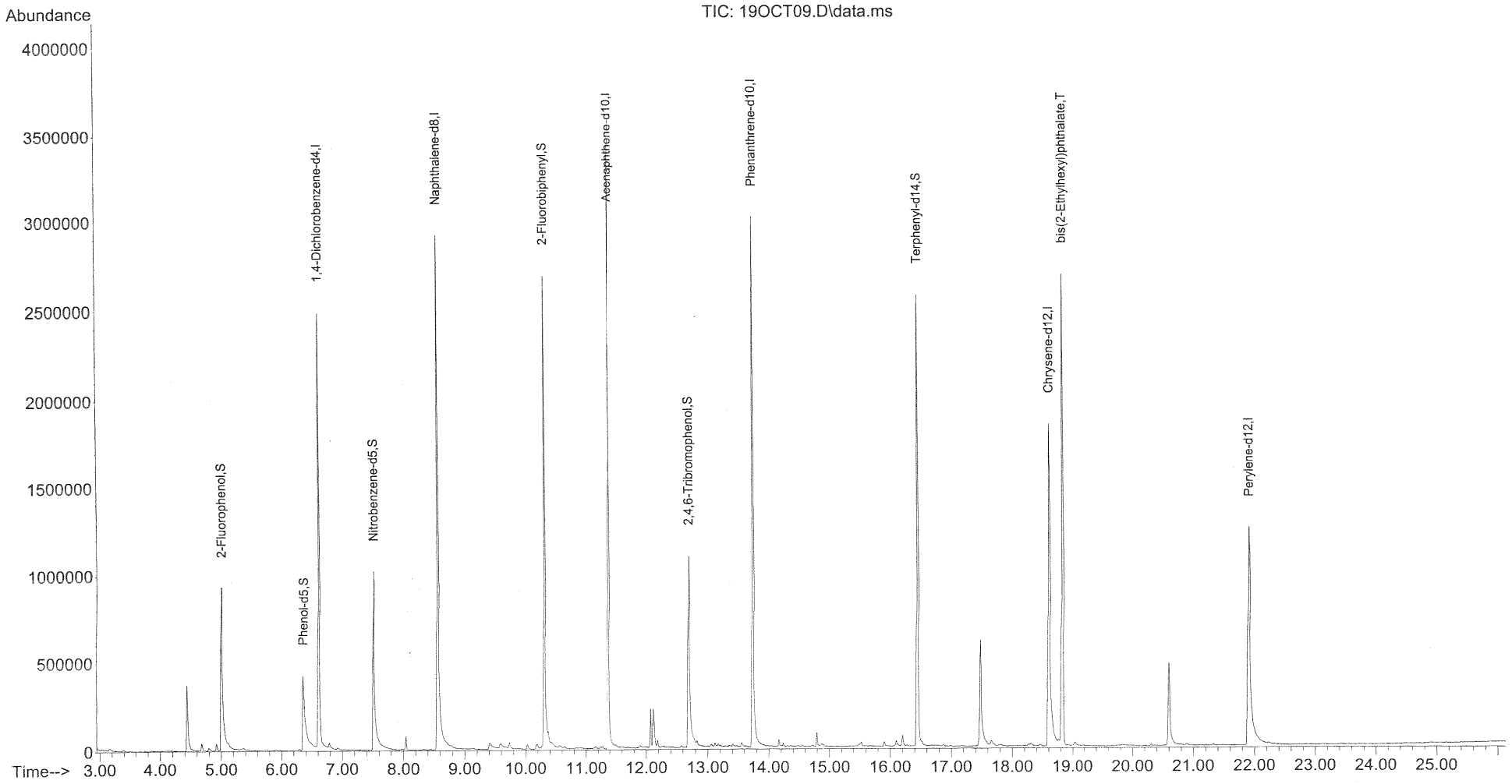
Quant Time: Oct 21 13:10:56 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.609	152	572135	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2214775	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.373	164	1202873	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.735	188	1923746	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1652267	40.00	ug/mL	-0.08
85) Perylene-d12	21.901	264	1300644	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	4.999	112	599691	33.51	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 44.68%			
8) Phenol-d5	6.352	99	538821	23.13	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 30.84%			
21) Nitrobenzene-d5	7.507	82	658613	31.09	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 62.18%			
40) 2-Fluorobiphenyl	10.306	172	1373557	34.32	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 68.64%			
65) 2,4,6-Tribromophenol	12.685	330	282897	53.90	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 71.87%			
77) Terphenyl-d14	16.448	244	1357652	38.50	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 77.00%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.680	169	8648	Below Cal	#	41
81) 3,3'-Dichlorobenzidine	18.769	252	278	Below Cal	#	25
84) bis(2-Ethylhexyl)phtha...	18.827	149	1413823	41.82	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT09.D
Acq On : 19 Oct 2009 4:54 pm
Operator : RIS
Sample : 09J0523-01
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 21 13:10:56 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT10.D
Acq On : 19 Oct 2009 5:31 pm
Operator : RIS
Sample : 09J0523-02
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 21 13:11:59 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

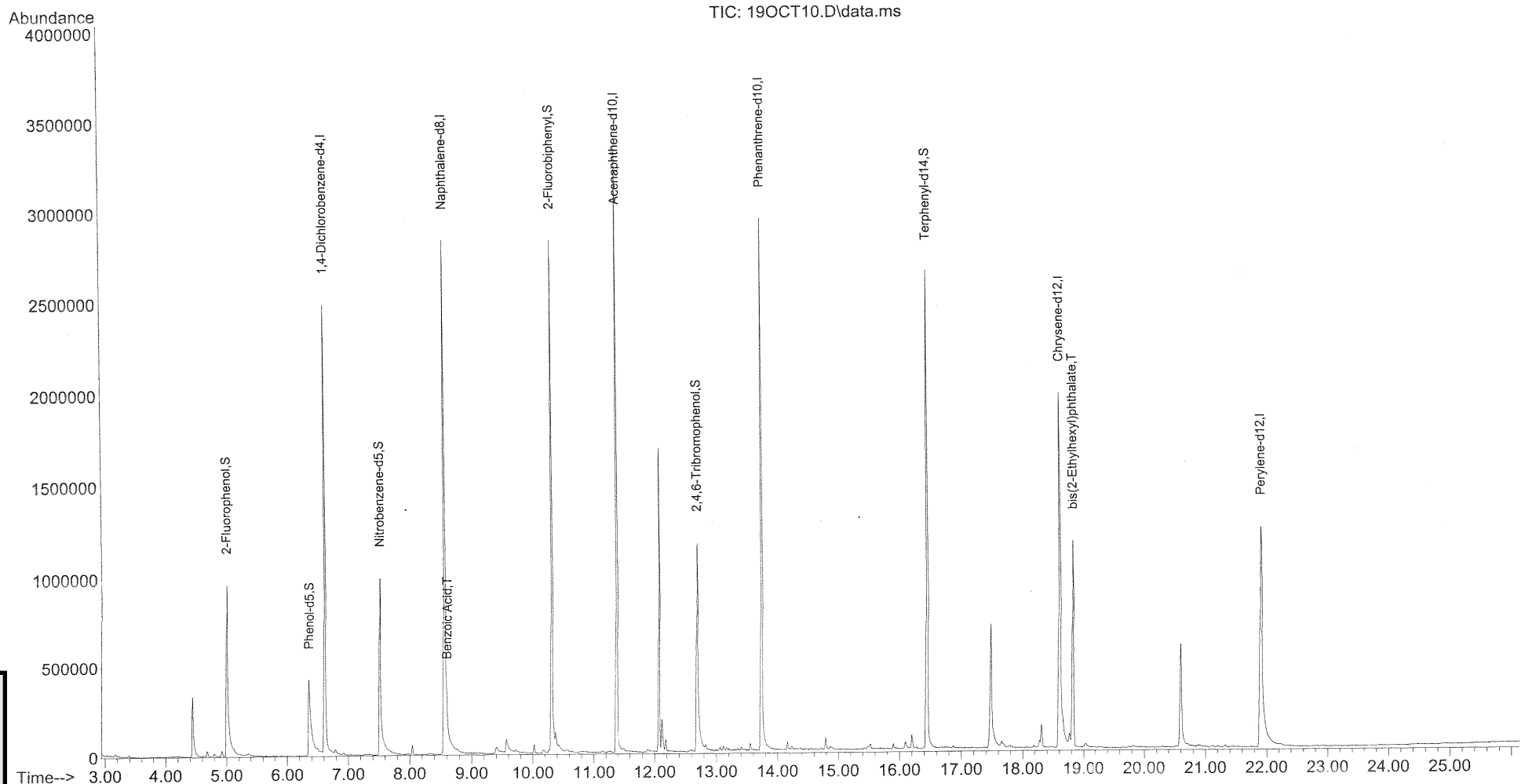
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.606	152	561228	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.556	136	2150397	40.00	ug/mL	-0.04
36) Acenaphthene-d10		11.374	164	1187759	40.00	ug/mL	-0.04
62) Phenanthrene-d10		13.736	188	1843034	40.00	ug/mL	-0.05
74) Chrysene-d12		18.606	240	1678229	40.00	ug/mL	-0.07
85) Perylene-d12		21.902	264	1288680	40.00	ug/mL	-0.08
System Monitoring Compounds							
4) 2-Fluorophenol		4.997	112	599054	34.13	ug/mL	-0.11
Spiked Amount	75.000	Range 10 - 83		Recovery =	45.51%		
8) Phenol-d5		6.350	99	537836	23.54	ug/mL	-0.12
Spiked Amount	75.000	Range 13 - 62		Recovery =	31.39%		
21) Nitrobenzene-d5		7.510	82	664368	32.30	ug/mL	-0.04
Spiked Amount	50.000	Range 40 - 140		Recovery =	64.60%		
40) 2-Fluorobiphenyl		10.306	172	1386444	35.08	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery =	70.16%		
65) 2,4,6-Tribromophenol		12.686	330	285386	56.75	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery =	75.67%		
77) Terphenyl-d14		16.448	244	1379616	38.51	ug/mL	-0.05
Spiked Amount	50.000	Range 24 - 129		Recovery =	77.02%		
Target Compounds							Qvalue
31) Benzoic Acid		8.597	105	179252	24.05	ug/mL#	80
64) n-Nitrosodiphenylamine		12.680	169	9311	Below Cal	#	34
84) bis(2-Ethylhexyl)phtha...		18.822	149	548596	15.98	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed) Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT10.D
Acq On : 19 Oct 2009 5:31 pm
Operator : RIS
Sample : 09J0523-02
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 21 13:11:59 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT11.D
Acq On : 19 Oct 2009 6:07 pm
Operator : RIS
Sample : 09J0523-03
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 8 Sample Multiplier: 1

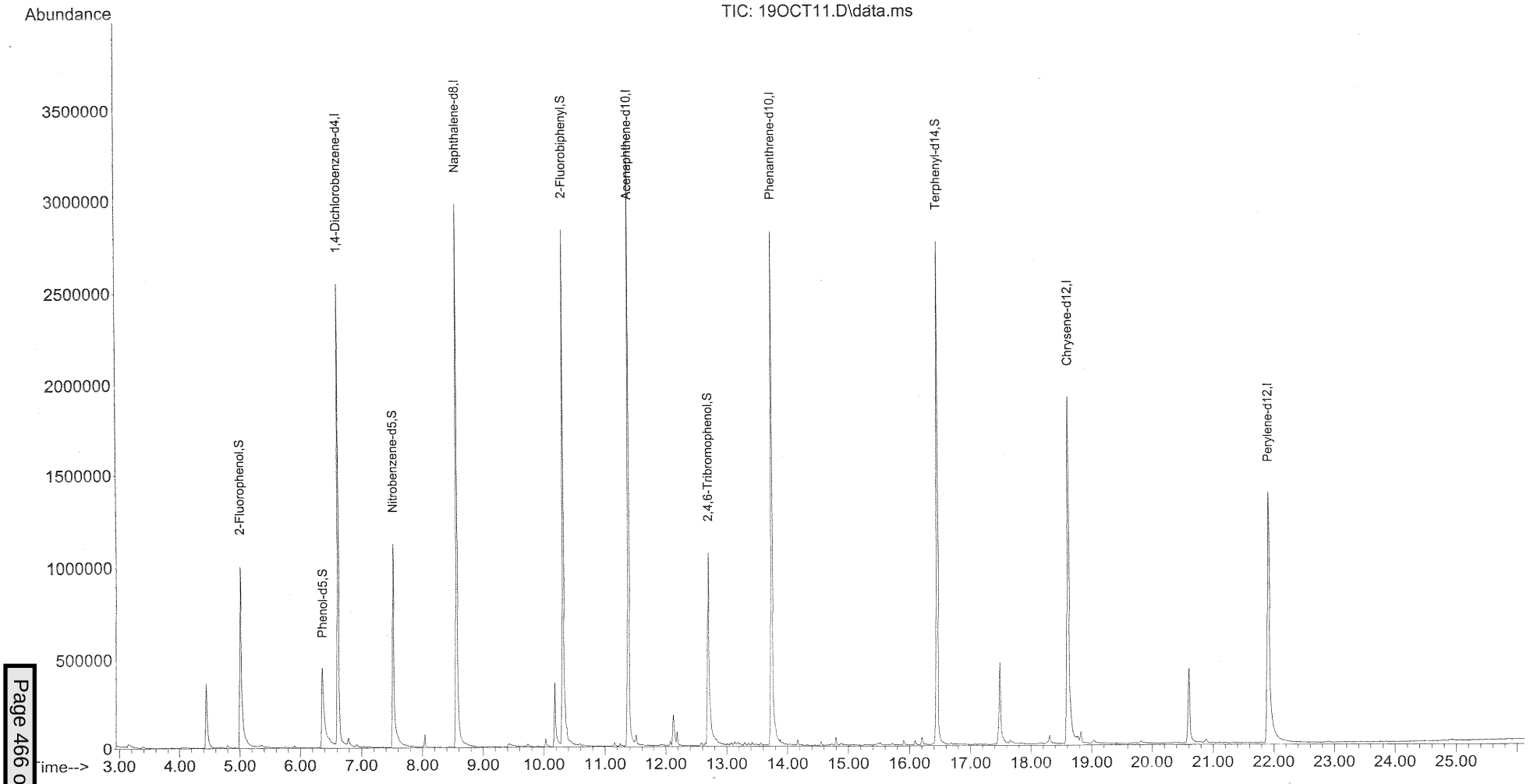
Quant Time: Oct 21 13:12:49 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.607	152	590260	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.557	136	2270323	40.00	ug/mL	-0.04
36) Acenaphthene-d10		11.374	164	1214740	40.00	ug/mL	-0.04
62) Phenanthrene-d10		13.736	188	1957073	40.00	ug/mL	-0.05
74) Chrysene-d12		18.607	240	1757675	40.00	ug/mL	-0.07
85) Perylene-d12		21.902	264	1353328	40.00	ug/mL	-0.08
System Monitoring Compounds							
4) 2-Fluorophenol		4.997	112	675029	36.57	ug/mL	-0.11
Spiked Amount	75.000	Range 10 - 83		Recovery =	48.76%		
8) Phenol-d5		6.356	99	575358	23.94	ug/mL	-0.11
Spiked Amount	75.000	Range 13 - 62		Recovery =	31.92%		
21) Nitrobenzene-d5		7.511	82	708560	32.63	ug/mL	-0.04
Spiked Amount	50.000	Range 40 - 140		Recovery =	65.26%		
40) 2-Fluorobiphenyl		10.307	172	1486620	36.78	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery =	73.56%		
65) 2,4,6-Tribromophenol		12.686	330	300951	56.36	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery =	75.15%		
77) Terphenyl-d14		16.449	244	1479970	39.45	ug/mL	-0.05
Spiked Amount	50.000	Range 24 - 129		Recovery =	78.90%		
Target Compounds							Qvalue
64) n-Nitrosodiphenylamine		12.681	169	9587	Below Cal	#	41

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT11.D
Acq On : 19 Oct 2009 6:07 pm
Operator : RIS
Sample : 09J0523-03
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 21 13:12:49 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT12.D
Acq On : 19 Oct 2009 6:44 pm
Operator : RIS
Sample : 09J0523-04
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 9 Sample Multiplier: 1

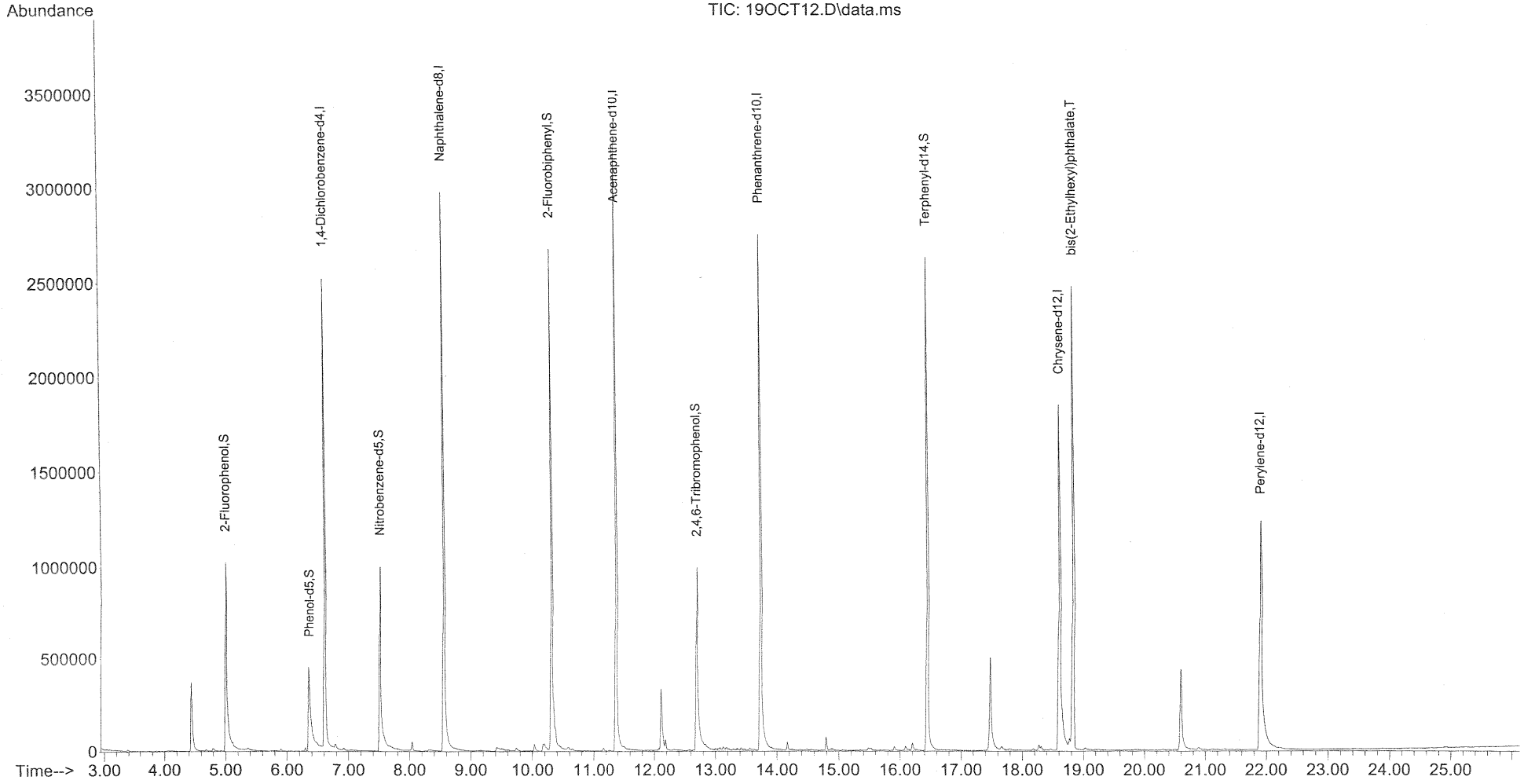
Quant Time: Oct 21 13:15:49 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	577843	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2226738	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.373	164	1218406	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.735	188	1906092	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1669378	40.00	ug/mL	-0.08
85) Perylene-d12	21.901	264	1280134	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	4.996	112	630709	34.90	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 46.53%			
8) Phenol-d5	6.350	99	548306	23.31	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 31.08%			
21) Nitrobenzene-d5	7.510	82	668505	31.39	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 62.78%			
40) 2-Fluorobiphenyl	10.306	172	1418488	34.99	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 69.98%			
65) 2,4,6-Tribromophenol	12.685	330	267369	51.41	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 68.55%			
77) Terphenyl-d14	16.448	244	1390725	39.03	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 78.06%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.685	169	9331	Below Cal	#	25
84) bis(2-Ethylhexyl)phtha...	18.827	149	1279763	37.47	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT12.D
Acq On : 19 Oct 2009 6:44 pm
Operator : RIS
Sample : 09J0523-04
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 21 13:15:49 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT13.D
Acq On : 19 Oct 2009 7:21 pm
Operator : RIS
Sample : 09J0523-05
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 21 13:16:35 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	574568	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.557	136	2236082	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.374	164	1208195	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.730	188	1899550	40.00	ug/mL	-0.05
74) Chrysene-d12	18.607	240	1724551	40.00	ug/mL	-0.07
85) Perylene-d12	21.902	264	1312897	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	4.997	112	557021	31.00	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 41.33%			
8) Phenol-d5	6.356	99	489720	20.94	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 27.92%			
21) Nitrobenzene-d5	7.505	82	603923	28.24	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 56.48%			
40) 2-Fluorobiphenyl	10.307	172	1312464	32.65	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 65.30%			
65) 2,4,6-Tribromophenol	12.692	330	253929	49.00	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 65.33%			
77) Terphenyl-d14	16.448	244	1327549	36.06	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 72.12%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	8120	Below Cal	#	39
84) bis(2-Ethylhexyl)phtha...	18.846	149	3144608	89.12	ug/mL	100

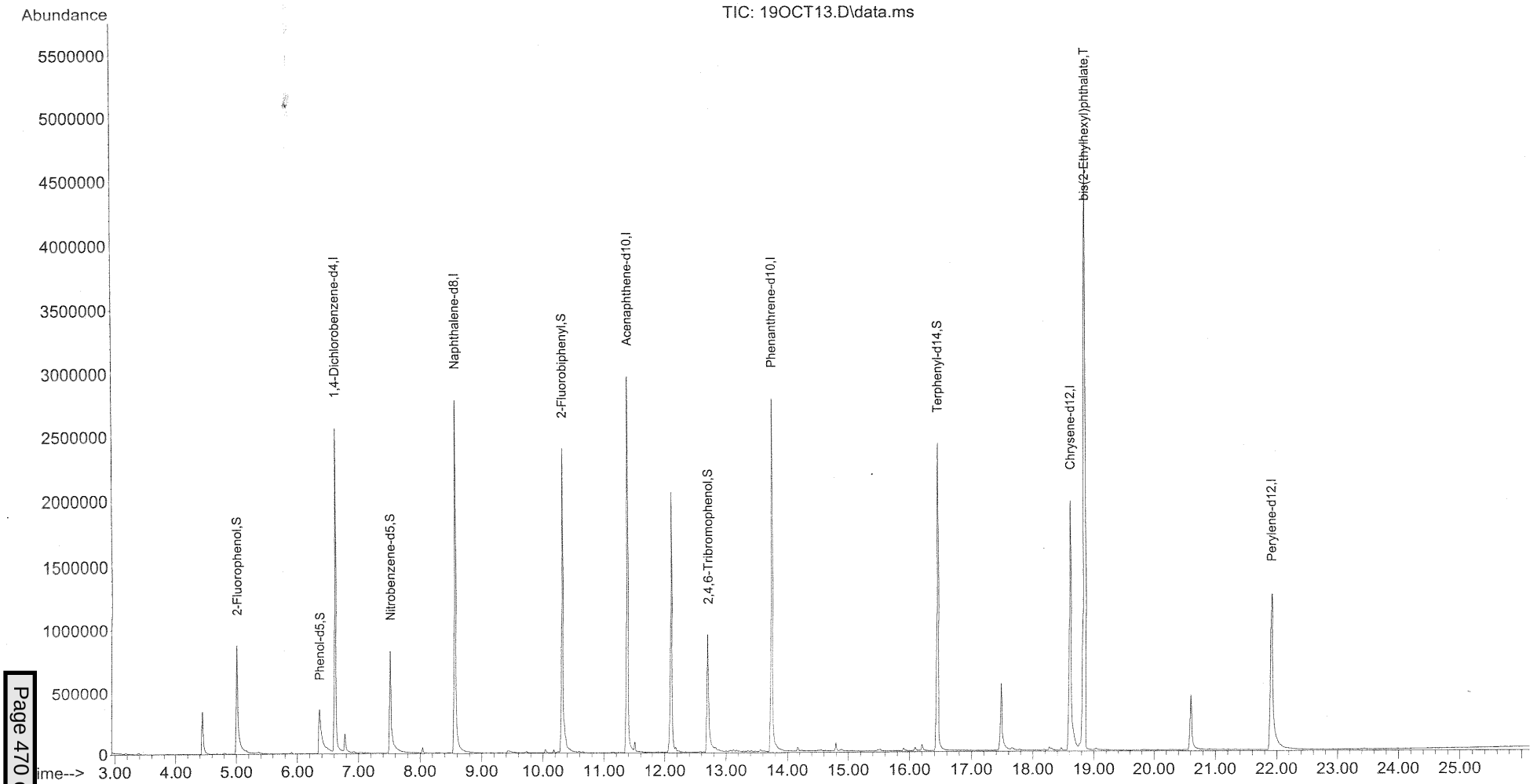
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Rerun @ 2X 10/21/09 RES

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT13.D
Acq On : 19 Oct 2009 7:21 pm
Operator : RIS
Sample : 09J0523-05
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 21 13:16:35 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT14.D
Acq On : 19 Oct 2009 7:57 pm
Operator : RIS
Sample : 09J0523-06
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 11 Sample Multiplier: 1

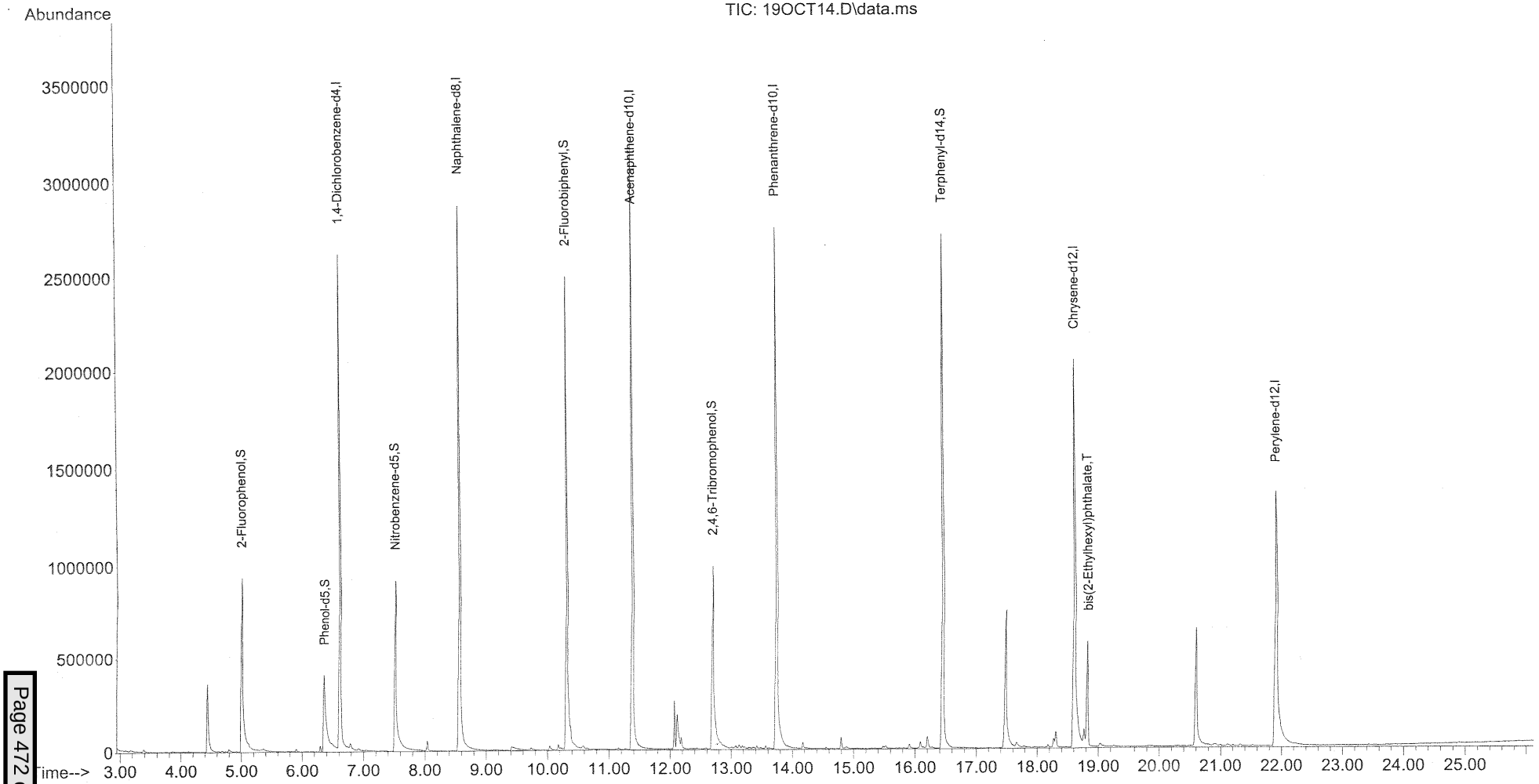
Quant Time: Oct 21 13:17:55 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	586667	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2274289	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.374	164	1258939	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.730	188	1982847	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1817403	40.00	ug/mL	-0.07
85) Perylene-d12	21.902	264	1366873	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	4.997	112	593552	32.35	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 43.13%			
8) Phenol-d5	6.350	99	529288	22.16	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 29.55%			
21) Nitrobenzene-d5	7.505	82	638928	29.37	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 58.74%			
40) 2-Fluorobiphenyl	10.306	172	1357352	32.40	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 64.80%			
65) 2,4,6-Tribromophenol	12.686	330	286521	52.96	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 70.61%			
77) Terphenyl-d14	16.448	244	1521461	39.22	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 78.44%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	9277	Below Cal	#	39
84) bis(2-Ethylhexyl)phtha...	18.816	149	268878	7.23	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT14.D
Acq On : 19 Oct 2009 7:57 pm
Operator : RIS
Sample : 09J0523-06
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 21 13:17:55 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT15.D
Acq On : 19 Oct 2009 8:34 pm
Operator : RIS
Sample : 09J0523-07
Misc : 1,SEVERSTAL,BNAwx,900:1
ALS Vial : 12 Sample Multiplier: 1

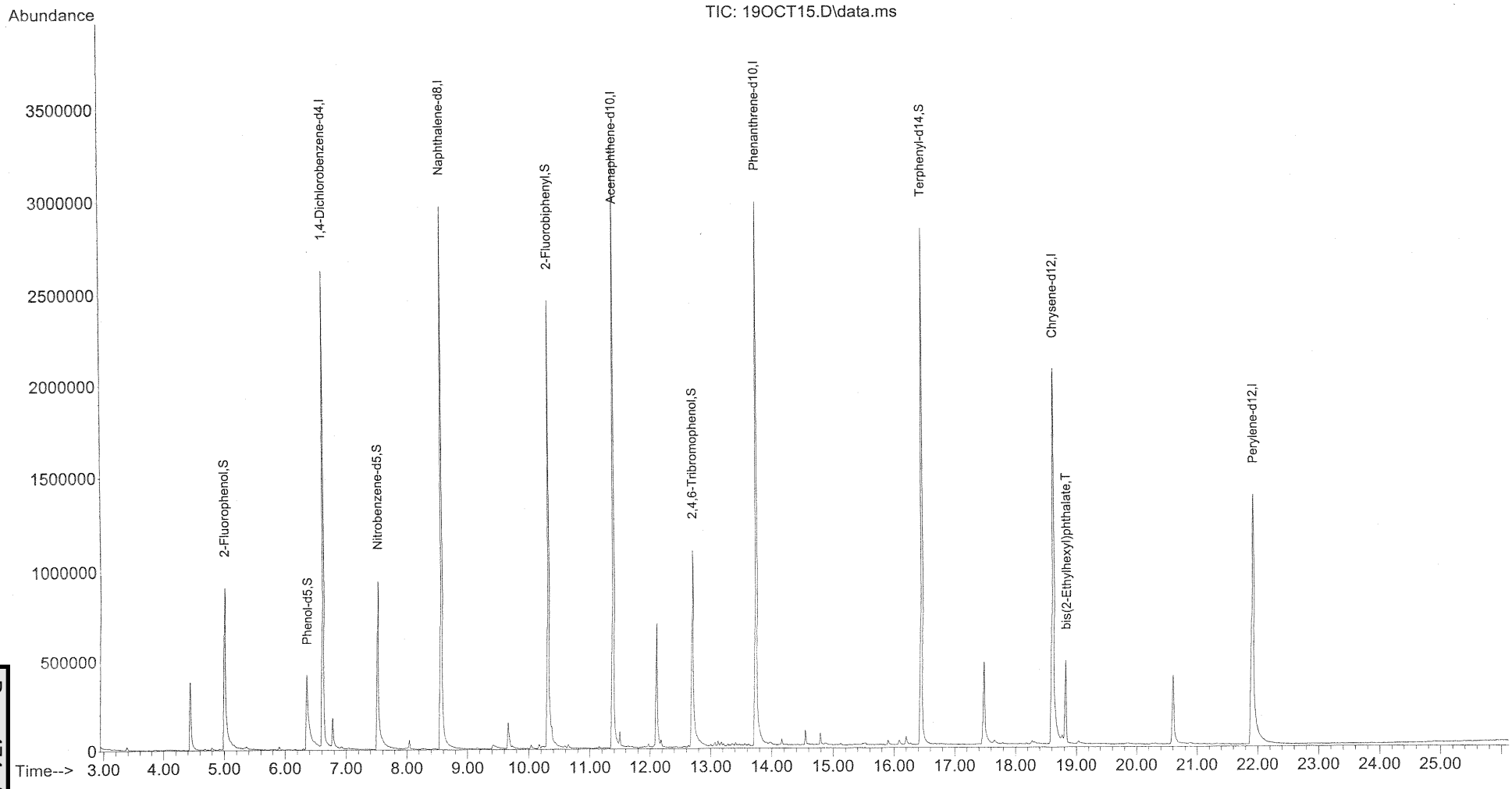
Quant Time: Oct 21 13:19:07 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	587556	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2309872	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.374	164	1249569	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.736	188	2013115	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1837234	40.00	ug/mL	-0.07
85) Perylene-d12	21.908	264	1352888	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	4.997	112	579834	31.55	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 42.07%			
8) Phenol-d5	6.350	99	528357	22.09	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 29.45%			
21) Nitrobenzene-d5	7.505	82	621295	28.12	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 56.24%			
40) 2-Fluorobiphenyl	10.306	172	1315430	31.64	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 63.28%			
65) 2,4,6-Tribromophenol	12.686	330	285696	52.02	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 69.36%			
77) Terphenyl-d14	16.448	244	1497150	38.18	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 76.36%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	9232	Below Cal	#	39
84) bis(2-Ethylhexyl)phtha...	18.816	149	209730	5.58	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT15.D
Acq On : 19 Oct 2009 8:34 pm
Operator : RIS
Sample : 09J0523-07
Misc : 1,SEVERSTAL,BNAwx,900:1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 21 13:19:07 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT16.D
Acq On : 19 Oct 2009 9:10 pm
Operator : RIS
Sample : 09J0523-08
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 13 Sample Multiplier: 1

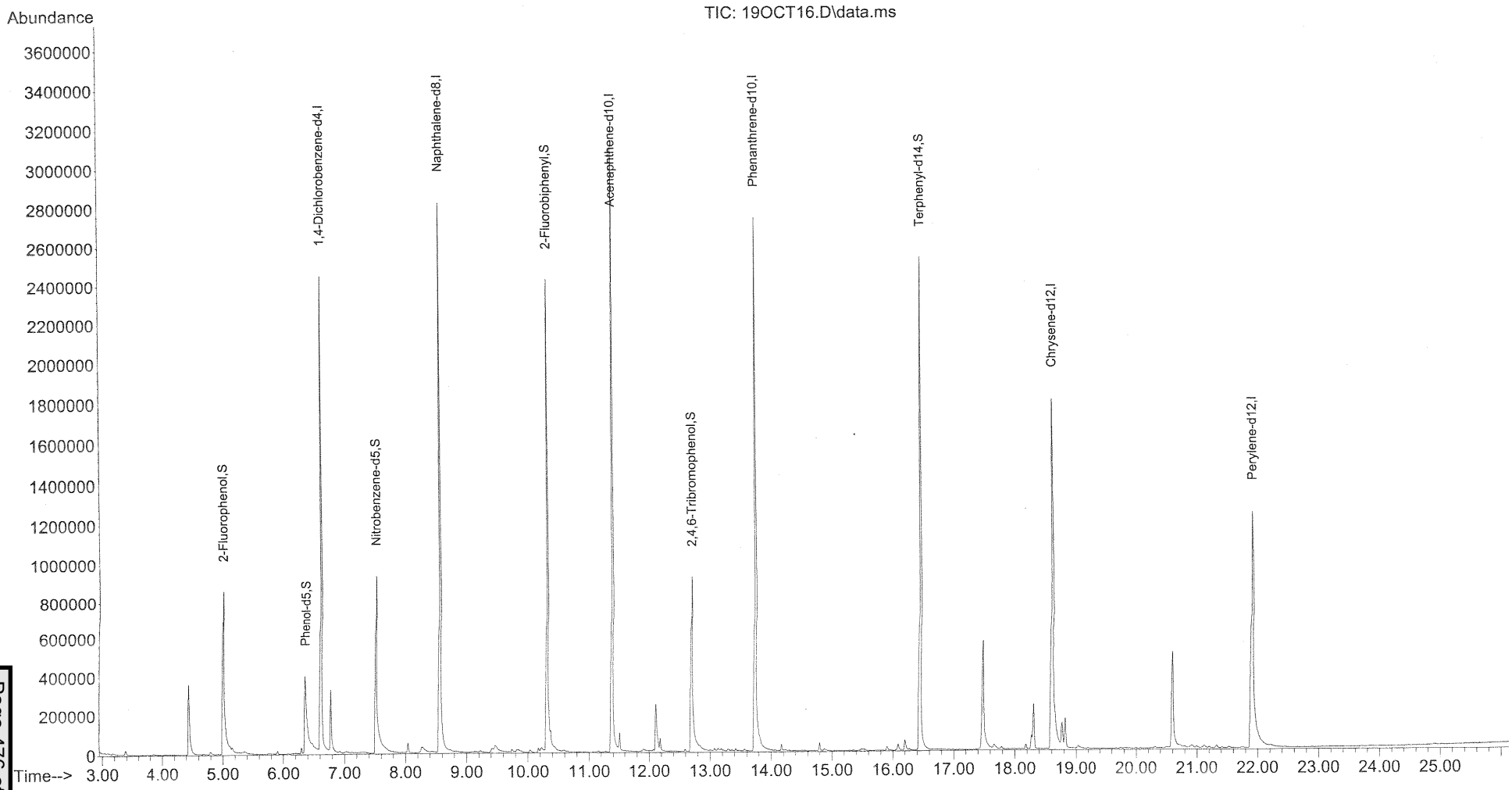
Quant Time: Oct 21 13:19:44 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.609	152	565256	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.557	136	2197292	40.00	ug/mL	-0.04
36) Acenaphthene-d10		11.368	164	1201111	40.00	ug/mL	-0.05
62) Phenanthrene-d10		13.731	188	1884577	40.00	ug/mL	-0.05
74) Chrysene-d12		18.601	240	1689409	40.00	ug/mL	-0.08
85) Perylene-d12		21.902	264	1254869	40.00	ug/mL	-0.08
System Monitoring Compounds							
4) 2-Fluorophenol		4.999	112	559431	31.65	ug/mL	-0.11
Spiked Amount	75.000	Range 10 - 83		Recovery =	42.20%		
8) Phenol-d5		6.352	99	512865	22.29	ug/mL	-0.12
Spiked Amount	75.000	Range 13 - 62		Recovery =	29.72%		
21) Nitrobenzene-d5		7.507	82	618936	29.45	ug/mL	-0.05
Spiked Amount	50.000	Range 40 - 140		Recovery =	58.90%		
40) 2-Fluorobiphenyl		10.307	172	1289828	32.27	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery =	64.54%		
65) 2,4,6-Tribromophenol		12.687	330	247660	48.17	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery =	64.23%		
77) Terphenyl-d14		16.449	244	1360924	37.74	ug/mL	-0.05
Spiked Amount	50.000	Range 24 - 129		Recovery =	75.48%		
Target Compounds							Qvalue
64) n-Nitrosodiphenylamine		12.687	169	8409	Below Cal	#	47

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT16.D
Acq On : 19 Oct 2009 9:10 pm
Operator : RIS
Sample : 09J0523-08
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 21 13:19:44 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT17.D
Acq On : 19 Oct 2009 9:47 pm
Operator : RIS
Sample : 09J0523-09
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 21 13:20:18 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

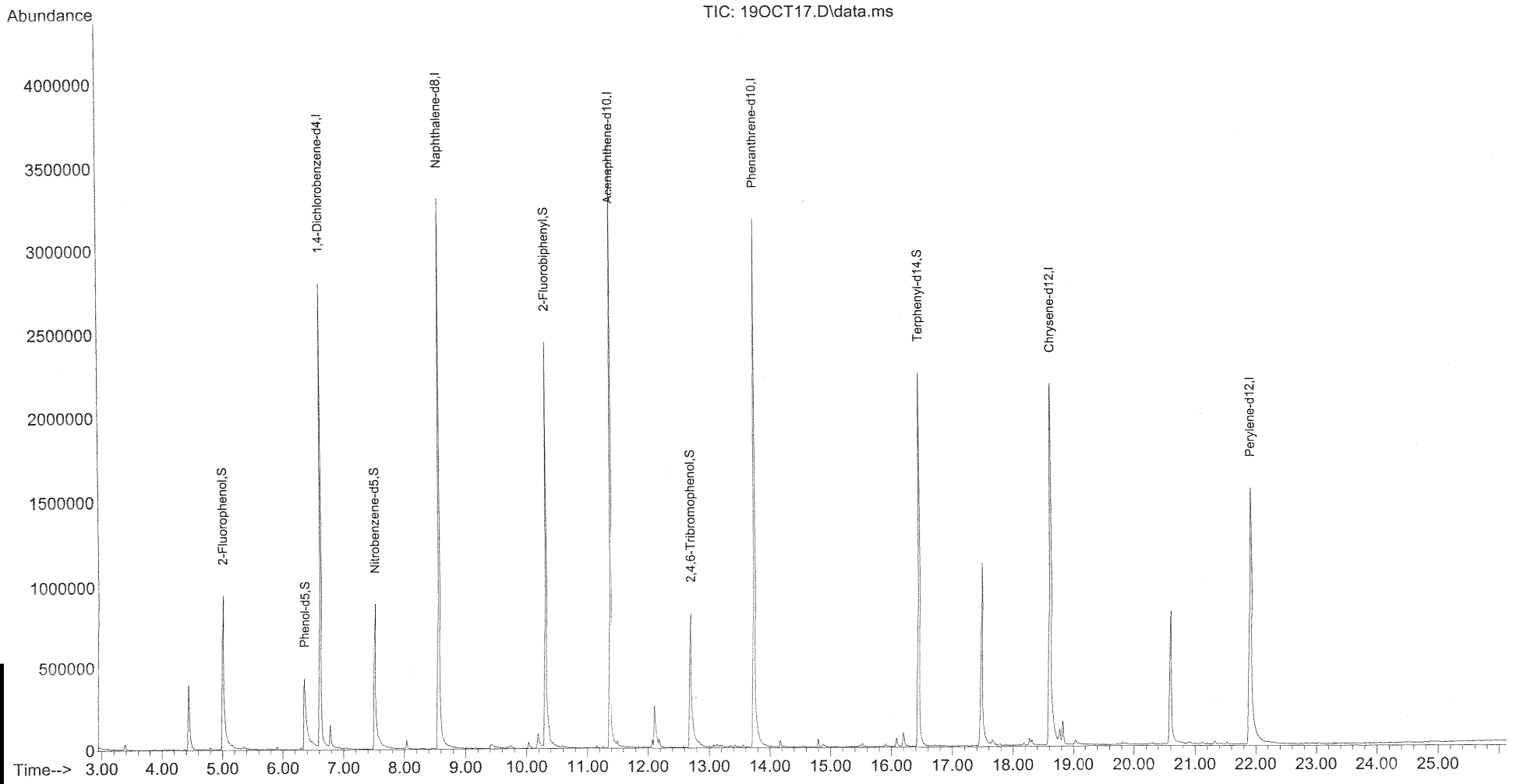
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	633042	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2487939	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.373	164	1365343	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.736	188	2190447	40.00	ug/mL	-0.05
74) Chrysene-d12	18.612	240	2008934	40.00	ug/mL	-0.07
85) Perylene-d12	21.907	264	1510445	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	4.997	112	593369	29.97	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 39.96%			
8) Phenol-d5	6.350	99	545799	21.18	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 28.24%			
21) Nitrobenzene-d5	7.505	82	614850	25.84	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 51.68%			
40) 2-Fluorobiphenyl	10.306	172	1297894	28.57	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 57.14%			
65) 2,4,6-Tribromophenol	12.686	330	242001	40.49	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 53.99%			
77) Terphenyl-d14	16.448	244	1244537	29.02	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 58.04%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	7488	Below Cal	#	34

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Re[illegible] Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT17.D
Acq On : 19 Oct 2009 9:47 pm
Operator : RIS
Sample : 09J0523-09
Misc : 1,SEVERSTAL,BNAwx,910:1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 21 13:20:18 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT18.D
Acq On : 19 Oct 2009 10:24 pm
Operator : RIS
Sample : 09J0523-10
Misc : 1,SEVERSTAL,BNAwx,950:1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 21 13:22:26 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	584678	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.609	136	1940772	40.00	ug/mL	0.01
36) Acenaphthene-d10	11.380	164	1218168	40.00	ug/mL	-0.03
62) Phenanthrene-d10	13.765	188	2098397	40.00	ug/mL	-0.02
74) Chrysene-d12	18.624	240	716469	40.00	ug/mL	-0.06
85) Perylene-d12	21.925	264	186803	40.00	ug/mL	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	5.025	112	611175	33.42	ug/mL	-0.08
Spiked Amount 75.000	Range 10 - 83		Recovery = 44.56%			
8) Phenol-d5	6.367	99	579954	24.37	ug/mL	-0.10
Spiked Amount 75.000	Range 13 - 62		Recovery = 32.49%			
21) Nitrobenzene-d5	7.516	82	700515	37.74	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 75.48%			
40) 2-Fluorobiphenyl	10.312	172	1505552	37.14	ug/mL	-0.03
Spiked Amount 50.000	Range 35 - 138		Recovery = 74.28%			
65) 2,4,6-Tribromophenol	12.721	330	374552	65.42	ug/mL	-0.02
Spiked Amount 75.000	Range 24 - 142		Recovery = 87.23%			
77) Terphenyl-d14	16.472	244	1416421	92.62	ug/mL	-0.03
Spiked Amount 50.000	Range 24 - 129		Recovery = 185.24%#			
Target Compounds						Qvalue
3) Pyridine	3.095	79	368701	19.00	ug/mL	96
16) 2-Methylphenol	7.195	108	616564	36.24	ug/mL	99
19) 4-Methylphenol,3-Methy...	7.458	108	1201177	71.98	ug/mL	86
25) 2,4-Dimethylphenol	8.230	107	1321068	80.22	ug/mL	95
29) Naphthalene	8.679	128	26201110	556.48	ug/mL	95
34) 2-Methylnaphthalene	9.682	142	875292	21.35	ug/mL	98
35) 1-Methylnaphthalene	9.851	142	517968	16.17	ug/mL	98
44) Acenaphthylene	11.129	152	543094	10.92	ug/mL	99
49) Acenaphthene	11.420	153	174384	5.69	ug/mL	100
52) Dibenzofuran	11.683	168	509904	12.37	ug/mL	100
57) Fluorene	12.237	166	407170	12.38	ug/mL	96
64) n-Nitrosodiphenylamine	12.529	169	4989	Below Cal #		51
68) Pentachlorophenol	13.648	266	11668	12.72	ug/mL	96
69) Phenanthrene	13.794	178	707509	12.31	ug/mL	100
71) Carbazole	14.238	167	2218569	46.58	ug/mL	96
81) 3,3'-Dichlorobenzidine	18.682	252	375	Below Cal		89
92) Benzo[g,h,i]perylene	24.585	276	105	Below Cal #		64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

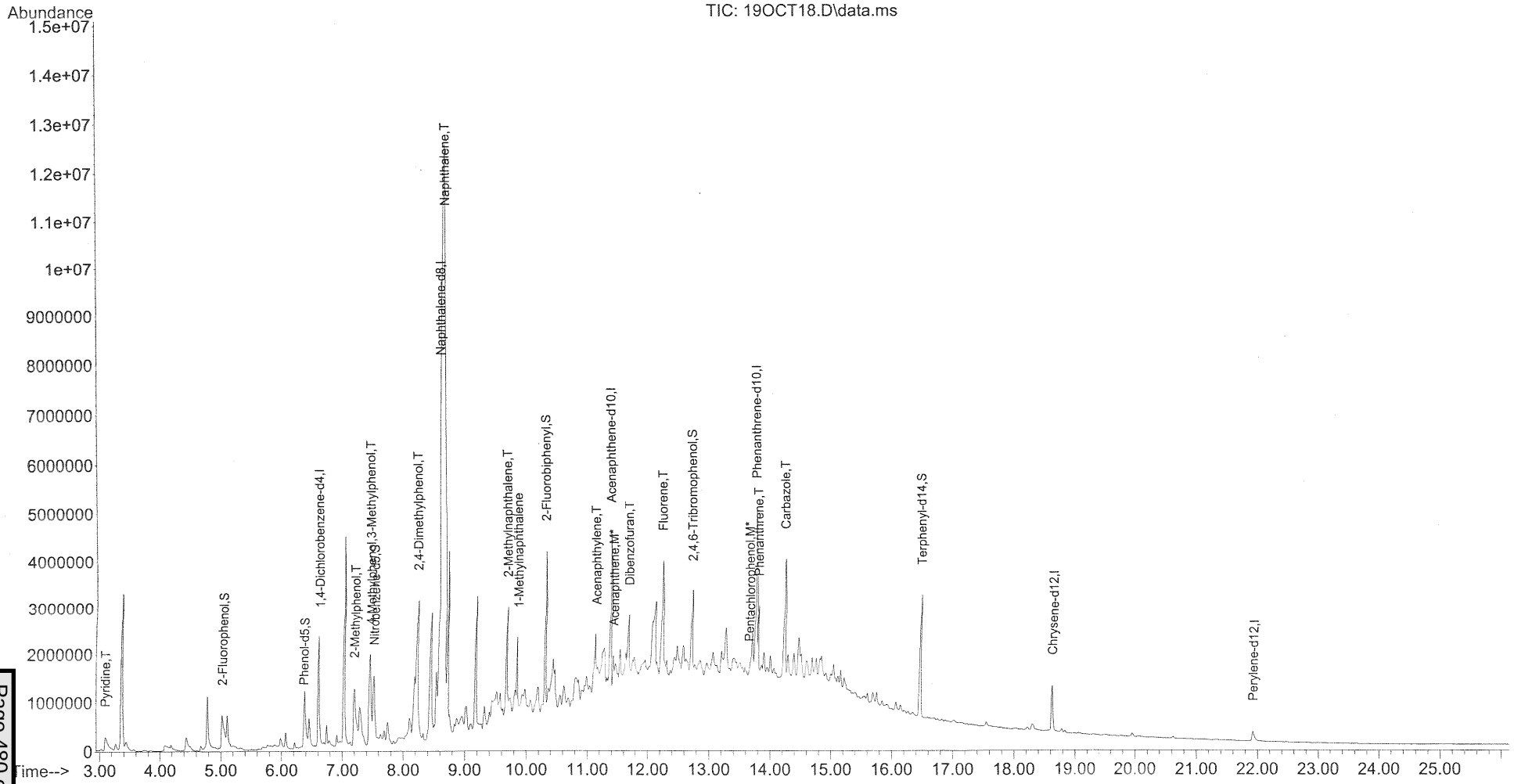
See IS

Not reported

Re ran @ 10X
10/21/09 RIS

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT18.D
Acq On : 19 Oct 2009 10:24 pm
Operator : RIS
Sample : 09J0523-10
Misc : 1,SEVERSTAL,BNAwx,950:1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 21 13:22:26 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT19.D
Acq On : 19 Oct 2009 11:00 pm
Operator : RIS
Sample : 09J0523-11
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 16 Sample Multiplier: 1

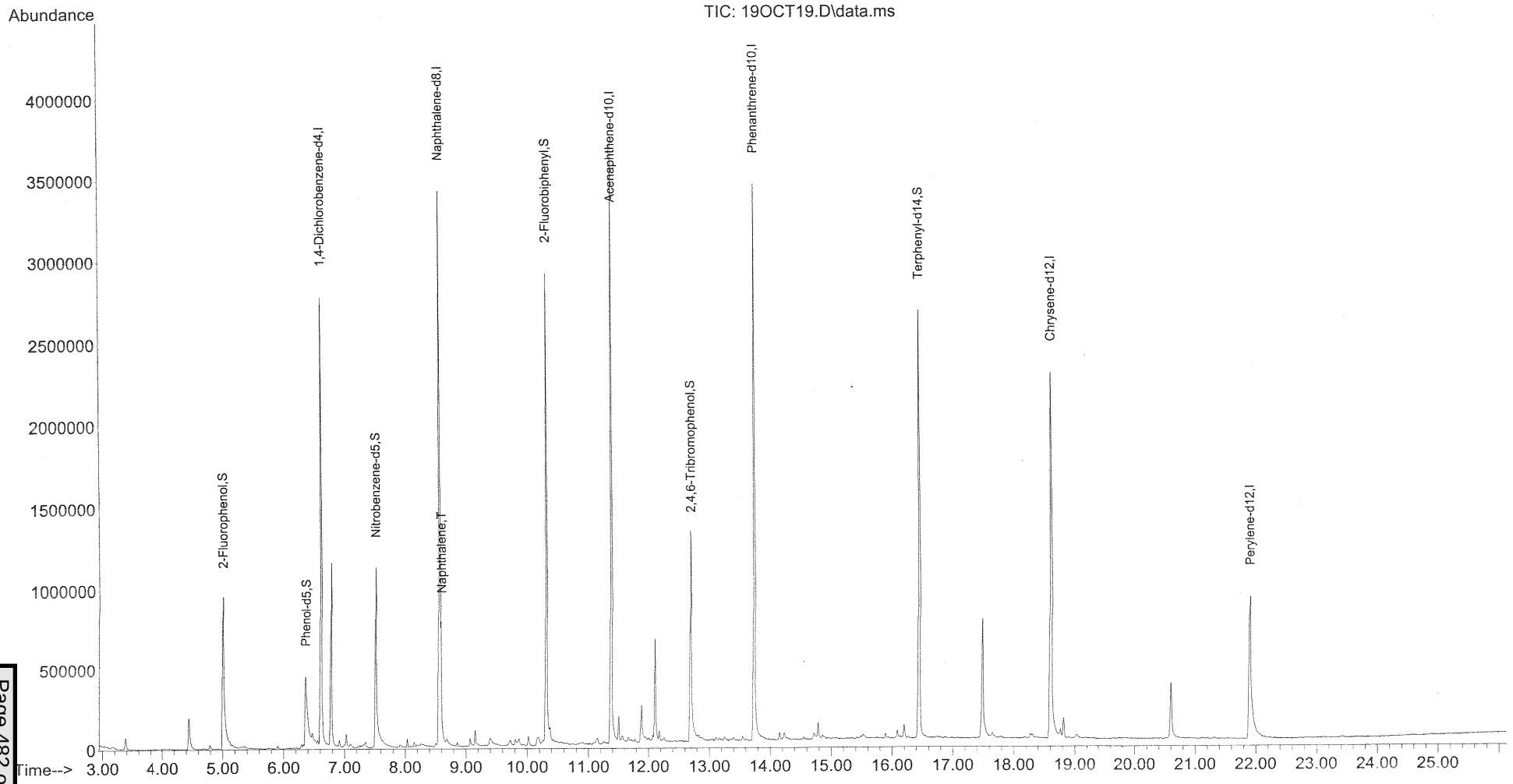
Quant Time: Oct 21 13:24:31 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	625098	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2420932	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.373	164	1324833	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.736	188	2173044	40.00	ug/mL	-0.05
74) Chrysene-d12	18.612	240	1914785	40.00	ug/mL	-0.07
85) Perylene-d12	21.896	264	884138	40.00	ug/mL	-0.09
System Monitoring Compounds						
4) 2-Fluorophenol	5.002	112	644113	32.95	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 43.93%			
8) Phenol-d5	6.361	99	565606	22.23	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 29.64%			
21) Nitrobenzene-d5	7.510	82	665996	28.76	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 57.52%			
40) 2-Fluorobiphenyl	10.306	172	1432683	32.50	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 65.00%			
65) 2,4,6-Tribromophenol	12.692	330	302722	51.06	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 68.08%			
77) Terphenyl-d14	16.448	244	1408901	34.47	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 68.94%			
Target Compounds						Qvalue
29) Naphthalene	8.585	128	393297	6.70	ug/mL	99
64) n-Nitrosodiphenylamine	12.493	169	833	Below Cal		98
81) 3,3'-Dichlorobenzidine	18.437	252	74	Below Cal	#	25

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT19.D
Acq On : 19 Oct 2009 11:00 pm
Operator : RIS
Sample : 09J0523-11
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 21 13:24:31 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT20.D
Acq On : 19 Oct 2009 11:37 pm
Operator : RIS
Sample : 09J0523-12
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 17 Sample Multiplier: 1

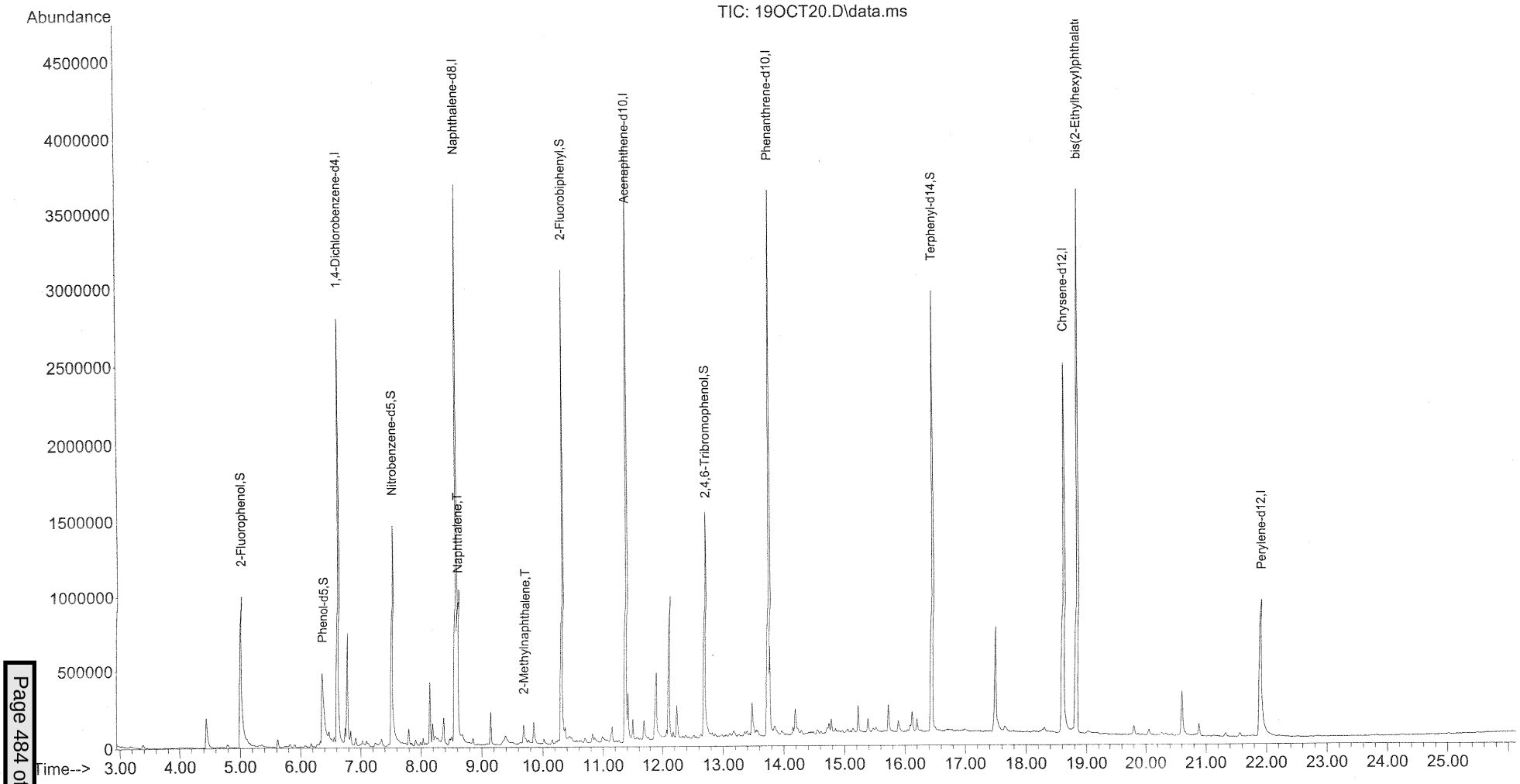
Quant Time: Oct 21 13:26:21 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	662535	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.557	136	2435968	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.374	164	1402443	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.737	188	2180525	40.00	ug/mL	-0.05
74) Chrysene-d12	18.613	240	2033756	40.00	ug/mL	-0.07
85) Perylene-d12	21.897	264	852952	40.00	ug/mL	-0.09
System Monitoring Compounds						
4) 2-Fluorophenol	5.002	112	652426	31.49	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 41.99%			
8) Phenol-d5	6.361	99	590296	21.89	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 29.19%			
21) Nitrobenzene-d5	7.510	82	706370	30.32	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 60.64%			
40) 2-Fluorobiphenyl	10.307	172	1481678	31.75	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 63.50%			
65) 2,4,6-Tribromophenol	12.693	330	317893	53.43	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 71.24%			
77) Terphenyl-d14	16.449	244	1521892	35.06	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 70.12%			
Target Compounds						Qvalue
29) Naphthalene	8.586	128	425388	7.20	ug/mL	99
34) 2-Methylnaphthalene	9.689	142	66669	5.24	ug/mL	100
64) n-Nitrosodiphenylamine	12.523	169	433	Below Cal		93
81) 3,3'-Dichlorobenzidine	18.671	252	222	Below Cal	#	25
84) bis(2-Ethylhexyl)phtha...	18.840	149	1938661	46.59	ug/mL	99
92) Benzo[g,h,i]perylene	24.556	276	169	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT20.D
Acq On : 19 Oct 2009 11:37 pm
Operator : RIS
Sample : 09J0523-12
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 21 13:26:21 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT21.D
Acq On : 20 Oct 2009 12:14 am
Operator : RIS
Sample : 09J0523-13
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 18 Sample Multiplier: 1

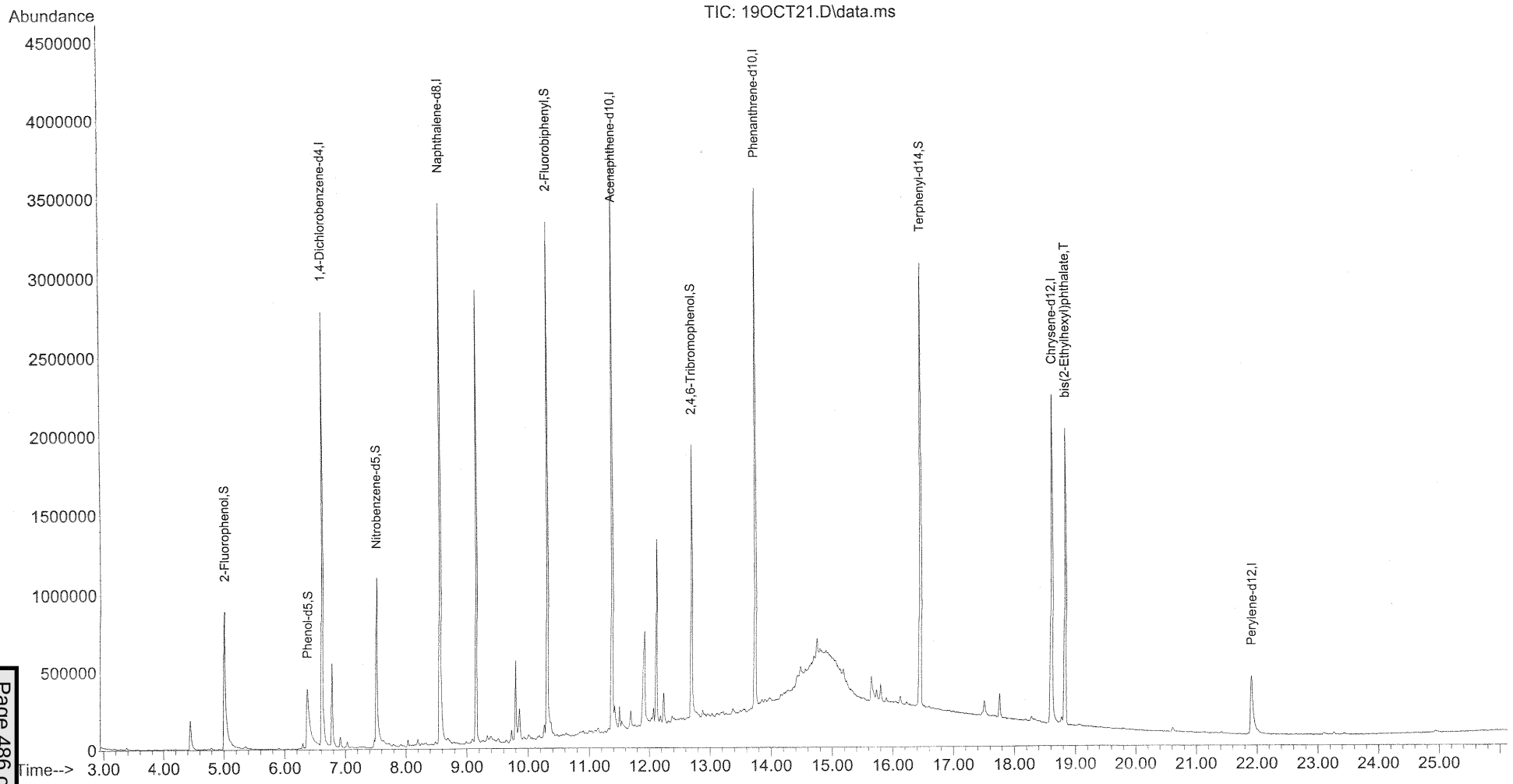
Quant Time: Oct 21 13:27:19 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.607	152	623694	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.557	136	2374487	40.00	ug/mL	-0.04
36) Acenaphthene-d10		11.374	164	1281064	40.00	ug/mL	-0.04
62) Phenanthrene-d10		13.742	188	1977721	40.00	ug/mL	-0.04
74) Chrysene-d12		18.613	240	1581197	40.00	ug/mL	-0.07
85) Perylene-d12		21.902	264	397903	40.00	ug/mL	-0.08
System Monitoring Compounds							
4) 2-Fluorophenol		5.003	112	607771	31.16	ug/mL	-0.11
Spiked Amount	75.000	Range 10 - 83		Recovery =	41.55%		
8) Phenol-d5		6.368	99	565486	22.27	ug/mL	-0.10
Spiked Amount	75.000	Range 13 - 62		Recovery =	29.69%		
21) Nitrobenzene-d5		7.505	82	661948	29.15	ug/mL	-0.05
Spiked Amount	50.000	Range 40 - 140		Recovery =	58.30%		
40) 2-Fluorobiphenyl		10.307	172	1568041	36.78	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery =	73.56%		
65) 2,4,6-Tribromophenol		12.692	330	333877	61.87	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery =	82.49%		
77) Terphenyl-d14		16.454	244	1508257	44.69	ug/mL	-0.05
Spiked Amount	50.000	Range 24 - 129		Recovery =	89.38%		
Target Compounds							Qvalue
64) n-Nitrosodiphenylamine		12.558	169	784	Below Cal	#	46
81) 3,3'-Dichlorobenzidine		18.548	252	102	Below Cal		79
84) bis(2-Ethylhexyl)phtha...		18.828	149	921805	28.49	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT1909\
Data File : 19OCT21.D
Acq On : 20 Oct 2009 12:14 am
Operator : RIS
Sample : 09J0523-13
Misc : 1,SEVERSTAL,BNAwx,920:1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 21 13:27:19 2009
Quant Method : C:\msdchem\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT06.D
Acq On : 21 Oct 2009 5:52 pm
Operator : RIS
Sample : 09J0523-05
Misc : 2,SEVERSTAL,2X DIL,0.5mL/1mL,BNAwx,910:1
ALS Vial : 3 Sample Multiplier: 1

2X

Quant Time: Oct 22 13:29:55 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

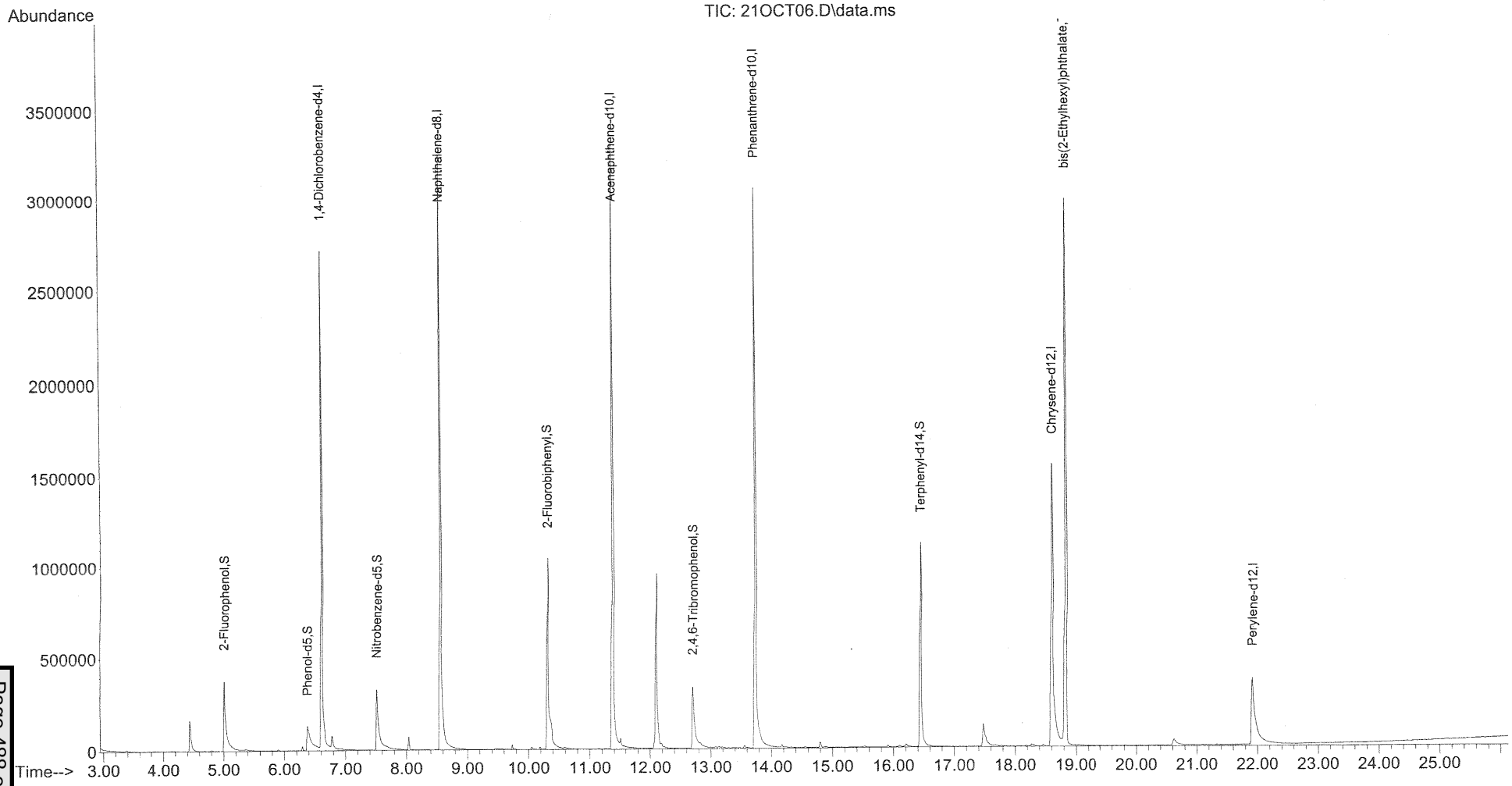
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	635496	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2531479	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.373	164	1384372	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.736	188	2138756	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1587970	40.00	ug/mL	-0.08
85) Perylene-d12	21.913	264	534996	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	5.008	112	291956	14.69	ug/mL	-0.10
Spiked Amount 75.000	Range 10 - 83		Recovery = 19.59%			
8) Phenol-d5	6.379	99	234713	9.07	ug/mL	-0.09
Spiked Amount 75.000	Range 13 - 62		Recovery = 12.09%#			
21) Nitrobenzene-d5	7.510	82	320880	13.25	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 26.50%#			
40) 2-Fluorobiphenyl	10.306	172	728699	15.82	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 31.64%#			
65) 2,4,6-Tribromophenol	12.703	330	123634	21.19	ug/mL	-0.03
Spiked Amount 75.000	Range 24 - 142		Recovery = 28.25%			
77) Terphenyl-d14	16.442	244	706408	20.84	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 41.68%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.709	169	3318	Below Cal	#	34
84) bis(2-Ethylhexyl)phtha...	18.828	149	1674243	51.53	ug/mL	99

report

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT06.D
Acq On : 21 Oct 2009 5:52 pm
Operator : RIS
Sample : 09J0523-05
Misc : 2,SEVERSTAL,2X DIL,0.5mL/1mL,BNAwx,910:1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 22 13:29:55 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT07.D
Acq On : 21 Oct 2009 6:29 pm
Operator : RIS
Sample : 09J0523-10
Misc : 10,SEVERSTAL,10X DIL,0.1mL/1mL,BNAwx,950:1
ALS Vial : 4 Sample Multiplier: 1

10X

Quant Time: Oct 22 13:31:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.603	152	651736	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.557	136	2469903	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.374	164	1346615	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.742	188	2111692	40.00	ug/mL	-0.04
74) Chrysene-d12	18.612	240	1780750	40.00	ug/mL	-0.07
85) Perylene-d12	21.896	264	567699	40.00	ug/mL	-0.09
System Monitoring Compounds						
4) 2-Fluorophenol	5.040	112	49948	2.45	ug/mL	-0.07
Spiked Amount 75.000	Range 10 - 83		Recovery = 3.27%#			
8) Phenol-d5	6.422	99	51856	1.95	ug/mL	-0.05
Spiked Amount 75.000	Range 13 - 62		Recovery = 2.60%#			
21) Nitrobenzene-d5	7.530	82	65437	2.77	ug/mL	-0.02
Spiked Amount 50.000	Range 40 - 140		Recovery = 5.54%#			
40) 2-Fluorobiphenyl	10.306	172	166398	3.71	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 7.42%#			
65) 2,4,6-Tribromophenol	12.692	330	36279	6.30	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 8.40%#			
77) Terphenyl-d14	16.431	244	169135	4.45	ug/mL	-0.07
Spiked Amount 50.000	Range 24 - 129		Recovery = 8.90%#			
Target Compounds						Qvalue
19) 4-Methylphenol,3-Methy...	7.466	108	122977	6.61	ug/mL	83
25) 2,4-Dimethylphenol	8.207	107	148802	7.10	ug/mL	93
29) Naphthalene	8.603	128	4370432	72.94	ug/mL	100
34) 2-Methylnaphthalene	9.682	142	100588	5.74	ug/mL	98
64) n-Nitrosodiphenylamine	12.809	169	545	Below Cal		81
71) Carbazole	14.174	167	253466	5.29	ug/mL	97
81) 3,3'-Dichlorobenzidine	18.542	252	92	Below Cal		79

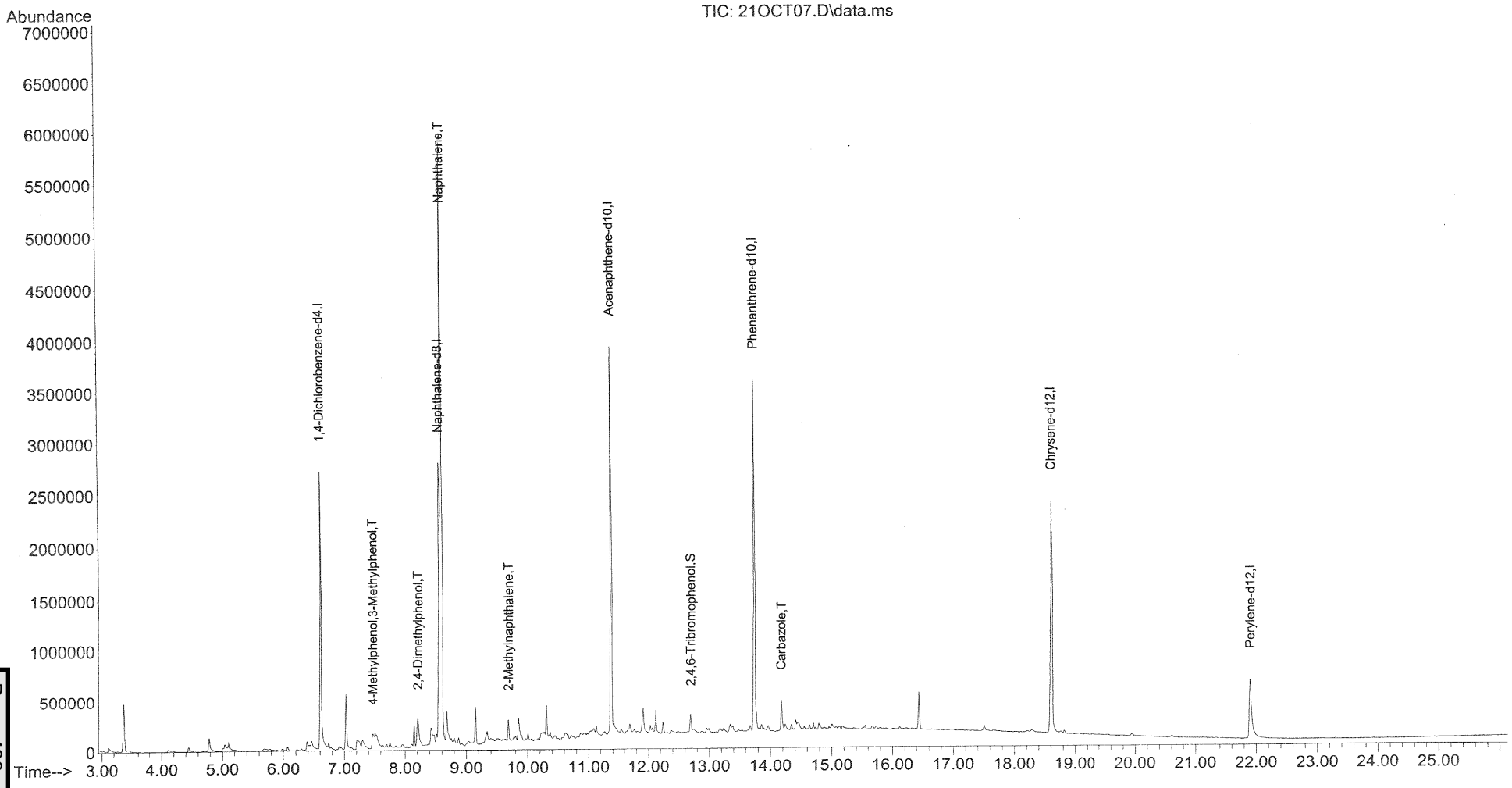
report

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT07.D
Acq On : 21 Oct 2009 6:29 pm
Operator : RIS
Sample : 09J0523-10
Misc : 10,SEVERSTAL,10X DIL,0.1mL/1mL,BNAwx,950:1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 22 13:31:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\2009\10oct09\OCT2109\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 21OCT35.D No data found		0	0.000	N/A
2) 21OCT01.D CAL BLANK	BLANK, 10uL MI90302	1	1.000	21 Oct 2009 2:48 pm
3) 21OCT02.D 50PPM TAIL CHK	50ng TAILING CHECK	99	1.000	21 Oct 2009 3:24 pm
4) 21OCT03.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	21 Oct 2009 4:01 pm
5) 21OCT04.D 40 ug/mL CCC	400uL MI90905>1mL	2	1.000	21 Oct 2009 4:38 pm
6) 21OCT05.D CCB	CONT CAL BLANK	1	1.000	21 Oct 2009 5:15 pm
7) 21OCT06.D J0523-05	2,SEVERSTAL,2X DIL,0	3	1.000	21 Oct 2009 5:52 pm
8) 21OCT07.D J0523-10	10,SEVERSTAL,10X DIL	4	1.000	21 Oct 2009 6:29 pm
9) 21OCT08.D 0943112-BLK1	1,METHOD BLANK,BNAwx	5	1.000	21 Oct 2009 7:05 pm
10) 21OCT09.D 0943112-BS1	1,50PPM LCS,BNAwx,20	6	1.000	21 Oct 2009 7:42 pm
11) 21OCT10.D 0943112-BSD1	1,50PPM LCS DUP,BNAw	7	1.000	21 Oct 2009 8:19 pm
12) 21OCT11.D [redacted]	[redacted],	8	1.000	21 Oct 2009 8:56 pm
13) 21OCT12.D [redacted]	[redacted]	9	1.000	21 Oct 2009 9:32 pm
14) 21OCT13.D 0943108-BLK1	1,METHOD BLANK,BNAwx	10	1.000	21 Oct 2009 10:09 pm
15) 21OCT14.D 0943108-BS1	1,50PPM LCS,BNAwx,10	11	1.000	21 Oct 2009 10:46 pm
16) 21OCT15.D 0943108-BSD1	1,50PPM LCS DUP,BNAw	12	1.000	21 Oct 2009 11:22 pm
17) 21OCT16.D J0523-14	Re ran @ 5X 10/22/09 RS 1,SEVERSTAL,BNAwx,10	13	1.000	21 Oct 2009 11:59 pm
18) 21OCT17.D J0523-15	1,SEVERSTAL,BNAwx,98	14	1.000	22 Oct 2009 12:35 am
19) 21OCT18.D J0523-16	1,SEVERSTAL,BNAwx,98	15	1.000	22 Oct 2009 1:12 am
20) 21OCT19.D J0523-17	1,SEVERSTAL,BNAwx,10	16	1.000	22 Oct 2009 1:49 am
21) 21OCT20.D				

[redacted] [redacted] 17 1.000 22 Oct 2009 2:26 am

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22) 21OCT21.D
TUNE MIX PCP,DFTPP,BENZ,DDT 100 1.000 22 Oct 2009 3:02 am

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23) 21OCT22.D
40 ug/mL CCC 400uL MI90905>1mL 2 1.000 22 Oct 2009 9:30 am

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24) 21OCT23.D
CCB CONT CAL BLANK 1 1.000 22 Oct 2009 10:06 am

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25) 21OCT24.D
[redacted] 18 1.000 22 Oct 2009 10:43 am

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26) 21OCT25.D
[redacted] 19 1.000 22 Oct 2009 11:19 am

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27) 21OCT26.D
[redacted] 20 1.000 22 Oct 2009 11:56 am

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28) 21OCT27.D
[redacted] 21 1.000 22 Oct 2009 12:33 pm

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29) 21OCT28.D
[redacted] 22 1.000 22 Oct 2009 1:09 pm

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30) 21OCT29.D
[redacted] 23 1.000 22 Oct 2009 1:46 pm

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31) 21OCT30.D
[redacted] 24 1.000 22 Oct 2009 2:22 pm

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32) 21OCT31.D
09J0779-01 1,SEVERSTAL,BNAwx,93 25 1.000 22 Oct 2009 2:59 pm

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33) 21OCT32.D
09J0779-02 1,SEVERSTAL,BNAwx,93 26 1.000 22 Oct 2009 3:35 pm

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34) 21OCT33.D
[redacted] 9 1.000 22 Oct 2009 4:12 pm

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35) 21OCT34.D
09J0779-03 1,SEVERSTAL,BNAwx,94 27 1.000 22 Oct 2009 4:48 pm

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36) 21OCT35.D
09J0523-14 5,SEVERSTAL,BNAwx,10 13 1.000 22 Oct 2009 5:25 pm

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\10oct09\OCT2109\21OCT03.D
Tune Time : 21 Oct 2009 4:01 pm

Daily Calibration File : C:\msdchem\1\DATA\2009\10oct09\OCT2109\21OCT04.D

(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				564976	2216400	1307610

(TBP)	(TPH)	(PHN)	(CRY)	(PRY)
		2219860	1800750	665882

File	Sample	Surrogate Recovery %				Internal Standard Responses			
21OCT04.D									
	40 ug/mL C	55	47	74	76	564976	2216398	1307611	
		47	80			2219863	1800751	665882	
21OCT05.D									
	CCB	0*	0*	0*	0*	766564	2907470	1633936	
		0*	0*			2363292	1687782	588402	
21OCT06.D									
	09J0523-05	20	12*	27*	32*	635496	2531479	1384372	2X
		28	42			2138756	1587970	534996	
21OCT07.D									
	09J0523-10	3*	3*	6*	7*	651736	2469903	1346615	10X
		8*	9*			2111692	1780750	567699	
21OCT08.D									
	0943112-BL	32	21	58	64	690646	2741524	1530802	
		55	48			2461299	2158179	697317	
21OCT09.D									
	0943112-BS	44	29	66	69	660914	2653685	1571502	
		70	56			2602358	2210460	656006	
21OCT10.D									
	0943112-BS	36	22	60	65	744821	2946447	1720491	
		66	55			2944038	2473756	705836	
21OCT11.D									
	[redacted]	50	33	81	89	576942	2230040	1243263	
		90	71			1945384	1712584	520534	
21OCT12.D									
	[redacted]	0*	0*	0*	0*	0*	0*	0*	Rerun 10/22/09 RES
		0*	0*			0*	0*	0*	
21OCT13.D									
	0943108-BL	48	31	82	92	519403	2016167	1090313	
		88	115			1735468	1258568	345232	
21OCT14.D									
	0943108-BS	56	42	89	99	475756	1847628	1048004	
		100	119			1776462	1360152	452018	
21OCT15.D									
	0943108-BS	56	41	86	98	460715	1809723	1014620	
		100	119			1689410	1288277	407404	
21OCT16.D									
	09J0523-14	49	34	85	90	520733	1826004	1054241	IS ↓
		101	114			1620475	1265285	322924*	
21OCT17.D									

	09J0523-15	52	34	91	98	526418	1939393	1053247
		103	101			1631487	1203050	312877*
21OCT18.D								
	09J0523-16	45	29	76	85	540874	2045825	1096680
		88	87			1704773	1300074	367160
21OCT19.D								
	09J0523-17	48	31	86	94	514472	1942688	1059354
		88	96			1657047	1257979	405836
21OCT20.D								
	[redacted]	47	30	82	93	543691	2059447	1101001
		94	112			1716184	1209342	354127

IS ↓ Data flagged

(fails) - fails 12hr time check * - fails criteria

Created: Thu Oct 22 17:30:06 2009 Instrument #1

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\10oct09\OCT2109\21OCT21.D
Tune Time : 22 Oct 2009 3:02 am

Daily Calibration File : C:\msdchem\1\DATA\2009\10oct09\OCT2109\21OCT22.D

	(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
					568142	2218970	1302530
	(TBP)	(TPH)			(PHN)	(CRY)	(PRY)
					2194860	1690930	528367

File	Sample	Surrogate Recovery %				Internal Standard Responses			
21OCT22.D									
	40 ug/mL C	57	47	75	76	568142	2218965	1302530	
		45	84			2194855	1690931	528367	
21OCT23.D									
	CCB	0*	0*	0*	0*	791796	3036964	1665850	
		0*	0*			2378167	1612815	455316	
21OCT24.D									
	[redacted]	53	37	97	98	502909	1795697	1017725	
		95	151*			1563819	1060115	279170	
21OCT25.D									
	[redacted]	37	25	64	76	553506	2085598	1141733	IS ↓
		81	104			1753724	1115418	261667*	
21OCT26.D									
	[redacted]	42	29	73	79	538466	2000638	1113380	
		88	116			1672930	1130066	277423	
21OCT27.D									
	[redacted]	51	35	84	90	518292	1956797	1063745	IS ↓
		91	122			1618606	999654	230275*	
21OCT28.D									
	[redacted]	43	28	75	85	537370	2057973	1116690	
		94	117			1695351	1100482	271003	
21OCT29.D									
	[redacted]	37	25	69	75	539586	2035949	1103692	
		76	70			1745844	1130755	273307	
21OCT30.D									
	[redacted]	42	27	73	88	524462	2005169	1105613	IS ↓
		86	125			1699324	1085219	256945*	
21OCT31.D									
	09J0779-01	47	31	81	85	551809	2126834	1146711	
		87	102			1766118	1142400	289207	
21OCT32.D									
(fails)	09J0779-02	47	31	80	84	512242	1934745	1050749	~~IS~~ ↓
		86	97			1577376	1015626	239445*	
21OCT33.D									
(fails)	[redacted]	36	22	65	72	551739	2202887	1222130	
		75	68			1844947	1335272	323877	
21OCT34.D									
(fails)	09J0779-03	47	31	83	88	529240	2016634	1090946	IS ↓
		90	102			1665424	1083920	263920*	
21OCT35.D									

not on client list 10/26/09 KES

Fail

Tune fr

(fails)	09J0523-14	9*	6*	15*	19*	540637	1935105	1085504
		19*	26			1660056	1115376	290346

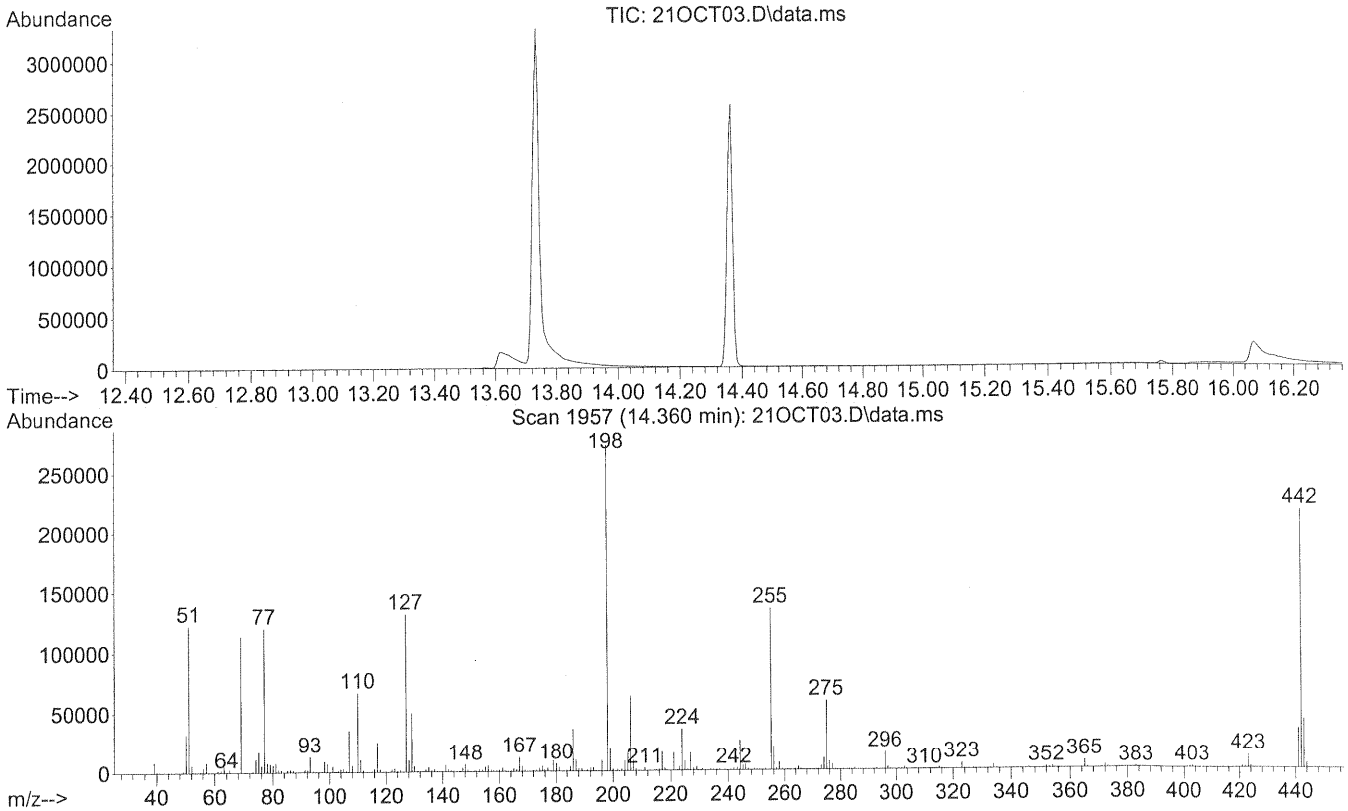
(fails) - fails 12hr time check * - fails criteria

Created: Mon Oct 26 11:48:01 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT03.D
Acq On : 21 Oct 2009 4:01 pm
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\TUNEMIX.M
Title : 8270/625 BNA Calibration
Last Update : Fri Jun 26 13:23:15 2009



Spectrum Information: Scan 1957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.8	122216	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.6	113552	PASS
70	69	0.00	2	0.5	588	PASS
127	198	40	60	48.3	131712	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	272960	PASS
199	198	5	9	6.9	18896	PASS
275	198	10	30	21.4	58336	PASS
365	198	1	100	2.5	6845	PASS
441	443	0.01	100	82.0	34200	PASS
442	198	40	100	79.5	217088	PASS
443	442	17	23	19.2	41720	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT04.D
Acq On : 21 Oct 2009 4:38 pm
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 22 13:24:17 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	-0.02
2		N-Nitrosodimethylamine	0.701	0.859	-22.5	127	-0.04
3	T	Pyridine	1.180	1.555	-31.8#	128	-0.01
4	S	2-Fluorophenol	1.112	1.296	-16.5	111	-0.11
5		Pentachloroethane	0.462	0.530	-14.7	104	-0.04
6		Aniline	1.217	1.265	-3.9	103	-0.05
7	T	bis(2-Chloroethyl)ether	1.423	1.564	-9.9	107	-0.04
8	S	Phenol-d5	1.447	1.437	0.7	96	-0.12
9	M*	Phenol	1.375	1.536	-11.7	109	-0.12
10	M	2-Chlorophenol	1.149	1.286	-11.9	109	-0.07
11	T	1,3-Dichlorobenzene	1.312	1.435	-9.4	108	-0.02
12	M*	1,4-Dichlorobenzene	1.368	1.436	-5.0	103	-0.02
13	T	1,2-Dichlorobenzene	1.323	1.412	-6.7	104	-0.03
14	T	Benzyl alcohol	0.708	0.819	-15.7	109	-0.06
15	T	bis(2-chloroisopropyl)ether	2.246	2.339	-4.1	102	-0.03
16	T	2-Methylphenol	1.035	1.130	-9.2	106	-0.09
17	T	Hexachloroethane	0.493	0.537	-8.9	108	-0.02
18	M**	N-Nitroso-di-n-propylamine	0.827	0.889	-7.5	104	-0.03
19	T	4-Methylphenol,3-Methylphen	1.015	1.130	-11.3	106	-0.09
20	I	Naphthalene-d8	1.000	1.000	0.0	101	-0.03
21	S	Nitrobenzene-d5	0.340	0.356	-4.7	108	-0.03
22	T	Nitrobenzene	0.336	0.314	6.5	102	-0.03
23	T	Isophorone	0.650	0.669	-2.9	101	-0.02
24	T*	2-Nitrophenol	0.164	0.186	-13.4	113	-0.03
25	T	2,4-Dimethylphenol	0.302	0.319	-5.6	109	-0.07
26	T	bis(2-Chloroethoxy)methane	0.363	0.369	-1.7	104	-0.03
27	T*	2,4-Dichlorophenol	0.229	0.243	-6.1	105	-0.07
28	M	1,2,4-Trichlorobenzene	0.300	0.310	-3.3	106	-0.03
29	T	Naphthalene	0.863	0.884	-2.4	105	-0.03
30	T	4-Chloroaniline	0.150	0.174	-16.0	119	-0.04
31	T	Benzoic Acid	0.143	0.164	-14.7	109	-0.07
32	T*	Hexachlorobutadiene	0.169	0.170	-0.6	103	-0.03
33	M*	4-Chloro-3-methylphenol	0.237	0.275	-16.0	115	-0.10
34	T	2-Methylnaphthalene	0.745	0.833	-11.8	105	-0.03
35		1-Methylnaphthalene	0.587	0.608	-3.6	106	-0.03
36	I	Acenaphthene-d10	1.000	1.000	0.0	109	-0.03
37	T**	Hexachlorocyclopentadiene	0.113	0.114	-0.9	91	-0.03
38	T*	2,4,6-Trichlorophenol	0.285	0.309	-8.4	103	-0.06
39	T	2,4,5-Trichlorophenol	0.270	0.305	-13.0	106	-0.08
40	S	2-Fluorobiphenyl	1.183	1.261	-6.6	104	-0.03
41	T	2-Chloronaphthalene	0.874	0.946	-8.2	108	-0.03
42	T	2-Nitroaniline	0.256	0.301	-17.6	114	-0.05
43		1,4-Dinitrobenzene	0.161	0.185	-14.9	107	-0.04
44	T	Acenaphthylene	1.451	1.559	-7.4	105	-0.03

45	T	Dimethylphthalate	1.040	1.127	-8.4	106	-0.04
46		1,3-Dinitrobenzene	0.140	0.161	-15.0	106	-0.03
47		1,2-Dinitrobenzene	0.110	0.123	-11.8	105	-0.04
48	T	2,6-Dinitrotoluene	0.231	0.251	-8.7	105	-0.03
49	M*	Acenaphthene	0.895	0.955	-6.7	105	-0.04
50	T	3-Nitroaniline	0.288	0.337	-17.0	115	-0.05
51	T**	2,4-Dinitrophenol	0.093	0.113	-21.5	103	-0.02
52	T	Dibenzofuran	1.204	1.343	-11.5	107	-0.04
53		2,3,5,6-Tetrachlorophenol	0.189	0.211	-11.6	97	-0.06
54		2,3,4,6-Tetrachlorophenol	0.190	0.252	-32.6#	119	-0.06
55	M	2,4-Dinitrotoluene	0.295	0.333	-12.9	105	-0.03
56	M**	4-Nitrophenol	0.099	0.083	16.2	70	-0.08
57	T	Fluorene	0.960	1.021	-6.4	104	-0.03
58	T	4-Chlorophenyl-phenylether	0.447	0.475	-6.3	105	-0.04
59	T	Diethylphthalate	1.024	1.103	-7.7	104	-0.04
60	T	1,2-Diphenylhydrazine (Azob	1.021	1.110	-8.7	105	-0.04
61	T	4-Nitroaniline	0.122	0.138	-13.1	107	-0.03
62	I	Phenanthrene-d10	1.000	1.000	0.0	129	-0.04
63	T	4,6-Dinitro-2-methylphenol	0.102	0.108	-5.9	99	-0.03
64	T*	n-Nitrosodiphenylamine	0.471	0.456	3.2	116	-0.04
65	S	2,4,6-Tribromophenol	0.097	0.096	1.0	103	-0.05
66	T	4-Bromophenyl-phenylether	0.207	0.197	4.8	106	-0.04
67	T	Hexachlorobenzene	0.227	0.208	8.4	102	-0.03
68	M*	Pentachlorophenol	0.070	0.070	0.0	97	-0.05
69	T	Phenanthrene	0.974	0.886	9.0	101	-0.04
70	T	Anthracene	0.985	0.925	6.1	103	-0.04
71	T	Carbazole	0.807	0.785	2.7	103	-0.05
72	T	Di-n-butylphthalate	1.205	1.123	6.8	102	-0.04
73	T*	Fluoranthene	1.052	0.963	8.5	101	-0.04
74	I	Chrysene-d12	1.000	1.000	0.0	104	-0.06
75	M	Pyrene	1.089	1.226	-12.6	99	-0.05
76		Benzidine	0.261	0.080	69.3#	22#	-0.03
77	S	Terphenyl-d14	0.759	0.854	-12.5	98	-0.05
78		3,3'-Dimethylbenzidine	0.382	0.186	51.3#	40	-0.07
79	T	Butylbenzylphthalate	0.508	0.558	-9.8	96	-0.06
80		bis(2-ethylhexyl)adipate	0.459	0.520	-13.3	99	-0.06
81	T	3,3'-Dichlorobenzidine	0.155	0.109	29.7	68	-0.02
82	T	Benzo[a]anthracene	0.994	0.965	2.9	84	-0.06
83	T	Chrysene	0.901	0.879	2.4	85	-0.06
84	T	bis(2-Ethylhexyl)phthalate	0.727	0.759	-4.4	92	-0.06
85	I	Perylene-d12	1.000	1.000	0.0	49	-0.08
86	T*	Di-n-octylphthalate	1.633	3.182	-94.9#	78	-0.08
87	T	Benzo[b]fluoranthene	1.284	1.440	-12.1	44	-0.07
88	T	Benzo[k]fluoranthene	1.105	1.507	-36.4#	54	-0.09
89	T*	Benzo[a]pyrene	1.131	1.152	-1.9	40	-0.08
90	T	Indeno[1,2,3-cd]pyrene	0.811	0.527	35.0#	27#	-0.04
91	T	Dibenz[a,h]anthracene	0.669	0.409	38.9#	26#	-0.06
92	T	Benzo[g,h,i]perylene	0.597	0.344	42.4#	25#	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FTASEP29A.M Thu Oct 22 13:27:20 2009 MSD5

Not in Samples
Data ok.
Initials DBS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT04.D
Acq On : 21 Oct 2009 4:38 pm
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 22 13:24:17 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	103	-0.02
2		N-Nitrosodimethylamine	40.000	43.544	-8.9	127	-0.04
3	T	Pyridine	40.000	46.858	-17.1	128	-0.01
4	S	2-Fluorophenol	40.000	41.433	-3.6	111	-0.11
5		Pentachloroethane	40.000	39.299	1.8	104	-0.04
6		Aniline	40.000	35.127	12.2	103	-0.05
7	T	bis(2-Chloroethyl)ether	40.000	39.086	2.3	107	-0.04
8	S	Phenol-d5	40.000	35.292	11.8	96	-0.12
9	M*	Phenol	40.000	39.714	0.7	109	-0.12
10	M	2-Chlorophenol	40.000	39.785	0.5	109	-0.07
11	T	1,3-Dichlorobenzene	40.000	38.890	2.8	108	-0.02
12	M*	1,4-Dichlorobenzene	40.000	37.314	6.7	103	-0.02
13	T	1,2-Dichlorobenzene	40.000	37.937	5.2	104	-0.03
14	T	Benzyl alcohol	40.000	41.112	-2.8	109	-0.06
15	T	bis(2-chloroisopropyl)ether	40.000	37.026	7.4	102	-0.03
16	T	2-Methylphenol	40.000	38.843	2.9	106	-0.09
17	T	Hexachloroethane	40.000	38.746	3.1	108	-0.02
18	M**	N-Nitroso-di-n-propylamine	40.000	38.235	4.4	104	-0.03
19	T	4-Methylphenol,3-Methylphen	40.000	39.599	1.0	106	-0.09
20	I	Naphthalene-d8	40.000	40.000	0.0	101	-0.03
21	S	Nitrobenzene-d5	40.000	37.188	7.0	108	-0.03
22	T	Nitrobenzene	40.000	33.437	16.4	102	-0.03
23	T	Isophorone	40.000	36.602	8.5	101	-0.02
24	T*	2-Nitrophenol	40.000	40.230	-0.6	113	-0.03
25	T	2,4-Dimethylphenol	40.000	37.599	6.0	109	-0.07
26	T	bis(2-Chloroethoxy)methane	40.000	36.153	9.6	104	-0.03
27	T*	2,4-Dichlorophenol	40.000	37.710	5.7	105	-0.07
28	M	1,2,4-Trichlorobenzene	40.000	36.746	8.1	106	-0.03
29	T	Naphthalene	40.000	36.443	8.9	105	-0.03
30	T	4-Chloroaniline	40.000	41.179	-2.9	119	-0.04
31	T	Benzoic Acid	40.000	35.970	10.1	109	-0.07
32	T*	Hexachlorobutadiene	40.000	35.822	10.4	103	-0.03
33	M*	4-Chloro-3-methylphenol	40.000	41.293	-3.2	115	-0.10
34	T	2-Methylnaphthalene	40.000	35.895	10.3	105	-0.03
35		1-Methylnaphthalene	40.000	36.843	7.9	106	-0.03
36	I	Acenaphthene-d10	40.000	40.000	0.0	109	-0.03
37	T**	Hexachlorocyclopentadiene	40.000	33.093	17.3	91	-0.03
38	T*	2,4,6-Trichlorophenol	40.000	38.596	3.5	103	-0.06
39	T	2,4,5-Trichlorophenol	40.000	40.236	-0.6	106	-0.08
40	S	2-Fluorobiphenyl	40.000	37.901	5.2	104	-0.03
41	T	2-Chloronaphthalene	40.000	38.487	3.8	108	-0.03
42	T	2-Nitroaniline	40.000	41.766	-4.4	114	-0.05
43		1,4-Dinitrobenzene	40.000	40.793	-2.0	107	-0.04
44	T	Acenaphthylene	40.000	38.193	4.5	105	-0.03

45	T	Dimethylphthalate	40.000	38.550	3.6	106	-0.04
46		1,3-Dinitrobenzene	40.000	41.054	-2.6	106	-0.03
47		1,2-Dinitrobenzene	40.000	39.829	0.4	105	-0.04
48	T	2,6-Dinitrotoluene	40.000	38.713	3.2	105	-0.03
49	M*	Acenaphthene	40.000	37.945	5.1	105	-0.04
50	T	3-Nitroaniline	40.000	41.608	-4.0	115	-0.05
51	T**	2,4-Dinitrophenol	40.000	39.106	2.2	103	-0.02
52	T	Dibenzofuran	40.000	39.675	0.8	107	-0.04
53		2,3,5,6-Tetrachlorophenol	40.000	35.568	11.1	97	-0.06
54		2,3,4,6-Tetrachlorophenol	40.000	42.627	-6.6	119	-0.06
55	M	2,4-Dinitrotoluene	40.000	40.118	-0.3	105	-0.03
56	M**	4-Nitrophenol	40.000	29.243	26.9	70	-0.08
57	T	Fluorene	40.000	37.836	5.4	104	-0.03
58	T	4-Chlorophenyl-phenylether	40.000	37.801	5.5	105	-0.04
59	T	Diethylphthalate	40.000	38.310	4.2	104	-0.04
60	T	1,2-Diphenylhydrazine (Azob	40.000	38.677	3.3	105	-0.04
61	T	4-Nitroaniline	40.000	39.954	0.1	107	-0.03
62							
62	I	Phenanthrene-d10	40.000	40.000	0.0	129	-0.04
63	T	4,6-Dinitro-2-methylphenol	40.000	33.604	16.0	99	-0.03
64	T*	n-Nitrosodiphenylamine	40.000	36.453	8.9	116	-0.04
65	S	2,4,6-Tribromophenol	40.000	35.146	12.1	103	-0.05
66	T	4-Bromophenyl-phenylether	40.000	33.727	15.7	106	-0.04
67	T	Hexachlorobenzene	40.000	32.691	18.3	102	-0.03
68	M*	Pentachlorophenol	40.000	35.265	11.8	97	-0.05
69	T	Phenanthrene	40.000	32.359	19.1	101	-0.04
70	T	Anthracene	40.000	33.372	16.6	103	-0.04
71	T	Carbazole	40.000	34.565	13.6	103	-0.05
72	T	Di-n-butylphthalate	40.000	33.141	17.1	102	-0.04
73	T*	Fluoranthene	40.000	32.574	18.6	101	-0.04
74	I	Chrysene-d12	40.000	40.000	0.0	104	-0.06
75	M	Pyrene	40.000	40.044	-0.1	99	-0.05
76		Benzidine	40.000	14.816	63.0#	22	-0.03
77	S	Terphenyl-d14	40.000	40.002	-0.0	98	-0.05
78		3,3'-Dimethylbenzidine	40.000	17.307	56.7#	40	-0.07
79	T	Butylbenzylphthalate	40.000	39.048	2.4	96	-0.06
80		bis(2-ethylhexyl)adipate	40.000	40.244	-0.6	99	-0.06
81	T	3,3'-Dichlorobenzidine	40.000	26.424	33.9#	68	-0.02
82	T	Benzo[a]anthracene	40.000	34.515	13.7	84	-0.06
83	T	Chrysene	40.000	34.681	13.3	85	-0.06
84	T	bis(2-Ethylhexyl)phthalate	40.000	37.108	7.2	92	-0.06
85							
85	I	Perylene-d12	40.000	40.000	0.0	49	-0.08
86	T*	Di-n-octylphthalate	40.000	69.280	-73.2#	78	-0.08
87	T	Benzo[b]fluoranthene	40.000	37.454	6.4	44	-0.07
88	T	Benzo[k]fluoranthene	40.000	48.519	-21.3	54	-0.09
89	T*	Benzo[a]pyrene	40.000	36.217	9.5	40	-0.08
90	T	Indeno[1,2,3-cd]pyrene	40.000	19.890	50.3#	27	-0.04
91	T	Dibenz[a,h]anthracene	40.000	18.458	53.9#	26	-0.06
92	T	Benzo[g,h,i]perylene	40.000	17.571	56.1#	25	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ASEP29A.M Thu Oct 22 13:25:53 2009 MSD5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT16.D
Acq On : 21 Oct 2009 11:59 pm
Operator : RIS
Sample : 09J0523-14
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 22 16:15:10 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	520733	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.557	136	1826004	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.368	164	1054241	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.736	188	1620475	40.00	ug/mL	-0.05
74) Chrysene-d12	18.607	240	1265285	40.00	ug/mL	-0.07
85) Perylene-d12	21.908	264	322924	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	5.002	112	597292	36.68	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 48.91%			
8) Phenol-d5	6.349	99	546737	25.79	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 34.39%			
21) Nitrobenzene-d5	7.510	82	739209	42.33	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 84.66%			
40) 2-Fluorobiphenyl	10.306	172	1569966	44.75	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 89.50%			
65) 2,4,6-Tribromophenol	12.692	330	335824	75.96	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 101.28%			
77) Terphenyl-d14	16.454	244	1535555	56.86	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 113.72%			
Target Compounds						Qvalue
16) 2-Methylphenol	7.177	108	230495	15.21	ug/mL	98
25) 2,4-Dimethylphenol	8.195	107	1618960	104.48	ug/mL	93
29) Naphthalene	8.586	128	501980	11.33	ug/mL	99
64) n-Nitrosodiphenylamine	12.517	169	368	Below Cal #		48
81) 3,3'-Dichlorobenzidine	18.881	252	498	Below Cal		83
84) bis(2-Ethylhexyl)phtha...	18.863	149	3952096	152.66	ug/mL	100

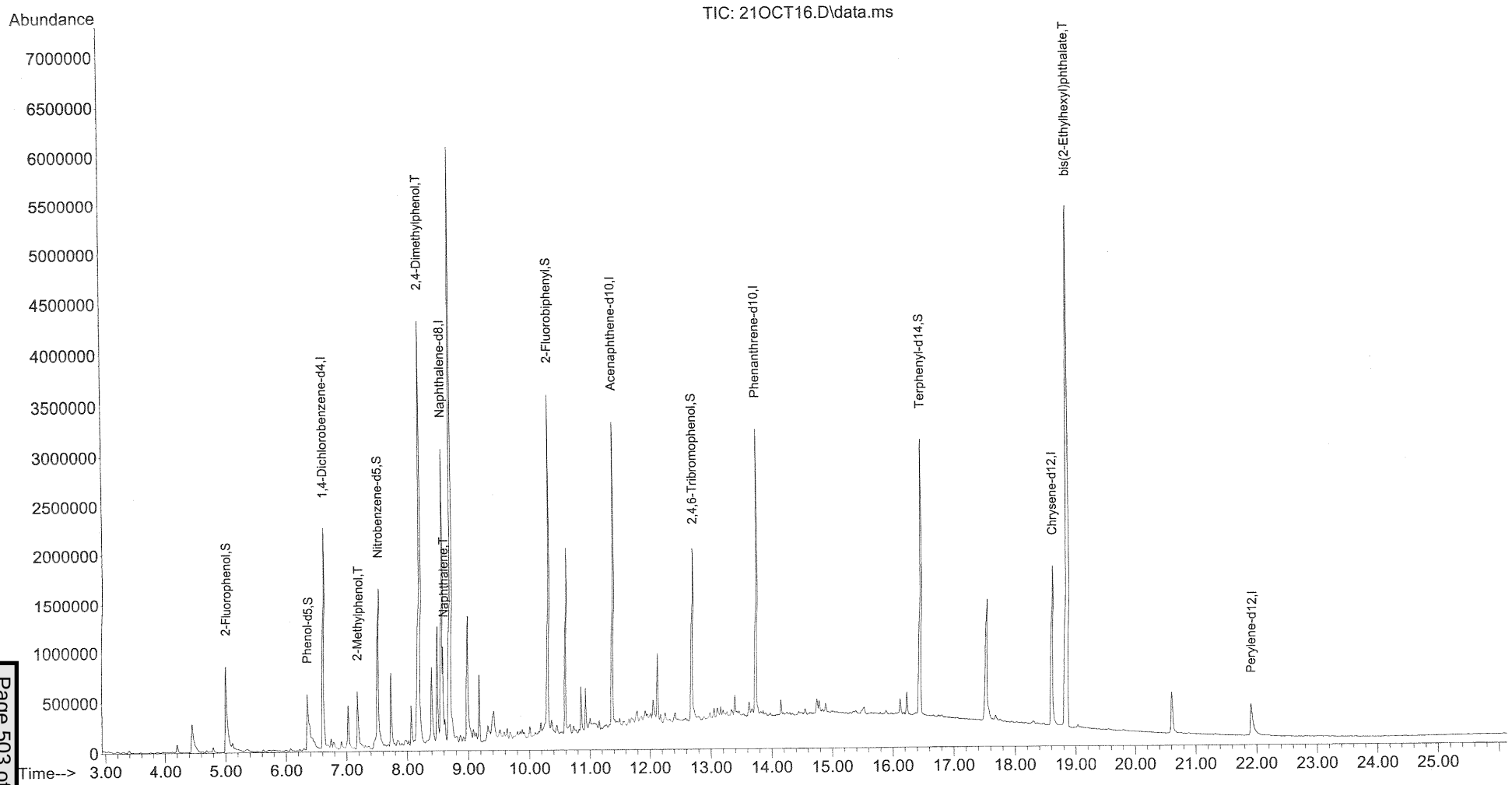
over Cal. Rerun 5X 10/22/09

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Reviewed)Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT16.D
Acq On : 21 Oct 2009 11:59 pm
Operator : RIS
Sample : 09J0523-14
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 22 16:15:10 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT17.D
Acq On : 22 Oct 2009 12:35 am
Operator : RIS
Sample : 09J0523-15
Misc : 1,SEVERSTAL,BNAwx,980:1
ALS Vial : 14 Sample Multiplier: 1

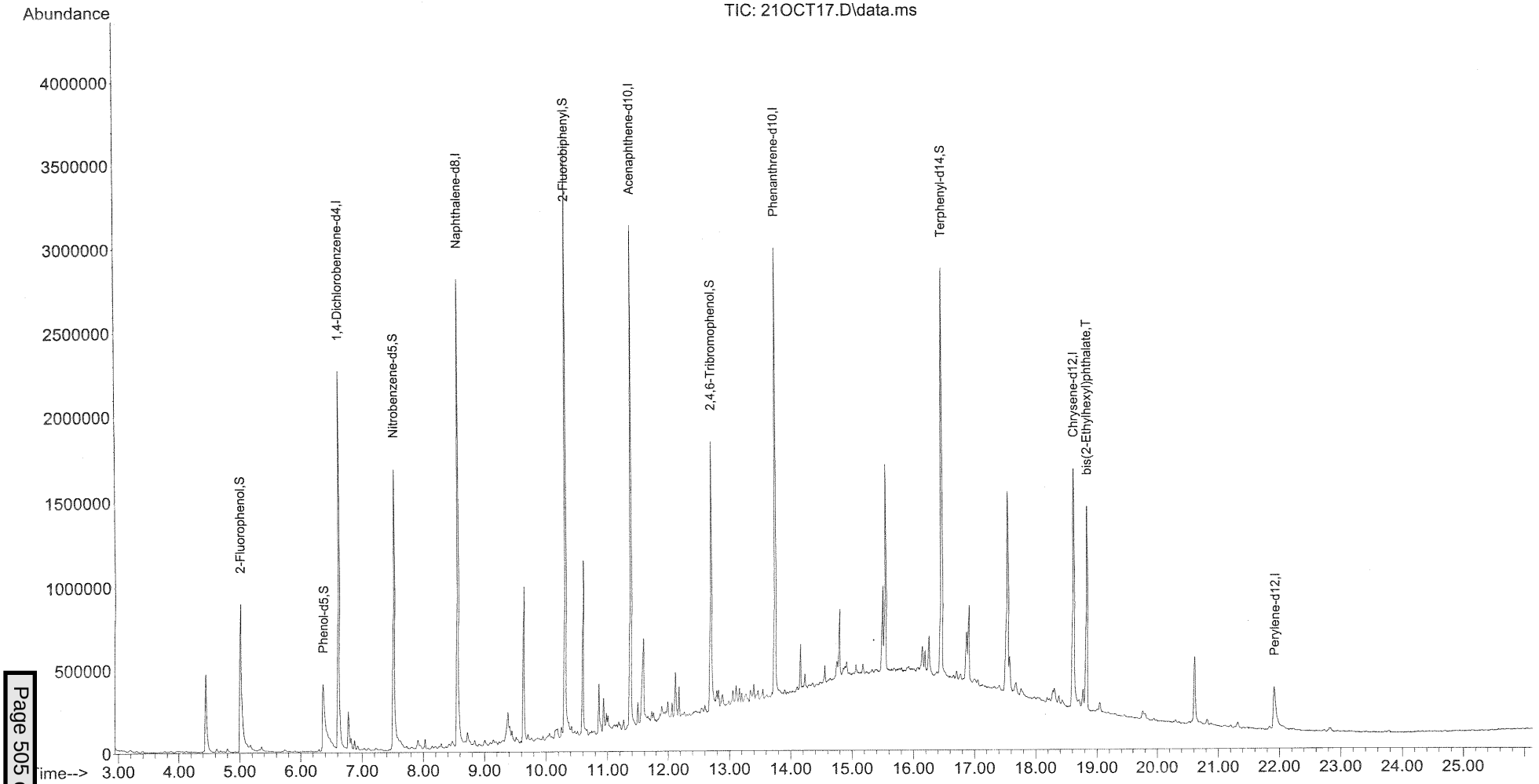
Quant Time: Oct 22 16:17:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.606	152	526418	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	1939393	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.368	164	1053247	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.736	188	1631487	40.00	ug/mL	-0.05
74) Chrysene-d12	18.612	240	1203050	40.00	ug/mL	-0.07
85) Perylene-d12	21.913	264	312877	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	5.002	112	641885	38.99	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 51.99%			
8) Phenol-d5	6.361	99	543050	25.34	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 33.79%			
21) Nitrobenzene-d5	7.510	82	846660	45.65	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 91.30%			
40) 2-Fluorobiphenyl	10.306	172	1720626	49.09	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 98.18%			
65) 2,4,6-Tribromophenol	12.692	330	342421	76.93	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 102.57%			
77) Terphenyl-d14	16.454	244	1300025	50.63	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 101.26%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.505	169	461	Below Cal	#	46
81) 3,3'-Dichlorobenzidine	18.781	252	408	Below Cal		91
84) bis(2-Ethylhexyl)phtha...	18.828	149	581204	23.61	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT17.D
Acq On : 22 Oct 2009 12:35 am
Operator : RIS
Sample : 09J0523-15
Misc : 1,SEVERSTAL,BNAwx,980:1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 22 16:17:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT18.D
Acq On : 22 Oct 2009 1:12 am
Operator : RIS
Sample : 09J0523-16
Misc : 1,SEVERSTAL,BNAwx,980:1
ALS Vial : 15 Sample Multiplier: 1

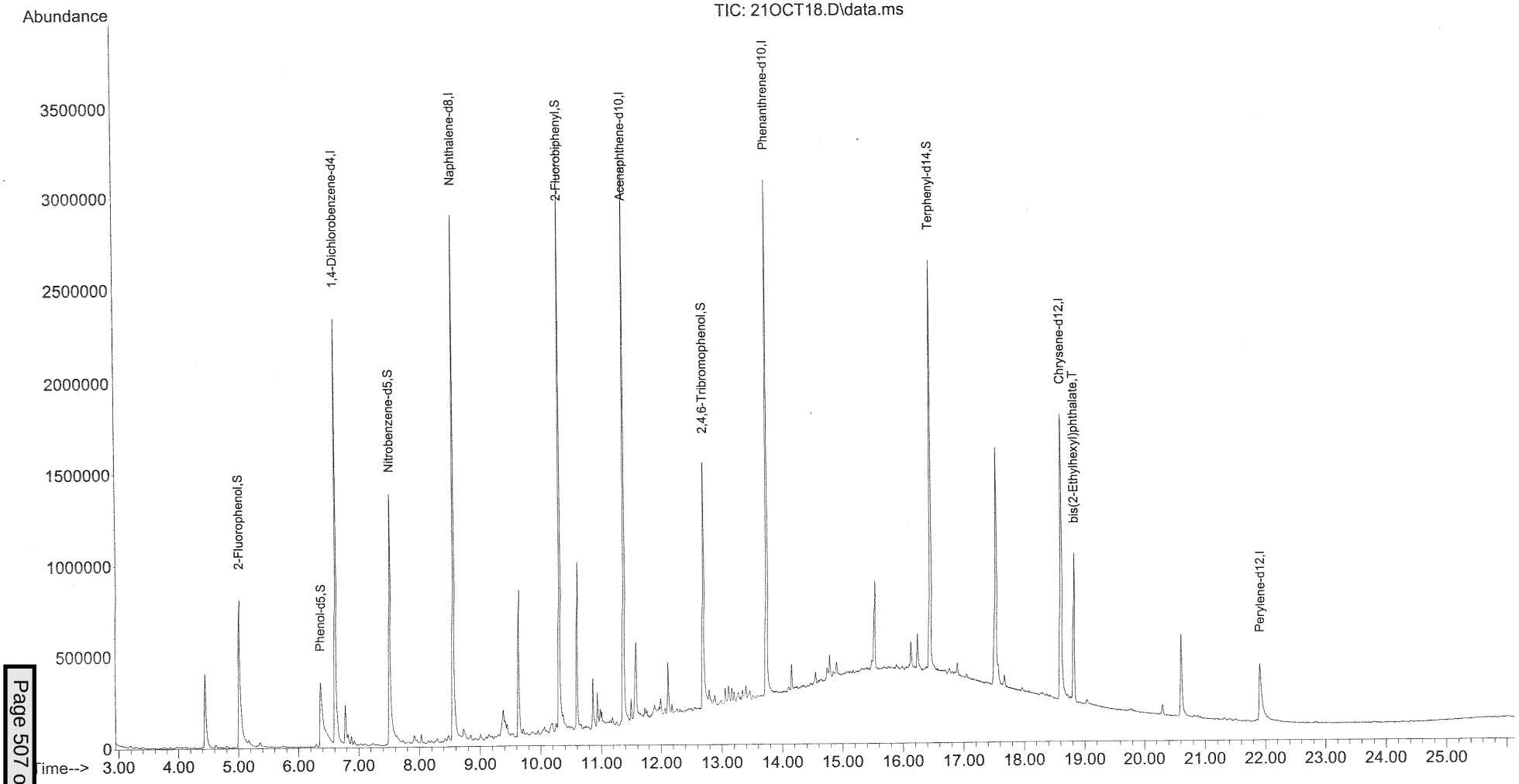
Quant Time: Oct 22 16:18:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.609	152	540874	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2045825	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.368	164	1096680	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.736	188	1704773	40.00	ug/mL	-0.05
74) Chrysene-d12	18.606	240	1300074	40.00	ug/mL	-0.07
85) Perylene-d12	21.908	264	367160	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	5.005	112	569953	33.69	ug/mL	-0.10
Spiked Amount 75.000	Range 10 - 83		Recovery = 44.92%			
8) Phenol-d5	6.364	99	477033	21.66	ug/mL	-0.10
Spiked Amount 75.000	Range 13 - 62		Recovery = 28.88%			
21) Nitrobenzene-d5	7.513	82	741936	37.92	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 75.84%			
40) 2-Fluorobiphenyl	10.306	172	1554885	42.61	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 85.22%			
65) 2,4,6-Tribromophenol	12.692	330	307349	66.08	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 88.11%			
77) Terphenyl-d14	16.448	244	1203630	43.37	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 86.74%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.499	169	526	Below Cal	#	77
81) 3,3'-Dichlorobenzidine	18.799	252	121	Below Cal		78
84) bis(2-Ethylhexyl)phtha...	18.822	149	382991	14.40	ug/mL	99
92) Benzo[g,h,i]perylene	24.719	276	73	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT18.D
Acq On : 22 Oct 2009 1:12 am
Operator : RIS
Sample : 09J0523-16
Misc : 1,SEVERSTAL,BNAwx,980:1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 22 16:18:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT19.D
Acq On : 22 Oct 2009 1:49 am
Operator : RIS
Sample : 09J0523-17
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 16 Sample Multiplier: 1

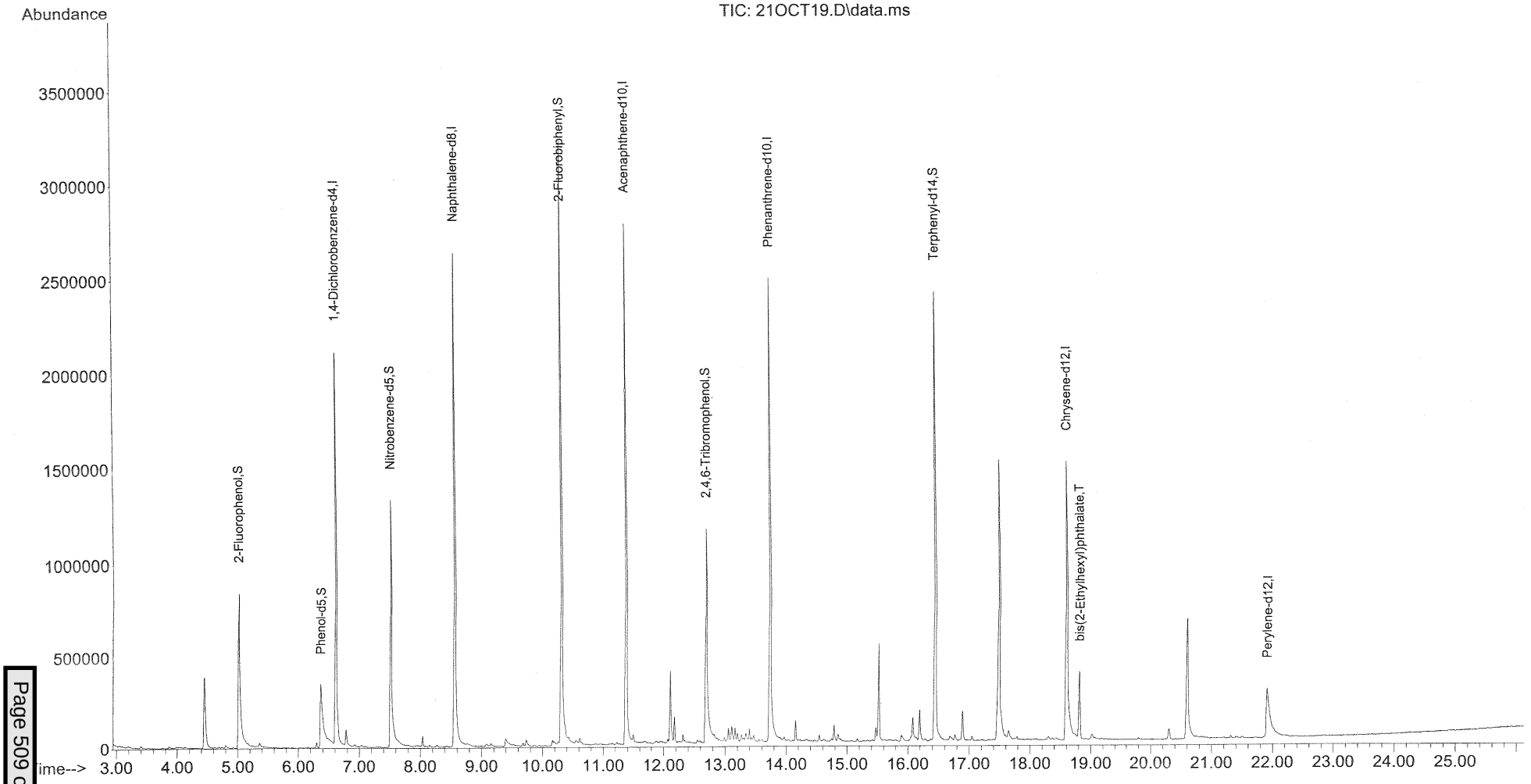
Quant Time: Oct 22 16:20:00 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.606	152	514472	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.556	136	1942688	40.00	ug/mL	-0.04
36) Acenaphthene-d10		11.368	164	1059354	40.00	ug/mL	-0.05
62) Phenanthrene-d10		13.730	188	1657047	40.00	ug/mL	-0.05
74) Chrysene-d12		18.601	240	1257979	40.00	ug/mL	-0.08
85) Perylene-d12		21.908	264	405836	40.00	ug/mL	-0.07
System Monitoring Compounds							
4) 2-Fluorophenol		5.008	112	576928	35.86	ug/mL	-0.10
Spiked Amount	75.000	Range 10 - 83		Recovery =	47.81%		
8) Phenol-d5		6.362	99	481266	22.98	ug/mL	-0.11
Spiked Amount	75.000	Range 13 - 62		Recovery =	30.64%		
21) Nitrobenzene-d5		7.511	82	803112	43.23	ug/mL	-0.04
Spiked Amount	50.000	Range 40 - 140		Recovery =	86.46%		
40) 2-Fluorobiphenyl		10.306	172	1663762	47.20	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery =	94.40%		
65) 2,4,6-Tribromophenol		12.686	330	299210	66.18	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery =	88.24%		
77) Terphenyl-d14		16.442	244	1284334	47.83	ug/mL	-0.06
Spiked Amount	50.000	Range 24 - 129		Recovery =	95.66%		
Target Compounds							Qvalue
64) n-Nitrosodiphenylamine		12.686	169	9617	Below Cal	#	32
84) bis(2-Ethylhexyl)phtha...		18.811	149	170602	6.63	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT19.D
Acq On : 22 Oct 2009 1:49 am
Operator : RIS
Sample : 09J0523-17
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 16 Sample Multiplier: 1

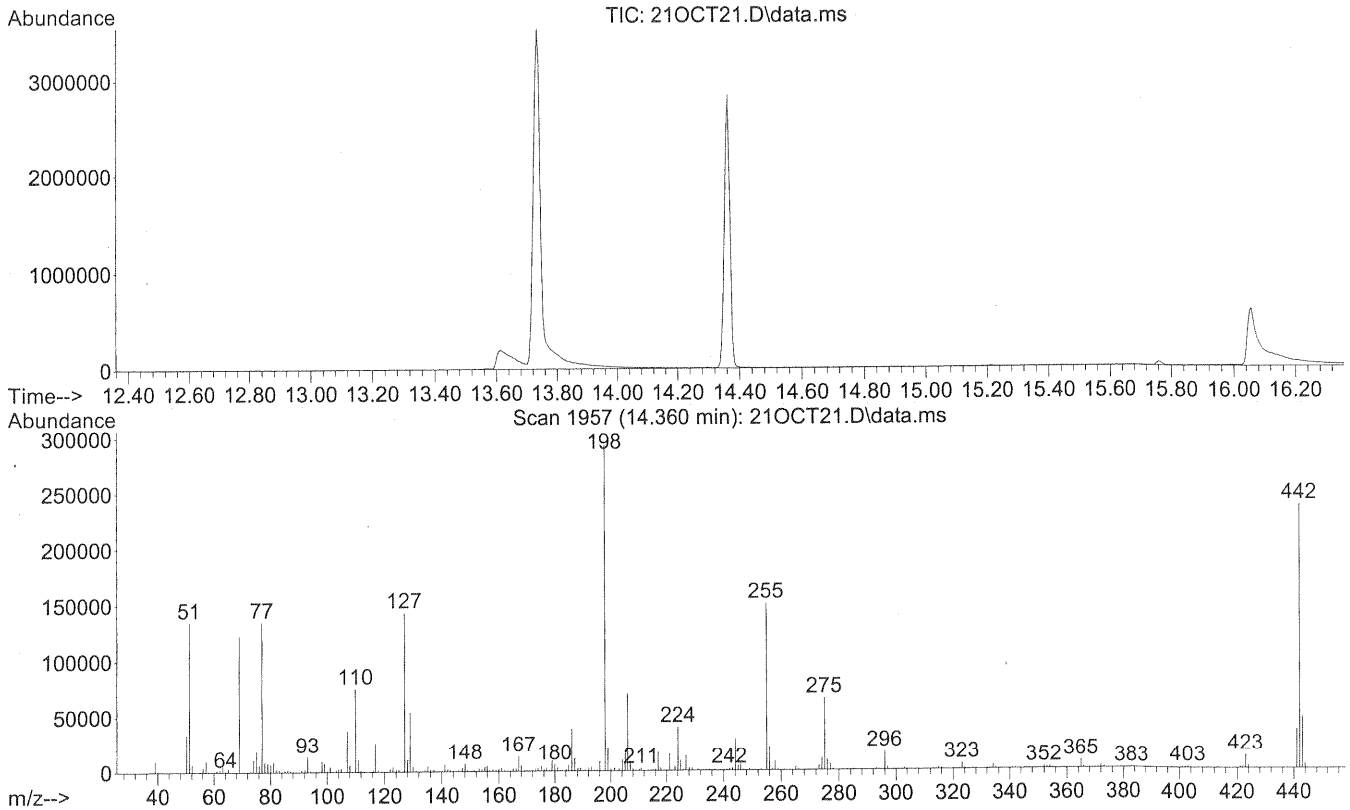
Quant Time: Oct 22 16:20:00 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT21.D
Acq On : 22 Oct 2009 3:02 am
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNASEP29A.M
Title : 8270/625 BNA Calibration
Last Update : Wed Oct 21 13:00:26 2009



Spectrum Information: Scan 1957

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.1	134720	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.0	122696	PASS
70	69	0.00	2	0.4	457	PASS
127	198	40	60	49.0	143232	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	292480	PASS
199	198	5	9	6.9	20264	PASS
275	198	10	30	22.3	65272	PASS
365	198	1	100	2.5	7305	PASS
441	443	0.01	100	75.4	35320	PASS
442	198	40	100	81.2	237568	PASS
443	442	17	23	19.7	46872	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT22.D
Acq On : 22 Oct 2009 9:30 am
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 22 16:24:53 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	-0.03
2		N-Nitrosodimethylamine	0.701	0.911	-30.0	135	-0.05
3	T	Pyridine	1.180	1.659	-40.6#	137	-0.02
4	S	2-Fluorophenol	1.112	1.331	-19.7	114	-0.12
5		Pentachloroethane	0.462	0.540	-16.9	107	-0.04
6		Aniline	1.217	1.422	-16.8	116	-0.05
7	T	bis(2-Chloroethyl)ether	1.423	1.548	-8.8	107	-0.04
8	S	Phenol-d5	1.447	1.439	0.6	97	-0.13
9	M*	Phenol	1.375	1.543	-12.2	110	-0.13
10	M	2-Chlorophenol	1.149	1.286	-11.9	110	-0.07
11	T	1,3-Dichlorobenzene	1.312	1.438	-9.6	109	-0.03
12	M*	1,4-Dichlorobenzene	1.368	1.438	-5.1	103	-0.03
13	T	1,2-Dichlorobenzene	1.323	1.411	-6.7	104	-0.04
14	T	Benzyl alcohol	0.708	0.817	-15.4	110	-0.06
15	T	bis(2-chloroisopropyl)ether	2.246	2.416	-7.6	106	-0.04
16	T	2-Methylphenol	1.035	1.116	-7.8	106	-0.10
17	T	Hexachloroethane	0.493	0.532	-7.9	108	-0.03
18	M**	N-Nitroso-di-n-propylamine	0.827	0.902	-9.1	106	-0.04
19	T	4-Methylphenol,3-Methylphen	1.015	1.140	-12.3	107	-0.10
20	I	Naphthalene-d8	1.000	1.000	0.0	101	-0.03
21	S	Nitrobenzene-d5	0.340	0.359	-5.6	109	-0.04
22	T	Nitrobenzene	0.336	0.318	5.4	104	-0.04
23	T	Isophorone	0.650	0.643	1.1	97	-0.02
24	T*	2-Nitrophenol	0.164	0.177	-7.9	109	-0.03
25	T	2,4-Dimethylphenol	0.302	0.319	-5.6	109	-0.08
26	T	bis(2-Chloroethoxy)methane	0.363	0.366	-0.8	104	-0.03
27	T*	2,4-Dichlorophenol	0.229	0.255	-11.4	111	-0.08
28	M	1,2,4-Trichlorobenzene	0.300	0.308	-2.7	106	-0.03
29	T	Naphthalene	0.863	0.884	-2.4	105	-0.03
30	T	4-Chloroaniline	0.150	0.191	-27.3	131	-0.06
31	T	Benzoic Acid	0.143	0.157	-9.8	105	-0.08
32	T*	Hexachlorobutadiene	0.169	0.167	1.2	102	-0.03
33	M*	4-Chloro-3-methylphenol	0.237	0.271	-14.3	114	-0.10
34	T	2-Methylnaphthalene	0.745	0.852	-14.4	107	-0.04
35		1-Methylnaphthalene	0.587	0.615	-4.8	107	-0.04
36	I	Acenaphthene-d10	1.000	1.000	0.0	108	-0.03
37	T**	Hexachlorocyclopentadiene	0.113	0.097	14.2	77	-0.03
38	T*	2,4,6-Trichlorophenol	0.285	0.310	-8.8	103	-0.06
39	T	2,4,5-Trichlorophenol	0.270	0.306	-13.3	105	-0.08
40	S	2-Fluorobiphenyl	1.183	1.272	-7.5	105	-0.04
41	T	2-Chloronaphthalene	0.874	0.949	-8.6	108	-0.03
42	T	2-Nitroaniline	0.256	0.303	-18.4	114	-0.05
43		1,4-Dinitrobenzene	0.161	0.182	-13.0	105	-0.04
44	T	Acenaphthylene	1.451	1.567	-8.0	105	-0.04

45	T	Dimethylphthalate	1.040	1.135	-9.1	106	-0.04
46		1,3-Dinitrobenzene	0.140	0.154	-10.0	101	-0.04
47		1,2-Dinitrobenzene	0.110	0.121	-10.0	103	-0.05
48	T	2,6-Dinitrotoluene	0.231	0.251	-8.7	105	-0.04
49	M*	Acenaphthene	0.895	0.957	-6.9	105	-0.04
50	T	3-Nitroaniline	0.288	0.344	-19.4	117	-0.05
51	T**	2,4-Dinitrophenol	0.093	0.072	22.6	66	-0.02
52	T	Dibenzofuran	1.204	1.343	-11.5	107	-0.04
53		2,3,5,6-Tetrachlorophenol	0.189	0.214	-13.2	98	-0.06
54		2,3,4,6-Tetrachlorophenol	0.190	0.213	-12.1	100	-0.06
55	M	2,4-Dinitrotoluene	0.295	0.328	-11.2	103	-0.03
56	M**	4-Nitrophenol	0.099	0.067	32.3#	56	-0.09
57	T	Fluorene	0.960	1.018	-6.0	103	-0.04
58	T	4-Chlorophenyl-phenylether	0.447	0.480	-7.4	105	-0.05
59	T	Diethylphthalate	1.024	1.113	-8.7	104	-0.04
60	T	1,2-Diphenylhydrazine (Azob	1.021	1.126	-10.3	106	-0.04
61	T	4-Nitroaniline	0.122	0.127	-4.1	99	-0.05
62	I	Phenanthrene-d10	1.000	1.000	0.0	127	-0.04
63	T	4,6-Dinitro-2-methylphenol	0.102	0.093	8.8	84	-0.03
64	T*	n-Nitrosodiphenylamine	0.471	0.485	-3.0	122	-0.05
65	S	2,4,6-Tribromophenol	0.097	0.091	6.2	97	-0.05
66	T	4-Bromophenyl-phenylether	0.207	0.195	5.8	103	-0.04
67	T	Hexachlorobenzene	0.227	0.204	10.1	99	-0.04
68	M*	Pentachlorophenol	0.070	0.067	4.3	91	-0.05
69	T	Phenanthrene	0.974	0.891	8.5	100	-0.05
70	T	Anthracene	0.985	0.911	7.5	101	-0.04
71	T	Carbazole	0.807	0.785	2.7	102	-0.06
72	T	Di-n-butylphthalate	1.205	1.118	7.2	101	-0.04
73	T*	Fluoranthene	1.052	0.954	9.3	99	-0.05
74	I	Chrysene-d12	1.000	1.000	0.0	97	-0.06
75	M	Pyrene	1.089	1.285	-18.0	98	-0.05
76		Benzidine	0.261	0.112	57.1#	29#	-0.05
77	S	Terphenyl-d14	0.759	0.895	-17.9	96	-0.05
78		3,3'-Dimethylbenzidine	0.382	0.188	50.8#	38	-0.08
79	T	Butylbenzylphthalate	0.508	0.590	-16.1	96	-0.06
80		bis(2-ethylhexyl)adipate	0.459	0.550	-19.8	99	-0.06
81	T	3,3'-Dichlorobenzidine	0.155	0.084	45.8#	49	-0.03
82	T	Benzo[a]anthracene	0.994	0.962	3.2	78	-0.06
83	T	Chrysene	0.901	0.868	3.7	79	-0.07
84	T	bis(2-Ethylhexyl)phthalate	0.727	0.790	-8.7	89	-0.06
85	I	Perylene-d12	1.000	1.000	0.0	39	-0.09
86	T*	Di-n-octylphthalate	1.633	3.652	-123.6#	71	-0.09
87	T	Benzo[b]fluoranthene	1.284	1.469	-14.4	35	-0.08
88	T	Benzo[k]fluoranthene	1.105	1.608	-45.5#	46	-0.09
89	T*	Benzo[a]pyrene	1.131	1.160	-2.6	32	-0.08
90	T	Indeno[1,2,3-cd]pyrene	0.811	0.456	43.8#	19#	-0.03
91	T	Dibenz[a,h]anthracene	0.669	0.391	41.6#	19#	-0.05
92	T	Benzo[g,h,i]perylene	0.597	0.332	44.4#	19#	0.00

Not in Samples
Data OK

(#) = Out of Range SPCC's out = 0 CCC's out = 0

DATASEP29A.M Thu Oct 22 16:25:32 2009 MSD5

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT22.D
Acq On : 22 Oct 2009 9:30 am
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 22 16:24:53 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	104	-0.03
2		N-Nitrosodimethylamine	40.000	46.200	-15.5	135	-0.05
3	T	Pyridine	40.000	49.991	-25.0	137	-0.02
4	S	2-Fluorophenol	40.000	42.572	-6.4	114	-0.12
5		Pentachloroethane	40.000	40.032	-0.1	107	-0.04
6		Aniline	40.000	38.952	2.6	116	-0.05
7	T	bis(2-Chloroethyl)ether	40.000	38.685	3.3	107	-0.04
8	S	Phenol-d5	40.000	35.349	11.6	97	-0.13
9	M*	Phenol	40.000	39.895	0.3	110	-0.13
10	M	2-Chlorophenol	40.000	39.811	0.5	110	-0.07
11	T	1,3-Dichlorobenzene	40.000	38.962	2.6	109	-0.03
12	M*	1,4-Dichlorobenzene	40.000	37.373	6.6	103	-0.03
13	T	1,2-Dichlorobenzene	40.000	37.926	5.2	104	-0.04
14	T	Benzyl alcohol	40.000	41.032	-2.6	110	-0.06
15	T	bis(2-chloroisopropyl)ether	40.000	38.243	4.4	106	-0.04
16	T	2-Methylphenol	40.000	38.354	4.1	106	-0.10
17	T	Hexachloroethane	40.000	38.373	4.1	108	-0.03
18	M**	N-Nitroso-di-n-propylamine	40.000	38.796	3.0	106	-0.04
19	T	4-Methylphenol,3-Methylphen	40.000	39.956	0.1	107	-0.10
20	I	Naphthalene-d8	40.000	40.000	0.0	101	-0.03
21	S	Nitrobenzene-d5	40.000	37.500	6.3	109	-0.04
22	T	Nitrobenzene	40.000	33.852	15.4	104	-0.04
23	T	Isophorone	40.000	35.158	12.1	97	-0.02
24	T*	2-Nitrophenol	40.000	38.456	3.9	109	-0.03
25	T	2,4-Dimethylphenol	40.000	37.606	6.0	109	-0.08
26	T	bis(2-Chloroethoxy)methane	40.000	35.835	10.4	104	-0.03
27	T*	2,4-Dichlorophenol	40.000	39.543	1.1	111	-0.08
28	M	1,2,4-Trichlorobenzene	40.000	36.557	8.6	106	-0.03
29	T	Naphthalene	40.000	36.444	8.9	105	-0.03
30	T	4-Chloroaniline	40.000	45.124	-12.8	131	-0.06
31	T	Benzoic Acid	40.000	34.950	12.6	105	-0.08
32	T*	Hexachlorobutadiene	40.000	35.286	11.8	102	-0.03
33	M*	4-Chloro-3-methylphenol	40.000	40.700	-1.8	114	-0.10
34	T	2-Methylnaphthalene	40.000	36.619	8.5	107	-0.04
35		1-Methylnaphthalene	40.000	37.269	6.8	107	-0.04
36	I	Acenaphthene-d10	40.000	40.000	0.0	108	-0.03
37	T**	Hexachlorocyclopentadiene	40.000	30.042	24.9	77	-0.03
38	T*	2,4,6-Trichlorophenol	40.000	38.744	3.1	103	-0.06
39	T	2,4,5-Trichlorophenol	40.000	40.282	-0.7	105	-0.08
40	S	2-Fluorobiphenyl	40.000	38.237	4.4	105	-0.04
41	T	2-Chloronaphthalene	40.000	38.601	3.5	108	-0.03
42	T	2-Nitroaniline	40.000	42.068	-5.2	114	-0.05
43		1,4-Dinitrobenzene	40.000	40.153	-0.4	105	-0.04
44	T	Acenaphthylene	40.000	38.392	4.0	105	-0.04

45	T	Dimethylphthalate	40.000	38.814	3.0	106	-0.04
46		1,3-Dinitrobenzene	40.000	39.227	1.9	101	-0.04
47		1,2-Dinitrobenzene	40.000	39.285	1.8	103	-0.05
48	T	2,6-Dinitrotoluene	40.000	38.714	3.2	105	-0.04
49	M*	Acenaphthene	40.000	38.036	4.9	105	-0.04
50	T	3-Nitroaniline	40.000	42.509	-6.3	117	-0.05
51	T**	2,4-Dinitrophenol	40.000	29.114	27.2	66	-0.02
52	T	Dibenzofuran	40.000	39.683	0.8	107	-0.04
53		2,3,5,6-Tetrachlorophenol	40.000	35.979	10.1	98	-0.06
54		2,3,4,6-Tetrachlorophenol	40.000	36.461	8.8	100	-0.06
55	M	2,4-Dinitrotoluene	40.000	39.493	1.3	103	-0.03
56	M**	4-Nitrophenol	40.000	25.546	36.1#	56	-0.09
57	T	Fluorene	40.000	37.705	5.7	103	-0.04
58	T	4-Chlorophenyl-phenylether	40.000	38.187	4.5	105	-0.05
59	T	Diethylphthalate	40.000	38.628	3.4	104	-0.04
60	T	1,2-Diphenylhydrazine (Azob	40.000	39.234	1.9	106	-0.04
61	T	4-Nitroaniline	40.000	37.006	7.5	99	-0.05
62	I	Phenanthrene-d10	40.000	40.000	0.0	127	-0.04
63	T	4,6-Dinitro-2-methylphenol	40.000	29.253	26.9	84	-0.03
64	T*	n-Nitrosodiphenylamine	40.000	39.079	2.3	122	-0.05
65	S	2,4,6-Tribromophenol	40.000	33.389	16.5	97	-0.05
66	T	4-Bromophenyl-phenylether	40.000	33.423	16.4	103	-0.04
67	T	Hexachlorobenzene	40.000	32.064	19.8	99	-0.04
68	M*	Pentachlorophenol	40.000	34.386	14.0	91	-0.05
69	T	Phenanthrene	40.000	32.539	18.7	100	-0.05
70	T	Anthracene	40.000	32.866	17.8	101	-0.04
71	T	Carbazole	40.000	34.592	13.5	102	-0.06
72	T	Di-n-butylphthalate	40.000	33.005	17.5	101	-0.04
73	T*	Fluoranthene	40.000	32.265	19.3	99	-0.05
74	I	Chrysene-d12	40.000	40.000	0.0	97	-0.06
75	M	Pyrene	40.000	41.966	-4.9	98	-0.05
76		Benzidine	40.000	18.717	53.2#	29	-0.05
77	S	Terphenyl-d14	40.000	41.935	-4.8	96	-0.05
78		3,3'-Dimethylbenzidine	40.000	17.512	56.2#	38	-0.08
79	T	Butylbenzylphthalate	40.000	41.288	-3.2	96	-0.06
80		bis(2-ethylhexyl)adipate	40.000	42.620	-6.5	99	-0.06
81	T	3,3'-Dichlorobenzidine	40.000	20.054	49.9#	49	-0.03
82	T	Benzo[a]anthracene	40.000	34.393	14.0	78	-0.06
83	T	Chrysene	40.000	34.266	14.3	79	-0.07
84	T	bis(2-Ethylhexyl)phthalate	40.000	38.614	3.5	89	-0.06
85	I	Perylene-d12	40.000	40.000	0.0	39	-0.09
86	T*	Di-n-octylphthalate	40.000	79.529	-98.8#	71	-0.09
87	T	Benzo[b]fluoranthene	40.000	38.169	4.6	35	-0.08
88	T	Benzo[k]fluoranthene	40.000	51.747	-29.4	46	-0.09
89	T*	Benzo[a]pyrene	40.000	36.473	8.8	32	-0.08
90	T	Indeno[1,2,3-cd]pyrene	40.000	16.803	58.0#	19	-0.03
91	T	Dibenz[a,h]anthracene	40.000	17.504	56.2#	19	-0.05
92	T	Benzo[g,h,i]perylene	40.000	16.869	57.8#	19	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BNASEP29A.M Thu Oct 22 16:26:02 2009 MSD5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT31.D
Acq On : 22 Oct 2009 2:59 pm
Operator : RIS
Sample : 09J0779-01
Misc : 1,SEVERSTAL,BNAwx,930:1
ALS Vial : 25 Sample Multiplier: 1

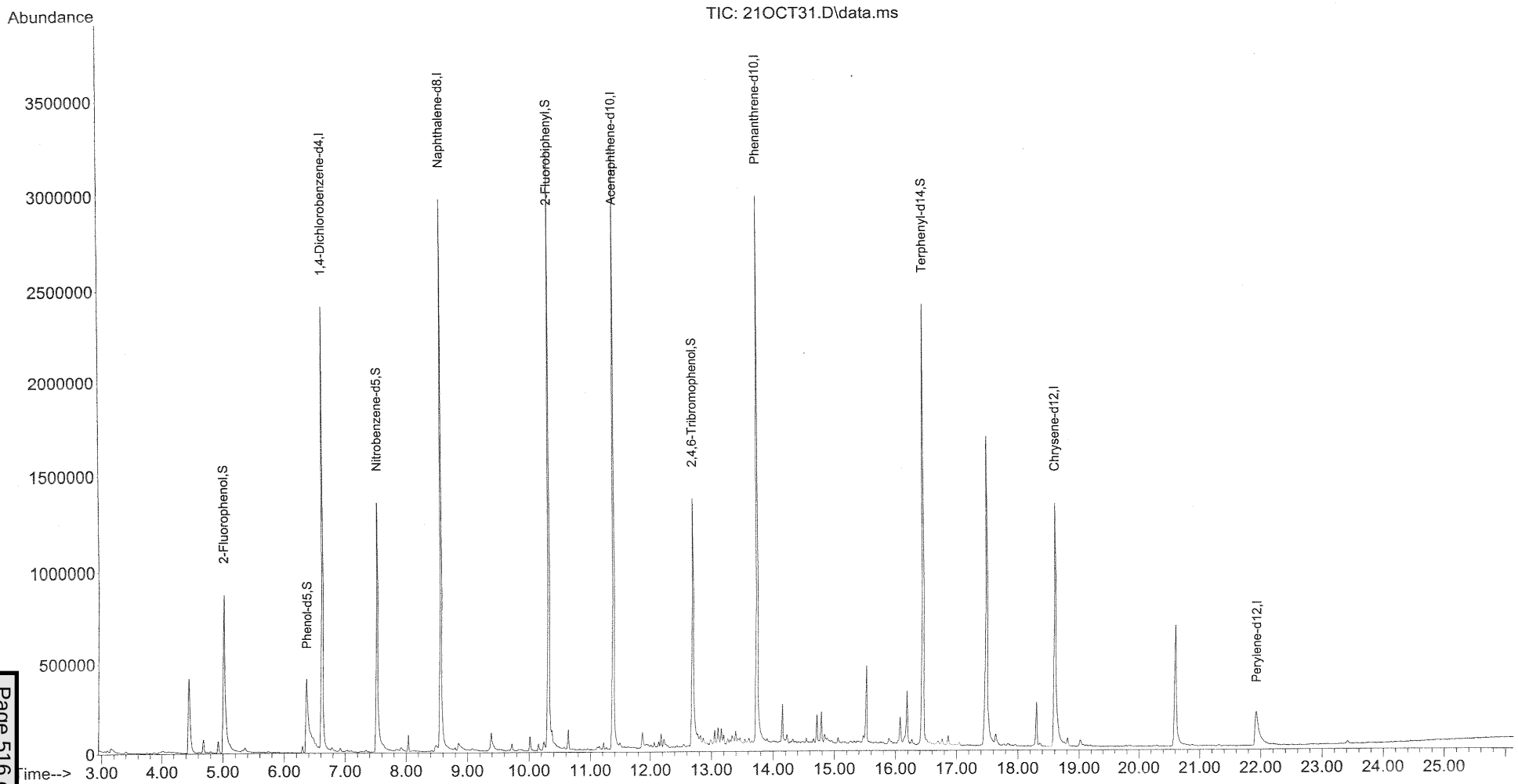
Quant Time: Oct 22 16:35:14 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.608	152	551809	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.551	136	2126834	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.368	164	1146711	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.731	188	1766118	40.00	ug/mL	-0.05
74) Chrysene-d12	18.595	240	1142400	40.00	ug/mL	-0.09
85) Perylene-d12	21.920	264	289207	40.00	ug/mL	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	5.004	112	602752	34.93	ug/mL	-0.10
Spiked Amount 75.000	Range 10 - 83		Recovery = 46.57%			
8) Phenol-d5	6.357	99	523597	23.31	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 31.08%			
21) Nitrobenzene-d5	7.512	82	822249	40.42	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 80.84%			
40) 2-Fluorobiphenyl	10.301	172	1622047	42.51	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 85.02%			
65) 2,4,6-Tribromophenol	12.681	330	312876	64.93	ug/mL	-0.06
Spiked Amount 75.000	Range 24 - 142		Recovery = 86.57%			
77) Terphenyl-d14	16.443	244	1237644	50.75	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 101.50%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.471	169	670	Below Cal	#	26
81) 3,3'-Dichlorobenzidine	18.304	252	198	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT31.D
Acq On : 22 Oct 2009 2:59 pm
Operator : RIS
Sample : 09J0779-01
Misc : 1,SEVERSTAL,BNAwx,930:1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 22 16:35:14 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT32.D
Acq On : 22 Oct 2009 3:35 pm
Operator : RIS
Sample : 09J0779-02
Misc : 1,SEVERSTAL,BNAwx,930:1
ALS Vial : 26 Sample Multiplier: 1

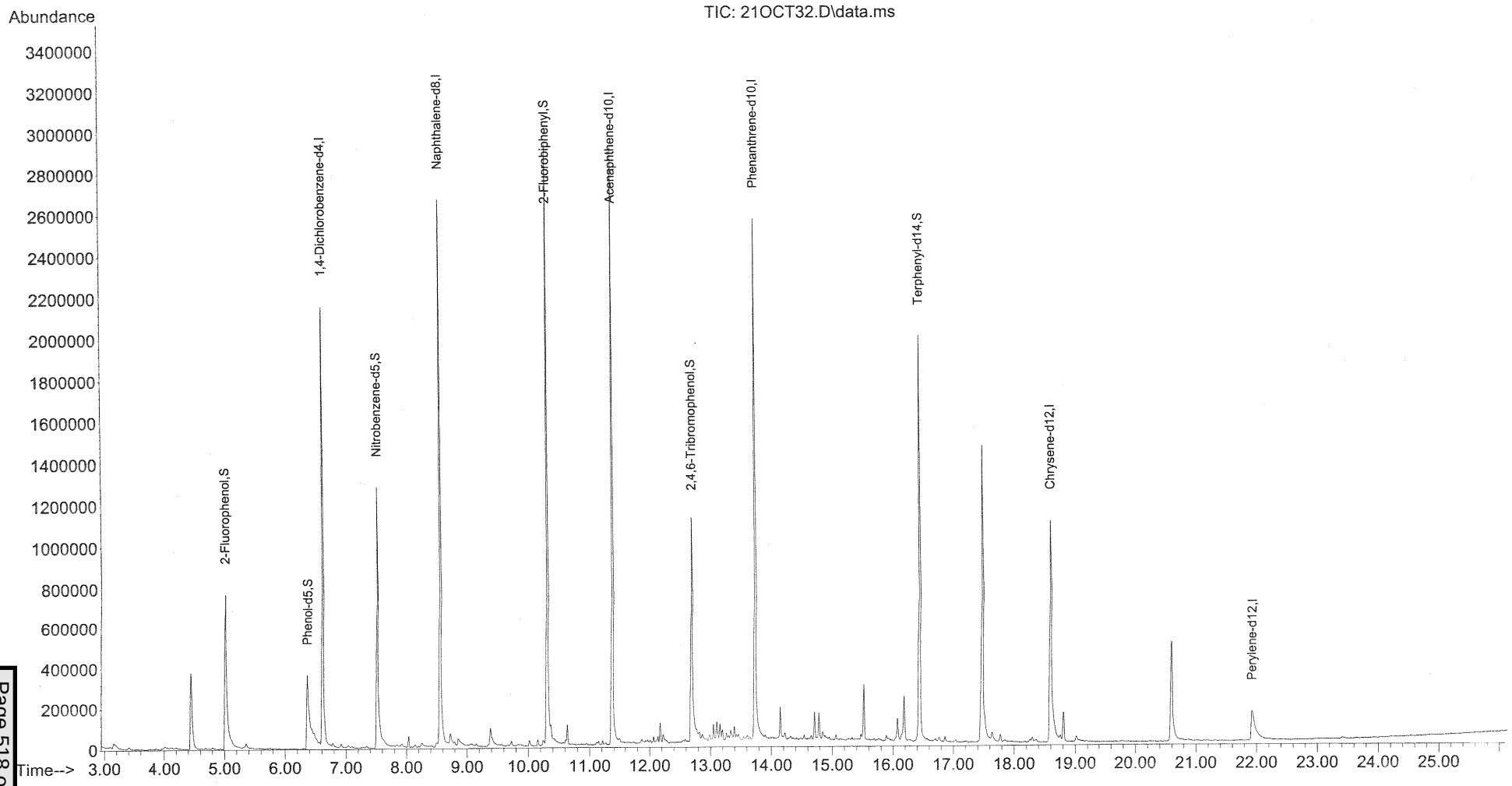
Quant Time: Oct 22 16:36:11 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.609	152	512242	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.550	136	1934745	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.367	164	1050749	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.729	188	1577376	40.00	ug/mL	-0.05
74) Chrysene-d12	18.594	240	1015626	40.00	ug/mL	-0.09
85) Perylene-d12	21.919	264	239445	40.00	ug/mL	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	5.005	112	561695	35.06	ug/mL	-0.10
Spiked Amount 75.000	Range 10 - 83		Recovery = 46.75%			
8) Phenol-d5	6.359	99	480805	23.06	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 30.75%			
21) Nitrobenzene-d5	7.508	82	739963	39.99	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 79.98%			
40) 2-Fluorobiphenyl	10.300	172	1464446	41.88	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 83.76%			
65) 2,4,6-Tribromophenol	12.685	330	278991	64.83	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 86.44%			
77) Terphenyl-d14	16.436	244	1049895	48.43	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 96.86%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.475	169	389	Below Cal	#	26

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT32.D
Acq On : 22 Oct 2009 3:35 pm
Operator : RIS
Sample : 09J0779-02
Misc : 1,SEVERSTAL,BNAwx,930:1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 22 16:36:11 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT33.D
Acq On : 22 Oct 2009 4:12 pm
Operator : RIS
Sample : 09J0838-01
Misc : 1,GREELEYHANSEN,BNAwx,200:1
ALS Vial : 9 Sample Multiplier: 1

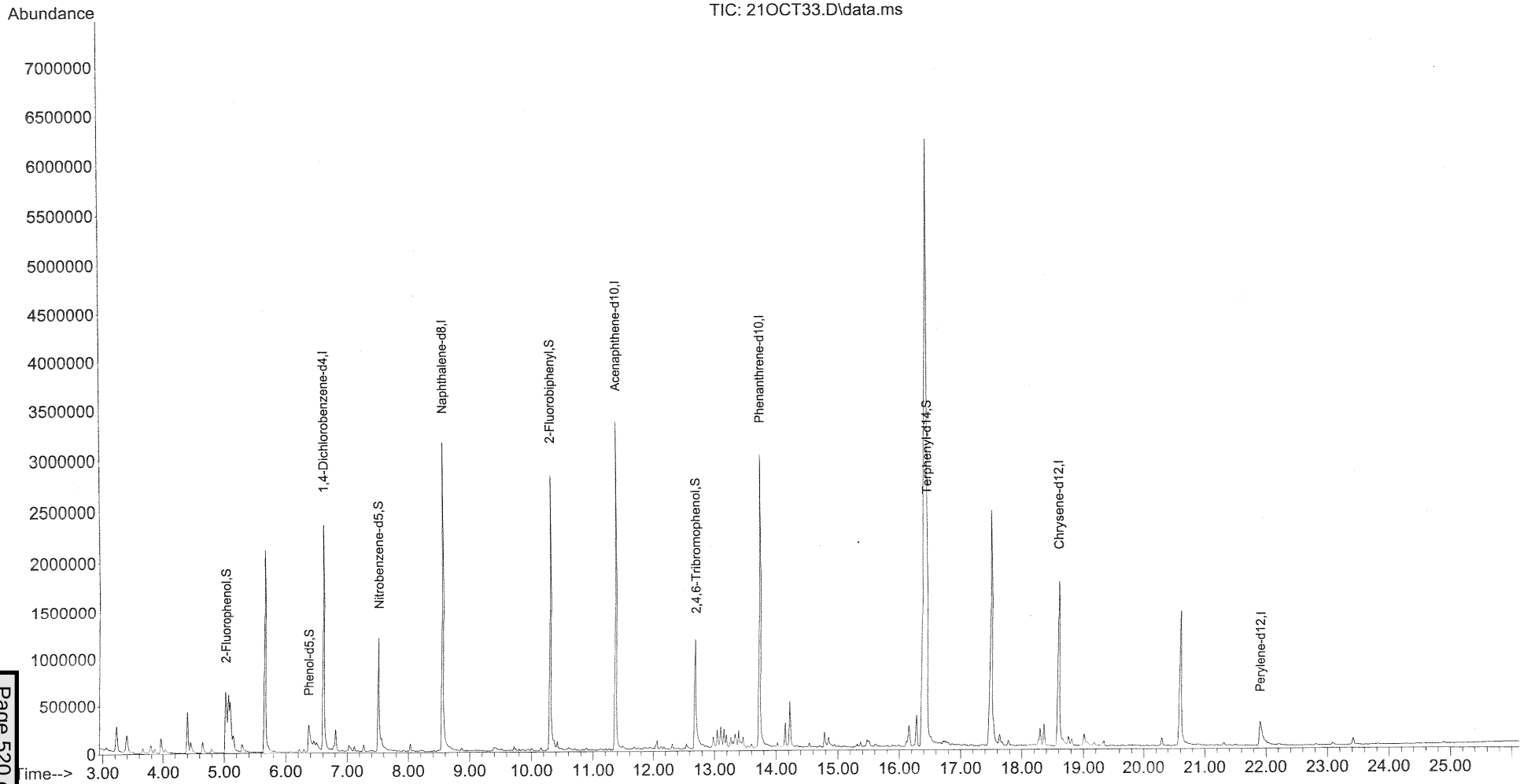
Quant Time: Oct 22 16:43:03 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.609	152	551739	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.556	136	2202887	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.367	164	1222130	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.730	188	1844947	40.00	ug/mL	-0.05
74) Chrysene-d12	18.600	240	1335272	40.00	ug/mL	-0.08
85) Perylene-d12	21.901	264	323877	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	5.023	112	472130	27.36	ug/mL	-0.09
Spiked Amount 75.000	Range 10 - 83		Recovery = 36.48%			
8) Phenol-d5	6.370	99	365294	16.26	ug/mL	-0.10
Spiked Amount 75.000	Range 13 - 62		Recovery = 21.68%			
21) Nitrobenzene-d5	7.508	82	684782	32.50	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 65.00%			
40) 2-Fluorobiphenyl	10.300	172	1461060	35.93	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 71.86%			
65) 2,4,6-Tribromophenol	12.686	330	283610	56.34	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 75.12%			
77) Terphenyl-d14	16.448	244	971168	34.07	ug/mL	-0.05
Spiked Amount 50.000	Range 24 - 129		Recovery = 68.14%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	9658	Below Cal	#	41
81) 3,3'-Dichlorobenzidine	18.361	252	1205	Below Cal	#	20

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT33.D
Acq On : 22 Oct 2009 4:12 pm
Operator : RIS
Sample : 09J0838-01
Misc : 1,GREELEYHANSEN,BNAwx,200:1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 22 16:43:03 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT34.D
Acq On : 22 Oct 2009 4:48 pm
Operator : RIS
Sample : 09J0779-03
Misc : 1,SEVERSTAL,BNAwx,940:1
ALS Vial : 27 Sample Multiplier: 1

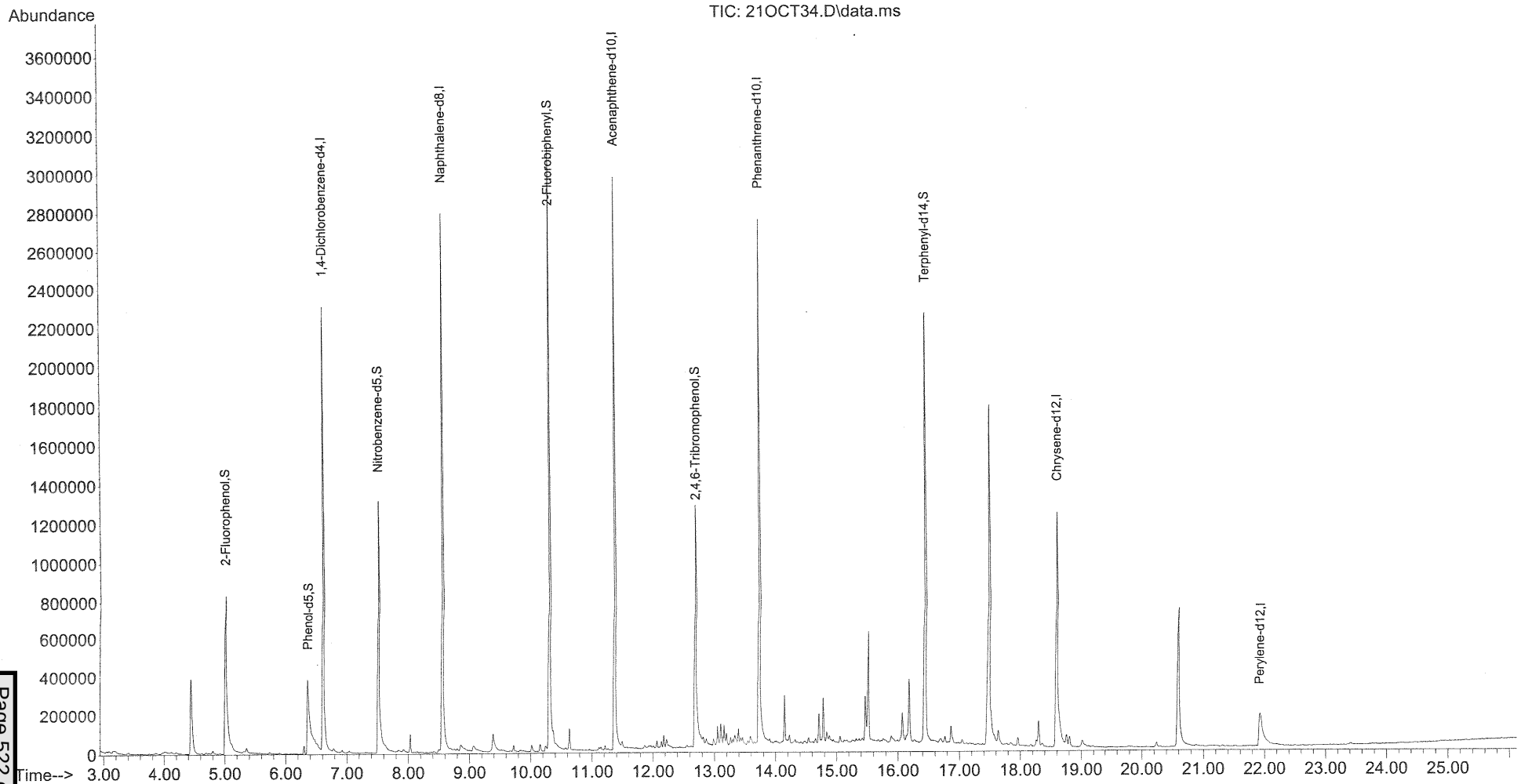
Quant Time: Oct 22 17:16:37 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	529240	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.551	136	2016634	40.00	ug/mL	-0.04
36) Acenaphthene-d10	11.368	164	1090946	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.731	188	1665424	40.00	ug/mL	-0.05
74) Chrysene-d12	18.595	240	1083920	40.00	ug/mL	-0.09
85) Perylene-d12	21.914	264	263920	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	5.003	112	578525	34.95	ug/mL	-0.10
Spiked Amount 75.000	Range 10 - 83		Recovery = 46.60%			
8) Phenol-d5	6.356	99	507760	23.57	ug/mL	-0.11
Spiked Amount 75.000	Range 13 - 62		Recovery = 31.43%			
21) Nitrobenzene-d5	7.505	82	797591	41.35	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 82.70%			
40) 2-Fluorobiphenyl	10.301	172	1595371	43.95	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 87.90%			
65) 2,4,6-Tribromophenol	12.687	330	306701	67.50	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 90.00%			
77) Terphenyl-d14	16.443	244	1182931	51.13	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 102.26%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.465	169	317	Below Cal	#	22
81) 3,3'-Dichlorobenzidine	18.350	252	76	Below Cal	#	25
92) Benzo[g,h,i]perylene	24.743	276	72	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT34.D
Acq On : 22 Oct 2009 4:48 pm
Operator : RIS
Sample : 09J0779-03
Misc : 1,SEVERSTAL,BNAwx,940:1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 22 17:16:37 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT35.D
Acq On : 22 Oct 2009 5:25 pm
Operator : RIS
Sample : 09J0523-14
Misc : 5,SEVERSTAL,BNAwx,1000:1
ALS Vial : 13 Sample Multiplier: 1

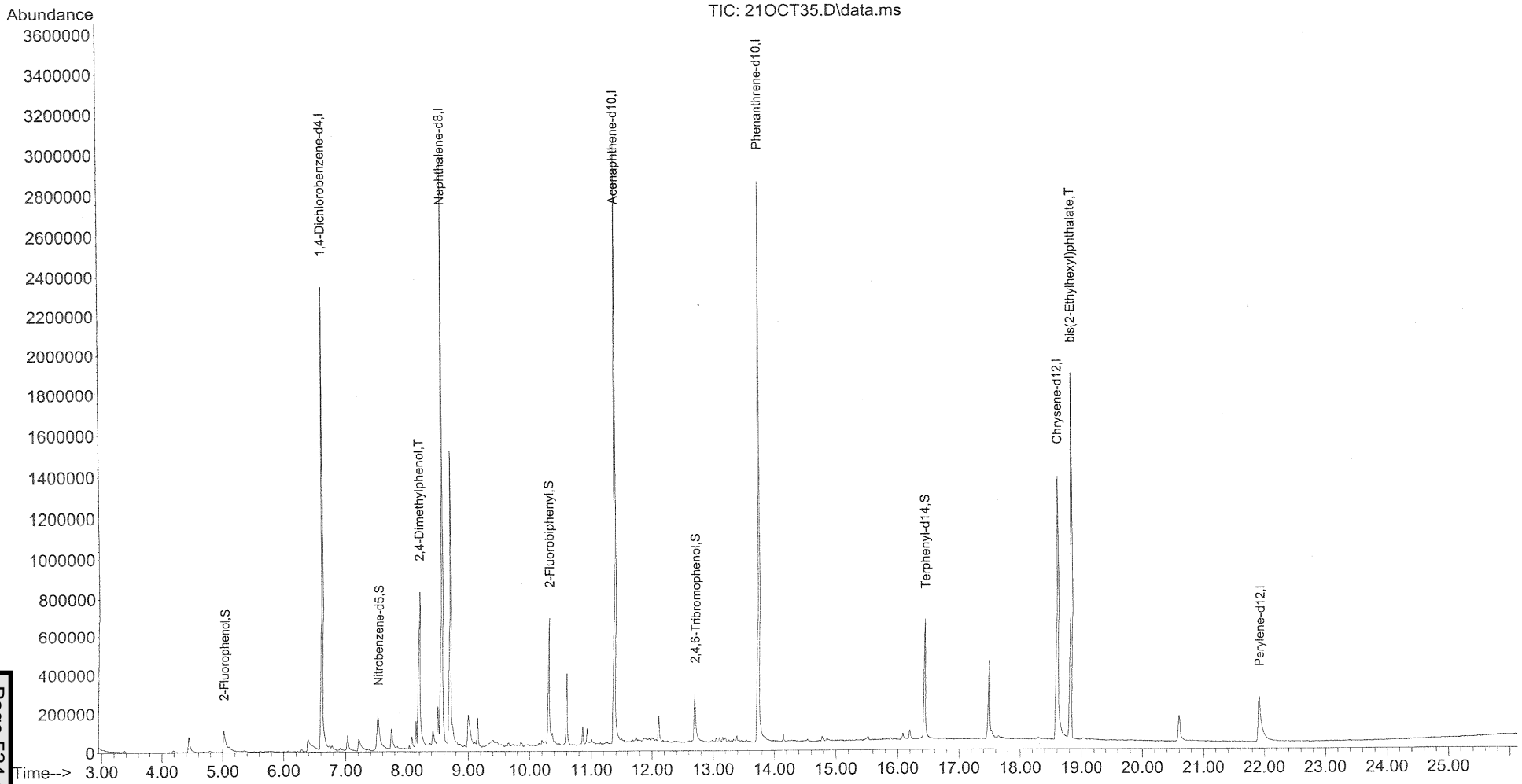
Quant Time: Oct 26 11:49:44 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.603	152	540637	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.551	136	1935105	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.368	164	1085504	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.731	188	1660056	40.00	ug/mL	-0.05
74) Chrysene-d12	18.595	240	1115376	40.00	ug/mL	-0.09
85) Perylene-d12	21.902	264	290346	40.00	ug/mL	-0.08
System Monitoring Compounds						
4) 2-Fluorophenol	5.016	112	111755	6.61	ug/mL	-0.09
Spiked Amount 75.000	Range 10 - 83		Recovery = 8.81%#			
8) Phenol-d5	6.393	99	98957	4.50	ug/mL	-0.07
Spiked Amount 75.000	Range 13 - 62		Recovery = 6.00%#			
21) Nitrobenzene-d5	7.518	82	142901	7.72	ug/mL	-0.03
Spiked Amount 50.000	Range 40 - 140		Recovery = 15.44%#			
40) 2-Fluorobiphenyl	10.301	172	350360	9.70	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 19.40%#			
65) 2,4,6-Tribromophenol	12.692	330	65779	14.52	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 19.36%#			
77) Terphenyl-d14	16.431	244	312483	13.13	ug/mL	-0.07
Spiked Amount 50.000	Range 24 - 129		Recovery = 26.26%			
Target Compounds						Qvalue
25) 2,4-Dimethylphenol	8.184	107	359612	21.90	ug/mL	95
64) n-Nitrosodiphenylamine	12.500	169	164	Below Cal	#	1
81) 3,3'-Dichlorobenzidine	18.624	252	80	Below Cal	#	25
84) bis(2-Ethylhexyl)phtha...	18.817	149	923747	40.48	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2109\
Data File : 21OCT35.D
Acq On : 22 Oct 2009 5:25 pm
Operator : RIS
Sample : 09J0523-14
Misc : 5,SEVERSTAL,BNAwx,1000:1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 26 11:49:44 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\2009\10oct09\OCT2609\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 26OCT01.D CAL BLANK	BLANK, 10uL MI90302	1	1.000	26 Oct 2009 6:18 pm
2) 26OCT02.D 50PPM TAIL CHK	50ng TAILING CHECK	99	1.000	26 Oct 2009 6:55 pm
3) 26OCT03.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	27 Oct 2009 9:00 am
4) 26OCT04.D 40 ug/mL CCC	400uL MI90905>1mL	2	1.000	27 Oct 2009 9:36 am
5) 26OCT05.D CCB	CONT CAL BLANK	1	1.000	27 Oct 2009 10:12 am
6) 26OCT06.D 0944041-BLK1	1,METHOD BLANK,BNAwx	3	1.000	27 Oct 2009 10:48 am
7) 26OCT07.D 0944041-BS1	1,50PPM LCS,BNAwx,10	4	1.000	27 Oct 2009 11:25 am
8) 26OCT08.D 0944041-BSD1	1,50PPM LCS DUP,BNAw	5	1.000	27 Oct 2009 12:01 pm
9) 26OCT09.D 09J0523-18	1,SEVERSTAL,BNAwx,10	6	1.000	27 Oct 2009 12:38 pm
10) 26OCT10.D 09J0523-19	1,SEVERSTAL,BNAwx,10	7	1.000	27 Oct 2009 1:15 pm
11) 26OCT11.D 09J0523-20	1,SEVERSTAL,BNAwx,10	8	1.000	27 Oct 2009 1:51 pm
12) 26OCT12.D 09J0523-21	1,SEVERSTAL,BNAwx,10	9	1.000	27 Oct 2009 2:28 pm
13) 26OCT13.D [redacted]	[redacted]	10	1.000	27 Oct 2009 3:05 pm
14) 26OCT14.D [redacted]	[redacted]	11	1.000	27 Oct 2009 3:42 pm
15) 26OCT15.D [redacted]	[redacted]	12	1.000	27 Oct 2009 4:18 pm
16) 26OCT16.D [redacted]	[redacted]	13	1.000	27 Oct 2009 4:55 pm

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\10oct09\OCT2609\26OCT03.D
Tune Time : 27 Oct 2009 9:00 am

Daily Calibration File : C:\msdchem\1\DATA\2009\10oct09\OCT2609\26OCT04.D

(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				546352	2156120	1276490

(TBP)	(TPH)	(PHN)	(CRY)	(PRY)
		2185590	1502730	409660

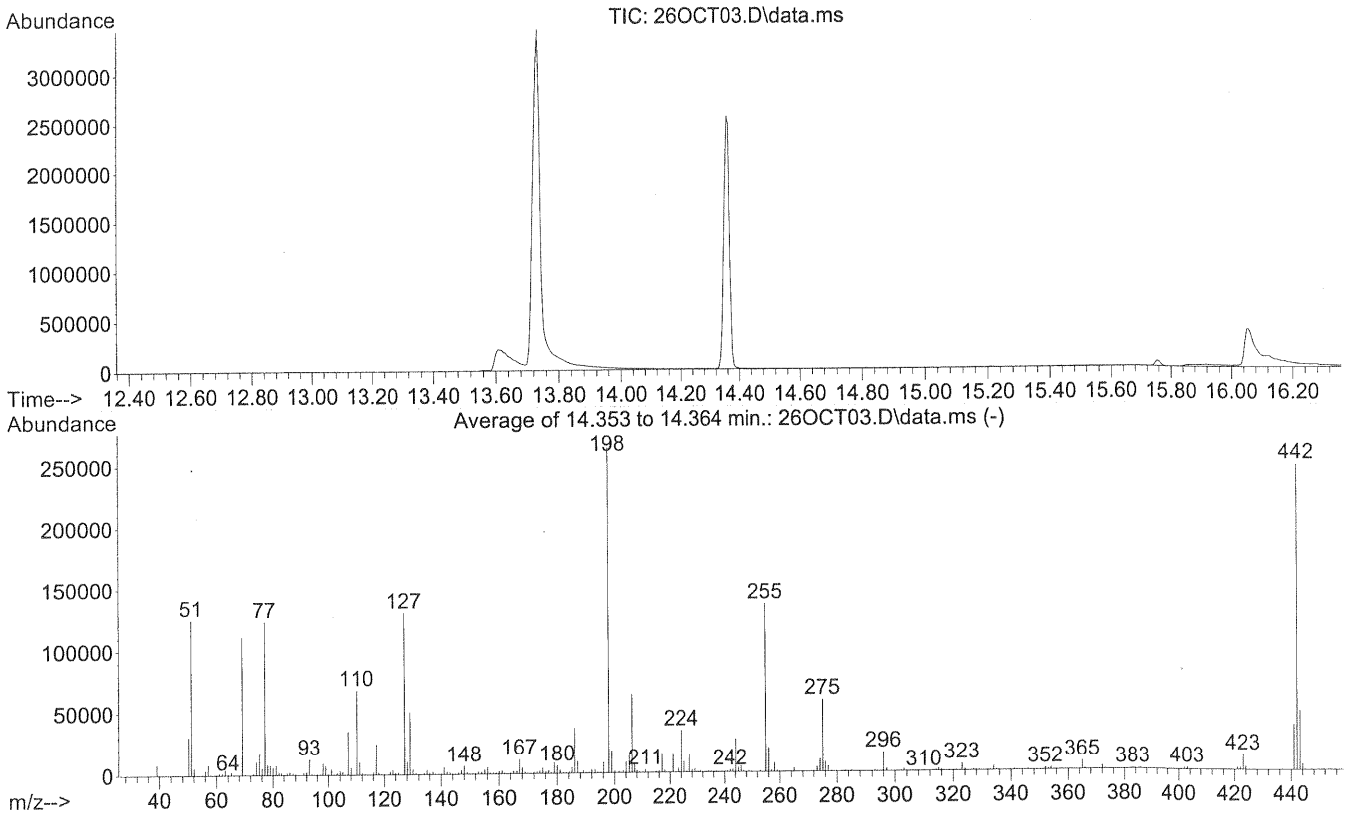
File	Sample	Surrogate Recovery %				Internal Standard Responses		
26OCT04.D								
	40 ug/mL C	54	52	74	77	546352	2156117	1276492
		47	97			2185589	1502726	409660
26OCT05.D								
	CCB	0*	0*	0*	0*	793915	3090081	1738087
		0*	0*			2536470	1629848	414623
26OCT06.D		No Surr. added - Data flagged						
	0944041-BL	0*	0*	0*	0*	531489	2005793	1135623
		0*	0*			1785575	1102271	262952
26OCT07.D								
	0944041-BS	44	33	69	77	499805	1995117	1129788
		92	116			1911095	1314582	343993
26OCT08.D		Surr. X2						
	0944041-BS	79	50	125	133	432133	1692178	968700
		162*	198*			1599702	1076856	265083
26OCT09.D								
	09J0523-18	37	23	53	56	470104	1797062	1002890
		81	66			1552697	1076702	269526
26OCT10.D								
	09J0523-19	45	29	62	65	562605	2206544	1211379
		79	92			1923410	1285402	310342
26OCT11.D								
	09J0523-20	35	24	48	53	602631	2233577	1197104
		61	88			1950332	994458	228485
26OCT12.D								
	09J0523-21	47	31	64	70	601577	2319029	1261754
		77	97			1984668	1195232	255719
26OCT13.D								
	[redacted]	43	27	67	75	463655	1801542	988464
		80	110			1588925	1018598	240603
26OCT14.D		No Surr. added - Data flagged						
	[redacted]	0*	0*	0*	0*	516948	1616714	1075678
		1*	6*			1683906	929516	207858
26OCT15.D								
	[redacted]	31	18	49	55	469862	1795335	981775
		65	98			1569301	969266	225099
26OCT16.D								
	[redacted]	22	15	37*	45	610478	2372585	1308801
		66	110			2056748	1304994	307765

(fails) - fails 12hr time check * - fails criteria

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT03.D
Acq On : 27 Oct 2009 9:00 am
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNASEP29A.M
Title : 8270/625 BNA Calibration
Last Update : Wed Oct 21 13:00:26 2009



AutoFind: Scans 1955, 1956, 1957; Background Corrected with Scan 1948

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.5	125253	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	111669	PASS
70	69	0.00	2	0.5	566	PASS
127	198	40	60	49.5	130576	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	263616	PASS
199	198	5	9	6.8	17953	PASS
275	198	10	30	22.2	58477	PASS
365	198	1	100	2.7	7166	PASS
441	443	0.01	100	76.5	36984	PASS
442	198	40	100	94.2	248213	PASS
443	442	17	23	19.5	48349	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT04.D
Acq On : 27 Oct 2009 9:36 am
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 16:05:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	-0.03
2		N-Nitrosodimethylamine	0.701	0.856	-22.1	122	-0.05
3	T	Pyridine	1.180	1.566	-32.7#	125	-0.03
4	S	2-Fluorophenol	1.112	1.265	-13.8	104	-0.12
5		Pentachloroethane	0.462	0.528	-14.3	100	-0.04
6		Aniline	1.217	1.076	11.6	85	-0.06
7	T	bis(2-Chloroethyl)ether	1.423	1.518	-6.7	101	-0.04
8	S	Phenol-d5	1.447	1.595	-10.2	104	-0.14
9	M*	Phenol	1.375	1.535	-11.6	105	-0.14
10	M	2-Chlorophenol	1.149	1.290	-12.3	106	-0.07
11	T	1,3-Dichlorobenzene	1.312	1.444	-10.1	105	-0.03
12	M*	1,4-Dichlorobenzene	1.368	1.432	-4.7	99	-0.03
13	T	1,2-Dichlorobenzene	1.323	1.424	-7.6	101	-0.04
14	T	Benzyl alcohol	0.708	0.814	-15.0	105	-0.07
15	T	bis(2-chloroisopropyl)ether	2.246	2.398	-6.8	101	-0.04
16	T	2-Methylphenol	1.035	1.145	-10.6	104	-0.10
17	T	Hexachloroethane	0.493	0.529	-7.3	103	-0.03
18	M**	N-Nitroso-di-n-propylamine	0.827	0.902	-9.1	102	-0.04
19	T	4-Methylphenol,3-Methylphen	1.015	1.145	-12.8	103	-0.10
20	I	Naphthalene-d8	1.000	1.000	0.0	99	-0.03
21	S	Nitrobenzene-d5	0.340	0.353	-3.8	104	-0.04
22	T	Nitrobenzene	0.336	0.317	5.7	101	-0.04
23	T	Isophorone	0.650	0.645	0.8	95	-0.03
24	T*	2-Nitrophenol	0.164	0.178	-8.5	106	-0.03
25	T	2,4-Dimethylphenol	0.302	0.315	-4.3	105	-0.08
26	T	bis(2-Chloroethoxy)methane	0.363	0.367	-1.1	101	-0.04
27	T*	2,4-Dichlorophenol	0.229	0.233	-1.7	98	-0.07
28	M	1,2,4-Trichlorobenzene	0.300	0.305	-1.7	102	-0.03
29	T	Naphthalene	0.863	0.885	-2.5	102	-0.03
30	T	4-Chloroaniline	0.150	0.150	0.0	100	-0.03
31	T	Benzoic Acid	0.143	0.150	-4.9	97	-0.09
32	T*	Hexachlorobutadiene	0.169	0.168	0.6	99	-0.03
33	M*	4-Chloro-3-methylphenol	0.237	0.277	-16.9	113	-0.10
34	T	2-Methylnaphthalene	0.745	0.846	-13.6	103	-0.04
35		1-Methylnaphthalene	0.587	0.606	-3.2	103	-0.04
36	I	Acenaphthene-d10	1.000	1.000	0.0	106	-0.04
37	T**	Hexachlorocyclopentadiene	0.113	0.069	38.9#	53	-0.03
38	T*	2,4,6-Trichlorophenol	0.285	0.312	-9.5	102	-0.06
39	T	2,4,5-Trichlorophenol	0.270	0.299	-10.7	101	-0.09
40	S	2-Fluorobiphenyl	1.183	1.276	-7.9	103	-0.04
41	T	2-Chloronaphthalene	0.874	0.956	-9.4	107	-0.03
42	T	2-Nitroaniline	0.256	0.296	-15.6	109	-0.05
43		1,4-Dinitrobenzene	0.161	0.185	-14.9	104	-0.04
44	T	Acenaphthylene	1.451	1.572	-8.3	104	-0.04

26	T	Dimethylphthalate	1.040	1.139	-9.5	104	-0.05
27		1,3-Dinitrobenzene	0.140	0.161	-15.0	103	-0.04
47		1,2-Dinitrobenzene	0.110	0.117	-6.4	98	-0.05
48	T	2,6-Dinitrotoluene	0.231	0.253	-9.5	103	-0.04
49	M*	Acenaphthene	0.895	0.968	-8.2	104	-0.05
50	T	3-Nitroaniline	0.288	0.328	-13.9	109	-0.05
51	T**	2,4-Dinitrophenol	0.093	0.071	23.7	63	-0.02
52	T	Dibenzofuran	1.204	1.351	-12.2	105	-0.04
53		2,3,5,6-Tetrachlorophenol	0.189	0.219	-15.9	98	-0.06
54		2,3,4,6-Tetrachlorophenol	0.190	0.220	-15.8	101	-0.06
55	M	2,4-Dinitrotoluene	0.295	0.336	-13.9	103	-0.03
56	M**	4-Nitrophenol	0.099	0.084	15.2	69	-0.09
57	T	Fluorene	0.960	1.040	-8.3	103	-0.04
58	T	4-Chlorophenyl-phenylether	0.447	0.483	-8.1	104	-0.05
59	T	Diethylphthalate	1.024	1.136	-10.9	104	-0.05
60	T	1,2-Diphenylhydrazine (Azob	1.021	1.135	-11.2	104	-0.04
61	T	4-Nitroaniline	0.122	0.146	-19.7	111	-0.05
62	I	Phenanthrene-d10	1.000	1.000	0.0	127	-0.05
63	T	4,6-Dinitro-2-methylphenol	0.102	0.090	11.8	81	-0.04
65	T*	n-Nitrosodiphenylamine	0.471	0.447	5.1	112	-0.05
66	S	2,4,6-Tribromophenol	0.097	0.096	1.0	101	-0.05
66	T	4-Bromophenyl-phenylether	0.207	0.192	7.2	101	-0.05
67	T	Hexachlorobenzene	0.227	0.208	8.4	101	-0.04
68	M*	Pentachlorophenol	0.070	0.075	-7.1	102	-0.06
69	T	Phenanthrene	0.974	0.901	7.5	101	-0.05
70	T	Anthracene	0.985	0.915	7.1	101	-0.05
71	T	Carbazole	0.807	0.792	1.9	103	-0.06
72	T	Di-n-butylphthalate	1.205	1.146	4.9	103	-0.05
73	T*	Fluoranthene	1.052	0.962	8.6	99	-0.05
74	I	Chrysene-d12	1.000	1.000	0.0	87	-0.07
75	M	Pyrene	1.089	1.479	-35.8#	100	-0.05
76		Benzidine	0.261	0.089	65.9#	20#	-0.05
77	S	Terphenyl-d14	0.759	1.037	-36.6#	99	-0.06
78		3,3'-Dimethylbenzidine	0.382	0.184	51.8#	33	-0.08
79	T	Butylbenzylphthalate	0.508	0.663	-30.5#	96	-0.06
80		bis(2-ethylhexyl)adipate	0.459	0.615	-34.0#	98	-0.06
81	T	3,3'-Dichlorobenzidine	0.155	0.080	48.4#	42	-0.02
82	T	Benzo[a]anthracene	0.994	0.965	2.9	70	-0.07
83	T	Chrysene	0.901	0.866	3.9	70	-0.07
84	T	bis(2-Ethylhexyl)phthalate	0.727	0.843	-16.0	85	-0.07
85	I	Perylene-d12	1.000	1.000	0.0	30	-0.08
86	T*	Di-n-octylphthalate	1.633	3.999	-144.9#	60	-0.09
87	T	Benzo[b]fluoranthene	1.284	1.412	-10.0	26#	-0.09
88	T	Benzo[k]fluoranthene	1.105	1.660	-50.2#	37	-0.10
89	T*	Benzo[a]pyrene	1.131	1.143	-1.1	24#	-0.08
90	T	Indeno[1,2,3-cd]pyrene	0.811	0.540	33.4#	17#	-0.04
91	T	Dibenz[a,h]anthracene	0.669	0.475	29.0	18#	-0.04
92	T	Benzo[g,h,i]perylene	0.597	0.449	24.8	20#	-0.02

↑ not in sample OK

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ASEP29A.M Tue Oct 27 16:06:04 2009 MSD5

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT04.D
Acq On : 27 Oct 2009 9:36 am
Operator : RIS
Sample : 40 ug/mL CCC
Misc : 400uL MI90905>1mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 16:05:45 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	-0.03
2		N-Nitrosodimethylamine	40.000	43.387	-8.5	122	-0.05
3	T	Pyridine	40.000	47.206	-18.0	125	-0.03
4	S	2-Fluorophenol	40.000	40.460	-1.2	104	-0.12
5		Pentachloroethane	40.000	39.142	2.1	100	-0.04
6		Aniline	40.000	30.466	23.8	85	-0.06
7	T	bis(2-Chloroethyl)ether	40.000	37.923	5.2	101	-0.04
8	S	Phenol-d5	40.000	39.168	2.1	104	-0.14
9	M*	Phenol	40.000	39.704	0.7	105	-0.14
10	M	2-Chlorophenol	40.000	39.910	0.2	106	-0.07
11	T	1,3-Dichlorobenzene	40.000	39.132	2.2	105	-0.03
12	M*	1,4-Dichlorobenzene	40.000	37.215	7.0	99	-0.03
13	T	1,2-Dichlorobenzene	40.000	38.261	4.3	101	-0.04
14	T	Benzyl alcohol	40.000	40.861	-2.2	105	-0.07
15	T	bis(2-chloroisopropyl)ether	40.000	37.959	5.1	101	-0.04
16	T	2-Methylphenol	40.000	39.339	1.7	104	-0.10
17	T	Hexachloroethane	40.000	38.214	4.5	103	-0.03
18	M**	N-Nitroso-di-n-propylamine	40.000	38.791	3.0	102	-0.04
19	T	4-Methylphenol,3-Methylphen	40.000	40.104	-0.3	103	-0.10
20	I	Naphthalene-d8	40.000	40.000	0.0	99	-0.03
21	S	Nitrobenzene-d5	40.000	36.905	7.7	104	-0.04
22	T	Nitrobenzene	40.000	33.753	15.6	101	-0.04
23	T	Isophorone	40.000	35.278	11.8	95	-0.03
24	T*	2-Nitrophenol	40.000	38.617	3.5	106	-0.03
25	T	2,4-Dimethylphenol	40.000	37.140	7.1	105	-0.08
26	T	bis(2-Chloroethoxy)methane	40.000	35.924	10.2	101	-0.04
27	T*	2,4-Dichlorophenol	40.000	36.180	9.6	98	-0.07
28	M	1,2,4-Trichlorobenzene	40.000	36.171	9.6	102	-0.03
29	T	Naphthalene	40.000	36.467	8.8	102	-0.03
30	T	4-Chloroaniline	40.000	35.421	11.4	100	-0.03
31	T	Benzoic Acid	40.000	33.865	15.3	97	-0.09
32	T*	Hexachlorobutadiene	40.000	35.349	11.6	99	-0.03
33	M*	4-Chloro-3-methylphenol	40.000	41.672	-4.2	113	-0.10
34	T	2-Methylnaphthalene	40.000	36.373	9.1	103	-0.04
35		1-Methylnaphthalene	40.000	36.730	8.2	103	-0.04
36	I	Acenaphthene-d10	40.000	40.000	0.0	106	-0.04
37	T**	Hexachlorocyclopentadiene	40.000	25.030	37.4#	53	-0.03
38	T*	2,4,6-Trichlorophenol	40.000	39.013	2.5	102	-0.06
39	T	2,4,5-Trichlorophenol	40.000	39.461	1.3	101	-0.09
40	S	2-Fluorobiphenyl	40.000	38.351	4.1	103	-0.04
41	T	2-Chloronaphthalene	40.000	38.857	2.9	107	-0.03
42	T	2-Nitroaniline	40.000	41.083	-2.7	109	-0.05
43		1,4-Dinitrobenzene	40.000	40.730	-1.8	104	-0.04
44	T	Acenaphthylene	40.000	38.527	3.7	104	-0.04

25	T	Dimethylphthalate	40.000	38.955	2.6	104	-0.05
26		1,3-Dinitrobenzene	40.000	40.895	-2.2	103	-0.04
27		1,2-Dinitrobenzene	40.000	38.082	4.8	98	-0.05
28	T	2,6-Dinitrotoluene	40.000	38.972	2.6	103	-0.04
29	M*	Acenaphthene	40.000	38.468	3.8	104	-0.05
30	T	3-Nitroaniline	40.000	40.470	-1.2	109	-0.05
31	T**	2,4-Dinitrophenol	40.000	28.654	28.4	63	-0.02
32	T	Dibenzofuran	40.000	39.927	0.2	105	-0.04
33		2,3,5,6-Tetrachlorophenol	40.000	36.692	8.3	98	-0.06
34		2,3,4,6-Tetrachlorophenol	40.000	37.604	6.0	101	-0.06
35	M	2,4-Dinitrotoluene	40.000	40.406	-1.0	103	-0.03
36	M**	4-Nitrophenol	40.000	29.416	26.5	69	-0.09
37	T	Fluorene	40.000	38.530	3.7	103	-0.04
38	T	4-Chlorophenyl-phenylether	40.000	38.397	4.0	104	-0.05
39	T	Diethylphthalate	40.000	39.432	1.4	104	-0.05
40	T	1,2-Diphenylhydrazine (Azob	40.000	39.546	1.1	104	-0.04
41	T	4-Nitroaniline	40.000	42.484	-6.2	111	-0.05
42	I	Phenanthrene-d10	40.000	40.000	0.0	127	-0.05
43	T	4,6-Dinitro-2-methylphenol	40.000	28.535	28.7	81	-0.04
44	T*	n-Nitrosodiphenylamine	40.000	35.659	10.9	112	-0.05
45	S	2,4,6-Tribromophenol	40.000	35.151	12.1	101	-0.05
46	T	4-Bromophenyl-phenylether	40.000	32.884	17.8	101	-0.05
47	T	Hexachlorobenzene	40.000	32.688	18.3	101	-0.04
48	M*	Pentachlorophenol	40.000	36.802	8.0	102	-0.06
49	T	Phenanthrene	40.000	32.897	17.8	101	-0.05
50	T	Anthracene	40.000	33.014	17.5	101	-0.05
51	T	Carbazole	40.000	34.903	12.7	103	-0.06
52	T	Di-n-butylphthalate	40.000	33.834	15.4	103	-0.05
53	T*	Fluoranthene	40.000	32.538	18.7	99	-0.05
54	I	Chrysene-d12	40.000	40.000	0.0	87	-0.07
55	M	Pyrene	40.000	48.294	-20.7	100	-0.05
56		Benzidine	40.000	15.857	60.4#	20	-0.05
57	S	Terphenyl-d14	40.000	48.605	-21.5	99	-0.06
58		3,3'-Dimethylbenzidine	40.000	17.126	57.2#	33	-0.08
59	T	Butylbenzylphthalate	40.000	46.364	-15.9	96	-0.06
60		bis(2-ethylhexyl)adipate	40.000	47.653	-19.1	98	-0.06
61	T	3,3'-Dichlorobenzidine	40.000	19.129	52.2#	42	-0.02
62	T	Benzo[a]anthracene	40.000	34.492	13.8	70	-0.07
63	T	Chrysene	40.000	34.177	14.6	70	-0.07
64	T	bis(2-Ethylhexyl)phthalate	40.000	41.205	-3.0	85	-0.07
65	I	Perylene-d12	40.000	40.000	0.0	30	-0.08
66	T*	Di-n-octylphthalate	40.000	87.091	-117.7#	60	-0.09
67	T	Benzo[b]fluoranthene	40.000	36.771	8.1	26	-0.09
68	T	Benzo[k]fluoranthene	40.000	53.438	-33.6#	37	-0.10
69	T*	Benzo[a]pyrene	40.000	35.956	10.1	24	-0.08
70	T	Indeno[1,2,3-cd]pyrene	40.000	20.458	48.9#	17	-0.04
71	T	Dibenz[a,h]anthracene	40.000	21.973	45.1#	18	-0.04
72	T	Benzo[g,h,i]perylene	40.000	24.176	39.6#	20	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BASEP29A.M Tue Oct 27 16:06:41 2009 MSD5

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT09.D
Acq On : 27 Oct 2009 12:38 pm
Operator : RIS
Sample : 09J0523-18
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 6 Sample Multiplier: 1

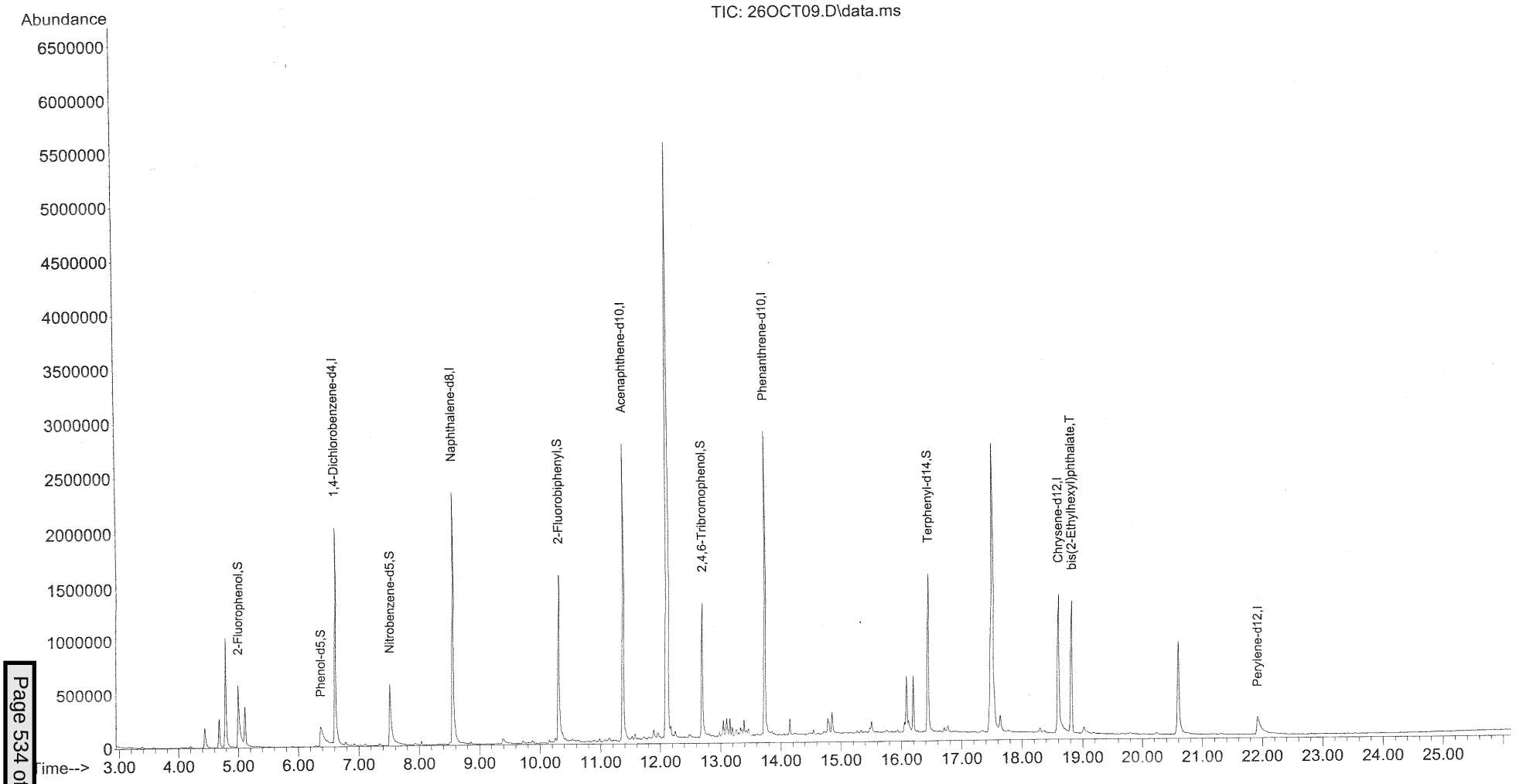
Quant Time: Oct 27 16:20:22 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		6.603	152	470104	40.00	ug/mL	-0.03
20) Naphthalene-d8		8.550	136	1797062	40.00	ug/mL	-0.05
36) Acenaphthene-d10		11.367	164	1002890	40.00	ug/mL	-0.05
62) Phenanthrene-d10		13.729	188	1552697	40.00	ug/mL	-0.05
74) Chrysene-d12		18.600	240	1076702	40.00	ug/mL	-0.08
85) Perylene-d12		21.913	264	269526	40.00	ug/mL	-0.07
System Monitoring Compounds							
4) 2-Fluorophenol		4.993	112	410767	27.94	ug/mL	-0.12
Spiked Amount	75.000	Range 10 - 83		Recovery = 37.25%			
8) Phenol-d5		6.369	99	335701	17.54	ug/mL	-0.10
Spiked Amount	75.000	Range 13 - 62		Recovery = 23.39%			
21) Nitrobenzene-d5		7.507	82	458740	26.69	ug/mL	-0.05
Spiked Amount	50.000	Range 40 - 140		Recovery = 53.38%			
40) 2-Fluorobiphenyl		10.305	172	928061	27.81	ug/mL	-0.04
Spiked Amount	50.000	Range 35 - 138		Recovery = 55.62%			
65) 2,4,6-Tribromophenol		12.691	330	256221	60.48	ug/mL	-0.05
Spiked Amount	75.000	Range 24 - 142		Recovery = 80.64%			
77) Terphenyl-d14		16.436	244	762625	33.18	ug/mL	-0.06
Spiked Amount	50.000	Range 24 - 129		Recovery = 66.36%			
Target Compounds							Qvalue
64) n-Nitrosodiphenylamine		12.475	169	11459	Below Cal		94
84) bis(2-Ethylhexyl)phtha...		18.815	149	606770	27.54	ug/mL	100
92) Benzo[g,h,i]perylene		24.683	276	85	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT09.D
Acq On : 27 Oct 2009 12:38 pm
Operator : RIS
Sample : 09J0523-18
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 27 16:20:22 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT10.D
Acq On : 27 Oct 2009 1:15 pm
Operator : RIS
Sample : 09J0523-19
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 7 Sample Multiplier: 1

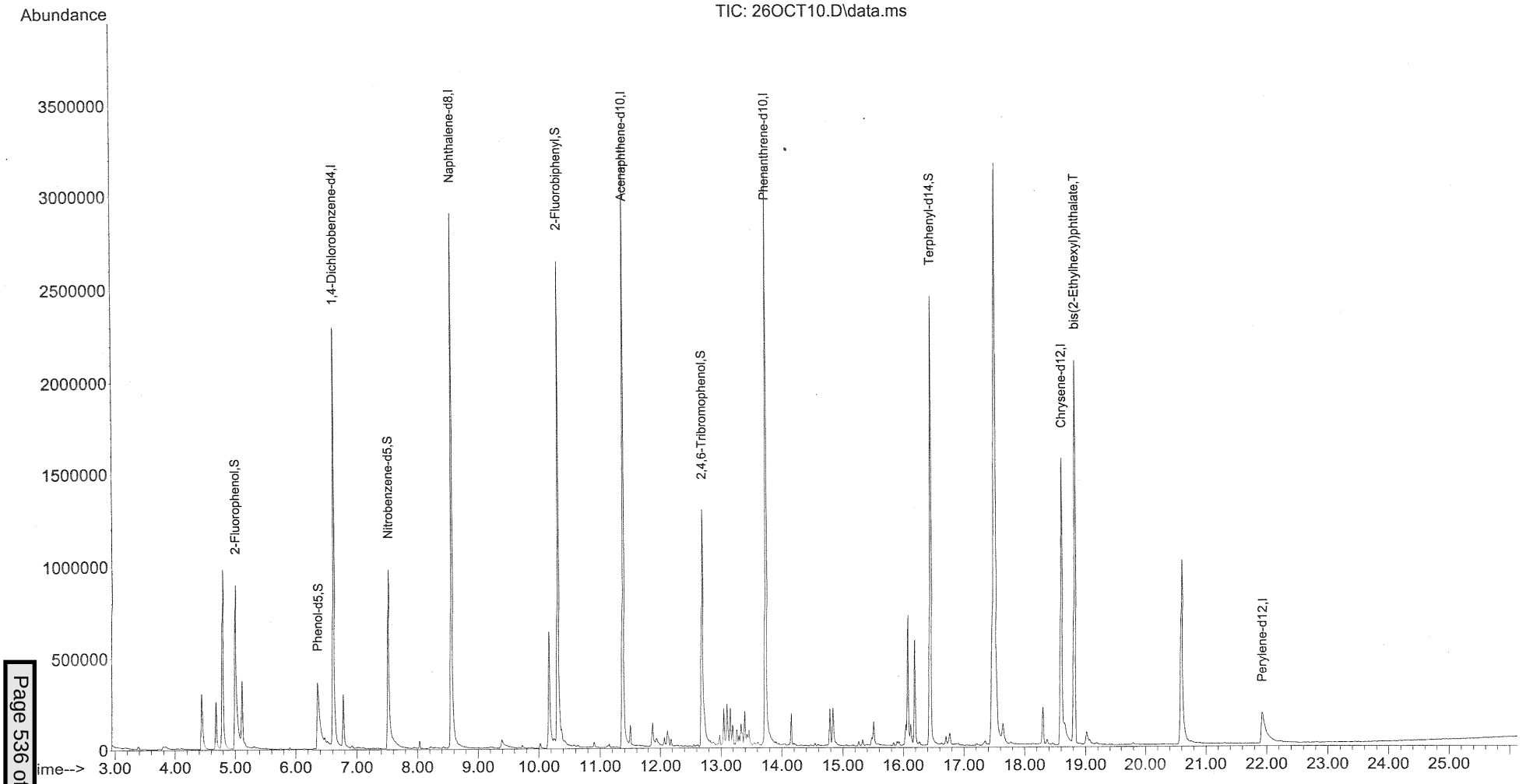
Quant Time: Oct 27 16:23:00 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	562605	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.551	136	2206544	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.368	164	1211379	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.731	188	1923410	40.00	ug/mL	-0.05
74) Chrysene-d12	18.601	240	1285402	40.00	ug/mL	-0.08
85) Perylene-d12	21.920	264	310342	40.00	ug/mL	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	4.992	112	594086	33.76	ug/mL	-0.12
Spiked Amount 75.000	Range 10 - 83		Recovery = 45.01%			
8) Phenol-d5	6.351	99	503076	21.96	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 29.28%			
21) Nitrobenzene-d5	7.506	82	650229	30.81	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 61.62%			
40) 2-Fluorobiphenyl	10.301	172	1318852	32.72	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 65.44%			
65) 2,4,6-Tribromophenol	12.681	330	311624	59.38	ug/mL	-0.06
Spiked Amount 75.000	Range 24 - 142		Recovery = 79.17%			
77) Terphenyl-d14	16.443	244	1266689	46.17	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 92.34%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.681	169	10268	Below Cal	#	36
84) bis(2-Ethylhexyl)phtha...	18.817	149	1062641	40.40	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT10.D
Acq On : 27 Oct 2009 1:15 pm
Operator : RIS
Sample : 09J0523-19
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 27 16:23:00 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT11.D
Acq On : 27 Oct 2009 1:51 pm
Operator : RIS
Sample : 09J0523-20
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 8 Sample Multiplier: 1

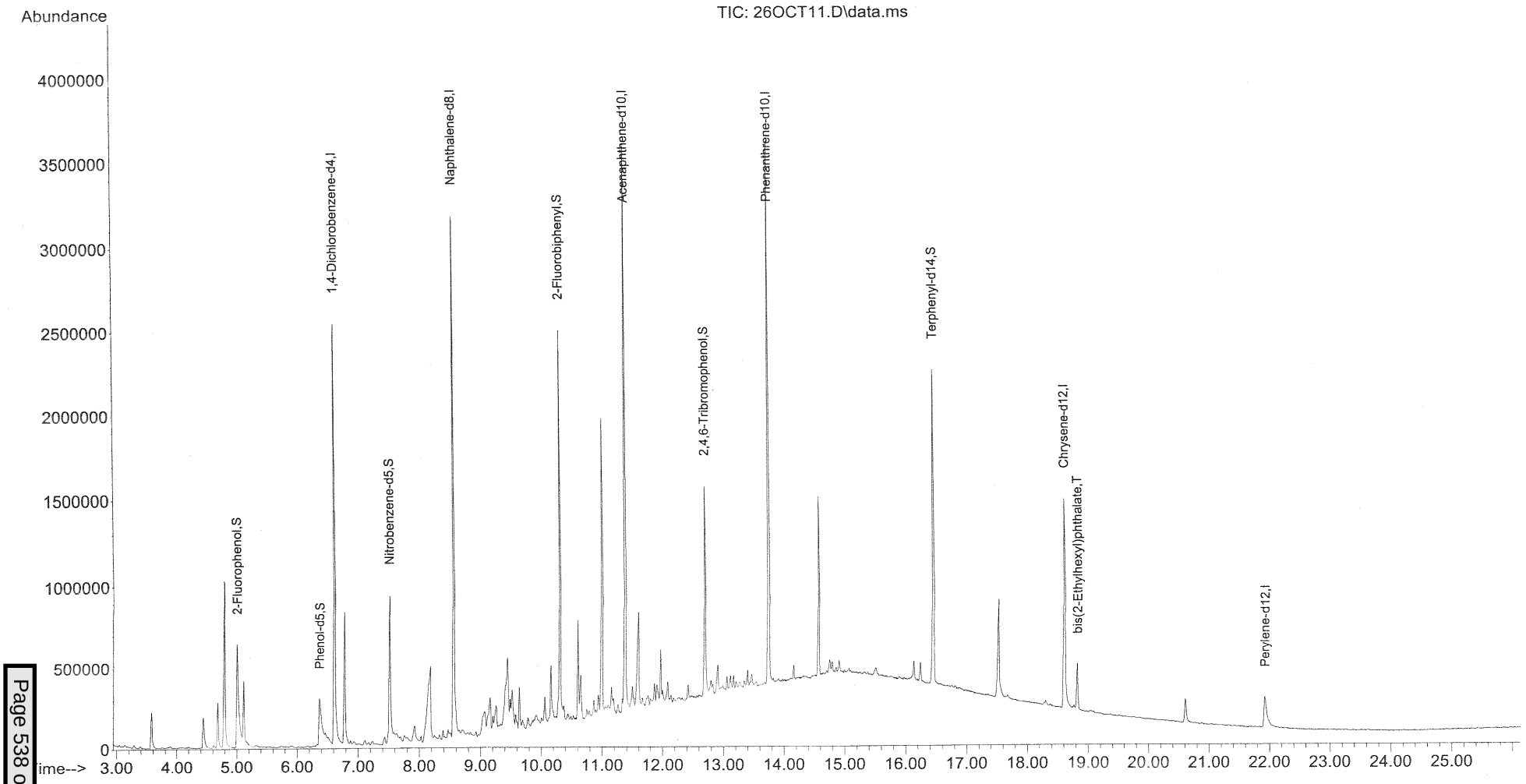
Quant Time: Oct 27 16:25:15 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.608	152	602631	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.551	136	2233577	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.374	164	1197104	40.00	ug/mL	-0.04
62) Phenanthrene-d10	13.742	188	1950332	40.00	ug/mL	-0.04
74) Chrysene-d12	18.601	240	994458	40.00	ug/mL	-0.08
85) Perylene-d12	21.914	264	228485	40.00	ug/mL	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	4.998	112	491833	26.10	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 34.80%			
8) Phenol-d5	6.363	99	435676	17.76	ug/mL	-0.10
Spiked Amount 75.000	Range 13 - 62		Recovery = 23.68%			
21) Nitrobenzene-d5	7.506	82	515104	24.11	ug/mL	-0.05
Spiked Amount 50.000	Range 40 - 140		Recovery = 48.22%			
40) 2-Fluorobiphenyl	10.301	172	1064689	26.73	ug/mL	-0.05
Spiked Amount 50.000	Range 35 - 138		Recovery = 53.46%			
65) 2,4,6-Tribromophenol	12.686	330	242867	45.64	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 60.85%			
77) Terphenyl-d14	16.443	244	931153	43.87	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 87.74%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.535	169	463	Below Cal	#	26
81) 3,3'-Dichlorobenzidine	18.875	252	281	Below Cal		89
84) bis(2-Ethylhexyl)phtha...	18.817	149	140320	6.90	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT11.D
Acq On : 27 Oct 2009 1:51 pm
Operator : RIS
Sample : 09J0523-20
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 27 16:25:15 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT12.D
Acq On : 27 Oct 2009 2:28 pm
Operator : RIS
Sample : 09J0523-21
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 16:27:22 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.607	152	601577	40.00	ug/mL	-0.03
20) Naphthalene-d8	8.550	136	2319029	40.00	ug/mL	-0.05
36) Acenaphthene-d10	11.368	164	1261754	40.00	ug/mL	-0.05
62) Phenanthrene-d10	13.730	188	1984668	40.00	ug/mL	-0.05
74) Chrysene-d12	18.595	240	1195232	40.00	ug/mL	-0.09
85) Perylene-d12	21.925	264	255719	40.00	ug/mL	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	4.997	112	666214	35.41	ug/mL	-0.11
Spiked Amount 75.000	Range 10 - 83		Recovery = 47.21%			
8) Phenol-d5	6.350	99	565324	23.08	ug/mL	-0.12
Spiked Amount 75.000	Range 13 - 62		Recovery = 30.77%			
21) Nitrobenzene-d5	7.511	82	713556	32.17	ug/mL	-0.04
Spiked Amount 50.000	Range 40 - 140		Recovery = 64.34%			
40) 2-Fluorobiphenyl	10.306	172	1461407	34.81	ug/mL	-0.04
Spiked Amount 50.000	Range 35 - 138		Recovery = 69.62%			
65) 2,4,6-Tribromophenol	12.686	330	312794	57.76	ug/mL	-0.05
Spiked Amount 75.000	Range 24 - 142		Recovery = 77.01%			
77) Terphenyl-d14	16.442	244	1242068	48.68	ug/mL	-0.06
Spiked Amount 50.000	Range 24 - 129		Recovery = 97.36%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.686	169	10058	Below Cal	#	35

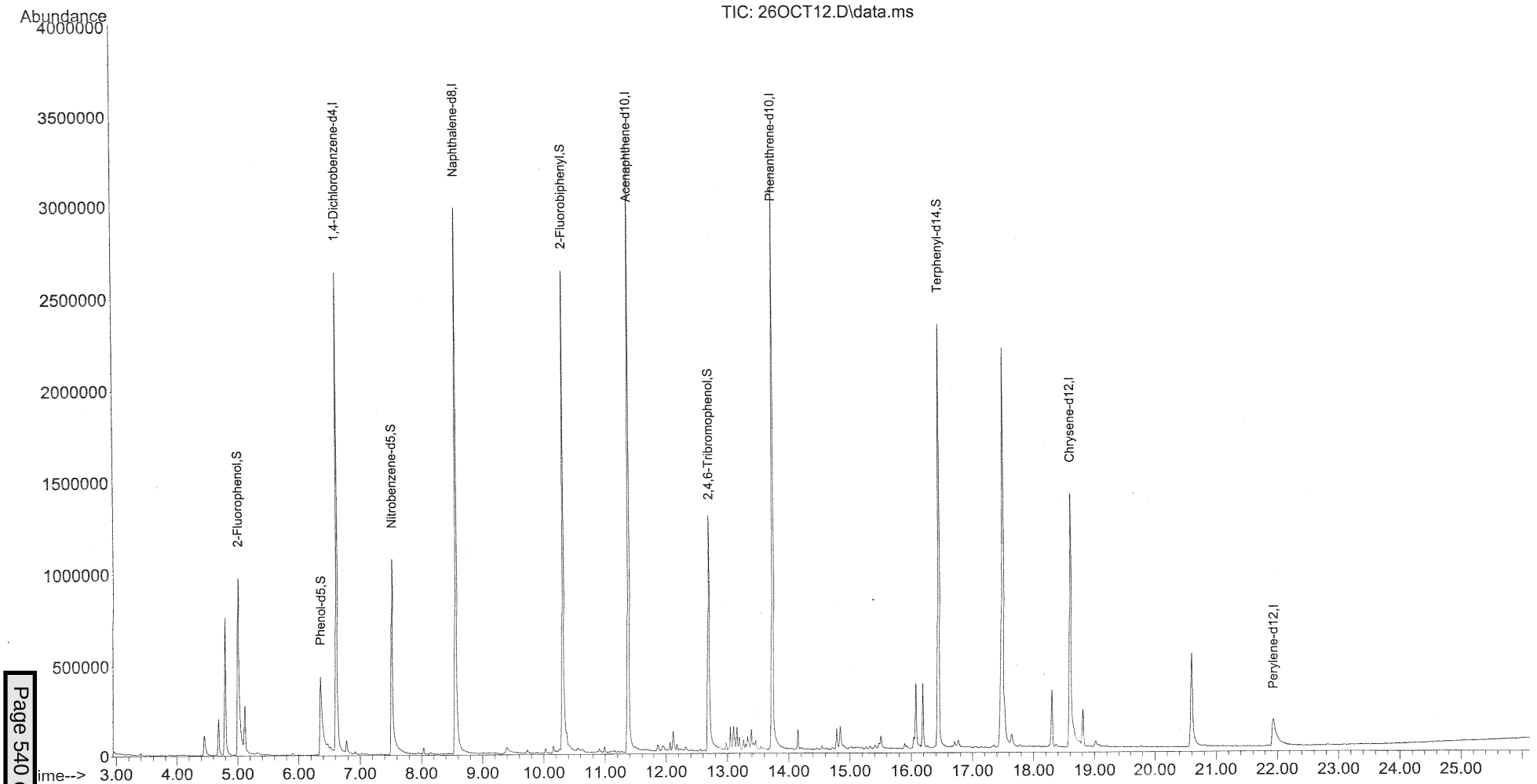
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Report (QT Reviewed)

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\10oct09\OCT2609\
Data File : 26OCT12.D
Acq On : 27 Oct 2009 2:28 pm
Operator : RIS
Sample : 09J0523-21
Misc : 1,SEVERSTAL,BNAwx,1000:1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 27 16:27:22 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNASEP29A.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Oct 21 13:00:26 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\2009\11nov09\NOV0309\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) 03NOV01.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 8:51 pm
2) 03NOV02.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 9:27 pm
3) 03NOV03.D PRIMER	60PPM PRIME	95	1.000	3 Nov 2009 10:04 pm
4) 03NOV04.D TAILING CHK	50ng TAILING CHECK	7	1.000	3 Nov 2009 10:40 pm
5) 03NOV05.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	3 Nov 2009 11:17 pm
6) 03NOV06.D CAL BLANK	BLANK, 10uL MF91808	1	1.000	3 Nov 2009 11:53 pm
7) 03NOV07.D 1.0 ug/mL ICal 2	10uL MK90317>1mL	2	1.000	4 Nov 2009 12:30 am
8) 03NOV08.D 5.0 ug/mL ICal 2	50uL MK90317>1mL	3	1.000	4 Nov 2009 1:06 am
9) 03NOV09.D 10 ug/mL ICal 3	100uL MK90317>1mL	4	1.000	4 Nov 2009 1:42 am
10) 03NOV10.D 20 ug/mL ICal 4	200uL MK90317>1mL	5	1.000	4 Nov 2009 2:19 am
11) 03NOV11.D 30 ug/mL ICal 5	300uL MK90317>1mL	6	1.000	4 Nov 2009 2:55 am
12) 03NOV12.D 40 ug/mL ICal 6	400uL MK90317>1mL	7	1.000	4 Nov 2009 3:31 am
13) 03NOV13.D 50 ug/mL ICal 7	500uL MK90317>1mL	8	1.000	4 Nov 2009 4:08 am
14) 03NOV14.D 60 ug/mL ICal 8	600uL MK90317>1mL	9	1.000	4 Nov 2009 4:44 am
15) 03NOV15.D 80 ug/mL ICal 9	800uL MK90317>1mL	10	1.000	4 Nov 2009 5:20 am
16) 03NOV16.D TUNE MIX	PCP,DFTPP,BENZ,DDT	100	1.000	4 Nov 2009 10:51 am
17) 03NOV17.D 40 ug/mL ICV	400uL MI92905>1mL	11	1.000	4 Nov 2009 11:31 am
18) 03NOV18.D CCB	CONT CAL BLANK	1	1.000	4 Nov 2009 12:08 pm
19) 03NOV19.D [redacted]	[redacted]	12	1.000	4 Nov 2009 12:44 pm
20) 03NOV20.D [redacted]	[redacted]	13	1.000	4 Nov 2009 1:21 pm
21) 03NOV21.D				

[redacted]	[redacted]	14	1.000	4 Nov 2009	1:57 pm
29) 03NOV22.D					
[redacted]	[redacted]	15	1.000	4 Nov 2009	2:34 pm
28) 03NOV23.D					
0945105-BLK1	1,METHODBLANK,1000:1	16	1.000	4 Nov 2009	3:10 pm
27) 03NOV24.D					
0945105-BS1	1,50PPM LCS,1000:1,B	17	1.000	4 Nov 2009	3:47 pm
25) 03NOV25.D					
09J0523-22	1,SEVERSTAL,950:1,BN	18	1.000	4 Nov 2009	4:23 pm
26) 03NOV26.D					
09J0523-23	1,SEVERSTAL,950:1,BN	19	1.000	4 Nov 2009	5:00 pm
27) 03NOV27.D					
09J0523-24	1,SEVERSTAL,950:1,BN	20	1.000	4 Nov 2009	5:36 pm
28) 03NOV28.D					
09J0523-25	1,SEVERSTAL,950:1,BN	21	1.000	4 Nov 2009	6:13 pm
29) 03NOV29.D					
09J0523-26	1,SEVERSTAL,920:1,BN	22	1.000	4 Nov 2009	6:49 pm
30) 03NOV30.D					
09J0523-27	1,SEVERSTAL,910:1,BN	23	1.000	4 Nov 2009	7:26 pm
31) 03NOV31.D					
09J0523-28	1,SEVERSTAL,910:1,BN	24	1.000	4 Nov 2009	8:02 pm
32) 03NOV32.D					
09J0523-29	1,SEVERSTAL,910:1,BN	25	1.000	4 Nov 2009	8:39 pm
33) 03NOV33.D					
09J0523-30	1,SEVERSTAL,950:1,BN	26	1.000	4 Nov 2009	9:15 pm
34) 03NOV34.D					
0945105-MS1	1,50PPM MS,950:1,BNA	27	1.000	4 Nov 2009	9:52 pm
35) 03NOV35.D					
0945105-MSD1	1,50PPM MSD,950:1,BN	28	1.000	4 Nov 2009	10:28 pm
36) 03NOV36.D					
8270E MIX	PCP,DFTPP,BENZ,DDT	100	1.000	4 Nov 2009	11:05 pm
37) 03NOV37.D					
40 ug/mL ICV	400uL MI92905>1mL	11	1.000	4 Nov 2009	11:41 pm
38) 03NOV38.D					
CCB	CONT CAL BLANK	1	1.000	5 Nov 2009	12:18 am
39) 03NOV39.D					
09J0523-31	1,SEVERSTAL,950:1,BN	29	1.000	5 Nov 2009	12:54 am
40) 03NOV40.D					
[redacted]	[redacted]	30	1.000	5 Nov 2009	1:30 am
41) 03NOV41.D					
[redacted]	[redacted]	31	1.000	5 Nov 2009	2:07 am
42) 03NOV42.D					
[redacted]	[redacted]	32	1.000	5 Nov 2009	2:43 am

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV16.D
Tune Time : 4 Nov 2009 10:51 am

Daily Calibration File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV17.D

(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				492460	1904880	1108310

(TBP)	(TPH)	(PHN)	(CRY)	(PRY)
		1902040	1809350	1319460

File	Sample	Surrogate Recovery %				Internal Standard Responses		
03NOV17.D								
	40 ug/mL I	54	51	83	76	492460	1904880	1108308
		54	75			1902036	1809351	1319461
03NOV18.D								
	CCB	0*	1*	0*	0*	522251	2117298	1180373
		0*	0*			1814635	1668779	1327117
03NOV19.D								
	[redacted]	89*	86*	84	85	497154	1893218	1148651
		92	88			1884617	1805147	1498674
03NOV20.D								
	[redacted]	89*	94*	94	86	468496	1857916	1087630
		98	91			1866446	1824804	1391778
03NOV21.D								
	[redacted]	52	95*	57	41	498189	1923664	1163237
		54	50			1878078	1751513	1439659
03NOV22.D								
	[redacted]	48	87*	53	40	518546	1974402	1168175
		59	46			1970351	1865529	1548394
03NOV23.D								
	0945105-BL	47	33	82	77	615142	2304978	1305141
		85	84			2055339	1929060	1573551
03NOV24.D								
	0945105-BS	53	35	83	78	560924	2176890	1267947
		96	87			2148664	1998175	1307436
03NOV25.D								
	09J0523-22	32	25	65	63	583085	2256154	1256778
		74	61			1969386	1912613	1433653
03NOV26.D								
	09J0523-23	32	25	61	57	450385	1674025	969687
		79	91			1552555	1153426	322212*
03NOV27.D								
	09J0523-24	71	56	117	107	551641	2108742	1188701
		138	92			1914627	1870171	1228985
03NOV28.D								
	09J0523-25	33	26	57	54	475115	1868025	1037161
		69	66			1697721	1541785	1167170
03NOV29.D								
	09J0523-26	28	22	52	51	441154	1663905	976911
		73	77			1564971	1330987	371031*
03NOV30.D								

IS ↓ / Data flagged

	09J0523-27	45	32	67	66	494474	1917425	1057765
		86	78			1692663	1554484	968703
03NOV31.D								
	09J0523-28	43	34	70	71	450930	1741172	955652
		89	73			1556602	1436173	894769
03NOV32.D								
	09J0523-29	41	31	66	62	524556	2054528	1146355
		81	75			1869539	1789514	1184750
03NOV33.D								
	09J0523-30	27	20	51	49	485895	1834177	1005817
		71	59			1565985	1510281	596106*

IS ↓
Data flagged

(fails) - fails 12hr time check * - fails criteria

Created: Thu Nov 05 13:08:00 2009 Instrument #1

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV36.D
Tune Time : 4 Nov 2009 11:05 pm

Daily Calibration File : C:\msdchem\1\DATA\2009\11nov09\NOV0309\03NOV37.D

(2FP)	(PHL)	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				498318	1970580	1138680

(TBP)	(TPH)	(PHN)	(CRY)	(PRY)
		1982010	1791270	1045030

File	Sample	Surrogate Recovery %				Internal Standard Responses		
03NOV37.D								
	40 ug/mL I	54	52	78	76	498318	1970584	1138679
		53	79			1982008	1791265	1045028
03NOV38.D								
	CCB	0*	1*	0*	0*	541369	2170659	1235535
		0*	0*			1945754	1752214	1114826
03NOV39.D								
	09J0523-31	31	23	60	55	482423	1801157	1039322
		68	68			1626722	1533659	754939
03NOV40.D								
	[redacted]	42	30	76	71	596866	2301250	1283201
		82	78			2129952	1982559	1284008
03NOV41.D								
	[redacted]	26	21	50	56	452087	1740485	978264
		70	66			1612708	1554856	568153
03NOV42.D								
	[redacted]	25	20	48	52	453217	1726574	1003298
		73	68			1665237	1553156	534209

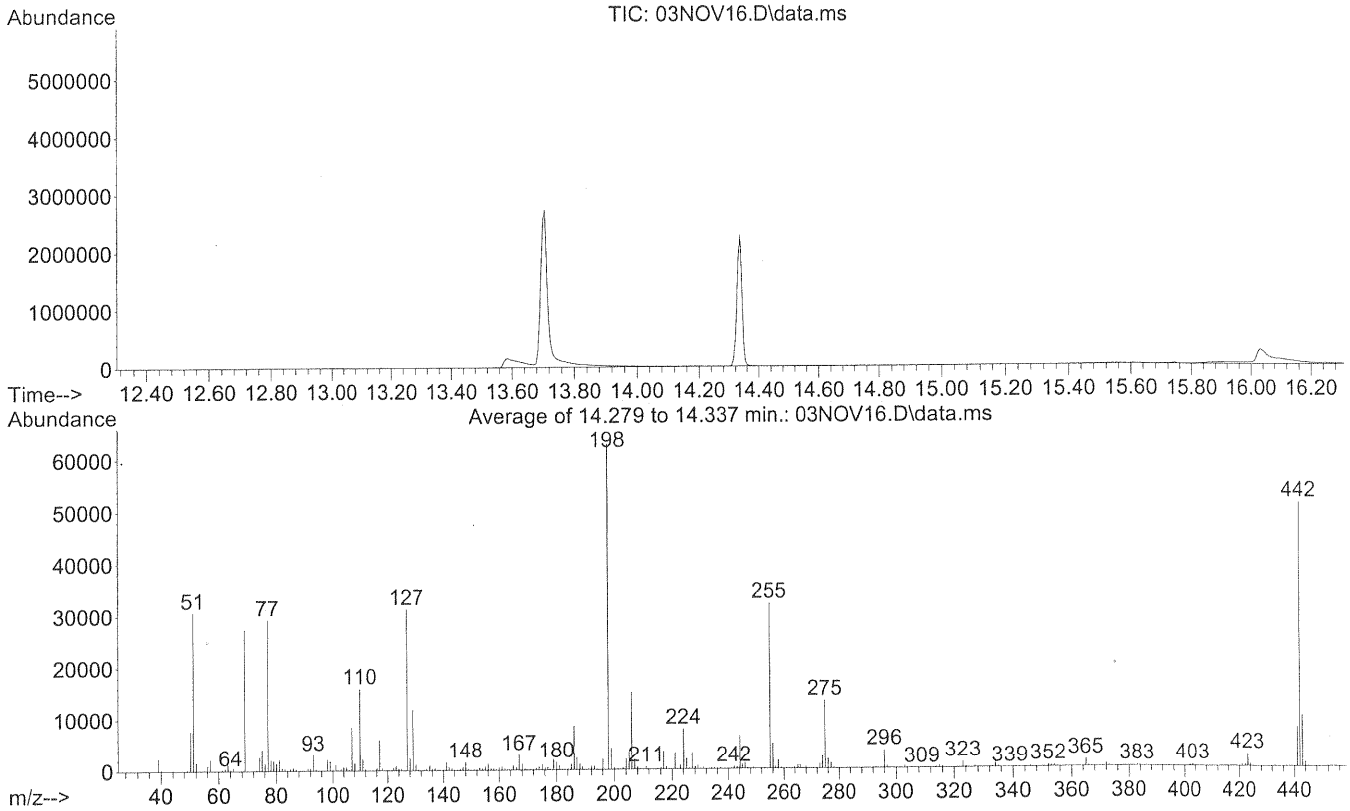
(fails) - fails 12hr time check * - fails criteria

Created: Thu Nov 05 13:09:31 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV16.D
Acq On : 4 Nov 2009 10:51 am
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\TUNEMIX.M
Title : 8270/625 BNA Calibration
Last Update : Fri Jun 26 13:23:15 2009



Spectrum Information: Average of 14.279 to 14.337 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	48.7	30638	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.5	27366	PASS
70	69	0.00	2	0.4	121	PASS
127	198	40	60	49.7	31267	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	62875	PASS
199	198	5	9	6.7	4208	PASS
275	198	10	30	21.1	13248	PASS
365	198	1	100	2.4	1478	PASS
441	443	0.01	100	77.0	7750	PASS
442	198	40	100	81.3	51131	PASS
443	442	17	23	19.7	10068	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV17.D
Acq On : 4 Nov 2009 11:31 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 16:48:50 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2		N-Nitrosodimethylamine	0.865	0.811	6.2	88	0.00
3	T	Pyridine	1.570	1.642	-4.6	96	0.00
4	S	2-Fluorophenol	1.226	1.243	-1.4	91	0.00
5		Pentachloroethane	0.611	0.585	4.3	92	0.00
6		Aniline	1.387	1.443	-4.0	89	0.00
7	T	bis(2-Chloroethyl)ether	1.721	1.539	10.6	97	0.00
8	S	Phenol-d5	1.319	1.417	-7.4	91	0.00
9	M*	Phenol	1.474	1.582	-7.3	91	0.00
10	M	2-Chlorophenol	1.328	1.372	-3.3	96	0.00
11	T	1,3-Dichlorobenzene	1.570	1.597	-1.7	99	0.00
12	M*	1,4-Dichlorobenzene	1.621	1.616	0.3	99	0.00
13	T	1,2-Dichlorobenzene	1.548	1.588	-2.6	99	0.00
14	T	Benzyl alcohol	0.832	0.888	-6.7	99	0.00
15	T	bis(2-chloroisopropyl)ether	2.545	2.537	0.3	98	0.00
16	T	2-Methylphenol	1.178	1.220	-3.6	97	0.00
17	T	Hexachloroethane	0.587	0.575	2.0	98	0.00
18	M**	N-Nitroso-di-n-propylamine	0.931	0.925	0.6	94	0.00
19	T	4-Methylphenol,3-Methylphen	1.188	1.202	-1.2	95	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00
21	S	Nitrobenzene-d5	0.324	0.334	-3.1	93	0.00
22	T	Nitrobenzene	0.359	0.352	1.9	98	0.00
23	T	Isophorone	0.703	0.708	-0.7	99	0.00
24	T*	2-Nitrophenol	0.137	0.148	-8.0	122	0.00
25	T	2,4-Dimethylphenol	0.341	0.333	2.3	93	0.00
26	T	bis(2-Chloroethoxy)methane	0.366	0.408	-11.5	99	0.00
27	T*	2,4-Dichlorophenol	0.259	0.259	0.0	95	0.00
28	M	1,2,4-Trichlorobenzene	0.345	0.342	0.9	96	0.00
29	T	Naphthalene	0.990	1.019	-2.9	101	0.00
30	T	4-Chloroaniline	0.190	0.201	-5.8	115	-0.02
31	T	Benzoic Acid	0.142	0.143	-0.7	89	0.00
32	T*	Hexachlorobutadiene	0.191	0.212	-11.0	107	0.00
33	M*	4-Chloro-3-methylphenol	0.279	0.296	-6.1	96	0.00
34	T	2-Methylnaphthalene	0.729	0.771	-5.8	102	0.00
35		1-Methylnaphthalene	0.677	0.648	4.3	94	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	0.120	0.128	-6.7	89	0.00
38	T*	2,4,6-Trichlorophenol	0.340	0.338	0.6	95	0.00
39	T	2,4,5-Trichlorophenol	0.313	0.337	-7.7	102	0.00
40	S	2-Fluorobiphenyl	1.306	1.236	5.4	93	0.00
41	T	2-Chloronaphthalene	1.051	1.111	-5.7	103	0.00
42	T	2-Nitroaniline	0.291	0.292	-0.3	96	0.00
43		1,4-Dinitrobenzene	0.184	0.198	-7.6	94	0.00
44	T	Acenaphthylene	1.737	1.807	-4.0	101	0.00

45	T	Dimethylphthalate	1.265	1.240	2.0	97	0.00
46		1,3-Dinitrobenzene	0.173	0.182	-5.2	97	-0.04
47		1,2-Dinitrobenzene	0.131	0.133	-1.5	93	0.00
48	T	2,6-Dinitrotoluene	0.282	0.294	-4.3	102	0.00
49	M*	Acenaphthene	1.089	1.115	-2.4	102	0.00
50	T	3-Nitroaniline	0.335	0.343	-2.4	95	0.00
51	T**	2,4-Dinitrophenol	0.136	0.166	-22.1	111	0.00
52	T	Dibenzofuran	1.470	1.550	-5.4	103	0.00
53		2,3,5,6-Tetrachlorophenol	0.226	0.244	-8.0	96	0.00
54		2,3,4,6-Tetrachlorophenol	0.242	0.224	7.4	91	0.00
55	M	2,4-Dinitrotoluene	0.358	0.395	-10.3	105	0.00
56	M**	4-Nitrophenol	0.108	0.112	-3.7	84	0.00
57	T	Fluorene	1.164	1.195	-2.7	101	0.00
58	T	4-Chlorophenyl-phenylether	0.540	0.537	0.6	96	0.00
59	T	Diethylphthalate	1.220	1.213	0.6	98	0.00
60	T	1,2-Diphenylhydrazine (Azob	1.186	1.254	-5.7	100	0.00
61	T	4-Nitroaniline	0.155	0.141	9.0	86	0.01
62							
63	I	Phenanthrene-d10	1.000	1.000	0.0	99	0.00
64	T	4,6-Dinitro-2-methylphenol	0.117	0.135	-15.4	104	0.00
65	T*	n-Nitrosodiphenylamine	0.498	0.432	13.3	90	0.00
66	S	2,4,6-Tribromophenol	0.100	0.101	-1.0	95	0.00
67	T	4-Bromophenyl-phenylether	0.221	0.215	2.7	96	0.00
68	T	Hexachlorobenzene	0.239	0.244	-2.1	103	0.00
69	M*	Pentachlorophenol	0.086	0.109	-26.7	120	0.00
70	T	Phenanthrene	1.010	1.043	-3.3	103	0.00
71	T	Anthracene	0.965	1.092	-13.2	105	0.00
72	T	Carbazole	0.827	0.840	-1.6	93	0.00
73	T	Di-n-butylphthalate	1.219	1.220	-0.1	99	0.00
74	T*	Fluoranthene	1.050	1.135	-8.1	107	0.00
75	I	Chrysene-d12	1.000	1.000	0.0	103	0.00
76	M	Pyrene	1.216	1.219	-0.2	104	0.00
77		Benzidine	0.179	0.174	2.8	94	0.00
78	S	Terphenyl-d14	0.756	0.707	6.5	98	0.00
79		3,3'-Dimethylbenzidine	0.342	0.364	-6.4	106	0.00
80	T	Butylbenzylphthalate	0.555	0.564	-1.6	105	0.00
81		bis(2-ethylhexyl)adipate	0.493	0.452	8.3	96	0.00
82	T	3,3'-Dichlorobenzidine	0.144	0.172	-19.4	139	-0.04
83	T	Benzo[a]anthracene	1.051	1.122	-6.8	107	0.00
84	T	Chrysene	1.007	1.023	-1.6	106	0.00
85	T	bis(2-Ethylhexyl)phthalate	0.788	0.776	1.5	104	0.00
86							
87	I	Perylene-d12	1.000	1.000	0.0	95	0.00
88	T*	Di-n-octylphthalate	1.705	1.868	-9.6	101	0.00
89	T	Benzo[b]fluoranthene	1.246	1.391	-11.6	99	0.00
90	T	Benzo[k]fluoranthene	1.299	1.371	-5.5	102	0.00
91	T*	Benzo[a]pyrene	1.158	1.262	-9.0	97	0.00
92	T	Indeno[1,2,3-cd]pyrene	0.860	0.861	-0.1	95	0.00
93	T	Dibenz[a,h]anthracene	0.697	0.730	-4.7	99	0.00
94	T	Benzo[g,h,i]perylene	0.662	0.642	3.0	96	0.00

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95 (#) = Out of Range SPCC's out = 0 CCC's out = 0

96

97 BNANOV03.M Wed Nov 04 16:49:22 2009 MSD5

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Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV17.D
Acq On : 4 Nov 2009 11:31 am
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 16:48:50 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00
2		N-Nitrosodimethylamine	40.000	37.511	6.2	88	0.00
3	T	Pyridine	40.000	41.841	-4.6	96	0.00
4	S	2-Fluorophenol	40.000	40.548	-1.4	91	0.00
5		Pentachloroethane	40.000	38.299	4.3	92	0.00
6		Aniline	40.000	38.230	4.4	89	0.00
7	T	bis(2-Chloroethyl)ether	40.000	39.367	1.6	97	0.00
8	S	Phenol-d5	40.000	38.434	3.9	91	0.00
9	M*	Phenol	40.000	38.548	3.6	91	0.00
10	M	2-Chlorophenol	40.000	41.328	-3.3	96	0.00
11	T	1,3-Dichlorobenzene	40.000	40.677	-1.7	99	0.00
12	M*	1,4-Dichlorobenzene	40.000	39.894	0.3	99	0.00
13	T	1,2-Dichlorobenzene	40.000	41.044	-2.6	99	0.00
14	T	Benzyl alcohol	40.000	42.706	-6.8	99	0.00
15	T	bis(2-chloroisopropyl)ether	40.000	39.870	0.3	98	0.00
16	T	2-Methylphenol	40.000	41.416	-3.5	97	0.00
17	T	Hexachloroethane	40.000	39.243	1.9	98	0.00
18	M**	N-Nitroso-di-n-propylamine	40.000	39.730	0.7	94	0.00
19	T	4-Methylphenol,3-Methylphen	40.000	40.470	-1.2	95	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	98	0.00
21	S	Nitrobenzene-d5	40.000	41.337	-3.3	93	0.00
22	T	Nitrobenzene	40.000	39.234	1.9	98	0.00
23	T	Isophorone	40.000	40.238	-0.6	99	0.00
24	T*	2-Nitrophenol	40.000	43.416	-8.5	122	0.00
25	T	2,4-Dimethylphenol	40.000	39.123	2.2	93	0.00
26	T	bis(2-Chloroethoxy)methane	40.000	41.570	-3.9	99	0.00
27	T*	2,4-Dichlorophenol	40.000	39.972	0.1	95	0.00
28	M	1,2,4-Trichlorobenzene	40.000	39.729	0.7	96	0.00
29	T	Naphthalene	40.000	41.182	-3.0	101	0.00
30	T	4-Chloroaniline	40.000	45.545	-13.9	115	-0.02
31	T	Benzoic Acid	40.000	35.939	10.2	89	0.00
32	T*	Hexachlorobutadiene	40.000	44.336	-10.8	107	0.00
33	M*	4-Chloro-3-methylphenol	40.000	42.369	-5.9	96	0.00
34	T	2-Methylnaphthalene	40.000	42.321	-5.8	102	0.00
35		1-Methylnaphthalene	40.000	38.290	4.3	94	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00
37	T**	Hexachlorocyclopentadiene	40.000	38.250	4.4	89	0.00
38	T*	2,4,6-Trichlorophenol	40.000	39.841	0.4	95	0.00
39	T	2,4,5-Trichlorophenol	40.000	42.996	-7.5	102	0.00
40	S	2-Fluorobiphenyl	40.000	37.868	5.3	93	0.00
41	T	2-Chloronaphthalene	40.000	42.317	-5.8	103	0.00
42	T	2-Nitroaniline	40.000	40.189	-0.5	96	0.00
43		1,4-Dinitrobenzene	40.000	39.354	1.6	94	0.00
44	T	Acenaphthylene	40.000	41.590	-4.0	101	-0.00

45	T	Dimethylphthalate	40.000	39.223	1.9	97	0.00
46		1,3-Dinitrobenzene	40.000	42.117	-5.3	97	-0.04
47		1,2-Dinitrobenzene	40.000	40.628	-1.6	93	0.00
48	T	2,6-Dinitrotoluene	40.000	41.693	-4.2	102	0.00
49	M*	Acenaphthene	40.000	40.977	-2.4	102	0.00
50	T	3-Nitroaniline	40.000	40.942	-2.4	95	0.00
51	T**	2,4-Dinitrophenol	40.000	42.701	-6.8	111	0.00
52	T	Dibenzofuran	40.000	42.184	-5.5	103	0.00
53		2,3,5,6-Tetrachlorophenol	40.000	38.499	3.8	96	0.00
54		2,3,4,6-Tetrachlorophenol	40.000	38.563	3.6	91	0.00
55	M	2,4-Dinitrotoluene	40.000	44.107	-10.3	105	0.00
56	M**	4-Nitrophenol	40.000	36.350	9.1	84	0.00
57	T	Fluorene	40.000	41.054	-2.6	101	0.00
58	T	4-Chlorophenyl-phenylether	40.000	39.723	0.7	96	0.00
59	T	Diethylphthalate	40.000	39.769	0.6	98	0.00
60	T	1,2-Diphenylhydrazine (Azob	40.000	42.292	-5.7	100	0.00
61	T	4-Nitroaniline	40.000	36.324	9.2	86	0.01
62	I	Phenanthrene-d10	40.000	40.000	0.0	99	0.00
63	T	4,6-Dinitro-2-methylphenol	40.000	46.393	-16.0	104	0.00
64	T*	n-Nitrosodiphenylamine	40.000	36.257	9.4	90	0.00
65	S	2,4,6-Tribromophenol	40.000	40.136	-0.3	95	0.00
66	T	4-Bromophenyl-phenylether	40.000	38.932	2.7	96	0.00
67	T	Hexachlorobenzene	40.000	40.886	-2.2	103	0.00
68	M*	Pentachlorophenol	40.000	45.756	-14.4	120	0.00
69	T	Phenanthrene	40.000	41.331	-3.3	103	0.00
70	T	Anthracene	40.000	44.208	-10.5	105	0.00
71	T	Carbazole	40.000	40.614	-1.5	93	0.00
72	T	Di-n-butylphthalate	40.000	40.061	-0.2	99	0.00
73	T*	Fluoranthene	40.000	43.241	-8.1	107	0.00
74	I	Chrysene-d12	40.000	40.000	0.0	103	0.00
75	M	Pyrene	40.000	40.117	-0.3	104	0.00
76		Benzidine	40.000	38.326	4.2	94	0.00
77	S	Terphenyl-d14	40.000	37.401	6.5	98	0.00
78		3,3'-Dimethylbenzidine	40.000	42.488	-6.2	106	0.00
79	T	Butylbenzylphthalate	40.000	40.620	-1.5	105	0.00
80		bis(2-ethylhexyl)adipate	40.000	36.663	8.3	96	0.00
81	T	3,3'-Dichlorobenzidine	40.000	49.910	-24.8	139	-0.04
82	T	Benzo[a]anthracene	40.000	42.714	-6.8	107	0.00
83	T	Chrysene	40.000	40.640	-1.6	106	0.00
84	T	bis(2-Ethylhexyl)phthalate	40.000	39.372	1.6	104	0.00
85	I	Perylene-d12	40.000	40.000	0.0	95	0.00
86	T*	Di-n-octylphthalate	40.000	43.807	-9.5	101	0.00
87	T	Benzo[b]fluoranthene	40.000	39.020	2.4	99	0.00
88	T	Benzo[k]fluoranthene	40.000	42.218	-5.5	102	0.00
89	T*	Benzo[a]pyrene	40.000	43.570	-8.9	97	0.00
90	T	Indeno[1,2,3-cd]pyrene	40.000	40.033	-0.1	95	0.00
91	T	Dibenz[a,h]anthracene	40.000	41.851	-4.6	99	0.00
92	T	Benzo[g,h,i]perylene	40.000	42.699	-6.7	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ANOV03.M Wed Nov 04 16:49:35 2009 MSD5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV25.D
Acq On : 4 Nov 2009 4:23 pm
Operator : RIS
Sample : 09J0523-22
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 05 11:35:37 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

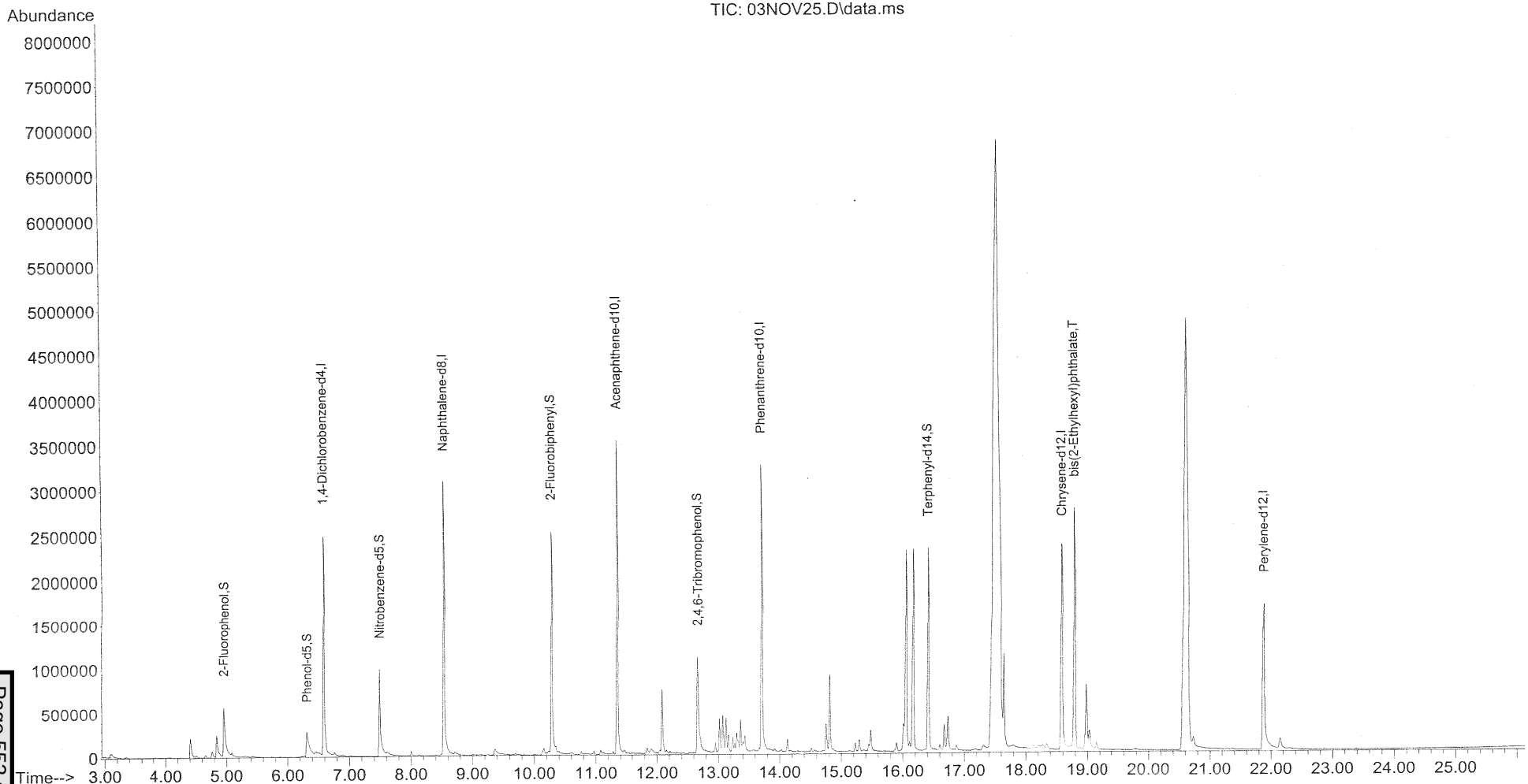
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.579	152	583085	40.00	ug/mL	0.00
20) Naphthalene-d8	8.533	136	2256154	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.345	164	1256778	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.707	188	1969386	40.00	ug/mL	0.00
74) Chrysene-d12	18.589	240	1912613	40.00	ug/mL	0.01
85) Perylene-d12	21.879	264	1433653	40.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-Fluorophenol	4.952	112	425836	23.82	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 31.76%			
8) Phenol-d5	6.311	99	395427	18.51	ug/mL	0.03
Spiked Amount 75.000	Range 13 - 62		Recovery = 24.68%			
21) Nitrobenzene-d5	7.483	82	593228	32.50	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 65.00%			
40) 2-Fluorobiphenyl	10.277	172	1290105	31.45	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 62.90%			
65) 2,4,6-Tribromophenol	12.657	330	272807	55.18	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 73.57%			
77) Terphenyl-d14	16.413	244	1108251	30.65	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 61.30%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.153	93	91	Below Cal	#	18
34) 2-Methylnaphthalene	9.735	142	238	Below Cal	#	7
64) n-Nitrosodiphenylamine	12.663	169	9059	Below Cal	#	42
70) Anthracene	13.829	178	399	Below Cal		61
84) bis(2-Ethylhexyl)phtha...	18.793	149	1423637	37.79	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV25.D
Acq On : 4 Nov 2009 4:23 pm
Operator : RIS
Sample : 09J0523-22
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 05 11:35:37 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV26.D
Acq On : 4 Nov 2009 5:00 pm
Operator : RIS
Sample : 09J0523-23
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 05 11:37:48 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

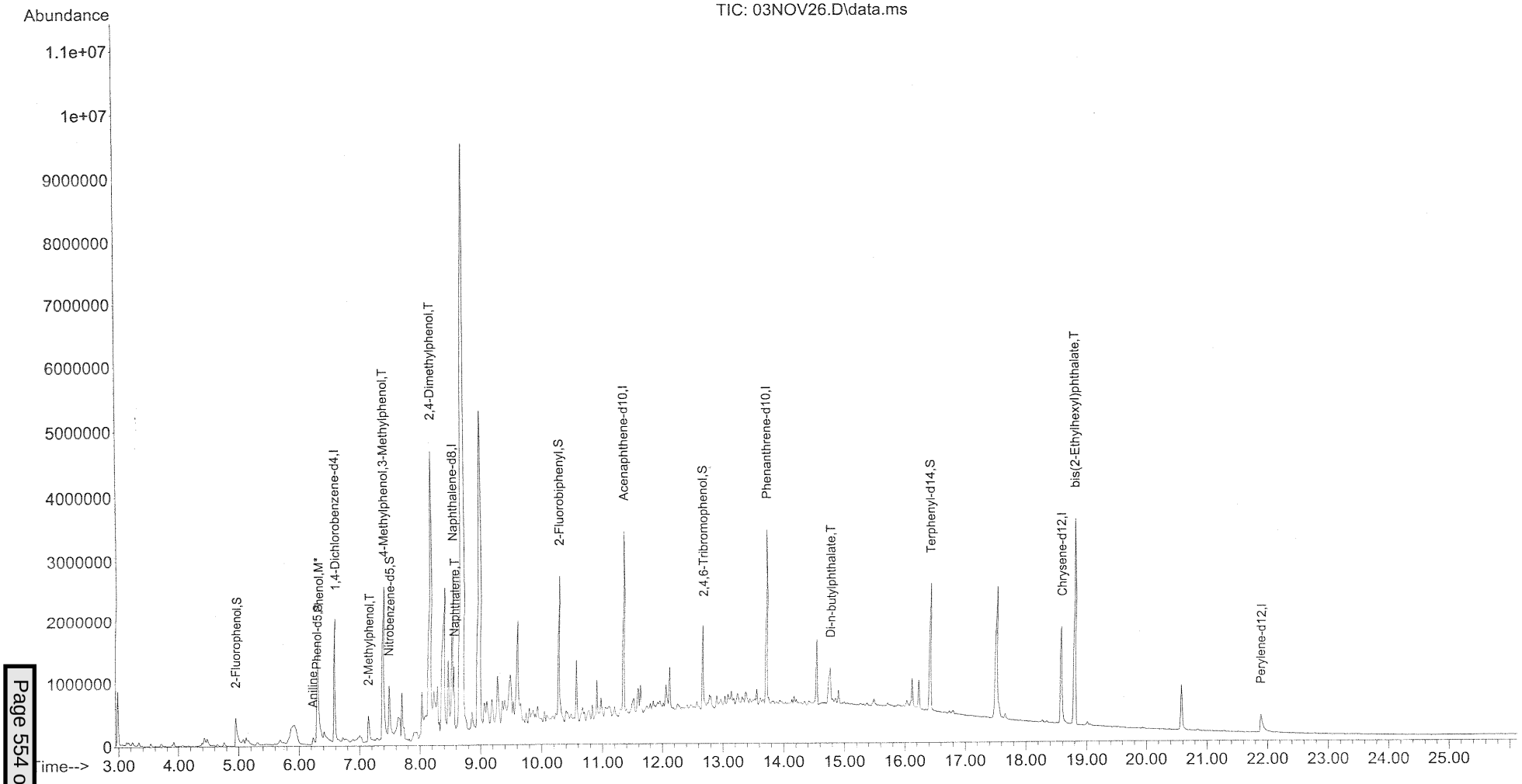
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.580	152	450385	40.00	ug/mL	0.00
20) Naphthalene-d8	8.532	136	1674025	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.349	164	969687	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.718	188	1552555	40.00	ug/mL	0.00
74) Chrysene-d12	18.582	240	1153426	40.00	ug/mL	0.00
85) Perylene-d12	21.889	264	322212	40.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-Fluorophenol	4.953	112	328847	23.82	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 31.76%			
8) Phenol-d5	6.288	99	315532	19.11	ug/mL	0.00
Spiked Amount 75.000	Range 13 - 62		Recovery = 25.48%			
21) Nitrobenzene-d5	7.484	82	409866	30.26	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 60.52%			
40) 2-Fluorobiphenyl	10.282	172	908055	28.69	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 57.38%			
65) 2,4,6-Tribromophenol	12.668	330	230404	59.11	ug/mL	0.01
Spiked Amount 75.000	Range 24 - 142		Recovery = 78.81%			
77) Terphenyl-d14	16.424	244	995936	45.68	ug/mL	0.01
Spiked Amount 50.000	Range 24 - 129		Recovery = 91.36%			
Target Compounds						Qvalue
6) Aniline	6.224	93	89419	8.31	ug/mL	95
9) Phenol	6.306	94	1084544	58.70	ug/mL	92
16) 2-Methylphenol	7.146	108	154791	11.67	ug/mL	98
19) 4-Methylphenol,3-Methy...	7.385	108	1237203	92.45	ug/mL	94
25) 2,4-Dimethylphenol	8.171	107	2124983	149.09	ug/mL	95
29) Naphthalene	8.561	128	560604	13.54	ug/mL	99
30) 4-Chloroaniline	8.923	127	2937	Below Cal	#	48
54) 2,3,4,6-Tetrachlorophenol	11.985	232	81	Below Cal	#	1
64) n-Nitrosodiphenylamine	12.452	169	1241	Below Cal		94
70) Anthracene	13.828	178	8798	Below Cal		95
72) Di-n-butylphthalate	14.767	149	317809	6.72	ug/mL	100
84) bis(2-Ethylhexyl)phtha...	18.810	149	1886157	83.01	ug/mL	100
92) Benzo[g,h,i]perylene	24.695	276	78	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Re run @ 1x 11/5/09 RIS

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV26.D
Acq On : 4 Nov 2009 5:00 pm
Operator : RIS
Sample : 09J0523-23
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 05 11:37:48 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV27.D
Acq On : 4 Nov 2009 5:36 pm
Operator : RIS
Sample : 09J0523-24
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 20 Sample Multiplier: 1

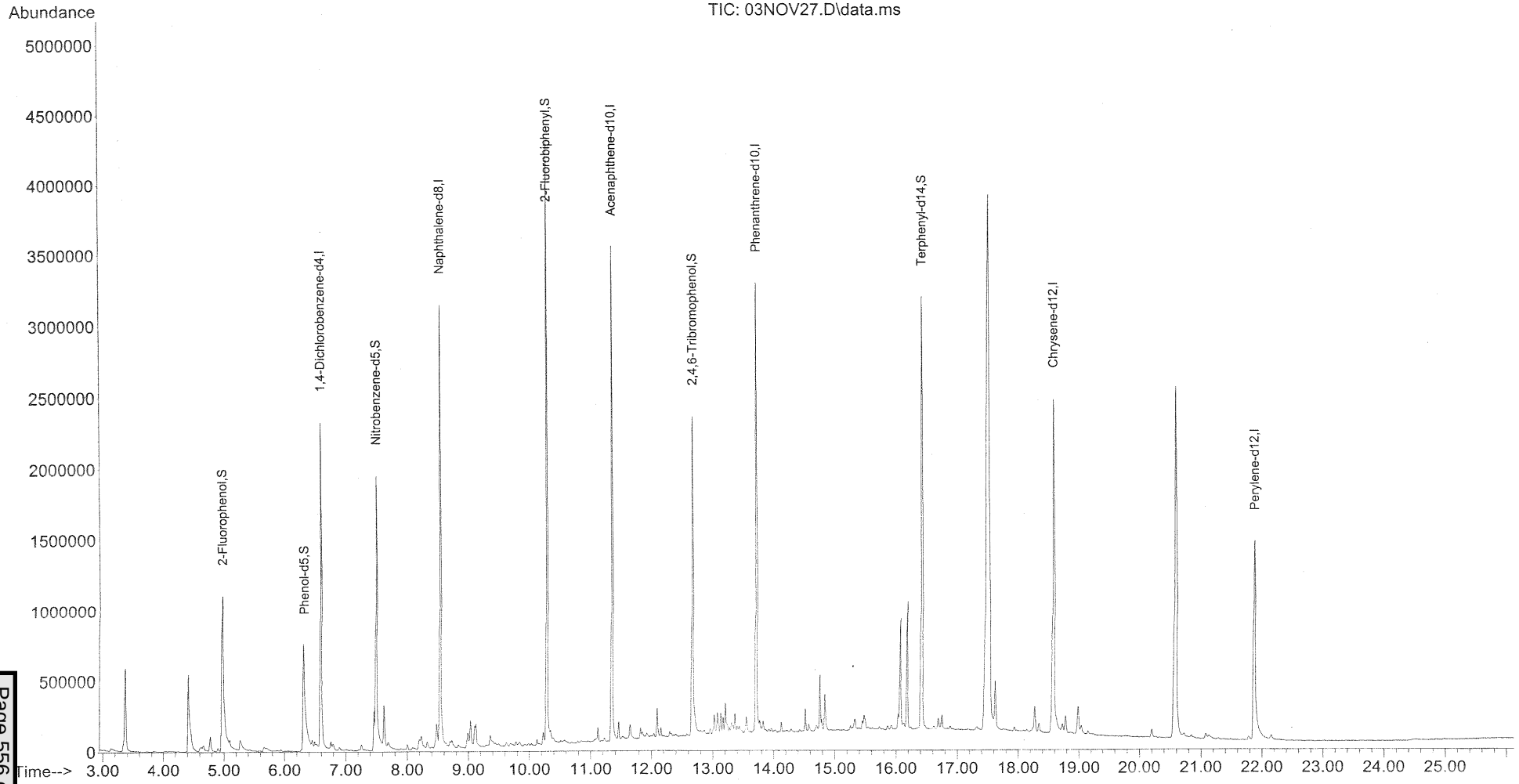
Quant Time: Nov 05 11:47:06 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.585	152	551641	40.00	ug/mL	0.00
20) Naphthalene-d8	8.533	136	2108742	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.345	164	1188701	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.713	188	1914627	40.00	ug/mL	0.00
74) Chrysene-d12	18.577	240	1870171	40.00	ug/mL	0.00
85) Perylene-d12	21.873	264	1228985	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.964	112	895939	52.98	ug/mL	0.03
Spiked Amount 75.000	Range 10 - 83		Recovery = 70.64%			
8) Phenol-d5	6.305	99	859842	42.25	ug/mL	0.02
Spiked Amount 75.000	Range 13 - 62		Recovery = 56.33%			
21) Nitrobenzene-d5	7.489	82	995685	58.36	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 116.72%			
40) 2-Fluorobiphenyl	10.283	172	2081049	53.64	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 107.28%			
65) 2,4,6-Tribromophenol	12.663	330	497701	103.54	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 138.05%			
77) Terphenyl-d14	16.419	244	1619597	45.81	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 91.62%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.288	93	84	Below Cal	#	18
30) 4-Chloroaniline	8.971	127	191	Below Cal	#	53
34) 2-Methylnaphthalene	9.694	142	1020	Below Cal	#	34
64) n-Nitrosodiphenylamine	12.482	169	573	Below Cal	#	26
70) Anthracene	13.742	178	1142	Below Cal		89
92) Benzo[g,h,i]perylene	24.480	276	2488	Below Cal		85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV27.D
Acq On : 4 Nov 2009 5:36 pm
Operator : RIS
Sample : 09J0523-24
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 05 11:47:06 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV28.D
Acq On : 4 Nov 2009 6:13 pm
Operator : RIS
Sample : 09J0523-25
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 05 11:48:09 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

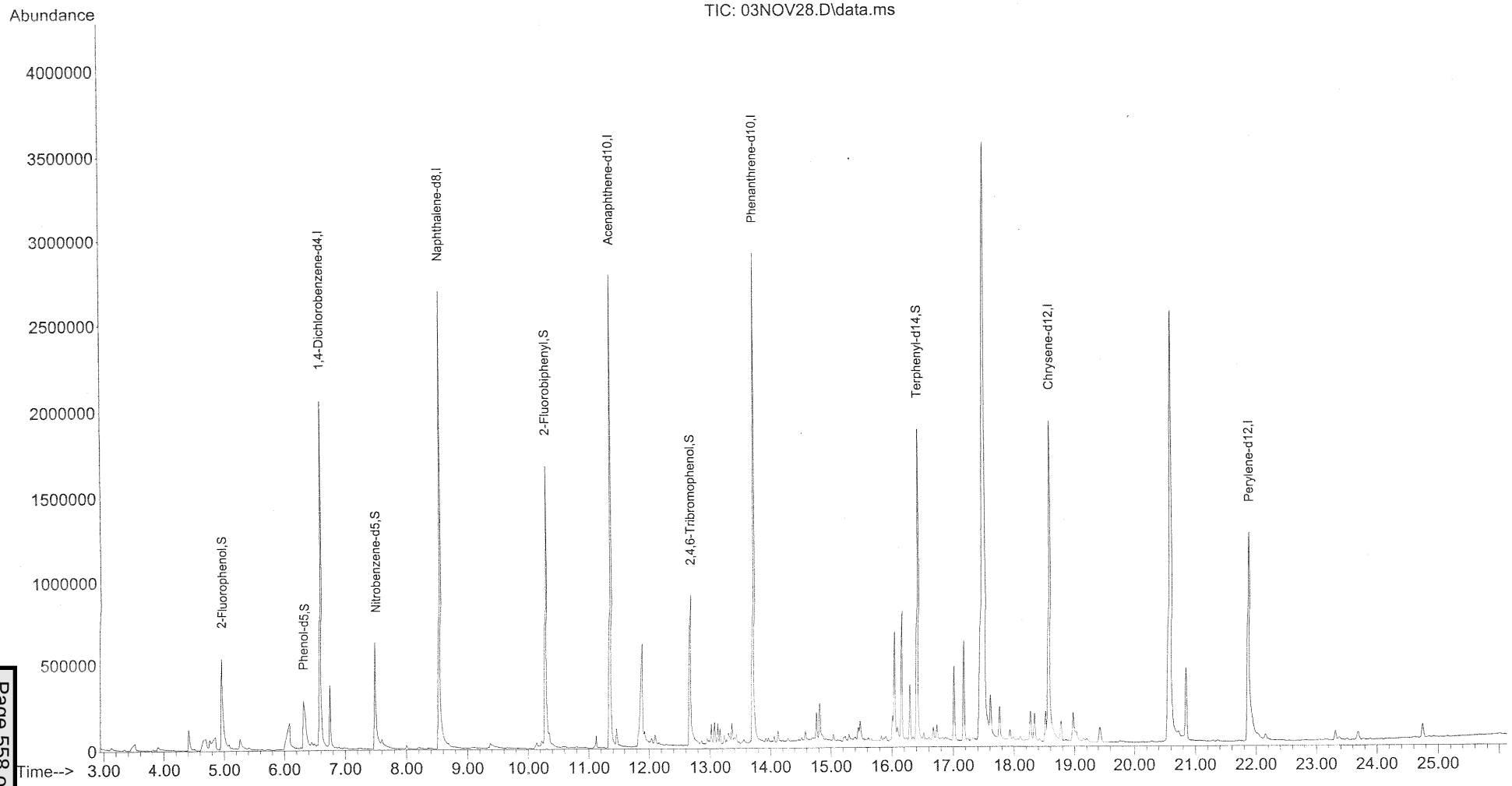
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.580	152	475115	40.00	ug/mL	0.00
20) Naphthalene-d8	8.527	136	1868025	40.00	ug/mL	-0.01
36) Acenaphthene-d10	11.345	164	1037161	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.707	188	1697721	40.00	ug/mL	0.00
74) Chrysene-d12	18.577	240	1541785	40.00	ug/mL	0.00
85) Perylene-d12	21.867	264	1167170	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.953	112	364814	25.05	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 33.40%			
8) Phenol-d5	6.312	99	338587	19.44	ug/mL	0.03
Spiked Amount 75.000	Range 13 - 62		Recovery = 25.92%			
21) Nitrobenzene-d5	7.484	82	429434	28.41	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 56.82%			
40) 2-Fluorobiphenyl	10.277	172	917211	27.10	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 54.20%			
65) 2,4,6-Tribromophenol	12.663	330	220282	51.68	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 68.91%			
77) Terphenyl-d14	16.408	244	959048	32.91	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 65.82%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.353	93	432	Below Cal	#	4
64) n-Nitrosodiphenylamine	12.663	169	6459	Below Cal	#	35
70) Anthracene	13.864	178	73	Below Cal		61

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV28.D
Acq On : 4 Nov 2009 6:13 pm
Operator : RIS
Sample : 09J0523-25
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 05 11:48:09 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV29.D
Acq On : 4 Nov 2009 6:49 pm
Operator : RIS
Sample : 09J0523-26
Misc : 1,SEVERSTAL,920:1,BNAww
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 05 11:49:46 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

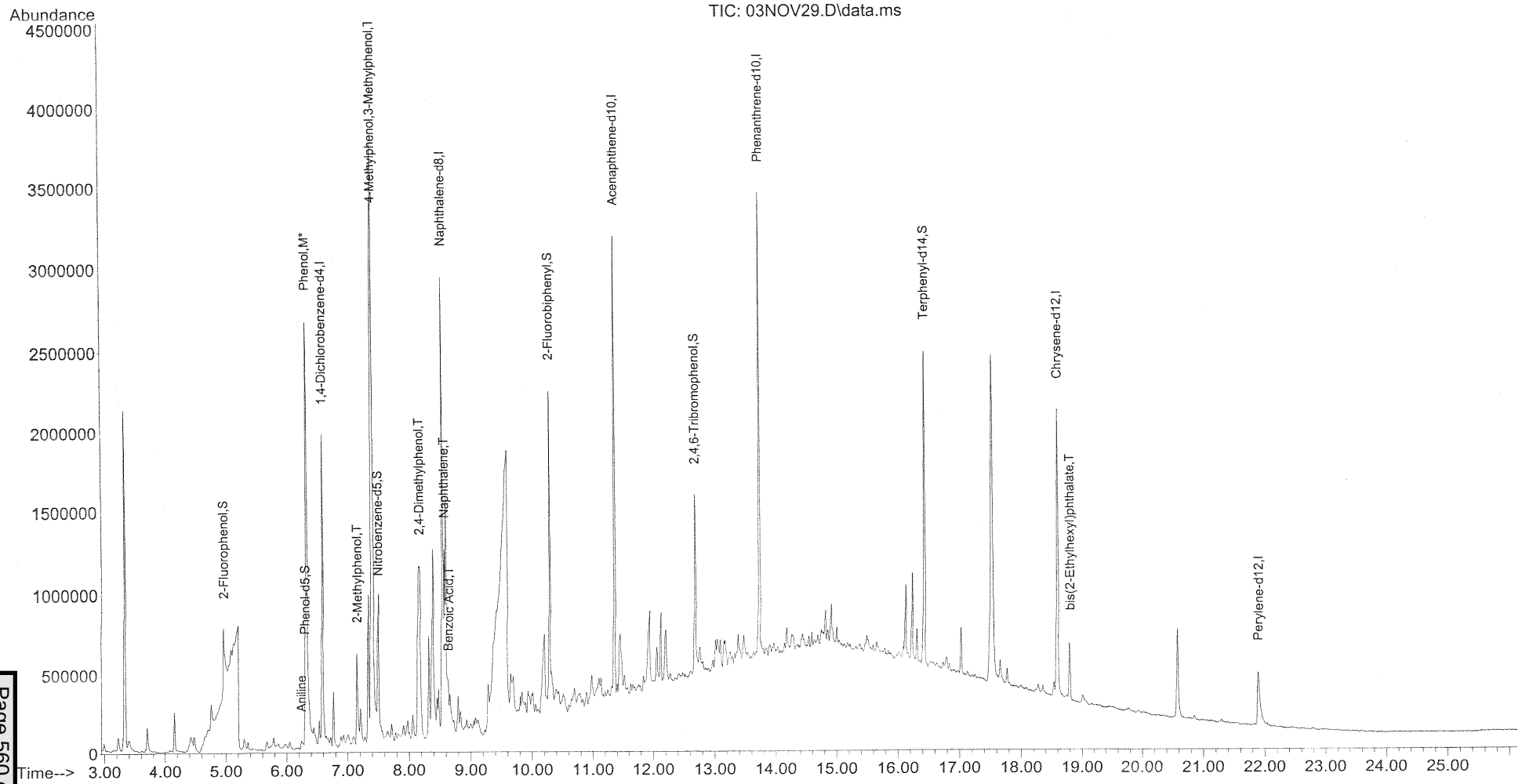
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.581	152	441154	40.00	ug/mL	0.00
20) Naphthalene-d8	8.533	136	1663905	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.350	164	976911	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.718	188	1564971	40.00	ug/mL	0.00
74) Chrysene-d12	18.589	240	1330987	40.00	ug/mL	0.01
85) Perylene-d12	21.884	264	371031	40.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-Fluorophenol	4.953	112	283726	20.98	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 27.97%			
8) Phenol-d5	6.295	99	263099	16.30	ug/mL	0.01
Spiked Amount 75.000	Range 13 - 62		Recovery = 21.73%			
21) Nitrobenzene-d5	7.485	82	353274	26.24	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 52.48%			
40) 2-Fluorobiphenyl	10.277	172	818256	25.66	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 51.32%			
65) 2,4,6-Tribromophenol	12.668	330	213706	54.39	ug/mL	0.01
Spiked Amount 75.000	Range 24 - 142		Recovery = 72.52%			
77) Terphenyl-d14	16.425	244	973214	38.68	ug/mL	0.01
Spiked Amount 50.000	Range 24 - 129		Recovery = 77.36%			
Target Compounds						Qvalue
6) Aniline	6.237	93	41447	5.48	ug/mL	97
9) Phenol	6.318	94	1863195	102.99	ug/mL	94
16) 2-Methylphenol	7.147	108	228286	17.57	ug/mL	97
19) 4-Methylphenol,3-Methy...	7.397	108	2121795	161.88	ug/mL	97
25) 2,4-Dimethylphenol	8.160	107	478725	33.79	ug/mL	98
29) Naphthalene	8.562	128	539645	13.11	ug/mL	99
30) 4-Chloroaniline	8.900	127	1880	Below Cal	#	57
31) Benzoic Acid	8.632	105	353047	48.17	ug/mL#	24
54) 2,3,4,6-Tetrachlorophenol	11.945	232	1390	Below Cal	#	83
64) n-Nitrosodiphenylamine	12.342	169	1171	Below Cal		82
70) Anthracene	13.748	178	47659	Below Cal		96
84) bis(2-Ethylhexyl)phtha...	18.787	149	178251	6.80	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Rerun 5x dilution RIS

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV29.D
Acq On : 4 Nov 2009 6:49 pm
Operator : RIS
Sample : 09J0523-26
Misc : 1,SEVERSTAL,920:1,BNAww
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 05 11:49:46 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV30.D
Acq On : 4 Nov 2009 7:26 pm
Operator : RIS
Sample : 09J0523-27
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 23 Sample Multiplier: 1

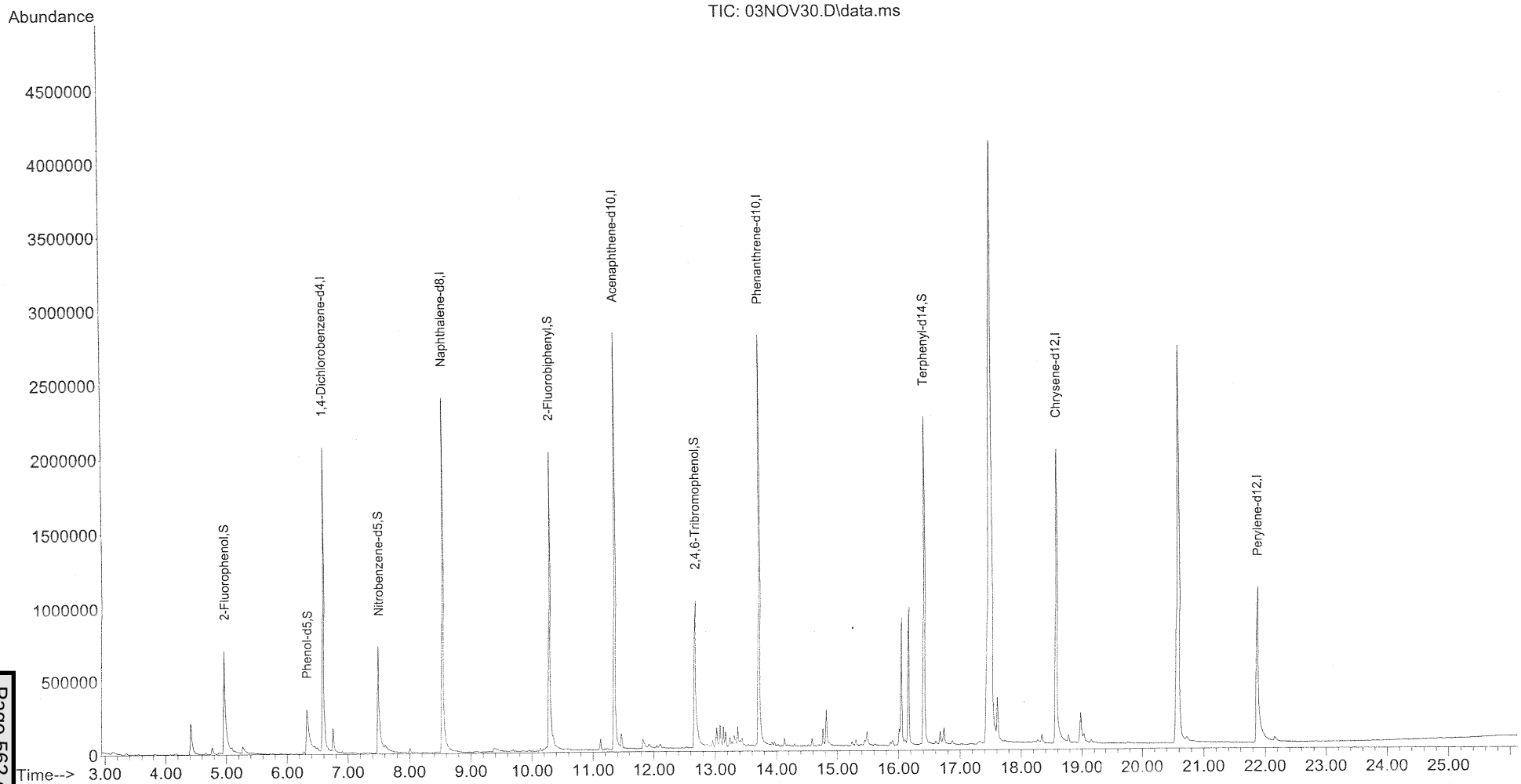
Quant Time: Nov 05 11:51:28 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.583	152	494474	40.00	ug/mL	0.00
20) Naphthalene-d8	8.533	136	1917425	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.344	164	1057765	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.706	188	1692663	40.00	ug/mL	0.00
74) Chrysene-d12	18.577	240	1554484	40.00	ug/mL	0.00
85) Perylene-d12	21.867	264	968703	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.956	112	514115	33.92	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 45.23%			
8) Phenol-d5	6.321	99	430200	23.68	ug/mL	0.04
Spiked Amount 75.000	Range 13 - 62		Recovery = 31.57%			
21) Nitrobenzene-d5	7.487	82	519627	33.50	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 67.00%			
40) 2-Fluorobiphenyl	10.283	172	1136458	32.92	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 65.84%			
65) 2,4,6-Tribromophenol	12.662	330	272665	64.16	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 85.55%			
77) Terphenyl-d14	16.413	244	1145555	38.98	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 77.96%			
Target Compounds						Qvalue
64) n-Nitrosodiphenylamine	12.662	169	8631	Below Cal	#	40
70) Anthracene	13.870	178	255	Below Cal		61

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV30.D
Acq On : 4 Nov 2009 7:26 pm
Operator : RIS
Sample : 09J0523-27
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 05 11:51:28 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV31.D
Acq On : 4 Nov 2009 8:02 pm
Operator : RIS
Sample : 09J0523-28
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 05 11:52:15 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

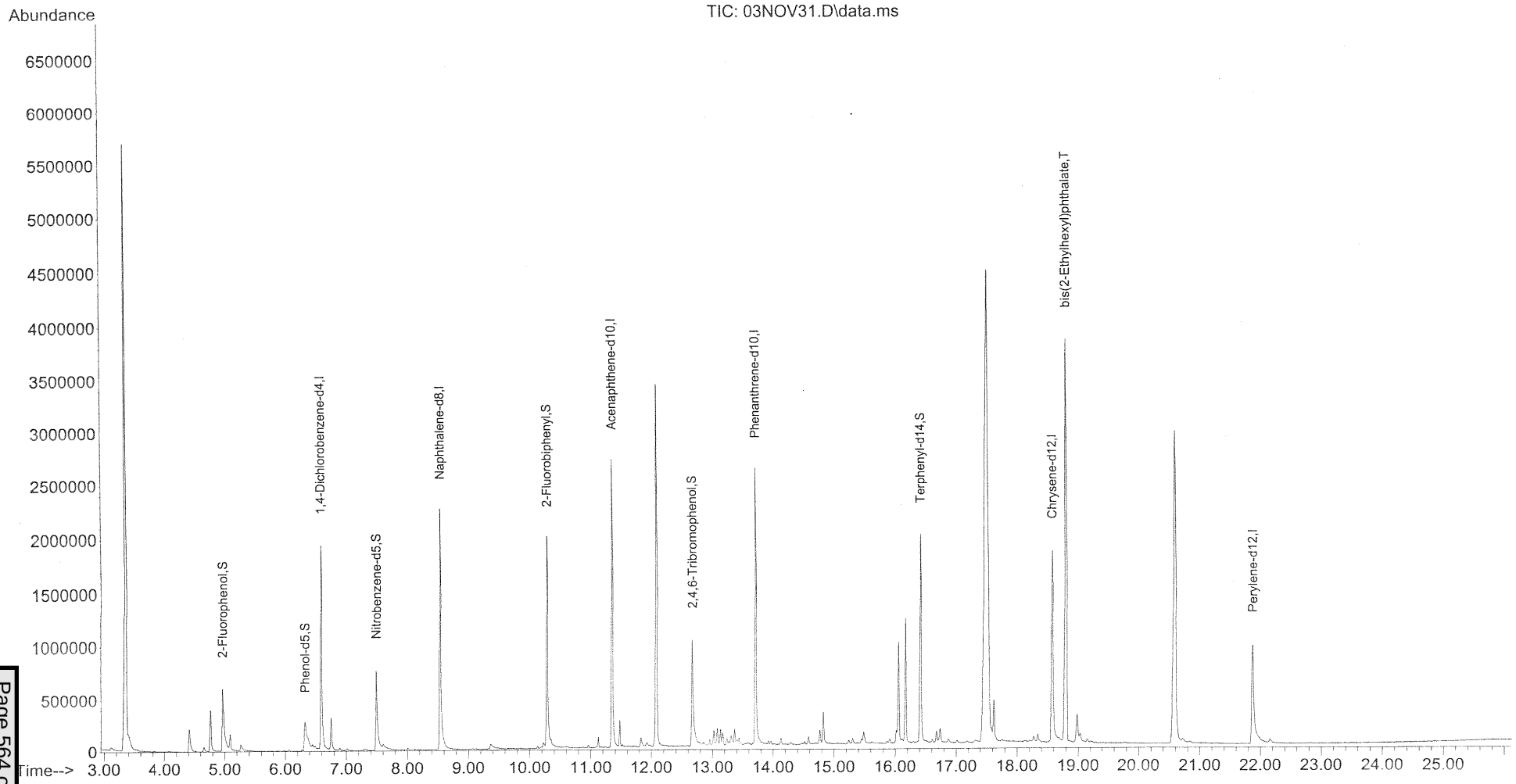
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.580	152	450930	40.00	ug/mL	0.00
20) Naphthalene-d8	8.532	136	1741172	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.344	164	955652	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.706	188	1556602	40.00	ug/mL	0.00
74) Chrysene-d12	18.576	240	1436173	40.00	ug/mL	0.00
85) Perylene-d12	21.866	264	894769	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.959	112	448137	32.42	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 43.23%			
8) Phenol-d5	6.318	99	416546	25.13	ug/mL	0.04
Spiked Amount 75.000	Range 13 - 62		Recovery = 33.51%			
21) Nitrobenzene-d5	7.484	82	495056	35.14	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 70.28%			
40) 2-Fluorobiphenyl	10.282	172	1100744	35.29	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 70.58%			
65) 2,4,6-Tribromophenol	12.662	330	260005	66.53	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 88.71%			
77) Terphenyl-d14	16.412	244	985938	36.32	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 72.64%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.335	93	86	Below Cal	#	1
9) Phenol	6.481	94	519	Below Cal		83
30) 4-Chloroaniline	8.847	127	151	Below Cal	#	45
34) 2-Methylnaphthalene	9.734	142	705	Below Cal	#	63
64) n-Nitrosodiphenylamine	12.662	169	9170	Below Cal	#	44
70) Anthracene	13.887	178	170	Below Cal		61
84) bis(2-Ethylhexyl)phtha...	18.804	149	2255645	79.73	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QA Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV31.D
Acq On : 4 Nov 2009 8:02 pm
Operator : RIS
Sample : 09J0523-28
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 05 11:52:15 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV32.D
Acq On : 4 Nov 2009 8:39 pm
Operator : RIS
Sample : 09J0523-29
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 25 Sample Multiplier: 1

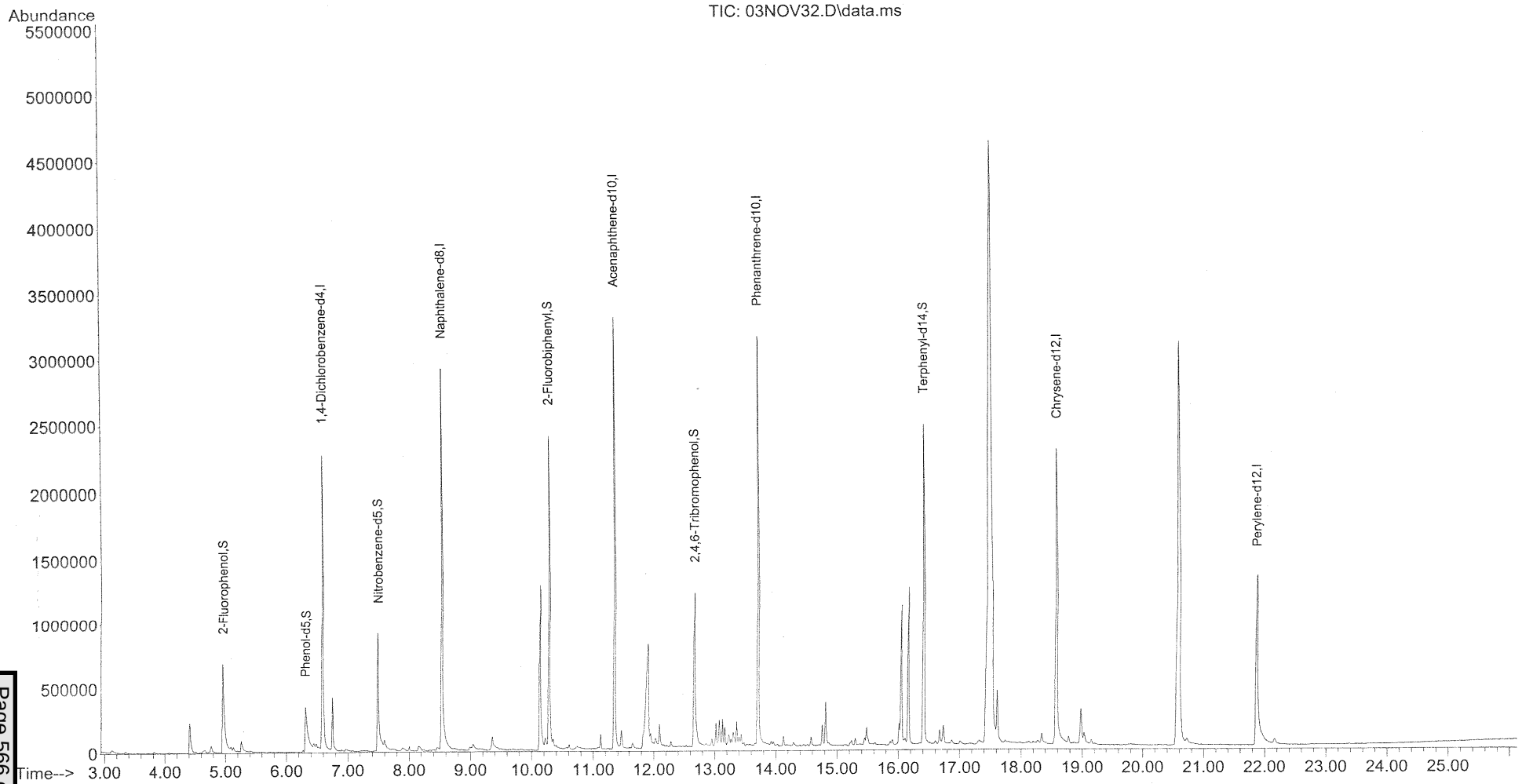
Quant Time: Nov 05 11:52:59 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.583	152	524556	40.00	ug/mL	0.00
20) Naphthalene-d8	8.533	136	2054528	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.345	164	1146355	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.707	188	1869539	40.00	ug/mL	0.00
74) Chrysene-d12	18.583	240	1789514	40.00	ug/mL	0.00
85) Perylene-d12	21.867	264	1184750	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.956	112	496079	30.85	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 41.13%			
8) Phenol-d5	6.309	99	442062	22.95	ug/mL	0.03
Spiked Amount 75.000	Range 13 - 62		Recovery = 30.60%			
21) Nitrobenzene-d5	7.481	82	548963	33.02	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 66.04%			
40) 2-Fluorobiphenyl	10.277	172	1156871	30.92	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 61.84%			
65) 2,4,6-Tribromophenol	12.663	330	284134	60.54	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 80.72%			
77) Terphenyl-d14	16.413	244	1273269	37.64	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 75.28%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.303	93	535	Below Cal	#	83
30) 4-Chloroaniline	8.912	127	85	Below Cal	#	45
34) 2-Methylnaphthalene	9.711	142	71	Below Cal	#	7
64) n-Nitrosodiphenylamine	12.657	169	9553	Below Cal	#	38
70) Anthracene	13.829	178	519	Below Cal		61

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV32.D
Acq On : 4 Nov 2009 8:39 pm
Operator : RIS
Sample : 09J0523-29
Misc : 1,SEVERSTAL,910:1,BNAww
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 05 11:52:59 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV33.D
Acq On : 4 Nov 2009 9:15 pm
Operator : RIS
Sample : 09J0523-30
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 26 Sample Multiplier: 1

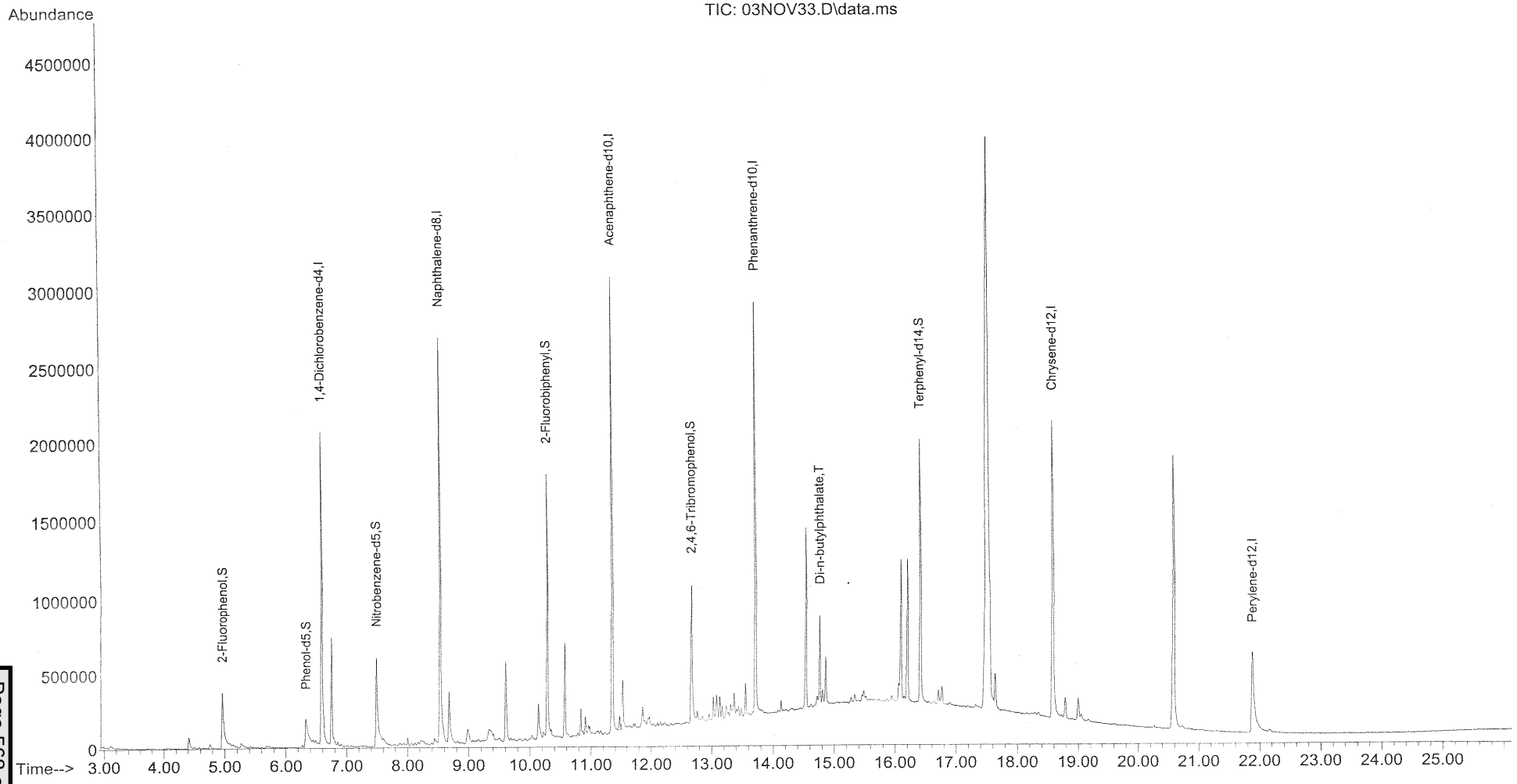
Quant Time: Nov 05 11:54:54 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.578	152	485895	40.00	ug/mL	0.00
20) Naphthalene-d8	8.527	136	1834177	40.00	ug/mL	-0.01
36) Acenaphthene-d10	11.344	164	1005817	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.713	188	1565985	40.00	ug/mL	0.00
74) Chrysene-d12	18.577	240	1510281	40.00	ug/mL	0.00
85) Perylene-d12	21.867	264	596106	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.956	112	304511	20.44	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 27.25%			
8) Phenol-d5	6.321	99	266001	14.98	ug/mL	0.04
Spiked Amount 75.000	Range 13 - 62		Recovery = 19.97%			
21) Nitrobenzene-d5	7.482	82	381968	25.74	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 51.48%			
40) 2-Fluorobiphenyl	10.277	172	805110	24.53	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 49.06%			
65) 2,4,6-Tribromophenol	12.663	330	209028	53.17	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 70.89%			
77) Terphenyl-d14	16.413	244	835816	29.28	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 58.56%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.397	93	91	Below Cal		100
30) 4-Chloroaniline	8.906	127	72	Below Cal	#	45
34) 2-Methylnaphthalene	9.851	142	959	Below Cal		82
54) 2,3,4,6-Tetrachlorophenol	11.939	232	192	Below Cal	#	18
64) n-Nitrosodiphenylamine	12.324	169	816	Below Cal		80
70) Anthracene	13.969	178	403	Below Cal		61
72) Di-n-butylphthalate	14.757	149	384011	8.05	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV33.D
Acq On : 4 Nov 2009 9:15 pm
Operator : RIS
Sample : 09J0523-30
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 26 Sample Multiplier: 1

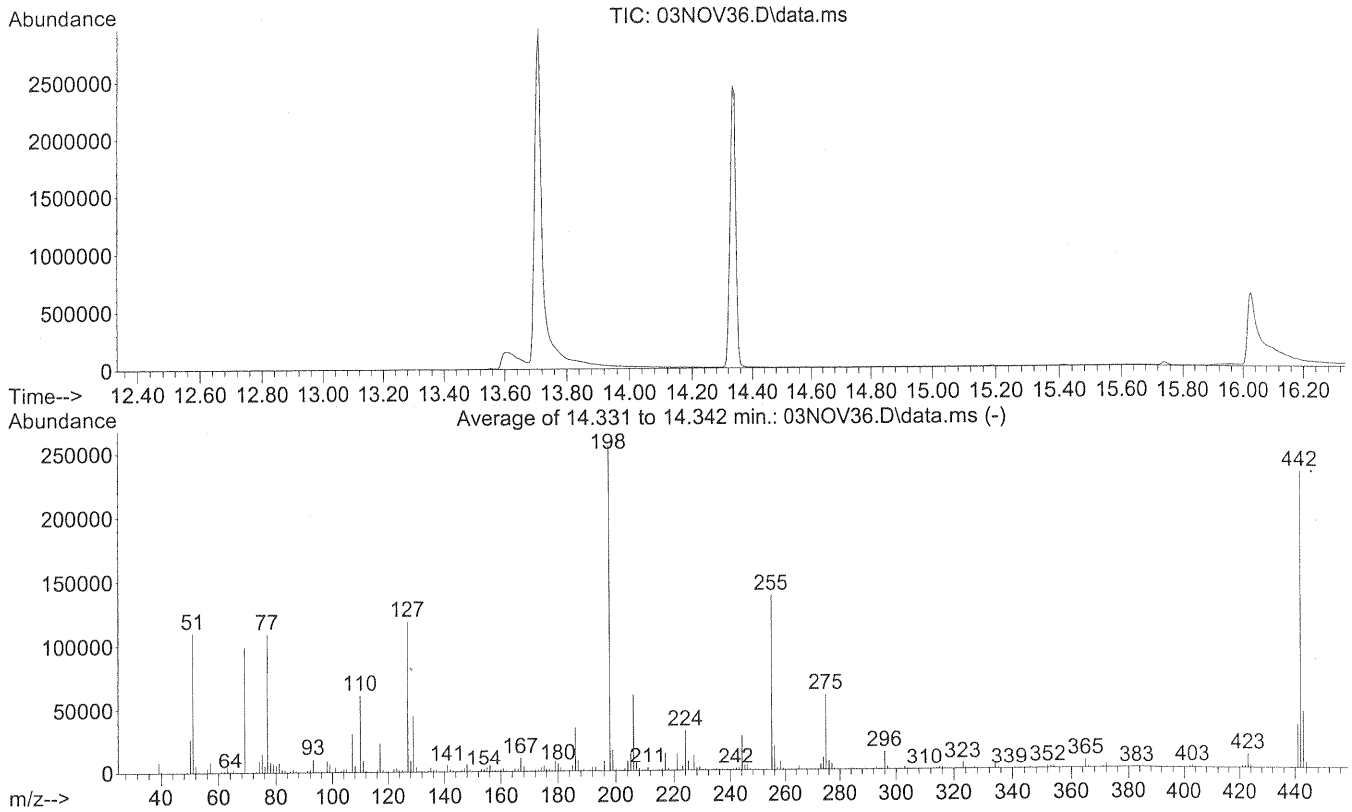
Quant Time: Nov 05 11:54:54 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV36.D
Acq On : 4 Nov 2009 11:05 pm
Operator : RIS
Sample : TUNE MIX
Misc : PCP,DFTPP,BENZ,DDT 50ng
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\BNANOV03.M
Title : 8270/625 BNA Calibration
Last Update : Wed Nov 04 16:14:19 2009



AutoFind: Scans 1952, 1953, 1954; Background Corrected with Scan 1945

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.1	109962	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.9	99200	PASS
70	69	0.00	2	0.5	533	PASS
127	198	40	60	46.5	118712	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	255317	PASS
199	198	5	9	6.7	17080	PASS
275	198	10	30	23.3	59613	PASS
365	198	1	100	2.8	7157	PASS
441	443	0.01	100	78.1	35069	PASS
442	198	40	100	91.4	233344	PASS
443	442	17	23	19.3	44928	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV37.D
Acq On : 4 Nov 2009 11:41 pm
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 05 12:02:49 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2		N-Nitrosodimethylamine	0.865	0.763	11.8	83	0.00
3	T	Pyridine	1.570	1.584	-0.9	94	0.02
4	S	2-Fluorophenol	1.226	1.253	-2.2	93	0.00
5		Pentachloroethane	0.611	0.588	3.8	94	0.00
6		Aniline	1.387	1.768	-27.5	110	0.00
7	T	bis(2-Chloroethyl)ether	1.721	1.493	13.2	95	0.00
8	S	Phenol-d5	1.319	1.446	-9.6	94	0.00
9	M*	Phenol	1.474	1.678	-13.8	98	0.00
10	M	2-Chlorophenol	1.328	1.373	-3.4	97	0.00
11	T	1,3-Dichlorobenzene	1.570	1.607	-2.4	101	0.00
12	M*	1,4-Dichlorobenzene	1.621	1.617	0.2	100	0.00
13	T	1,2-Dichlorobenzene	1.548	1.599	-3.3	101	0.00
14	T	Benzyl alcohol	0.832	0.910	-9.4	103	0.00
15	T	bis(2-chloroisopropyl)ether	2.545	2.551	-0.2	100	0.00
16	T	2-Methylphenol	1.178	1.225	-4.0	99	0.00
17	T	Hexachloroethane	0.587	0.581	1.0	100	0.00
18	M**	N-Nitroso-di-n-propylamine	0.931	0.918	1.4	94	0.00
19	T	4-Methylphenol,3-Methylphen	1.188	1.233	-3.8	98	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00
21	S	Nitrobenzene-d5	0.324	0.317	2.2	92	0.00
22	T	Nitrobenzene	0.359	0.348	3.1	100	0.00
23	T	Isophorone	0.703	0.687	2.3	99	0.00
24	T*	2-Nitrophenol	0.137	0.120	12.4	102	0.02
25	T	2,4-Dimethylphenol	0.341	0.336	1.5	97	0.00
26	T	bis(2-Chloroethoxy)methane	0.366	0.404	-10.4	101	0.00
27	T*	2,4-Dichlorophenol	0.259	0.278	-7.3	105	0.00
28	M	1,2,4-Trichlorobenzene	0.345	0.346	-0.3	101	0.00
29	T	Naphthalene	0.990	1.010	-2.0	104	0.00
30	T	4-Chloroaniline	0.190	0.245	-28.9	145	-0.07
31	T	Benzoic Acid	0.142	0.157	-10.6	101	0.00
32	T*	Hexachlorobutadiene	0.191	0.209	-9.4	109	0.00
33	M*	4-Chloro-3-methylphenol	0.279	0.293	-5.0	98	0.00
34	T	2-Methylnaphthalene	0.729	0.766	-5.1	105	0.00
35		1-Methylnaphthalene	0.677	0.646	4.6	96	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
37	T**	Hexachlorocyclopentadiene	0.120	0.093	22.5	67	0.00
38	T*	2,4,6-Trichlorophenol	0.340	0.340	0.0	98	0.00
39	T	2,4,5-Trichlorophenol	0.313	0.337	-7.7	105	0.01
40	S	2-Fluorobiphenyl	1.306	1.244	4.7	96	0.00
41	T	2-Chloronaphthalene	1.051	1.113	-5.9	106	0.00
42	T	2-Nitroaniline	0.291	0.341	-17.2	116	0.00
43		1,4-Dinitrobenzene	0.184	0.200	-8.7	97	0.00
44	T	Acenaphthylene	1.737	1.838	-5.8	106	0.00

45	T	Dimethylphthalate	1.265	1.261	0.3	101	0.00
46		1,3-Dinitrobenzene	0.173	0.191	-10.4	105	-0.04
47		1,2-Dinitrobenzene	0.131	0.134	-2.3	96	0.00
48	T	2,6-Dinitrotoluene	0.282	0.298	-5.7	106	0.01
49	M*	Acenaphthene	1.089	1.136	-4.3	107	0.00
50	T	3-Nitroaniline	0.335	0.401	-19.7	115	0.00
51	T**	2,4-Dinitrophenol	0.136	0.085	37.5#	58	0.02
52	T	Dibenzofuran	1.470	1.580	-7.5	108	0.00
53		2,3,5,6-Tetrachlorophenol	0.226	0.237	-4.9	96	0.00
54		2,3,4,6-Tetrachlorophenol	0.242	0.209	13.6	87	0.01
55	M	2,4-Dinitrotoluene	0.358	0.397	-10.9	108	0.01
56	M**	4-Nitrophenol	0.108	0.101	6.5	78	0.02
57	T	Fluorene	1.164	1.214	-4.3	106	0.00
58	T	4-Chlorophenyl-phenylether	0.540	0.547	-1.3	100	0.00
59	T	Diethylphthalate	1.220	1.226	-0.5	102	0.00
60	T	1,2-Diphenylhydrazine (Azob	1.186	1.273	-7.3	104	0.00
61	T	4-Nitroaniline	0.155	0.156	-0.6	98	-0.04
62	I	Phenanthrene-d10	1.000	1.000	0.0	103	0.00
63	T	4,6-Dinitro-2-methylphenol	0.117	0.105	10.3	85	0.00
64	T*	n-Nitrosodiphenylamine	0.498	0.555	11.4	120	0.00
65	S	2,4,6-Tribromophenol	0.100	0.099	1.0	97	0.00
66	T	4-Bromophenyl-phenylether	0.221	0.214	3.2	99	0.00
67	T	Hexachlorobenzene	0.239	0.241	-0.8	106	0.00
68	M*	Pentachlorophenol	0.086	0.083	3.5	95	0.01
69	T	Phenanthrene	1.010	1.043	-3.3	107	0.00
70	T	Anthracene	0.965	1.061	-9.9	107	0.00
71	T	Carbazole	0.827	0.877	-6.0	101	0.00
72	T	Di-n-butylphthalate	1.219	1.224	-0.4	104	0.00
73	T*	Fluoranthene	1.050	1.139	-8.5	112	0.00
74	I	Chrysene-d12	1.000	1.000	0.0	102	0.01
75	M	Pyrene	1.216	1.262	-3.8	107	0.00
76		Benzidine	0.179	0.193	-7.8	103	0.01
77	S	Terphenyl-d14	0.756	0.749	0.9	103	0.00
78		3,3'-Dimethylbenzidine	0.342	0.337	1.5	97	0.00
79	T	Butylbenzylphthalate	0.555	0.573	-3.2	106	0.00
80		bis(2-ethylhexyl)adipate	0.493	0.466	5.5	98	0.00
81	T	3,3'-Dichlorobenzidine	0.144	0.143	0.7	115	0.00
82	T	Benzo[a]anthracene	1.051	1.126	-7.1	106	0.00
83	T	Chrysene	1.007	1.034	-2.7	106	0.00
84	T	bis(2-Ethylhexyl)phthalate	0.788	0.774	1.8	103	0.00
85	I	Perylene-d12	1.000	1.000	0.0	75	0.00
86	T*	Di-n-octylphthalate	1.705	2.335	-37.0#	100	0.00
87	T	Benzo[b]fluoranthene	1.246	1.526	-22.5	86	0.00
88	T	Benzo[k]fluoranthene	1.299	1.545	-18.9	91	0.00
89	T*	Benzo[a]pyrene	1.158	1.312	-13.3	80	0.00
90	T	Indeno[1,2,3-cd]pyrene	0.860	0.569	33.8#	50	0.02
91	T	Dibenz[a,h]anthracene	0.697	0.491	29.6	53	0.01
92	T	Benzo[g,h,i]perylene	0.662	0.394	40.5#	47	0.05

↑ - Not in Samples Data OK

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ENANOV03.M Thu Nov 05 12:03:22 2009 MSD5

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV37.D
Acq On : 4 Nov 2009 11:41 pm
Operator : RIS
Sample : 40 ug/mL ICV
Misc : 400uL MI92905>1mL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 05 12:02:49 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 30% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	98	0.00
2		N-Nitrosodimethylamine	40.000	35.278	11.8	83	0.00
3	T	Pyridine	40.000	40.368	-0.9	94	0.02
4	S	2-Fluorophenol	40.000	40.860	-2.1	93	0.00
5		Pentachloroethane	40.000	38.488	3.8	94	0.00
6		Aniline	40.000	45.162	-12.9	110	0.00
7	T	bis(2-Chloroethyl)ether	40.000	38.046	4.9	95	0.00
8	S	Phenol-d5	40.000	39.197	2.0	94	0.00
9	M*	Phenol	40.000	40.873	-2.2	98	0.00
10	M	2-Chlorophenol	40.000	41.338	-3.3	97	0.00
11	T	1,3-Dichlorobenzene	40.000	40.925	-2.3	101	0.00
12	M*	1,4-Dichlorobenzene	40.000	39.919	0.2	100	0.00
13	T	1,2-Dichlorobenzene	40.000	41.329	-3.3	101	0.00
14	T	Benzyl alcohol	40.000	43.732	-9.3	103	0.00
15	T	bis(2-chloroisopropyl)ether	40.000	40.086	-0.2	100	0.00
16	T	2-Methylphenol	40.000	41.595	-4.0	99	0.00
17	T	Hexachloroethane	40.000	39.623	0.9	100	0.00
18	M**	N-Nitroso-di-n-propylamine	40.000	39.412	1.5	94	0.00
19	T	4-Methylphenol,3-Methylphen	40.000	41.499	-3.7	98	0.00
20							
20	I	Naphthalene-d8	40.000	40.000	0.0	101	0.00
21	S	Nitrobenzene-d5	40.000	39.181	2.0	92	0.00
22	T	Nitrobenzene	40.000	38.827	2.9	100	0.00
23	T	Isophorone	40.000	39.059	2.4	99	0.00
24	T*	2-Nitrophenol	40.000	35.130	12.2	102	0.02
25	T	2,4-Dimethylphenol	40.000	39.464	1.3	97	0.00
26	T	bis(2-Chloroethoxy)methane	40.000	41.171	-2.9	101	0.00
27	T*	2,4-Dichlorophenol	40.000	42.874	-7.2	105	0.00
28	M	1,2,4-Trichlorobenzene	40.000	40.187	-0.5	101	0.00
29	T	Naphthalene	40.000	40.842	-2.1	104	0.00
30	T	4-Chloroaniline	40.000	50.951	-27.4	145	-0.07
31	T	Benzoic Acid	40.000	38.405	4.0	101	0.00
32	T*	Hexachlorobutadiene	40.000	43.841	-9.6	109	0.00
33	M*	4-Chloro-3-methylphenol	40.000	41.995	-5.0	98	0.00
34	T	2-Methylnaphthalene	40.000	42.038	-5.1	105	0.00
35		1-Methylnaphthalene	40.000	38.159	4.6	96	0.00
36							
36	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
37	T**	Hexachlorocyclopentadiene	40.000	31.816	20.5	67	0.00
38	T*	2,4,6-Trichlorophenol	40.000	40.069	-0.2	98	0.00
39	T	2,4,5-Trichlorophenol	40.000	43.037	-7.6	105	0.01
40	S	2-Fluorobiphenyl	40.000	38.106	4.7	96	0.00
41	T	2-Chloronaphthalene	40.000	42.381	-6.0	106	0.00
42	T	2-Nitroaniline	40.000	46.911	-17.3	116	0.00
43		1,4-Dinitrobenzene	40.000	39.772	0.6	97	0.00
44	T	Acenaphthylene	40.000	42.322	-5.8	106	0.00

45	T	Dimethylphthalate	40.000	39.895	0.3	101	0.00
46		1,3-Dinitrobenzene	40.000	44.185	-10.5	105	-0.04
47		1,2-Dinitrobenzene	40.000	40.853	-2.1	96	0.00
48	T	2,6-Dinitrotoluene	40.000	42.249	-5.6	106	0.01
49	M*	Acenaphthene	40.000	41.739	-4.3	107	0.00
50	T	3-Nitroaniline	40.000	47.948	-19.9	115	0.00
51	T**	2,4-Dinitrophenol	40.000	26.428	33.9#	58	0.02
52	T	Dibenzofuran	40.000	42.994	-7.5	108	0.00
53		2,3,5,6-Tetrachlorophenol	40.000	37.506	6.2	96	0.00
54		2,3,4,6-Tetrachlorophenol	40.000	36.461	8.8	87	0.01
55	M	2,4-Dinitrotoluene	40.000	44.310	-10.8	108	0.01
56	M**	4-Nitrophenol	40.000	33.906	15.2	78	0.02
57	T	Fluorene	40.000	41.698	-4.2	106	0.00
58	T	4-Chlorophenyl-phenylether	40.000	40.522	-1.3	100	0.00
59	T	Diethylphthalate	40.000	40.208	-0.5	102	0.00
60	T	1,2-Diphenylhydrazine (Azob	40.000	42.939	-7.3	104	0.00
61	T	4-Nitroaniline	40.000	40.319	-0.8	98	-0.04
62	I	Phenanthrene-d10	40.000	40.000	0.0	103	0.00
63	T	4,6-Dinitro-2-methylphenol	40.000	36.114	9.7	85	0.00
64	T*	n-Nitrosodiphenylamine	40.000	49.007	-22.5	120	0.00
65	S	2,4,6-Tribromophenol	40.000	39.478	1.3	97	0.00
66	T	4-Bromophenyl-phenylether	40.000	38.715	3.2	99	0.00
67	T	Hexachlorobenzene	40.000	40.328	-0.8	106	0.00
68	M*	Pentachlorophenol	40.000	37.464	6.3	95	0.01
69	T	Phenanthrene	40.000	41.315	-3.3	107	0.00
70	T	Anthracene	40.000	42.939	-7.3	107	0.00
71	T	Carbazole	40.000	42.381	-6.0	101	0.00
72	T	Di-n-butylphthalate	40.000	40.171	-0.4	104	0.00
73	T*	Fluoranthene	40.000	43.379	-8.4	112	0.00
74	I	Chrysene-d12	40.000	40.000	0.0	102	0.01
75	M	Pyrene	40.000	41.528	-3.8	107	0.00
76		Benzidine	40.000	40.742	-1.9	103	0.01
77	S	Terphenyl-d14	40.000	39.620	1.0	103	0.00
78		3,3'-Dimethylbenzidine	40.000	39.351	1.6	97	0.00
79	T	Butylbenzylphthalate	40.000	41.299	-3.2	106	0.00
80		bis(2-ethylhexyl)adipate	40.000	37.757	5.6	98	0.00
81	T	3,3'-Dichlorobenzidine	40.000	41.580	-3.9	115	0.00
82	T	Benzo[a]anthracene	40.000	42.859	-7.1	106	0.00
83	T	Chrysene	40.000	41.064	-2.7	106	0.00
84	T	bis(2-Ethylhexyl)phthalate	40.000	39.269	1.8	103	0.00
85	I	Perylene-d12	40.000	40.000	0.0	75	0.00
86	T*	Di-n-octylphthalate	40.000	54.766	-36.9#	100	0.00
87	T	Benzo[b]fluoranthene	40.000	42.468	-6.2	86	0.00
88	T	Benzo[k]fluoranthene	40.000	47.567	-18.9	91	0.00
89	T*	Benzo[a]pyrene	40.000	45.323	-13.3	80	0.00
90	T	Indeno[1,2,3-cd]pyrene	40.000	26.435	33.9#	50	0.02
91	T	Dibenz[a,h]anthracene	40.000	28.186	29.5	53	0.01
92	T	Benzo[g,h,i]perylene	40.000	23.159	42.1#	47	0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BNANOV03.M Thu Nov 05 12:03:40 2009 MSD5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV39.D
Acq On : 5 Nov 2009 12:54 am
Operator : RIS
Sample : 09J0523-31
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 29 Sample Multiplier: 1

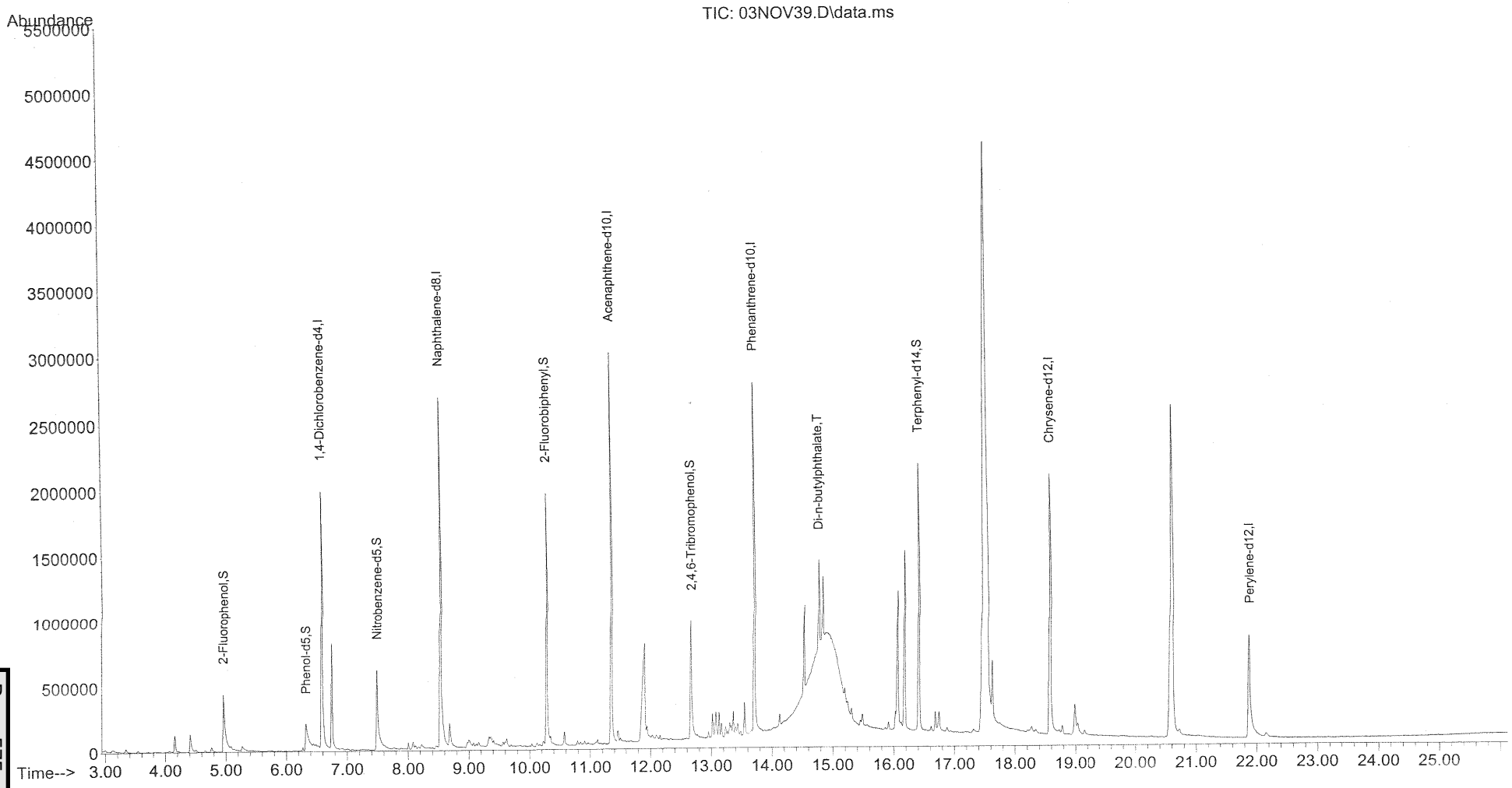
Quant Time: Nov 05 12:05:43 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.577	152	482423	40.00	ug/mL	0.00
20) Naphthalene-d8	8.527	136	1801157	40.00	ug/mL	-0.01
36) Acenaphthene-d10	11.344	164	1039322	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.706	188	1626722	40.00	ug/mL	0.00
74) Chrysene-d12	18.576	240	1533659	40.00	ug/mL	0.00
85) Perylene-d12	21.866	264	754939	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.955	112	340694	23.04	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 30.72%			
8) Phenol-d5	6.320	99	298176	16.89	ug/mL	0.04
Spiked Amount 75.000	Range 13 - 62		Recovery = 22.52%			
21) Nitrobenzene-d5	7.487	82	437538	30.02	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 60.04%			
40) 2-Fluorobiphenyl	10.276	172	927956	27.36	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 54.72%			
65) 2,4,6-Tribromophenol	12.662	330	209591	51.32	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 68.43%			
77) Terphenyl-d14	16.413	244	978988	33.77	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 67.54%			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.308	93	456	Below Cal	#	18
30) 4-Chloroaniline	8.929	127	71	Below Cal	#	45
34) 2-Methylnaphthalene	9.705	142	926	Below Cal		94
54) 2,3,4,6-Tetrachlorophenol	11.927	232	77	Below Cal	#	18
64) n-Nitrosodiphenylamine	12.662	169	7804	Below Cal	#	42
70) Anthracene	13.834	178	252	Below Cal		67
72) Di-n-butylphthalate	14.768	149	427809	8.63	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0309\
Data File : 03NOV39.D
Acq On : 5 Nov 2009 12:54 am
Operator : RIS
Sample : 09J0523-31
Misc : 1,SEVERSTAL,950:1,BNAww
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 05 12:05:43 2009
Quant Method : C:\msdchem\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0509\
Data File : 05NOV06.D
Acq On : 5 Nov 2009 1:08 pm
Operator : RIS
Sample : 09J0523-23
Misc : 2,SEVERSTAL,2X DIL 0.5mL/1mL,950:1,BNAwx
ALS Vial : 8 Sample Multiplier: 1

2 X Dilution

Quant Time: Nov 05 15:36:40 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

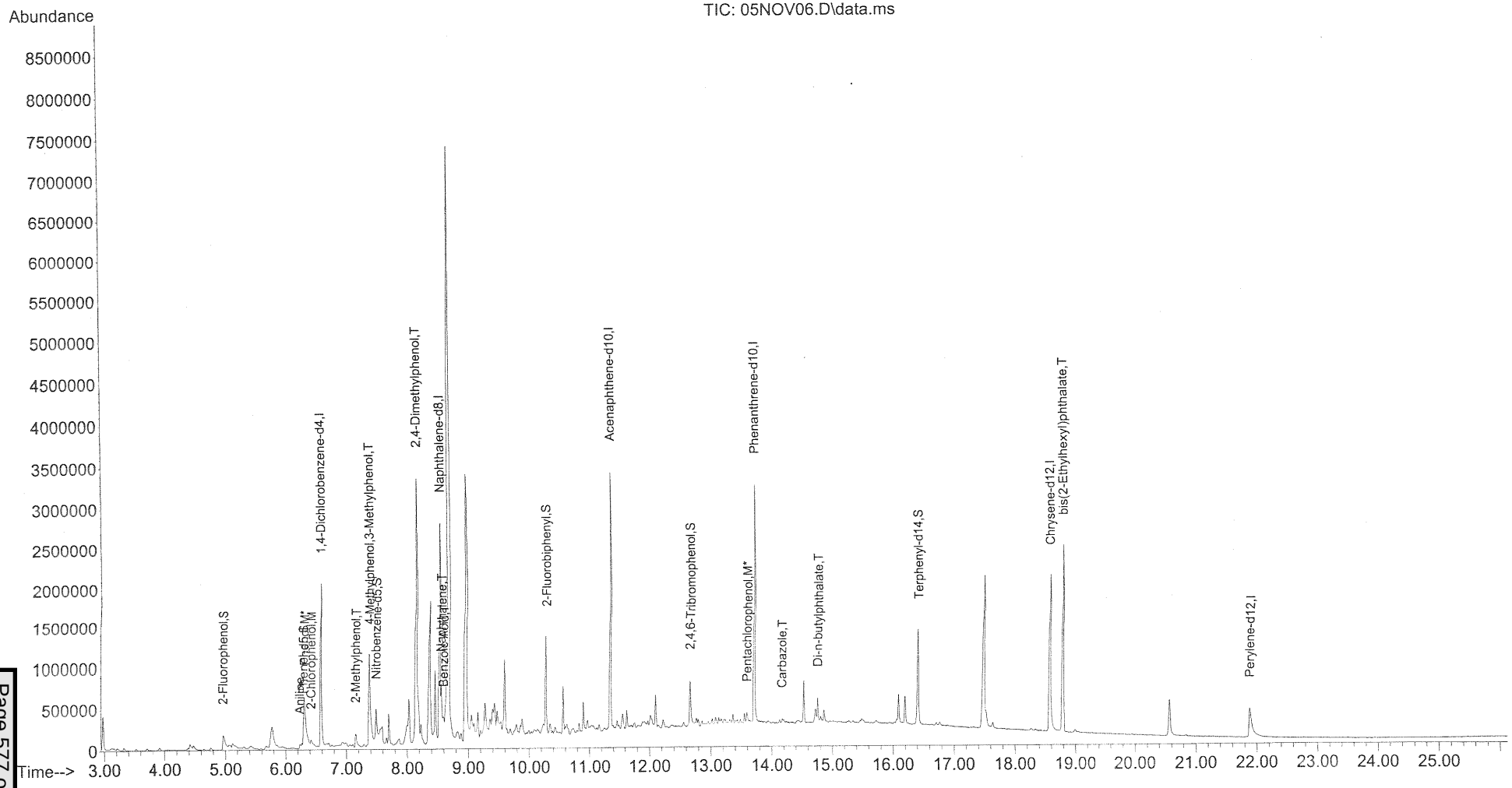
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.575	152	470168	40.00	ug/mL	-0.01
20) Naphthalene-d8	8.533	136	1767840	40.00	ug/mL	0.00
36) Acenaphthene-d10	11.345	164	1030584	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.713	188	1660510	40.00	ug/mL	0.00
74) Chrysene-d12	18.577	240	1499769	40.00	ug/mL	0.00
85) Perylene-d12	21.879	264	415813	40.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-Fluorophenol	4.959	112	150817	10.46	ug/mL	0.02
Spiked Amount 75.000	Range 10 - 83		Recovery = 13.95%			
8) Phenol-d5	6.289	99	166735	9.79	ug/mL	0.00
Spiked Amount 75.000	Range 13 - 62		Recovery = 13.05%			
21) Nitrobenzene-d5	7.490	82	208525	14.58	ug/mL	0.00
Spiked Amount 50.000	Range 40 - 140		Recovery = 29.16%#			
40) 2-Fluorobiphenyl	10.277	172	477032	14.18	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 28.36%#			
65) 2,4,6-Tribromophenol	12.663	330	110890	26.60	ug/mL	0.00
Spiked Amount 75.000	Range 24 - 142		Recovery = 35.47%			
77) Terphenyl-d14	16.408	244	516095	18.20	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 36.40%			
Target Compounds						Qvalue
6) Aniline	6.230	93	44797	5.52	ug/mL	100
9) Phenol	6.306	94	560023	29.00	ug/mL	94
10) 2-Chlorophenol	6.417	128	20622	1.32	ug/mL	98
16) 2-Methylphenol	7.152	108	77374	5.59	ug/mL	99
19) 4-Methylphenol,3-Methy...	7.374	108	635434	45.49	ug/mL	96
25) 2,4-Dimethylphenol	8.154	107	1132569	75.24	ug/mL	94
29) Naphthalene	8.557	128	287217	6.57	ug/mL	99
30) 4-Chloroaniline	8.808	127	1752	Below Cal		92
31) Benzoic Acid	8.598	105	129082	23.65	ug/mL#	64
34) 2-Methylnaphthalene	9.659	142	14471	Below Cal		93
54) 2,3,4,6-Tetrachlorophenol	11.940	232	5125	Below Cal	#	80
64) n-Nitrosodiphenylamine	12.465	169	881	Below Cal	#	52
68) Pentachlorophenol	13.590	266	38218	15.87	ug/mL	98
70) Anthracene	13.830	178	4973	Below Cal		69
71) Carbazole	14.168	167	46912	1.37	ug/mL	89
72) Di-n-butylphthalate	14.757	149	166887	3.30	ug/mL	99
84) bis(2-Ethylhexyl)phtha...	18.793	149	1192731	40.37	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Revie Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0509\
Data File : 05NOV06.D
Acq On : 5 Nov 2009 1:08 pm
Operator : RIS
Sample : 09J0523-23
Misc : 2,SEVERSTAL,2X DIL 0.5mL/1mL,950:1,BNAwx
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 05 15:36:40 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0509\
Data File : 05NOV07.D
Acq On : 5 Nov 2009 1:45 pm
Operator : RIS
Sample : 09J0523-26
Misc : 5,SEVERSTAL,5X DIL 0.2mL/1mL,920:1,BNAwx
ALS Vial : 9 Sample Multiplier: 1

5X

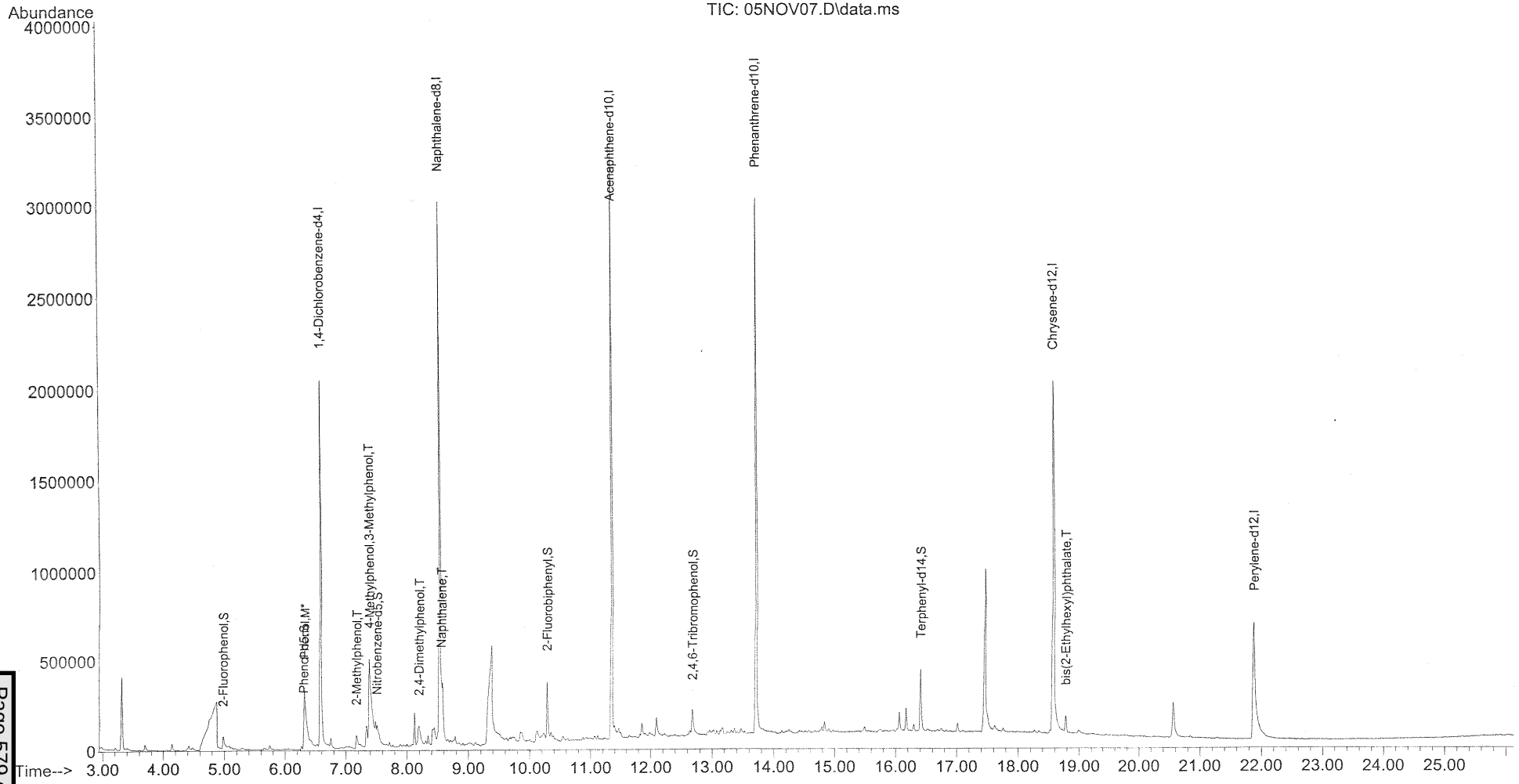
Quant Time: Nov 05 15:38:01 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.577	152	507764	40.00	ug/mL	0.00
20) Naphthalene-d8	8.527	136	1956173	40.00	ug/mL	-0.01
36) Acenaphthene-d10	11.344	164	1098723	40.00	ug/mL	0.00
62) Phenanthrene-d10	13.712	188	1796168	40.00	ug/mL	0.00
74) Chrysene-d12	18.571	240	1609894	40.00	ug/mL	0.00
85) Perylene-d12	21.867	264	710164	40.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.979	112	50223	3.23	ug/mL	0.04
Spiked Amount 75.000	Range 10 - 83		Recovery = 4.31%#			
8) Phenol-d5	6.303	99	47036	2.72	ug/mL	0.02
Spiked Amount 75.000	Range 13 - 62		Recovery = 3.63%#			
21) Nitrobenzene-d5	7.505	82	68743	4.34	ug/mL	0.02
Spiked Amount 50.000	Range 40 - 140		Recovery = 8.68%#			
40) 2-Fluorobiphenyl	10.283	172	160394	4.47	ug/mL	0.00
Spiked Amount 50.000	Range 35 - 138		Recovery = 8.94%#			
65) 2,4,6-Tribromophenol	12.680	330	37322	8.28	ug/mL	0.02
Spiked Amount 75.000	Range 24 - 142		Recovery = 11.04%#			
77) Terphenyl-d14	16.407	244	180772	5.94	ug/mL	0.00
Spiked Amount 50.000	Range 24 - 129		Recovery = 11.88%#			
Target Compounds						Qvalue
7) bis(2-Chloroethyl)ether	6.315	93	12761	Below Cal	#	1
9) Phenol	6.315	94	373230	17.88	ug/mL	95
16) 2-Methylphenol	7.172	108	43079	2.88	ug/mL	97
19) 4-Methylphenol,3-Methy...	7.377	108	427189	28.32	ug/mL	91
25) 2,4-Dimethylphenol	8.195	107	86121	5.17	ug/mL	95
29) Naphthalene	8.556	128	110995	2.29	ug/mL	98
30) 4-Chloroaniline	8.924	127	171	Below Cal	#	1
34) 2-Methylnaphthalene	9.682	142	9035	Below Cal		99
54) 2,3,4,6-Tetrachlorophenol	11.986	232	82	Below Cal	#	18
64) n-Nitrosodiphenylamine	12.243	169	499	Below Cal		83
70) Anthracene	13.847	178	2526	Below Cal		68
84) bis(2-Ethylhexyl)phtha...	18.775	149	43948	1.39	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2009\11nov09\NOV0509\
Data File : 05NOV07.D
Acq On : 5 Nov 2009 1:45 pm
Operator : RIS
Sample : 09J0523-26
Misc : 5,SEVERSTAL,5X DIL 0.2mL/1mL,920:1,BNAwx
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 05 15:38:01 2009
Quant Method : C:\MSDCHEM\1\METHODS\BNANOV03.M
Quant Title : 8270/625 BNA Calibration
QLast Update : Wed Nov 04 16:14:19 2009
Response via : Initial Calibration



SEVERSTAL

09J0523

8260 QC

Response Factor Report Instrument #1

ICAL RF Report

Method Path : C:\msdchem\1\METHODS\
Method File : M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009
Response Via : Initial Calibration

Calibration Files
5 =08SEP06.D 10 =08SEP07.D 50 =08SEP09.D 100 =08SEP10.D 1 =08SEP05.D 20 =08SEP08.D
200 =08SEP11.D 0.5 =08SEP04.D

		Compound	5	10	50	100	1	20	200	0.5	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluo...	0.269	0.263	0.252	0.245	0.198	0.227	0.245	0.179	0.235	13.43
3)	T**	Chloromethane	0.405	0.395	0.379	0.380	0.423	0.358	0.390	0.488	0.402	9.88
4)	T*	Vinyl Chloride	0.353	0.345	0.353	0.353	0.293	0.320	0.350	0.213	0.323	15.21
5)	T	Bromomethane	0.194	0.173	0.143	0.099	0.165	0.151	0.069	0.377	0.172	53.89
6)	T	Chloroethane	0.170	0.202	0.196	0.193	0.179	0.122	0.144	0.191	0.175	16.09
7)	T	Trichlorofluor...	0.394	0.370	0.386	0.378	0.340	0.348	0.383	0.315	0.364	7.48
8)	T	Acrolein	0.055	0.050	0.057	0.057	0.060	0.051	0.065	0.064	0.058	9.67
9)	MT*	1,1-Dichloroet...	0.367	0.327	0.350	0.360	0.336	0.323	0.339	0.355	0.345	4.61
10)	T	Acetone	0.036	0.032	0.035	0.032	0.043	0.031	0.035	0.051	0.037	18.84
11)	T	Iodomethane	0.180	0.131	0.304		0.140	0.168		0.142	0.177	36.56
12)	T	Carbon Disulfide	0.865	0.714	0.831	0.798	0.865	0.740	0.817	0.894	0.816	7.71
13)	T	Allyl Chloride	0.181	0.158	0.170	0.172	0.186	0.156	0.163	0.172	0.170	6.21
14)	T	Isobutyl Alcohol									0.000	-1.00
15)	T	Methyl Acetate									0.000	-1.00
16)	T	Acetonitrile	0.060	0.051	0.051	0.061	0.117	0.048	0.049	0.205	0.080	68.94
17)	T	Methylene Chlo...	0.580	0.441	0.387	0.372	1.811	0.392	0.355	3.036	0.922	106.92
18)	T	Methyl tert-Bu...	0.913	0.831	0.883	0.868	0.881	0.817	0.866	0.865	0.866	3.49
19)	T	trans-1,2-Dich...	0.397	0.352	0.378	0.384	0.391	0.351	0.365	0.393	0.376	4.89
20)	T	Acrylonitrile	0.151	0.141	0.146	0.139	0.142	0.133	0.146	0.129	0.141	5.10
21)	T**	1,1-Dichloroet...	0.535	0.489	0.523	0.527	0.540	0.484	0.504	0.530	0.516	4.16
22)	T	Chloroprene	0.422	0.369	0.399	0.405	0.403	0.367	0.385	0.381	0.391	4.88
23)	T	Vinyl Acetate	0.576	0.507	0.571	0.419	0.599	0.533	0.613	0.584	0.550	11.48
24)	T	2,2-Dichloropr...	0.360	0.321	0.333	0.341	0.359	0.305	0.320	0.353	0.336	5.96
25)	T	cis-1,2-Dichlo...	0.411	0.375	0.398	0.404	0.437	0.377	0.382	0.411	0.399	5.30
26)	T	2-Butanone	0.173	0.162	0.169	0.156	0.174	0.155	0.163	0.180	0.166	5.35
27)	T	Proprionitrile	0.057	0.057	0.058	0.055	0.056	0.053	0.059	0.024	0.052	22.20
28)	T	Methacrylonitrile	0.222	0.210	0.216	0.202	0.239	0.193	0.203	0.278	0.220	12.32
29)	T*	Chloroform	0.494	0.442	0.464	0.463	0.506	0.435	0.448	0.483	0.467	5.44
30)	T	Bromochloromet...	0.267	0.243	0.256	0.249	0.269	0.241	0.241	0.246	0.252	4.50
31)	S	Dibromofluorom...	0.287	0.265	0.272	0.269	0.411	0.255	0.268	0.284	0.289	17.49

Method Path : C:\msdchem\1\METHODS\
Method File : M090809.M
Title : GLI METHOD 8260A/624

32)	T	1,1,1-Trichlor...	0.370	0.332	0.363	0.376	0.353	0.333	0.363	0.363	0.357	4.55
33)	S	1,2-Dichloroet...	0.305	0.273	0.278	0.271	0.395	0.266	0.267	0.298	0.294	14.70
34)	T	1,1-Dichloropr...	0.398	0.349	0.381	0.393	0.358	0.350	0.376	0.381	0.373	5.08
35)	T	Carbon Tetrach...	0.303	0.271	0.306	0.323	0.272	0.274	0.313	0.285	0.293	6.96
36)	MT	Benzene	1.282	1.153	1.219	1.230	1.312	1.122	1.185	1.278	1.223	5.44
37)	T	1,2-Dichloroet...	0.344	0.316	0.331	0.325	0.351	0.305	0.319	0.328	0.327	4.57
38)	MT	Trichloroethene	0.311	0.277	0.300	0.319	0.314	0.274	0.293	0.306	0.299	5.62
39)	T*	1,2-Dichloropr...	0.342	0.313	0.331	0.327	0.343	0.305	0.320	0.305	0.323	4.61
40)	T	Bromodichlorom...	0.379	0.339	0.365	0.366	0.373	0.339	0.361	0.367	0.361	4.04
41)	T	Methyl Methacr...	0.294	0.275	0.287	0.274	0.296	0.263	0.277	0.293	0.282	4.19
42)	T	Dibromomethane	0.221	0.201	0.210	0.209	0.207	0.196	0.215	0.204	0.208	3.84
43)	T	2-Chloroethyl ...	0.259	0.244	0.258	0.247	0.254	0.238	0.244	0.226	0.246	4.44
44)	T	4-Methyl-2-Pen...	0.362	0.337	0.345	0.323	0.362	0.322	0.314	0.336	0.337	5.30
45)	T	cis-1,3-Dichlo...	0.516	0.475	0.505	0.499	0.504	0.462	0.495	0.494	0.494	3.55
46)	MT*	Toluene	1.324	1.205	1.281	1.307	1.383	1.166	1.289	1.349	1.288	5.57
47)	T	trans-1,3-Dich...	0.464	0.432	0.477	0.469	0.436	0.430	0.475	0.447	0.454	4.38
48)	T	Ethyl Methacry...	0.466	0.431	0.477	0.464	0.449	0.425	0.479	0.437	0.454	4.60
49)	T	1,1,2-Trichlor...	0.311	0.280	0.303	0.301	0.295	0.274	0.308	0.297	0.296	4.44
50)	T	2-Hexanone	0.257	0.240	0.251	0.233	0.255	0.228	0.234	0.240	0.242	4.46
51)	T	1,2-Dibromoethane	0.325	0.297	0.314	0.310	0.324	0.288	0.317	0.300	0.310	4.27
52)	I	Chlorobenzene-d5	----------ISTD----------									
53)	S	Toluene-d8	1.460	1.372	1.358	1.395		1.303	1.339		1.371	3.91
54)	T	Tetrachloroethene	0.503	0.537	0.554	0.739	0.404	0.469		0.420	0.518	21.67
55)	T	1,3-Dichloropr...	0.675	0.622	0.638	0.634	0.677	0.601	0.614	0.648	0.639	4.26
56)	T	Dibromochlorom...	0.391	0.363	0.386	0.389	0.384	0.356	0.389	0.363	0.378	3.81
57)	M**	Chlorobenzene	1.110	1.015	1.061	1.071	1.140	1.004	1.057	1.087	1.068	4.27
58)	T	1,1,1,2-Tetrac...	0.352	0.324	0.343	0.358	0.355	0.318	0.364	0.332	0.343	4.90
59)	T*	Ethylbenzene	1.815	1.632	1.734	1.787	1.836	1.611	1.762	1.801	1.747	4.80
60)	T	m & p Xylenes	1.379	1.257	1.339	1.372	1.400	1.230	1.354	1.354	1.336	4.52
61)	T	o-Xylene	1.451	1.321	1.382	1.407	1.469	1.276	1.376	1.470	1.394	5.04
62)	T	Styrene	1.256	1.168	1.214	1.221	1.280	1.119	1.215	1.248	1.215	4.24
63)	T**	Bromoform	0.286	0.271	0.296	0.304	0.279	0.270	0.318	0.253	0.285	7.33
64)	I	1,4-Dichlorobenzen...	----------ISTD----------									
65)	T	Isopropylbenzene	3.190	2.830	3.147	3.136	3.032	2.827	3.082	3.015	3.032	4.57
66)	T**	1,1,2,2-Tetrac...	1.102	1.000	1.066	0.983	1.036	0.988	1.089	1.203	1.058	6.99
67)	S	Bromofluoroben...	1.014	0.919	0.975	0.933	1.325	0.890	0.933	1.166	1.019	14.76
68)	T	1,2,3-Trichlor...	0.301	0.283	0.297	0.287	0.292	0.276	0.297	0.276	0.289	3.36
69)	T	Bromobenzene	1.388	1.273	1.344	1.311	1.364	1.234	1.294	1.325	1.317	3.80
70)	T	n-Propylbenzene	3.714	3.305	3.574	3.656	3.533	3.242	3.591	3.626	3.530	4.77

Method Path : C:\msdchem\1\METHODS\
Method File : M090809.M
Title : GLI METHOD 8260A/624

71)	T	2-Chlorotoluene	2.261	2.054	2.198	2.172	2.291	2.001	2.143	2.293	2.177	4.95
72)	T	1,3,5-Trimethy...	2.517	2.243	2.283	2.497	2.468	2.229	2.459	2.522	2.402	5.30
73)	T	4-Chlorotoluene	2.449	2.209	2.327	2.296	2.435	2.119	2.278	2.481	2.324	5.41
74)	T	t-Butylbenzene	2.074	1.830	1.968	2.043	2.040	1.821	2.024	2.006	1.976	4.94
75)	T	1,2,4-Trimethy...	2.527	2.261	2.022	2.486	2.408	2.235	2.520	2.542	2.375	7.84
76)	T	sec-Butylbenzene	2.915	2.606	2.717	2.925	2.879	2.593	2.861	2.855	2.794	4.86
77)	T	1,4-Isopropylt...	2.444	2.224	2.090	2.522	2.330	2.202	2.506	2.453	2.346	6.82
78)	T	1,3-Dichlorobe...	1.633	1.477	1.579	1.603	1.649	1.454	1.623	1.616	1.579	4.65
79)	T	1,4-Dichlorobe...	1.684	1.535	1.616	1.631	1.758	1.499	1.637	1.733	1.637	5.48
80)	T	t-1,4-Dichloro...	0.286	0.267	0.284	0.269	0.274	0.253	0.272	0.250	0.269	4.89
81)	T	n-Butylbenzene	2.013	1.769	1.297	2.055	1.794	1.778	1.988	2.105	1.850	14.06
82)	T	1,2-Dichlorobe...	1.590	1.452	1.528	1.497	1.576	1.407	1.504	1.490	1.505	4.00
83)	T	1,2-Dibromo-3-...	0.250	0.228	0.266	0.240	0.234	0.230	0.253	0.222	0.240	6.19
84)	T	1,2,4-Trichlor...	0.896	0.813	0.522	0.898	0.771	0.799	0.917	0.870	0.811	15.78
85)	T	Hexachlorobuta...	0.340	0.318	0.317	0.333	0.377	0.314	0.340	0.409	0.343	9.67
86)	T	Naphthalene	2.220	2.015	1.546	2.304	1.614	2.046	2.286	2.197	2.029	14.58
87)	T	1,2,3-Trichlor...	0.815	0.728	0.572	0.803	0.686	0.717	0.826	0.756	0.738	11.33

(#) = Out of Range

Injection Log

Data Directory: C:\msdchem\1\DATA\OCT1309\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1 13OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	13 Oct 2009 9:46 am
2) 13OCT02.D 0942052-BS1	1, 20PPB 8260 CCV+ M	11	1.000	13 Oct 2009 10:43 am
3) 13OCT03.D 0942052-BLK1	1,DI WATER+ 1uLMI916	12	1.000	13 Oct 2009 11:19 am
4) 13OCT04.D 09J0523-01	1,SS, 5mL+ 1uLMI9160 pH<2	13	1.000	13 Oct 2009 11:57 am
5) 13OCT05.D 09J0523-02	1,SS, 5mL+ 1uLMI9160 pH<2	14	1.000	13 Oct 2009 12:34 pm
6) 13OCT06.D 09J0523-03	1,SS, 5mL+ 1uLMI9160 pH<2	15	1.000	13 Oct 2009 1:12 pm
7) 13OCT07.D 0942052-MS1	09J0523-03 5, 20PPB 8260 MS,10m	16	1.000	13 Oct 2009 1:49 pm
8) 13OCT08.D 0942052-MSD1	09J0523-03 5, 20PPB 8260 MSD,10	16	1.000	13 Oct 2009 2:27 pm
9) 13OCT09.D 09J0523-04	1,SS, 5mL+ 1uLMI9160 pH<2	18	1.000	13 Oct 2009 3:04 pm
10) 13OCT10.D 09J0342-03	1,[redacted], 5mL+ 1uL pH<2	18	1.000	13 Oct 2009 3:52 pm
11) 13OCT11.D 09J0342-04	1,[redacted], 5mL+ 1uL pH<2	19	1.000	13 Oct 2009 4:30 pm
12) 13OCT12.D 09J0342-05	1,[redacted], 5mL+ 1uL pH<2	20	1.000	13 Oct 2009 5:07 pm
13) 13OCT13.D 09J0342-06 RE1	1,[redacted], 5mL+ 1uL pH<2	21	1.000	13 Oct 2009 5:44 pm
14) 13OCT14.D BLK	1,DI WATER+ 1uLMI916	22	1.000	13 Oct 2009 6:21 pm
15) 13OCT15.D BLK	1,DI WATER+ 1uLMI916	23	1.000	13 Oct 2009 6:58 pm
16) 13OCT16.D BLK	1,DI WATER+ 1uLMI916	24	1.000	13 Oct 2009 7:35 pm
17) 13OCT17.D 09J0342-06	10,[redacted], 5mL/50m pH<2	25	1.000	13 Oct 2009 8:12 pm
18) 13OCT18.D 09J0342-08	1,[redacted], 5mL+ 1uL pH<2	26	1.000	13 Oct 2009 8:49 pm
19) 13OCT19.D 09J0342-07 RE1	10,[redacted], 5mL/50m pH<2	27	1.000	13 Oct 2009 9:26 pm
20) 13OCT20.D 09J0302-01	1,[redacted], 5mL+ 1u pH<2	28	1.000	13 Oct 2009 10:03 pm
21) 13OCT21.D				

09J0303-01 1, [redacted], 5mL+ 1u 29 1.000 13 Oct 2009 10:30 pm

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22) 13OCT22.D
09J0304-01 1, [redacted], 5mL+ 1u 30 1.000 13 Oct 2009 11:16 pm

pH ~2

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23) 13OCT23.D
09J0345-02 1, [redacted], 5mL+ 1uLMI91 31 1.000 13 Oct 2009 11:53 pm

pH ~2

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24) 13OCT24.D
09J0345-04 1, [redacted], 5mL+ 1uLMI91 32 1.000 14 Oct 2009 12:31 am

pH ~2

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25) 13OCT25.D
09J0511-07 1, [redacted], 5mL+ 1uLMI9 33 1.000 14 Oct 2009 1:07 am

pH ~2

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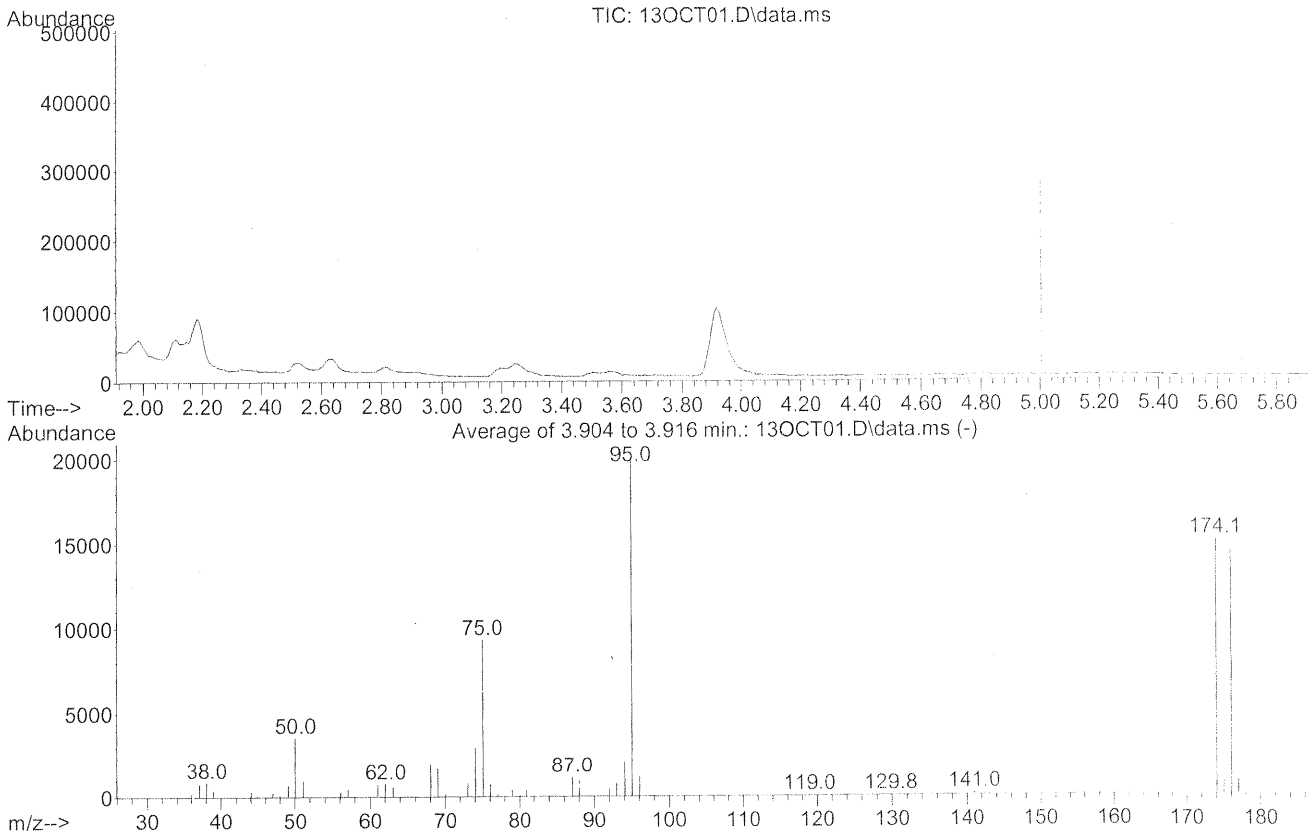
26) 13OCT26.D
09J0342-07 1, [redacted], 5mL+ 1uL 34 1.000 14 Oct 2009 1:44 am

pH ~2

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT01.D
Acq On : 13 Oct 2009 9:46 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009



AutoFind: Scans 381, 382, 383; Background Corrected with Scan 371

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	3579	PASS
75	95	30	80	46.7	9335	PASS
95	95	100	100	100.0	19984	PASS
96	95	5	9	6.1	1224	PASS
173	174	0.00	2	0.7	103	PASS
174	95	50	120	75.9	15160	PASS
175	174	5	9	7.5	1133	PASS
176	174	95	101	95.7	14512	PASS
177	176	5	9	6.2	906	PASS

Tune File : C:\msdchem\1\DATA\OCT1309\13OCT01.D
Tune Time : 13 Oct 2009 9:46 am

Daily Calibration File : C:\msdchem\1\DATA\OCT1309\13OCT02.D

		DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
						708444	513940	248907
File	Sample	Surrogate Recovery %				Internal Standard Responses		
13OCT02.D	0942052-BS	84	83	93	89	708444	513940	248907
13OCT03.D	0942052-BL	86	86	94	92	689672	500415	233810
13OCT04.D	09J0523-01	86	86	95	90	675562	484659	228435
13OCT05.D	09J0523-02	86	85	96	89	668664	473114	225770
13OCT06.D	09J0523-03	86	86	95	91	662819	476049	224866
13OCT07.D	0942052-MS	86	85	94	90	674263	487425	238001
13OCT08.D	0942052-MSD	84	85	95	89	679166	491383	237362
13OCT09.D	09J0523-04	85	88	95	91	667849	477584	224582
13OCT10.D	09J0342-03	86	89	94	91	643815	469484	219142
13OCT11.D	09J0342-04	86	90	96	91	650469	464722	218021
13OCT12.D	09J0342-05	87	89	95	92	645012	459358	214609
No Quant Results for C:\msdchem\1\DATA\OCT1309\13OCT13.D								
13OCT17.D	09J0342-06	85	89	95	93	621979	442751	202363
13OCT18.D	09J0342-08	86	91	96	93	610570	438213	204371
13OCT19.D	09J0342-07	85	89	96	94	610125	437108	202527
13OCT20.D (fails)	09J0302-01	86	91	95	93	608336	435839	199370
13OCT21.D (fails)	09J0303-01	86	91	96	93	612005	432502	200352
13OCT22.D (fails)	09J0304-01	86	90	96	92	610407	436037	200600
13OCT23.D (fails)	09J0345-02	86	90	96	94	608606	436161	203349

OK 624 Samples

13OCT25.D								
(fails)	09J0511-07	87	92	96	95	606919	442048	204471
13OCT26.D								
(fails)	09J0342-07	86	91	96	97	614504	439938	194713

(fails) - fails 12hr time check * - fails criteria

Created: Wed Oct 14 09:55:03 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT02.D
Acq On : 13 Oct 2009 10:43 am
Operator : EMG
Sample : 0942052-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 11:08:25 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	83	0.00
2	T	Dichlorodifluoromethane	20.000	34.159	-70.8#	147	0.00
3	T**	Chloromethane	20.000	22.643	-13.2	105	0.00
4	T*	Vinyl Chloride	20.000	25.482	-27.4#	115	0.00
5	T	Bromomethane	20.000	22.813	-14.1	90	0.00
6	T	Chloroethane	20.000	24.015	-20.1#	166	0.00
7	T	Trichlorofluoromethane	20.000	25.033	-25.2#	109	0.00
8	T	Acrolein	100.000	74.710	25.3#	69	0.00
9	MT*	1,1-Dichloroethene	20.000	19.671	1.6	87	0.00
10	T	Acetone	100.000	111.666	-11.7	97	0.00
11	T	Iodomethane	20.000	18.712	6.4	77	0.00
12	T	Carbon Disulfide	20.000	18.489	7.6	84	0.00
13	T	Allyl Chloride	20.000	17.530	12.3	79	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	125	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	103	0.00
16	T	Acetonitrile	20.000	8.811	55.9#	41	0.00
17	T	Methylene Chloride	20.000	17.439	12.8	79	0.00
18	T	Methyl tert-Butyl Ether	20.000	17.202	14.0	76	0.00
19	T	trans-1,2-Dichloroethene	20.000	19.801	1.0	88	0.00
20	T	Acrylonitrile	20.000	21.508	-7.5	94	0.00
21	T**	1,1-Dichloroethane	20.000	19.938	0.3	88	0.00
22	T	Chloroprene	20.000	19.870	0.6	88	0.00
23	T	Vinyl Acetate	20.000	23.362	-16.8	100	0.00
24	T	2,2-Dichloropropane	20.000	17.928	10.4	82	0.00
25	T	cis-1,2-Dichloroethene	20.000	20.440	-2.2	90	0.00
26	T	2-Butanone	100.000	111.908	-11.9	100	0.00
27	T	Proprionitrile	20.000	22.542	-12.7	96	0.00
28	T	Methacrylonitrile	20.000	20.724	-3.6	98	0.00
29	T*	Chloroform	20.000	20.143	-0.7	89	0.00
30	T	Bromochloromethane	20.000	22.039	-10.2	95	0.00
31	S	Dibromofluoromethane	20.000	21.024	-5.1	92	0.00
32	T	1,1,1-Trichloroethane	20.000	19.261	3.7	85	0.00
33	S	1,2-Dichloroethane-d4	20.000	20.793	-4.0	95	0.00
34	T	1,1-Dichloropropene	20.000	18.703	6.5	83	0.00
35	T	Carbon Tetrachloride	20.000	19.300	3.5	86	0.00
36	MT	Benzene	20.000	19.104	4.5	86	0.00
37	T	1,2-Dichloroethane	20.000	21.935	-9.7	98	0.00
38	MT	Trichloroethene	20.000	18.349	8.3	83	0.00
39	T*	1,2-Dichloropropane	20.000	19.909	0.5	87	0.00

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT02.D
Acq On : 13 Oct 2009 10:43 am
Operator : EMG
Sample : 0942052-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 11:08:25 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	T	Bromodichloromethane	20.000	21.365	-6.8	94	0.00
41	T	Methyl Methacrylate	20.000	21.513	-7.6	96	0.00
42	T	Dibromomethane	20.000	18.527	7.4	82	0.00
43	T	2-Chloroethyl vinyl ether	20.000	18.006	10.0	77	0.00
44	T	4-Methyl-2-Pentanone	100.000	111.011	-11.0	96	0.00
45	T	cis-1,3-Dichloropropene	20.000	19.755	1.2	88	-0.01
46	MT*	Toluene	20.000	18.108	9.5	83	-0.01
47	T	trans-1,3-Dichloropropene	20.000	19.103	4.5	84	-0.01
48	T	Ethyl Methacrylate	20.000	19.712	1.4	87	0.00
49	T	1,1,2-Trichloroethane	20.000	19.416	2.9	87	0.00
50	T	2-Hexanone	100.000	109.872	-9.9	97	0.00
51	T	1,2-Dibromoethane	20.000	19.473	2.6	87	0.00
52	I	Chlorobenzene-d5	25.000	25.000	0.0	76	-0.01
53	S	Toluene-d8	20.000	23.289	-16.4	94	-0.01
54	T	Tetrachloroethene	20.000	16.324	18.4	61	0.00
55	T	1,3-Dichloropropane	20.000	22.243	-11.2	90	-0.01
56	T	Dibromochloromethane	20.000	22.095	-10.5	90	-0.01
57	M**	Chlorobenzene	20.000	19.693	1.5	80	0.00
58	T	1,1,1,2-Tetrachloroethane	20.000	20.656	-3.3	85	-0.01
59	T*	Ethylbenzene	20.000	19.723	1.4	82	0.00
60	T	m & p Xylenes	40.000	39.384	1.5	82	-0.01
61	T	o-Xylene	20.000	19.135	4.3	80	-0.01
62	T	Styrene	20.000	18.957	5.2	79	-0.01
63	T**	Bromoform	20.000	20.547	-2.7	83	0.00
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	71	-0.01
65	T	Isopropylbenzene	20.000	19.722	1.4	75	0.00
66	T**	1,1,2,2-Tetrachloroethane	20.000	22.749	-13.7	86	-0.01
67	S	Bromofluorobenzene	20.000	22.320	-11.6	90	0.00
68	T	1,2,3-Trichloropropane	20.000	23.117	-15.6	85	-0.01
69	T	Bromobenzene	20.000	22.218	-11.1	84	-0.01
70	T	n-Propylbenzene	20.000	20.329	-1.6	78	-0.01
71	T	2-Chlorotoluene	20.000	20.592	-3.0	79	-0.01
72	T	1,3,5-Trimethylbenzene	20.000	19.452	2.7	74	-0.01
73	T	4-Chlorotoluene	20.000	21.191	-6.0	82	-0.01
74	T	t-Butylbenzene	20.000	18.804	6.0	72	-0.01
75	T	1,2,4-Trimethylbenzene	20.000	20.353	-1.8	76	-0.01
76	T	sec-Butylbenzene	20.000	19.010	4.9	72	-0.01

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT02.D
Acq On : 13 Oct 2009 10:43 am
Operator : EMG
Sample : 0942052-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 13 11:08:25 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77 T	1,4-Isopropyltoluene	20.000	19.422	2.9	73	-0.01
78 T	1,3-Dichlorobenzene	20.000	19.536	2.3	75	-0.01
79 T	1,4-Dichlorobenzene	20.000	19.598	2.0	76	-0.01
80 T	t-1,4-Dichloro-2-butene	20.000	24.740	-23.7#	93	-0.01
81 T	n-Butylbenzene	20.000	20.834	-4.2	77	-0.01
82 T	1,2-Dichlorobenzene	20.000	19.944	0.3	75	-0.01
83 T	1,2-Dibromo-3-chloropropane	20.000	19.472	2.6	72	-0.01
84 T	1,2,4-Trichlorobenzene	20.000	20.203	-1.0	64	0.00
85 T	Hexachlorobutadiene	20.000	15.202	24.0#	59	-0.01
86 T	Naphthalene	20.000	19.199	4.0	67	0.00
87 T	1,2,3-Trichlorobenzene	20.000	18.793	6.0	63	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT04.D
Acq On : 13 Oct 2009 11:57 am
Operator : EMG
Sample : 09J0523-01
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 14 10:53:08 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

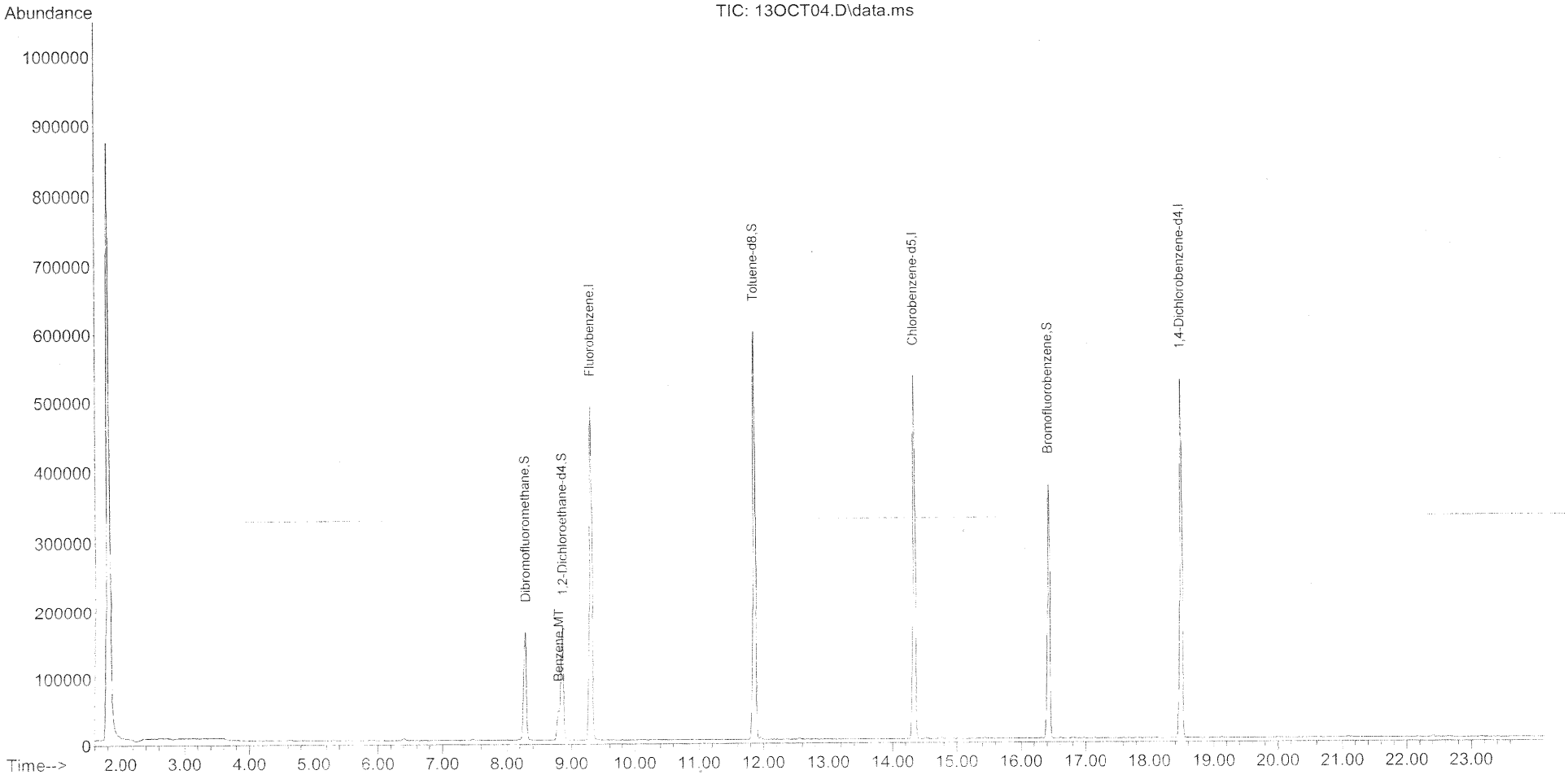
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	675562	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	484659	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	228435	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	156581	21.49	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.96%			
33) 1,2-Dichloroethane-d4	8.847	65	170968	21.52	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.08%			
53) Toluene-d8	11.851	98	630677	23.73	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 94.92%			
67) Bromofluorobenzene	16.416	95	210549	22.61	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 90.44%			
Target Compounds						Qvalue
5) Bromomethane	2.900	94	173	Below Cal	#	65
10) Acetone	4.592	58	144	Below Cal	#	57
17) Methylene Chloride	5.299	49	646	Below Cal	#	51
36) Benzene	8.793	78	58748	1.78	ug/L #	85
54) Tetrachloroethene	12.809	166	85	Below Cal	#	27

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT04.D
Acq On : 13 Oct 2009 11:57 am
Operator : EMG
Sample : 09J0523-01
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 14 10:53:08 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT05.D
Acq On : 13 Oct 2009 12:34 pm
Operator : EMG
Sample : 09J0523-02
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 14 10:53:32 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

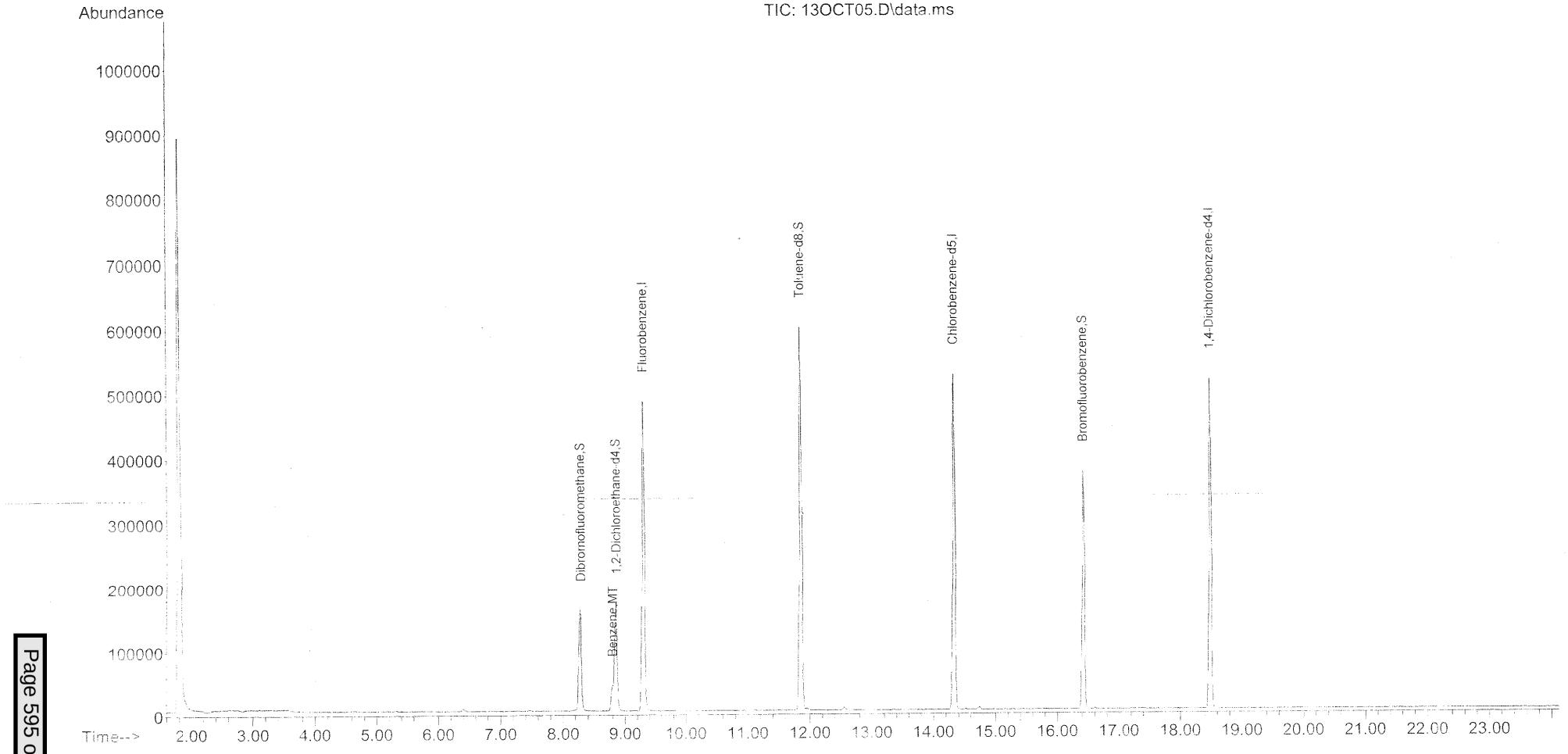
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.294	96	668664	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	473114	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.485	152	225770	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.271	111	154300	21.40	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.60%			
33) 1,2-Dichloroethane-d4	8.848	65	167861	21.35	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.40%			
53) Toluene-d8	11.846	98	622387	23.99	ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.96%			
67) Bromofluorobenzene	16.417	95	203696	22.13	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 88.52%			
Target Compounds						Qvalue
5) Bromomethane	2.895	94	83	Below Cal	#	18
10) Acetone	4.593	58	106	Below Cal	#	57
17) Methylene Chloride	5.306	49	1146	Below Cal	#	62
36) Benzene	8.793	78	55235	1.69	ug/L #	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT05.D
Acq On : 13 Oct 2009 12:34 pm
Operator : EMG
Sample : 09J0523-02
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 14 10:53:32 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT06.D
Acq On : 13 Oct 2009 1:12 pm
Operator : EMG
Sample : 09J0523-03
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 14 10:53:50 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

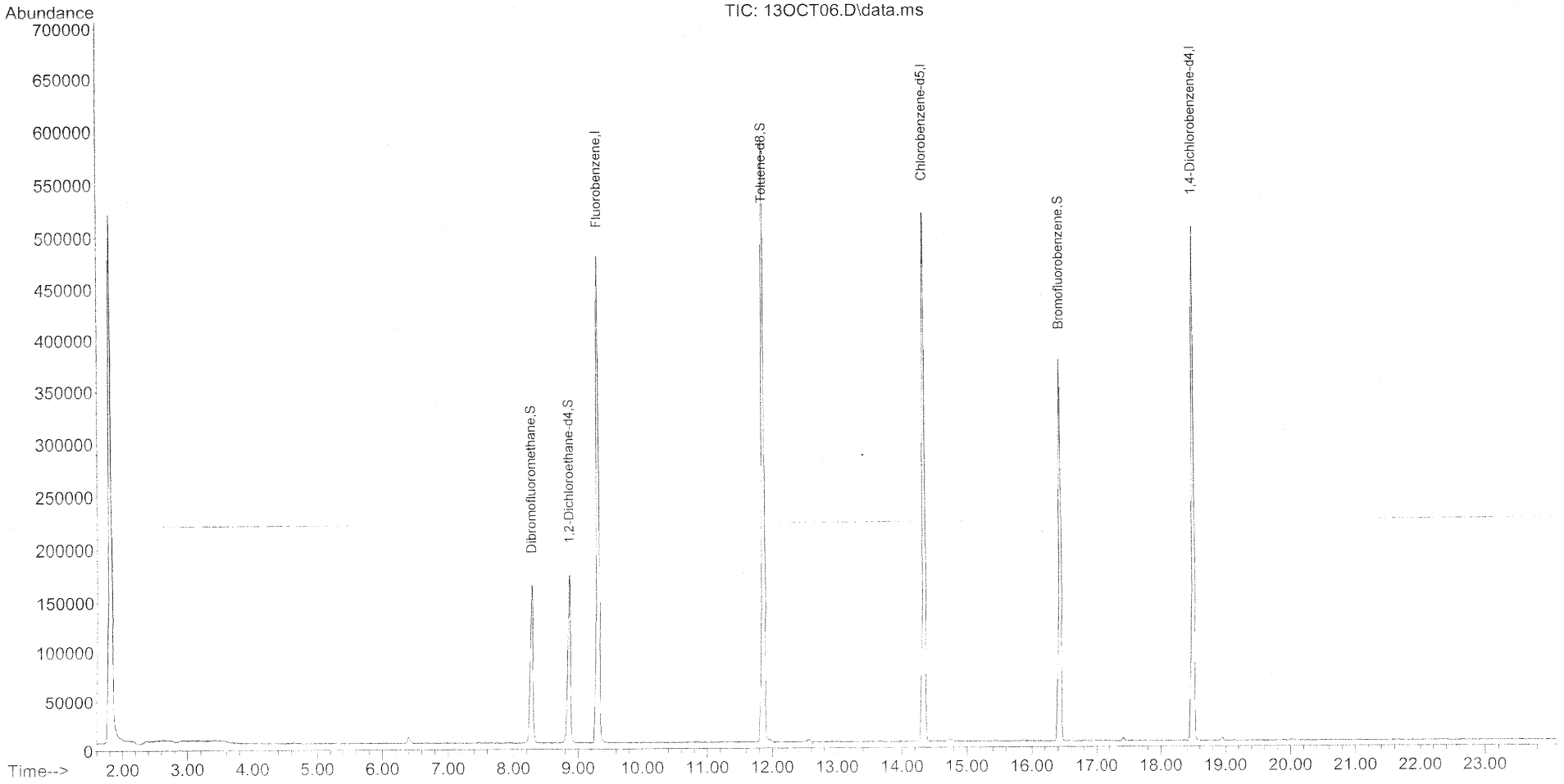
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.296	96	662819	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.324	117	476049	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.487	152	224866	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.268	111	154530	21.62	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.48%			
33) 1,2-Dichloroethane-d4	8.850	65	167925	21.54	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.16%			
53) Toluene-d8	11.848	98	621138	23.79	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.16%			
67) Bromofluorobenzene	16.419	95	207600	22.64	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 90.56%			
Target Compounds						Qvalue
5) Bromomethane	2.881	94	131	Below Cal	#	18
17) Methylene Chloride	5.308	49	614	Below Cal	#	78
54) Tetrachloroethene	12.800	166	115	Below Cal	#	14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT06.D
Acq On : 13 Oct 2009 1:12 pm
Operator : EMG
Sample : 09J0523-03
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 14 10:53:50 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT09.D
Acq On : 13 Oct 2009 3:04 pm
Operator : EMG
Sample : 09J0523-04
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 14 10:57:26 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

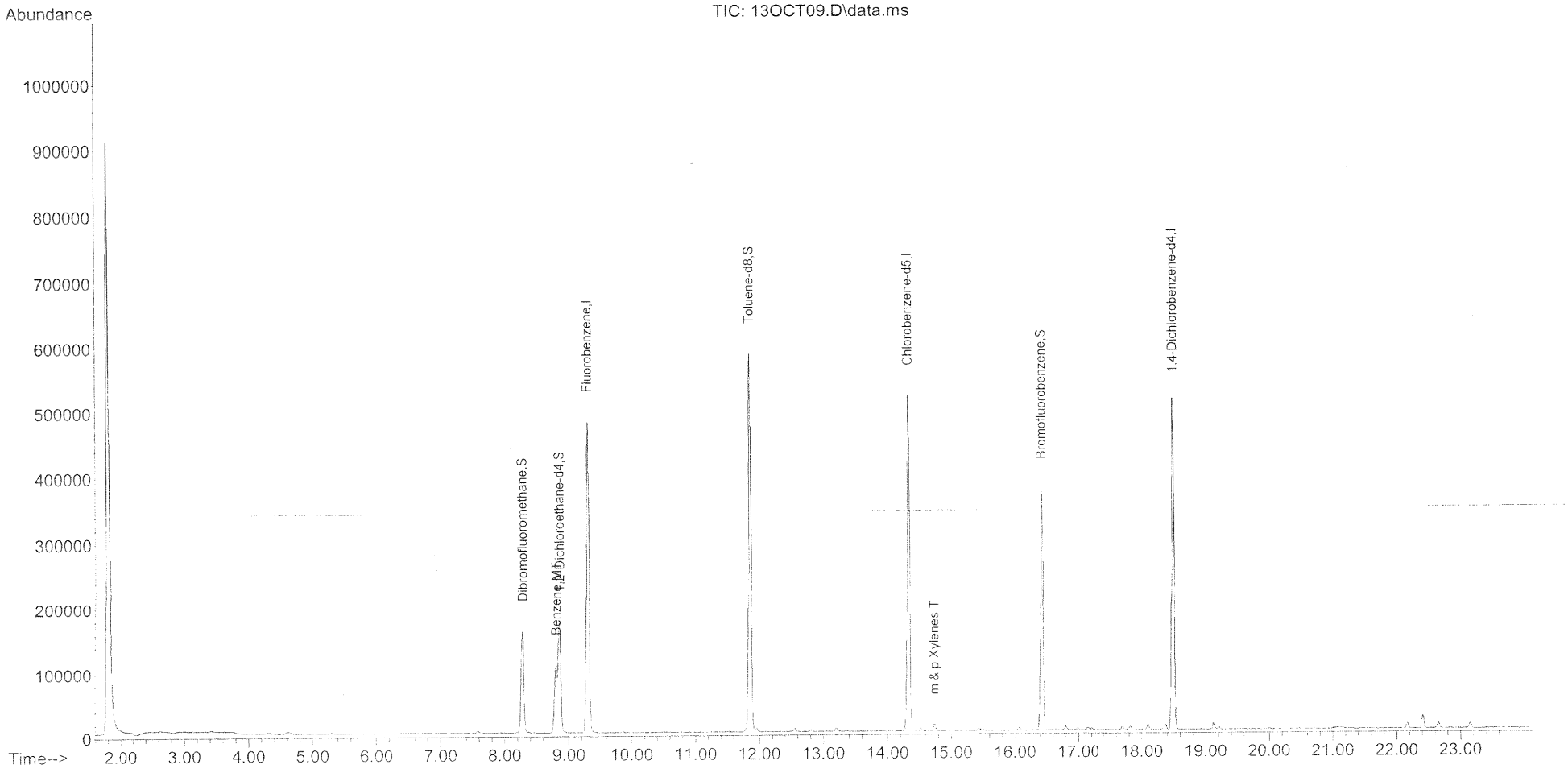
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.292	96	667849	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.326	117	477584	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.488	152	224582	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	153107	21.26	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.04%			
33) 1,2-Dichloroethane-d4	8.846	65	173645	22.11	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 88.44%			
53) Toluene-d8	11.850	98	621795	23.74	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 94.96%			
67) Bromofluorobenzene	16.415	95	208251	22.74	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 90.96%			
Target Compounds						Qvalue
5) Bromomethane	2.899	94	338	Below Cal	#	47
10) Acetone	4.591	58	1271	Below Cal	#	69
17) Methylene Chloride	5.304	49	454	Below Cal	#	45
27) Proprionitrile	7.802	54	263	Below Cal	#	60
36) Benzene	8.797	78	145534	4.46	ug/L #	85
54) Tetrachloroethene	12.791	166	394	Below Cal	#	47
60) m & p Xylenes	14.728	91	10367	0.41	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1309\
Data File : 13OCT09.D
Acq On : 13 Oct 2009 3:04 pm
Operator : EMG
Sample : 09J0523-04
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 14 10:57:26 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\OCT1409\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
14OCT18.D No data found		0	0.000	N/A
2) 14OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	14 Oct 2009 10:37 am
3) 14OCT02.D 0942098-BS1	1, 20PPB 8260 CCV+ M	11	1.000	14 Oct 2009 11:14 am
4) 14OCT03.D 0942098-BLK1	1,DI WATER+ 1uLMI916	12	1.000	14 Oct 2009 11:51 am
5) 14OCT04.D 09J0583-03 S	1, [redacted] 5mL+ 1uLM pH <2	13	1.000	14 Oct 2009 12:28 pm
6) 14OCT05.D 09J0583-01 S	1, [redacted] 5mL+ 1uLM pH <2	14	1.000	14 Oct 2009 1:05 pm
7) 14OCT06.D 0942098-MS1	1, 20PPB 8260 MS,5mL 09J0585-01 BMS 10/15/09	15	1.000	14 Oct 2009 1:42 pm
8) 14OCT07.D 0942098-MSD1	1, 20PPB 8260 MSD,5m 09J0585-01	15	1.000	14 Oct 2009 2:19 pm
9) 14OCT08.D 09J0583-02 S	1, [redacted] 5mL+ 1uLM pH <2	16	1.000	14 Oct 2009 2:56 pm
14OCT09.D 09J0523-05	1,SS, 5mL+ 1uLMI9160 pH <2	17	1.000	14 Oct 2009 3:33 pm
11) 14OCT10.D 09J0523-06	1,SS, 5mL+ 1uLMI9160 pH <2	18	1.000	14 Oct 2009 4:10 pm
12) 14OCT11.D 09J0523-07	1,SS, 5mL+ 1uLMI9160 pH <2	19	1.000	14 Oct 2009 4:47 pm
13) 14OCT12.D 09J0523-08	1,SS, 5mL+ 1uLMI9160 pH <2	20	1.000	14 Oct 2009 5:23 pm
14) 14OCT13.D 09J0523-09	1,SS, 5mL+ 1uLMI9160 pH <2	21	1.000	14 Oct 2009 6:00 pm
15) 14OCT14.D 09J0523-10	1,SS, 5mL+ 1uLMI9160 pH <2	22	1.000	14 Oct 2009 6:37 pm
16) 14OCT15.D 09J0523-11	1,SS, 5mL+ 1uLMI9160 pH <2	23	1.000	14 Oct 2009 7:14 pm
17) 14OCT16.D 09J0523-12	1,SS, 5mL+ 1uLMI9160 pH <2	24	1.000	14 Oct 2009 7:51 pm
18) 14OCT17.D 09J0523-13	1,SS, 5mL+ 1uLMI9160 pH <2	25	1.000	14 Oct 2009 8:28 pm
14OCT18.D 0631-07	1, [redacted] 5mL+ 1uLM pH <2	26	1.000	14 Oct 2009 9:05 pm

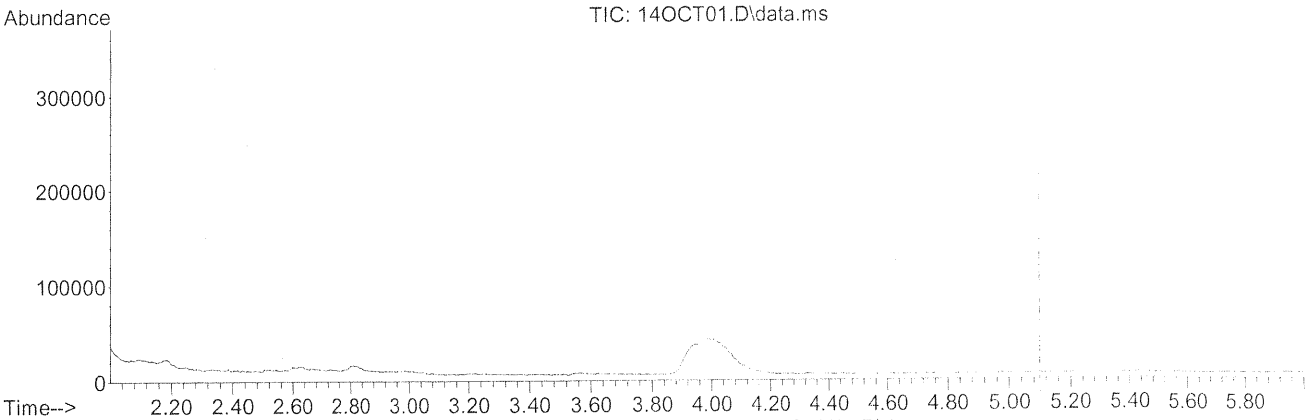
Not used

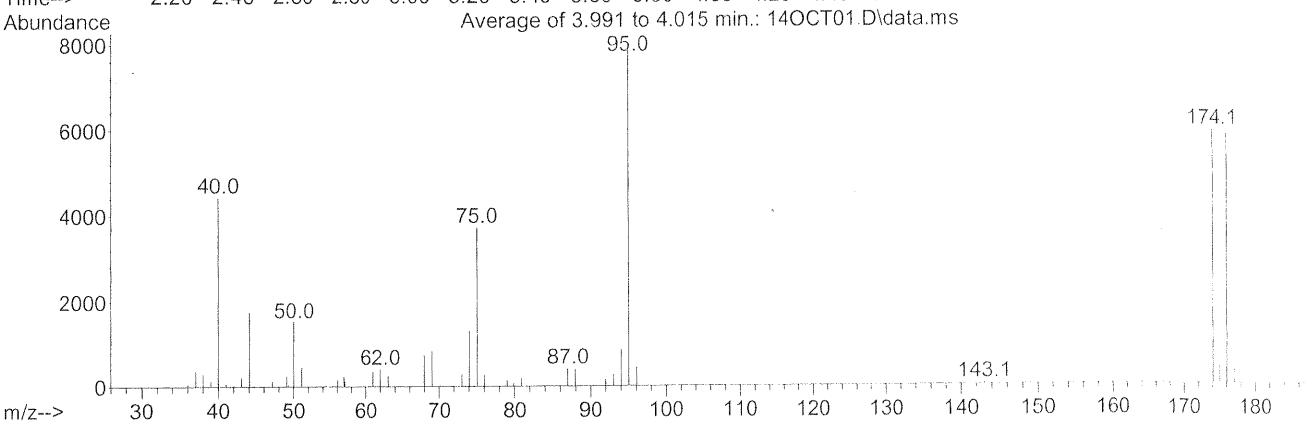
Compound issue failed 10/16/09

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT01.D
Acq On : 14 Oct 2009 10:37 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009





Spectrum Information: Average of 3.991 to 4.015 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	1524	PASS
75	95	30	80	47.3	3726	PASS
95	95	100	100	100.0	7878	PASS
96	95	5	9	5.6	442	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	75.1	5919	PASS
175	174	5	9	7.1	420	PASS
176	174	95	101	98.5	5833	PASS
177	176	5	9	5.7	331	PASS

Tune File : C:\msdchem\1\DATA\OCT1409\14OCT01.D
Tune Time : 14 Oct 2009 10:37 am

Daily Calibration File : C:\msdchem\1\DATA\OCT1409\14OCT02.D

	DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
					644198	466462	222207

File	Sample	Surrogate Recovery %				Internal Standard Responses		
14OCT02.D	0942098-BS	84	87	95	94	644198	466462	222207
14OCT03.D	0942098-BLK	86	89	96	92	633617	454116	211103
14OCT04.D	09J0583-03	85	89	94	94	626571	447456	205736
14OCT05.D	09J0583-01	86	89	96	94	619427	442130	205344
14OCT06.D	0942098-MS	85	88	96	94	624628	447972	216234
14OCT07.D	0942098-MSD	86	88	96	94	625301	449038	215372
14OCT08.D	09J0583-02	86	90	95	93	618411	443731	204112
14OCT09.D	09J0523-05	86	90	95	94	603599	432602	200469
14OCT10.D	09J0523-06	86	91	96	94	599829	428271	201754
14OCT11.D	09J0523-07	86	91	95	94	608160	434768	199989
14OCT12.D	09J0523-08	87	91	95	91	603686	435775	200058
14OCT13.D	09J0523-09	86	91	97	94	605217	423865	197060
14OCT14.D	09J0523-10	86	86	96	94	596995	427196	201219
14OCT15.D	09J0523-11	85	89	95	95	611951	431067	204884
14OCT16.D	09J0523-12	86	89	97	94	608782	426458	201557
14OCT17.D	09J0523-13	87	89	96	95	595663	426970	200699
14OCT18.D	09J0631-07	86	89	98	93	602901	429711	201423

(fails) - fails 12hr time check * - fails criteria

Created: Thu Oct 15 11:36:37 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT02.D
Acq On : 14 Oct 2009 11:14 am
Operator : EMG
Sample : 0942098-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 14 13:12:18 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	75	0.00
2	T	Dichlorodifluoromethane	20.000	28.440	-42.2#	111	0.00
3	T**	Chloromethane	20.000	20.260	-1.3	86	0.00
4	T*	Vinyl Chloride	20.000	23.814	-19.1	98	0.00
5	T	Bromomethane	20.000	16.302	18.5	61	0.00
6	T	Chloroethane	20.000	21.025	-5.1	131	0.00
7	T	Trichlorofluoromethane	20.000	24.337	-21.7#	96	0.00
8	T	Acrolein	100.000	80.409	19.6	68	0.00
9	MT*	1,1-Dichloroethene	20.000	21.443	-7.2	86	0.00
10	T	Acetone	100.000	112.266	-12.3	89	0.00
11	T	Iodomethane	20.000	17.569	12.2	64	0.00
12	T	Carbon Disulfide	20.000	19.851	0.7	82	0.00
13	T	Allyl Chloride	20.000	18.471	7.6	76	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	91	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	110	0.00
16	T	Acetonitrile	20.000	15.020	24.9#	69	0.00
17	T	Methylene Chloride	20.000	18.021	9.9	74	0.00
18	T	Methyl tert-Butyl Ether	20.000	16.586	17.1	66	0.00
19	T	trans-1,2-Dichloroethene	20.000	21.527	-7.6	87	0.00
20	T	Acrylonitrile	20.000	22.006	-10.0	88	0.00
21	T**	1,1-Dichloroethane	20.000	21.931	-9.7	88	0.00
22	T	Chloroprene	20.000	22.130	-10.6	89	0.00
23	T	Vinyl Acetate	20.000	23.382	-16.9	91	0.00
24	T	2,2-Dichloropropane	20.000	17.532	12.3	73	-0.01
25	T	cis-1,2-Dichloroethene	20.000	21.255	-6.3	85	0.00
26	T	2-Butanone	100.000	114.315	-14.3	93	0.00
27	T	Proprionitrile	20.000	22.083	-10.4	85	0.00
28	T	Methacrylonitrile	20.000	22.208	-11.0	96	0.00
29	T*	Chloroform	20.000	21.490	-7.4	87	-0.01
30	T	Bromochloromethane	20.000	23.623	-18.1	93	-0.01
31	S	Dibromofluoromethane	20.000	21.096	-5.5	84	-0.01
32	T	1,1,1-Trichloroethane	20.000	19.738	1.3	80	0.00
33	S	1,2-Dichloroethane-d4	20.000	21.840	-9.2	91	0.00
34	T	1,1-Dichloropropene	20.000	20.051	-0.3	81	0.00
35	T	Carbon Tetrachloride	20.000	20.680	-3.4	83	-0.01
36	MT	Benzene	20.000	20.221	-1.1	83	0.00
37	T	1,2-Dichloroethane	20.000	23.006	-15.0	93	0.00
38	MT	Trichloroethene	20.000	19.308	3.5	79	0.00
39	T*	1,2-Dichloropropane	20.000	21.038	-5.2	84	0.00

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT02.D
Acq On : 14 Oct 2009 11:14 am
Operator : EMG
Sample : 0942098-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 14 13:12:18 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	T	Bromodichloromethane	20.000	22.537	-12.7	91	0.00
41	T	Methyl Methacrylate	20.000	22.419	-12.1	91	0.00
42	T	Dibromomethane	20.000	17.865	10.7	72	0.00
43	T	2-Chloroethyl vinyl ether	20.000	17.471	12.6	68	-0.01
44	T	4-Methyl-2-Pentanone	100.000	116.629	-16.6	92	0.00
45	T	cis-1,3-Dichloropropene	20.000	19.974	0.1	81	-0.01
46	MT*	Toluene	20.000	18.965	5.2	79	-0.01
47	T	trans-1,3-Dichloropropene	20.000	19.284	3.6	77	-0.01
48	T	Ethyl Methacrylate	20.000	19.505	2.5	78	0.00
49	T	1,1,2-Trichloroethane	20.000	19.436	2.8	79	-0.01
50	T	2-Hexanone	100.000	113.384	-13.4	91	-0.01
51	T	1,2-Dibromoethane	20.000	19.469	2.7	79	-0.01
52	I	Chlorobenzene-d5	25.000	25.000	0.0	69	-0.01
53	S	Toluene-d8	20.000	23.831	-19.2	87	-0.01
54	T	Tetrachloroethene	20.000	17.487	12.6	59	-0.01
55	T	1,3-Dichloropropane	20.000	22.639	-13.2	83	-0.01
56	T	Dibromochloromethane	20.000	22.119	-10.6	81	-0.01
57	M**	Chlorobenzene	20.000	20.168	-0.8	74	0.00
58	T	1,1,1,2-Tetrachloroethane	20.000	20.974	-4.9	78	-0.01
59	T*	Ethylbenzene	20.000	20.700	-3.5	78	0.00
60	T	m & p Xylenes	40.000	41.485	-3.7	78	-0.01
61	T	o-Xylene	20.000	20.098	-0.5	76	-0.01
62	T	Styrene	20.000	19.261	3.7	73	0.00
63	T**	Bromoform	20.000	19.984	0.1	73	-0.01
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	63	-0.01
65	T	Isopropylbenzene	20.000	20.926	-4.6	71	0.00
66	T**	1,1,2,2-Tetrachloroethane	20.000	23.247	-16.2	79	-0.01
67	S	Bromofluorobenzene	20.000	23.434	-17.2	85	-0.01
68	T	1,2,3-Trichloropropane	20.000	23.190	-16.0	77	-0.01
69	T	Bromobenzene	20.000	23.233	-16.2	78	-0.01
70	T	n-Propylbenzene	20.000	21.594	-8.0	74	-0.01
71	T	2-Chlorotoluene	20.000	22.117	-10.6	76	-0.01
72	T	1,3,5-Trimethylbenzene	20.000	20.719	-3.6	70	-0.01
73	T	4-Chlorotoluene	20.000	22.111	-10.6	77	-0.02
74	T	t-Butylbenzene	20.000	19.459	2.7	67	-0.02
75	T	1,2,4-Trimethylbenzene	20.000	21.568	-7.8	72	-0.02
76	T	sec-Butylbenzene	20.000	19.920	0.4	68	-0.01

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT02.D
Acq On : 14 Oct 2009 11:14 am
Operator : EMG
Sample : 0942098-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 14 13:12:18 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77 T	1,4-Isopropyltoluene	20.000	20.084	-0.4	68	-0.01
78 T	1,3-Dichlorobenzene	20.000	19.399	3.0	67	-0.01
79 T	1,4-Dichlorobenzene	20.000	19.516	2.4	67	-0.02
80 T	t-1,4-Dichloro-2-butene	20.000	26.358	-31.8#	89	-0.01
81 T	n-Butylbenzene	20.000	22.484	-12.4	74	-0.01
82 T	1,2-Dichlorobenzene	20.000	19.826	0.9	67	-0.02
83 T	1,2-Dibromo-3-chloropropane	20.000	18.423	7.9	61	-0.02
84 T	1,2,4-Trichlorobenzene	20.000	20.299	-1.5	58	-0.01
85 T	Hexachlorobutadiene	20.000	14.222	28.9#	49	-0.02
86 T	Naphthalene	20.000	20.454	-2.3	64	-0.01
87 T	1,2,3-Trichlorobenzene	20.000	19.239	3.8	58	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT09.D
Acq On : 14 Oct 2009 3:33 pm
Operator : EMG
Sample : 09J0523-05
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 15 11:28:15 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

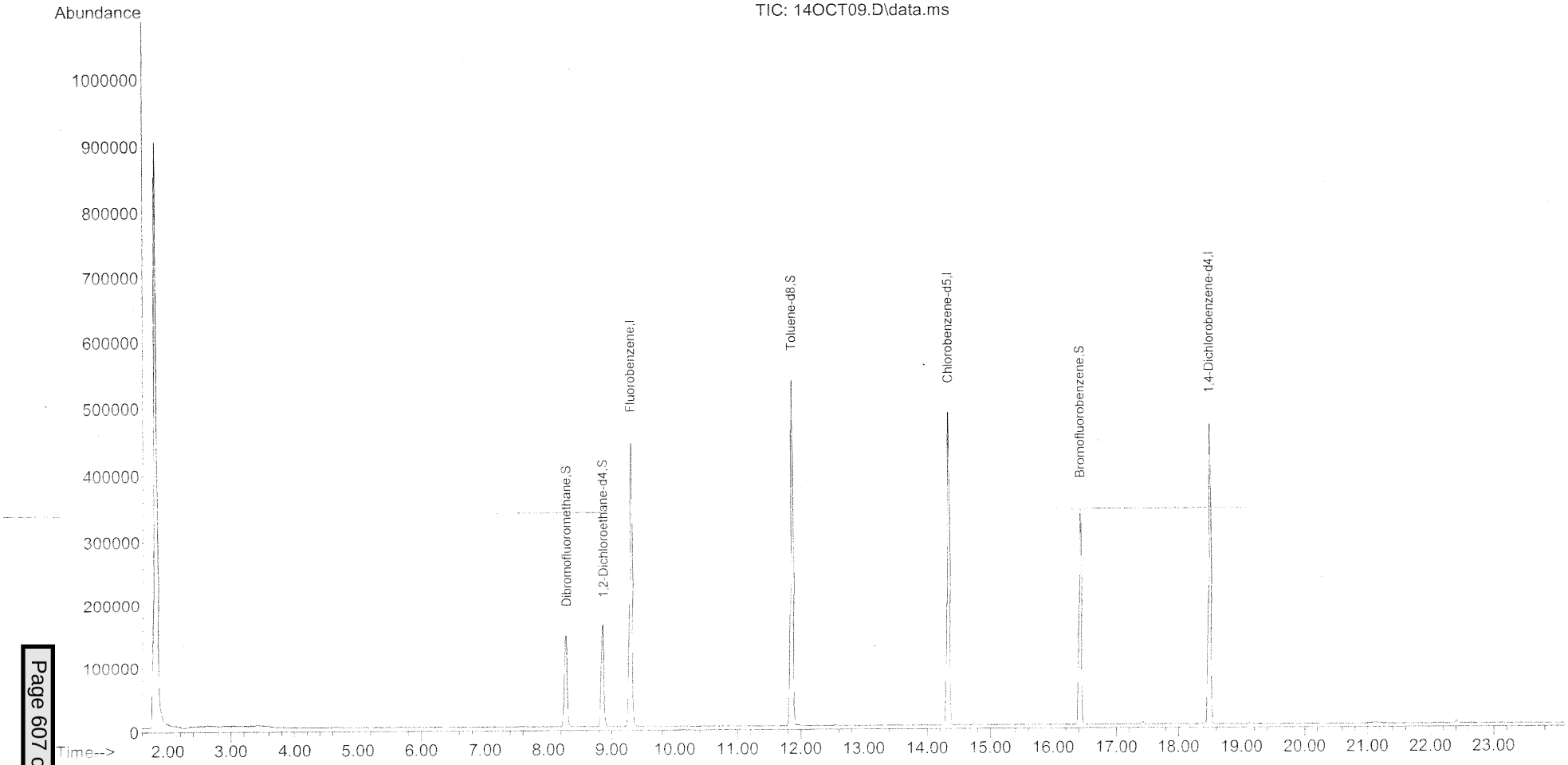
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.290	96	603599	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.329	117	432602	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.486	152	200469	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.267	111	139841	21.48	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.92%			
33) 1,2-Dichloroethane-d4	8.844	65	160447	22.60	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.40%			
53) Toluene-d8	11.848	98	561214	23.65	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 94.60%			
67) Bromofluorobenzene	16.419	95	192339	23.53	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.12%			
Target Compounds						Qvalue
5) Bromomethane	2.886	94	200	Below Cal	#	18
17) Methylene Chloride	5.297	49	389	Below Cal	#	59
54) Tetrachloroethene	12.811	166	134	Below Cal	#	28

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT09.D
Acq On : 14 Oct 2009 3:33 pm
Operator : EMG
Sample : 09J0523-05
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 15 11:28:15 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT10.D
Acq On : 14 Oct 2009 4:10 pm
Operator : EMG
Sample : 09J0523-06
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 15 11:28:32 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

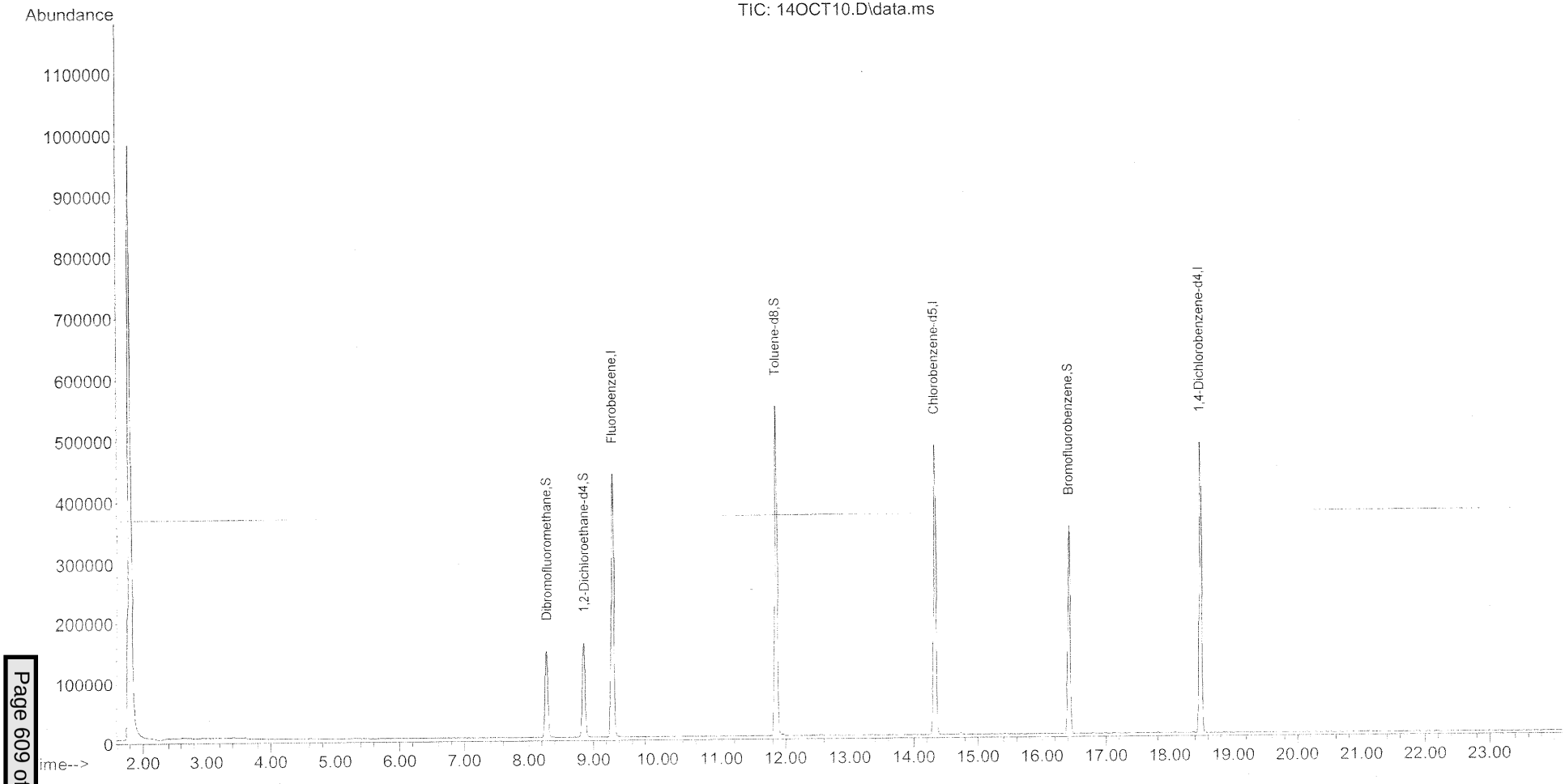
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	599829	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.326	117	428271	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.483	152	201754	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	139263	21.53	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.12%			
33) 1,2-Dichloroethane-d4	8.847	65	160422	22.74	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.96%			
53) Toluene-d8	11.845	98	561190	23.89	ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.56%			
67) Bromofluorobenzene	16.416	95	192603	23.41	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 93.64%			
Target Compounds						Qvalue
5) Bromomethane	2.899	94	274	Below Cal	#	18
10) Acetone	4.613	58	187	Below Cal	#	57
17) Methylene Chloride	5.305	49	767	Below Cal	#	42

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT10.D
Acq On : 14 Oct 2009 4:10 pm
Operator : EMG
Sample : 09J0523-06
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 15 11:28:32 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT11.D
Acq On : 14 Oct 2009 4:47 pm
Operator : EMG
Sample : 09J0523-07
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 15 11:28:46 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

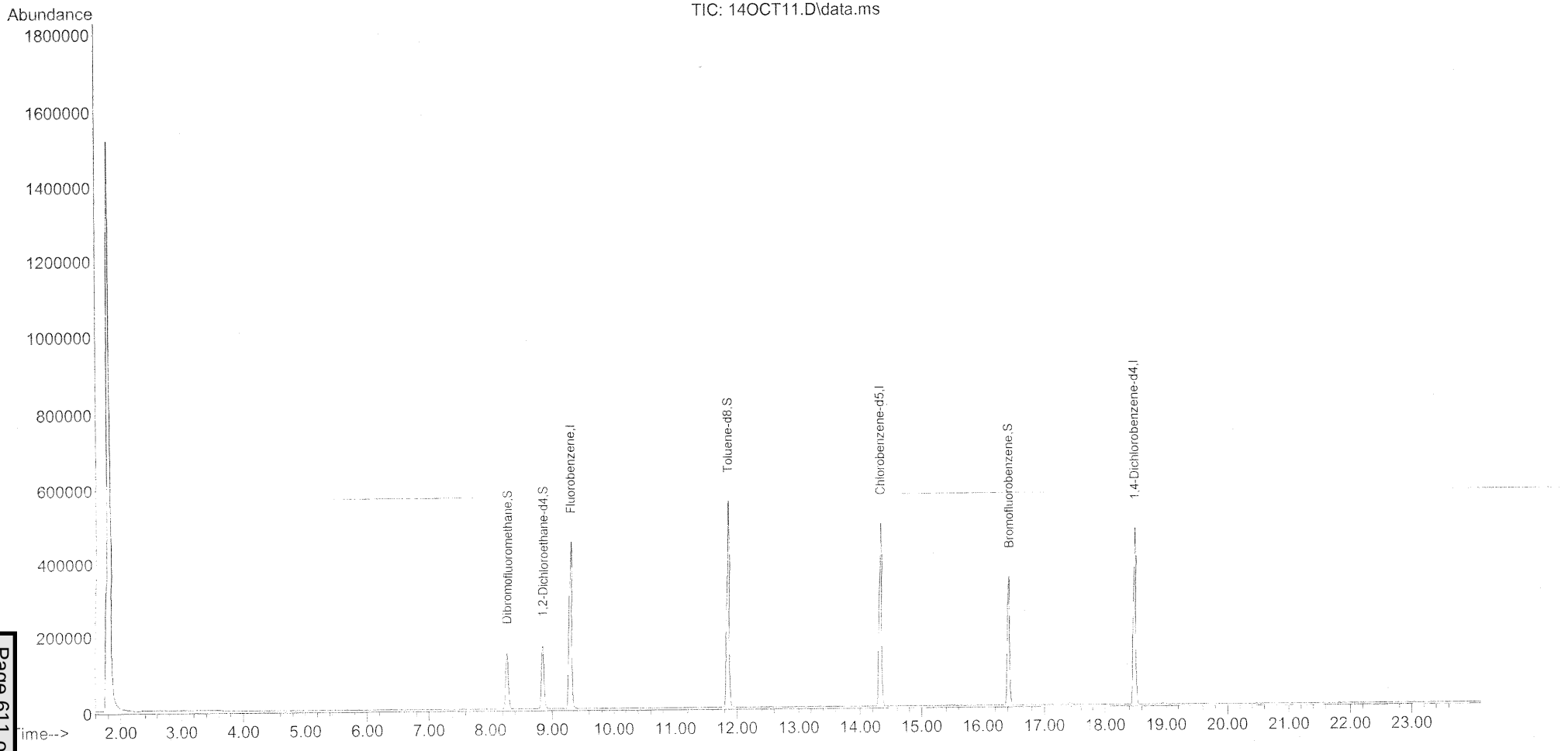
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	608160	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	434768	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	199989	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	141812	21.62	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.48%			
33) 1,2-Dichloroethane-d4	8.847	65	161875	22.63	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.52%			
53) Toluene-d8	11.851	98	568713	23.85	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.40%			
67) Bromofluorobenzene	16.416	95	191808	23.52	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.08%			
Target Compounds						Qvalue
5) Bromomethane	2.900	94	299	Below Cal	#	18
10) Acetone	4.587	58	181	Below Cal	#	57
17) Methylene Chloride	5.299	49	570	Below Cal	#	66

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT11.D
Acq On : 14 Oct 2009 4:47 pm
Operator : EMG
Sample : 09J0523-07
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 15 11:28:46 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT12.D
Acq On : 14 Oct 2009 5:23 pm
Operator : EMG
Sample : 09J0523-08
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 15 11:30:08 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

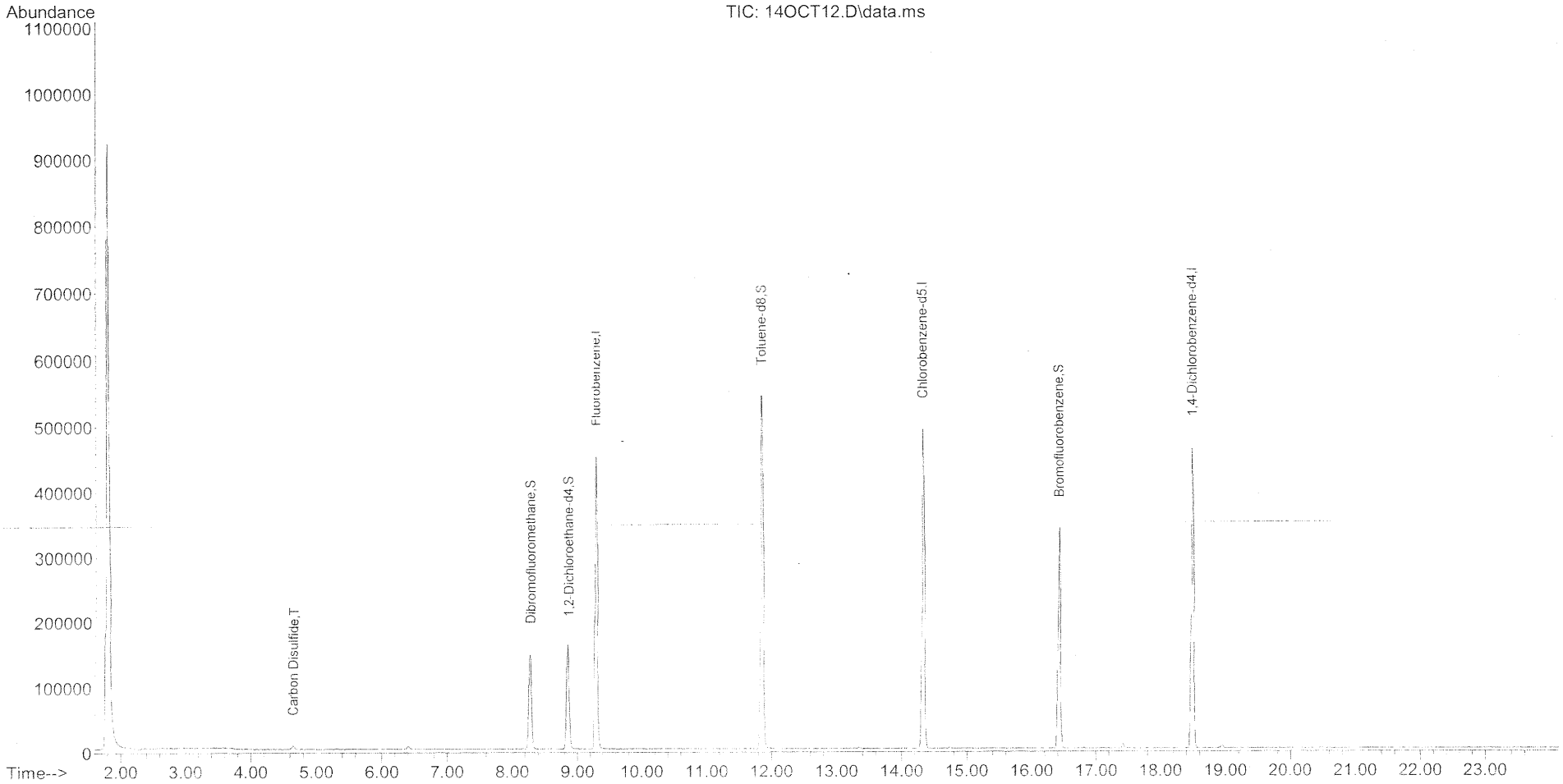
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.293	96	603686	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.326	117	435775	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	200058	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.270	111	141051	21.66 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 86.64%		
33) 1,2-Dichloroethane-d4	8.852	65	161674	22.77 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 91.08%		
53) Toluene-d8	11.850	98	568301	23.78 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.12%		
67) Bromofluorobenzene	16.421	95	185200	22.70 ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 90.80%		
Target Compounds					Qvalue
5) Bromomethane	2.883	94	72	Below Cal	# 18
10) Acetone	4.581	58	54	Below Cal	# 57
12) Carbon Disulfide	4.646	76	12689	0.64 ug/L	# 77
17) Methylene Chloride	5.305	49	300	Below Cal	# 47

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT12.D
Acq On : 14 Oct 2009 5:23 pm
Operator : EMG
Sample : 09J0523-08
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 15 11:30:08 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT13.D
Acq On : 14 Oct 2009 6:00 pm
Operator : EMG
Sample : 09J0523-09
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 15 11:30:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

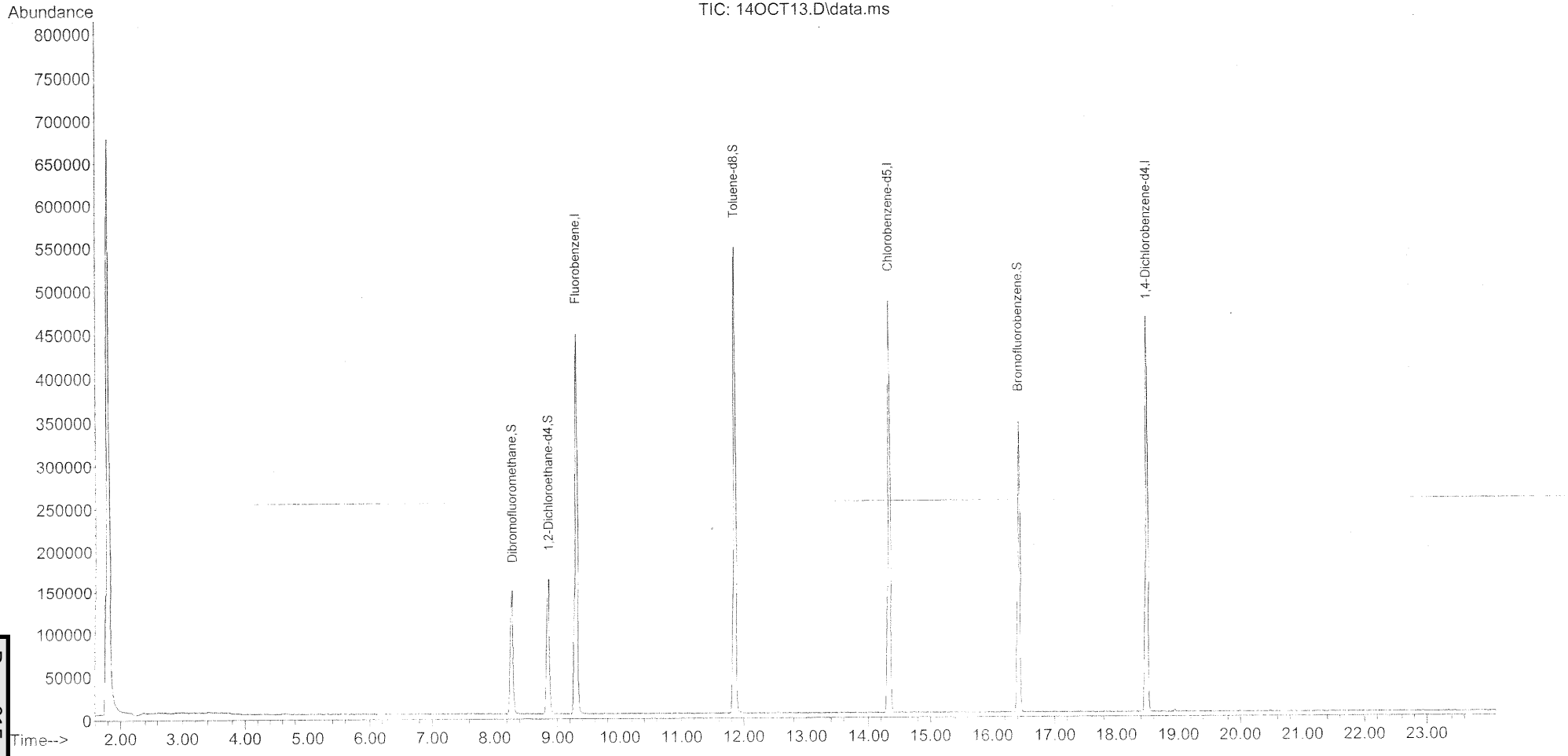
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.293	96	605217	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.326	117	423865	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	197060	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.270	111	139792	21.42 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.68%		
33) 1,2-Dichloroethane-d4	8.847	65	161852	22.74 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.96%		
53) Toluene-d8	11.850	98	561159	24.14 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 96.56%		
67) Bromofluorobenzene	16.416	95	188579	23.47 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 93.88%		
Target Compounds					Qvalue
5) Bromomethane	2.894	94	76	Below Cal #	18
10) Acetone	4.597	58	228	Below Cal #	57
17) Methylene Chloride	5.304	49	757	Below Cal #	28

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT13.D
Acq On : 14 Oct 2009 6:00 pm
Operator : EMG
Sample : 09J0523-09
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 15 11:30:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT14.D
Acq On : 14 Oct 2009 6:37 pm
Operator : EMG
Sample : 09J0523-10
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 15 11:31:55 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.292	96	596995	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.326	117	427196	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.488	152	201219	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.269	111	137982	21.43 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.72%		
33) 1,2-Dichloroethane-d4	8.852	65	150475	21.43 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.72%		
53) Toluene-d8	11.850	98	559645	23.89 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 95.56%		
67) Bromofluorobenzene	16.415	95	192926	23.51 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.04%		
Target Compounds					Qvalue
5) Bromomethane	2.899	94	54	Below Cal #	18
17) Methylene Chloride	5.298	49	595	Below Cal #	40
21) 1,1-Dichloroethane	6.485	63	21922	1.78 ug/L #	77
25) cis-1,2-Dichloroethene	7.469	61	3124	0.33 ug/L #	78
36) Benzene	8.792	78	4162970	142.57 ug/L #	90
46) Toluene	11.959	91	8796022	286.01 ug/L #	99
54) Tetrachloroethene	12.802	166	868	Below Cal #	76
59) Ethylbenzene	14.521	91	108015	3.62 ug/L	97
60) m & p Xylenes	14.734	91	1041302	45.63 ug/L	96
61) o-Xylene	15.430	91	520721	21.86 ug/L #	93
65) Isopropylbenzene	16.061	105	20616	0.84 ug/L	95
72) 1,3,5-Trimethylbenzene	17.144	105	179409	9.28 ug/L	96
75) 1,2,4-Trimethylbenzene	17.819	105	416986	21.81 ug/L	97
86) Naphthalene	22.645	128	30434565m	1864.06 ug/L	

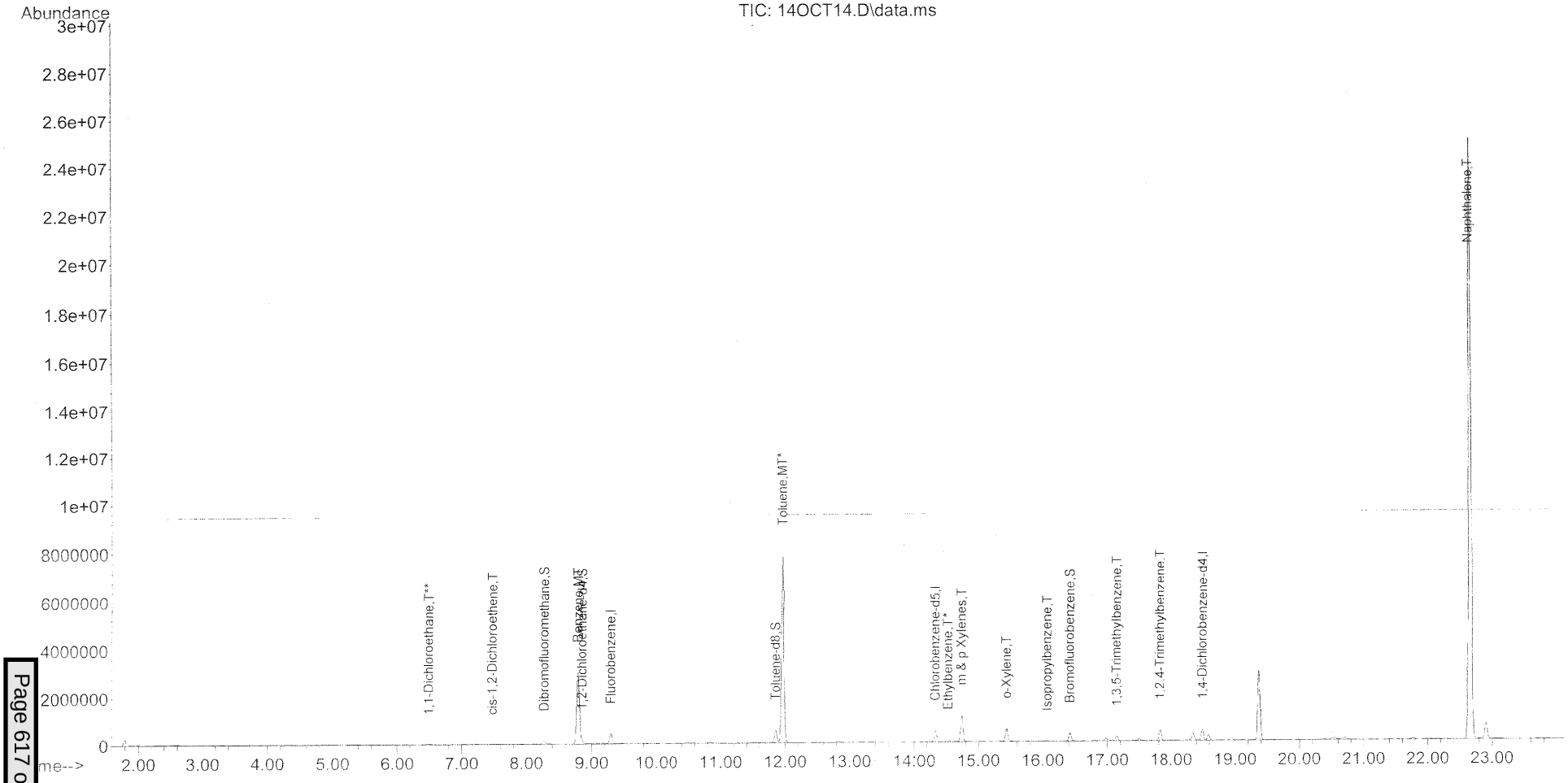
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EMK 10/15/09 Not reported Above Cal Level

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT14.D
Acq On : 14 Oct 2009 6:37 pm
Operator : EMG
Sample : 09J0523-10
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 22 Sample Multiplier: 1

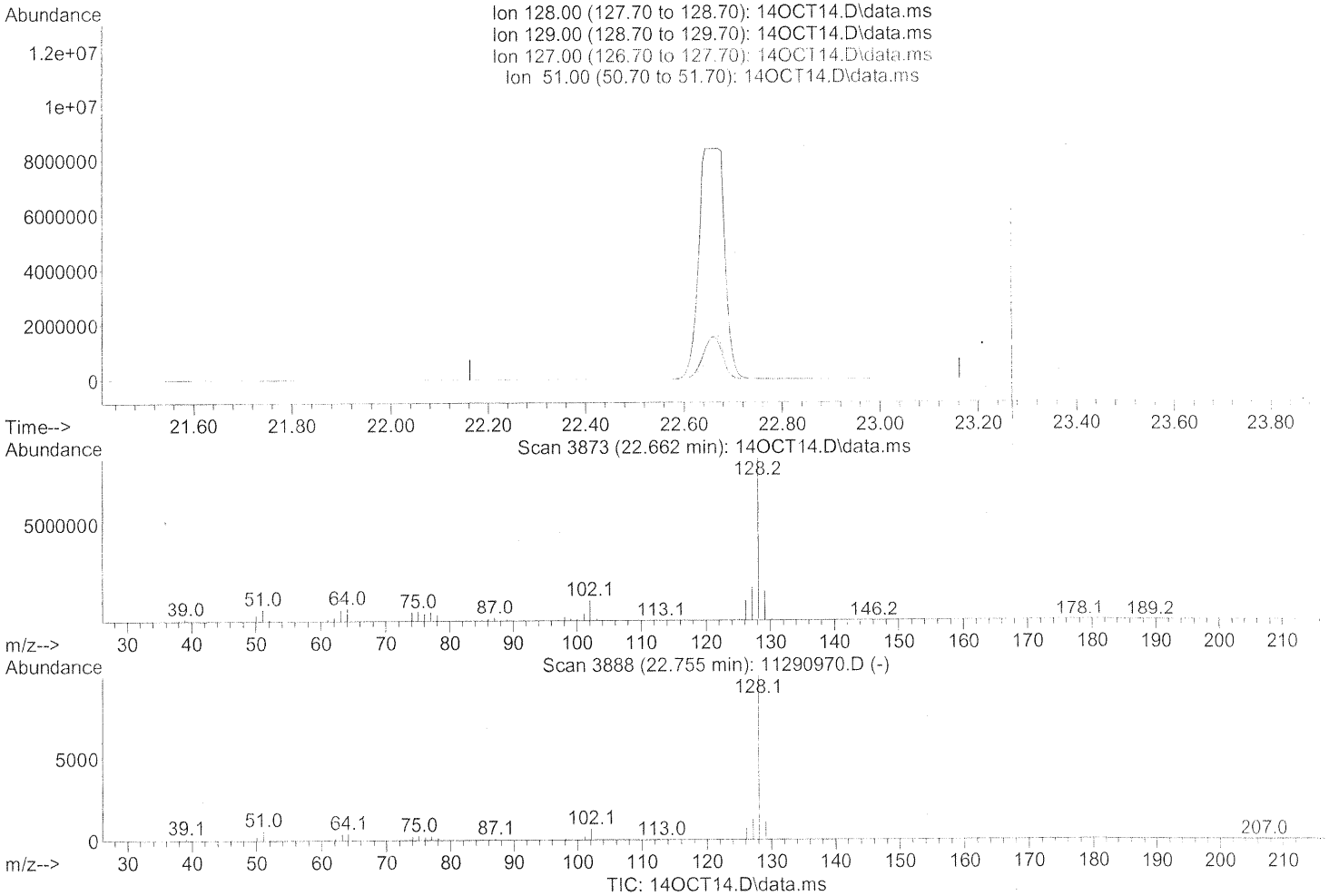
Quant Time: Oct 15 11:31:55 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT14.D
Acq On : 14 Oct 2009 6:37 pm
Operator : EMG
Sample : 09J0523-10
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 15 11:31:28 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



(86) Naphthalene (T)

22.662min (-22.662) 0.00 ug/L

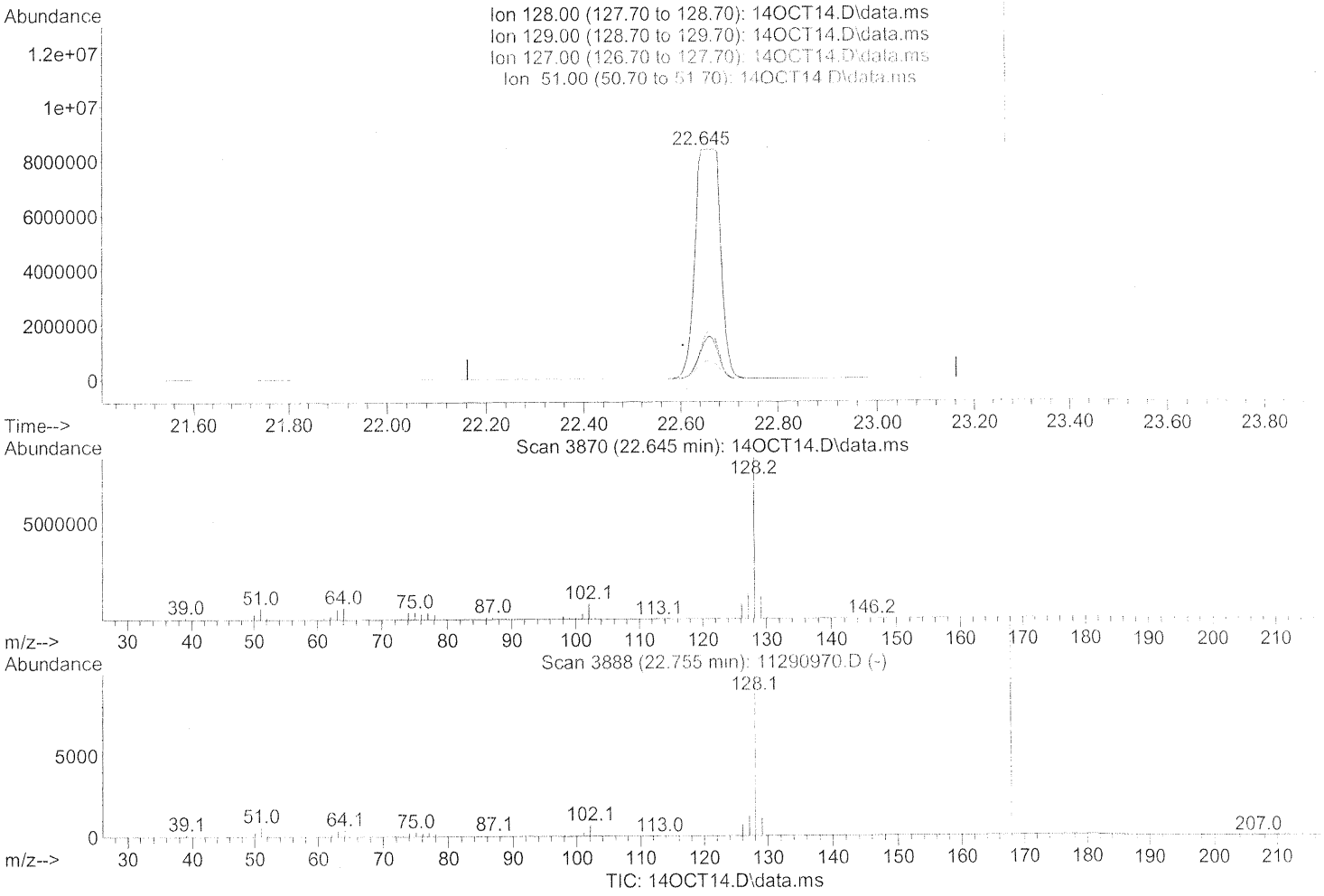
response 0

Ion	Exp%	Act%
128.00	100	0.00
129.00	10.90	0.00#
127.00	12.40	0.00#
51.00	7.30	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\OCT1409\
Data File : 14OCT14.D
Acq On : 14 Oct 2009 6:37 pm
Operator : EMG
Sample : 09J0523-10
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 15 11:31:28 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



(86) Naphthalene (T)

22.645min (-0.017) 1864.06 ug/L m

response 30434565

Ion	Exp%	Act%
128.00	100	100
129.00	10.90	0.00#
127.00	12.40	0.00#
51.00	7.30	0.00#

Injection Log

Data Directory: C:\msdchem\1\DATA\OCT1609\

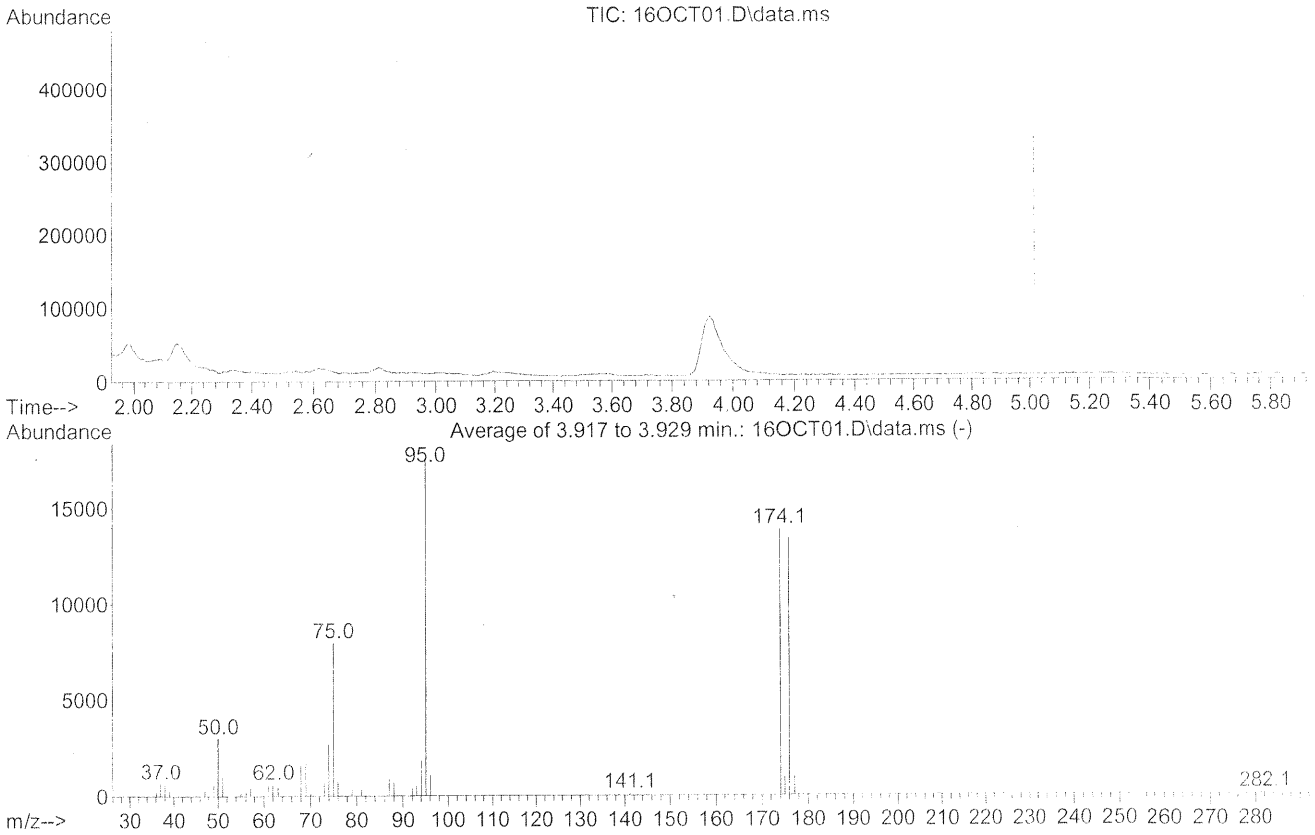
SampleName	MiscInfo	Vial	Multiplier	Injection Time
1 16OCT15.D No data found		0	0.000	N/A
2) 16OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	16 Oct 2009 9:48 am
3) 16OCT02.D 0942156-BS1	1, 20PPB 8260 CCV+ M	11	1.000	16 Oct 2009 10:25 am
4) 16OCT03.D 0942156-BLK1	1,DI WATER+ 1uLMI916	12	1.000	16 Oct 2009 11:01 am
5) 16OCT04.D 09J0715-04	1, pH<2 5mL+ 1uLM	13	1.000	16 Oct 2009 11:38 am
6) 16OCT05.D 09J0715-01	1, pH<2 5mL+ 1uLM	14	1.000	16 Oct 2009 12:14 pm
7) 16OCT06.D 09J0715-02	1, pH<2 5mL+ 1uLM	15	1.000	16 Oct 2009 12:51 pm
8) 16OCT07.D 09J0715-03	1, pH<2 5mL+ 1uLM	16	1.000	16 Oct 2009 1:27 pm
9) 16OCT08.D 0942156-MS1	0a30715-01 1, 20PPB 8260 MS,5mL	17	1.000	16 Oct 2009 2:11 pm
10 16OCT09.D 0942156-MSD1	0a30715-01 1, 20PPB 8260 MSD,5m	17	1.000	16 Oct 2009 2:48 pm
11) 16OCT10.D 09J0523-11	pH<2 1,SS, 5mL+ 1uLMI9160	18	1.000	16 Oct 2009 3:24 pm
12) 16OCT11.D 09J0523-12	pH<2 1,SS, 5mL+ 1uLMI9160	19	1.000	16 Oct 2009 4:01 pm
13) 16OCT12.D 09J0523-13	pH<2 1,SS, 5mL+ 1uLMI9160	20	1.000	16 Oct 2009 4:38 pm
14) 16OCT13.D 09J0523-10RE1	pH<2 20,SS, 2.5mL/50mL+ 1	21	1.000	16 Oct 2009 5:15 pm
15) 16OCT14.D 09J0685-02	pH<2 1, 5mL+ 1u	22	1.000	16 Oct 2009 5:52 pm
16) 16OCT15.D 09J0686-02	1, 5mL+ 1u	23	1.000	16 Oct 2009 6:29 pm

Not used
Surr Run Out

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT01.D
Acq On : 16 Oct 2009 9:48 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009



AutoFind: Scans 383, 384, 385; Background Corrected with Scan 371

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	3007	PASS
75	95	30	80	45.6	7981	PASS
95	95	100	100	100.0	17501	PASS
96	95	5	9	6.3	1100	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	79.2	13859	PASS
175	174	5	9	6.9	961	PASS
176	174	95	101	96.7	13404	PASS
177	176	5	9	7.3	984	PASS

Tune File : C:\msdchem\1\DATA\OCT1609\16OCT01.D
Tune Time : 16 Oct 2009 9:48 am

Daily Calibration File : C:\msdchem\1\DATA\OCT1609\16OCT02.D

	DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
					697160	505734	248928

File	Sample	Surrogate Recovery %				Internal Standard Responses		
16OCT02.D	0942156-BS	82	83	94	93	697160	505734	248928
16OCT03.D	0942156-BL	84	82	93	94	690553	501769	234586
16OCT04.D	09J0715-04	83	85	93	94	663861	480043	225676
16OCT05.D	09J0715-01	84	85	93	94	654422	476956	226336
16OCT06.D	09J0715-02	84	86	94	94	642827	467412	223195
16OCT07.D	09J0715-03	84	86	94	97	645125	468280	217538
16OCT08.D	0942156-MS	84	85	94	95	647043	474809	229287
16OCT09.D	0942156-MSD	82	84	93	97	644921	471570	225290
16OCT10.D	09J0523-11	84	86	93	97	641819	465134	216711
16OCT11.D	09J0523-12	83	86	92	94	628687	458271	212364
16OCT12.D	09J0523-13	83	83	92	95	633429	461049	213910
16OCT13.D	09J0523-10	82	84	93	96	627906	452317	214105
16OCT14.D	09J0685-02	83	84	94	95	621795	447252	212489

(fails) - fails 12hr time check * - fails criteria

Created: Mon Oct 19 11:06:04 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT02.D
Acq On : 16 Oct 2009 10:25 am
Operator : EMG
Sample : 0942156-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 16 12:34:16 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	82	-0.01
2	T	Dichlorodifluoromethane	20.000	29.487	-47.4#	125	0.00
3	T**	Chloromethane	20.000	19.703	1.5	90	0.00
4	T*	Vinyl Chloride	20.000	23.746	-18.7	106	0.00
5	T	Bromomethane	20.000	21.695	-8.5	85	0.00
6	T	Chloroethane	20.000	20.714	-3.6	140	0.00
7	T	Trichlorofluoromethane	20.000	24.268	-21.3#	104	0.00
8	T	Acrolein	100.000	68.959	31.0#	63	0.00
9	MT*	1,1-Dichloroethene	20.000	21.453	-7.3	93	0.00
10	T	Acetone	100.000	112.406	-12.4	97	0.00
11	T	Iodomethane	20.000	19.846	0.8	83	0.00
12	T	Carbon Disulfide	20.000	19.816	0.9	89	0.00
13	T	Allyl Chloride	20.000	19.487	2.6	87	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	135	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	119	0.00
16	T	Acetonitrile	20.000	15.500	22.5#	77	0.00
17	T	Methylene Chloride	20.000	18.571	7.1	82	0.00
18	T	Methyl tert-Butyl Ether	20.000	17.471	12.6	75	0.00
19	T	trans-1,2-Dichloroethene	20.000	21.623	-8.1	95	0.00
20	T	Acrylonitrile	20.000	21.132	-5.7	91	0.00
21	T**	1,1-Dichloroethane	20.000	22.131	-10.7	96	0.00
22	T	Chloroprene	20.000	22.440	-12.2	98	0.00
23	T	Vinyl Acetate	20.000	22.592	-13.0	95	0.00
24	T	2,2-Dichloropropane	20.000	18.251	8.7	82	-0.01
25	T	cis-1,2-Dichloroethene	20.000	21.720	-8.6	94	0.00
26	T	2-Butanone	100.000	109.223	-9.2	96	0.00
27	T	Proprionitrile	20.000	22.111	-10.6	92	0.00
28	T	Methacrylonitrile	20.000	21.453	-7.3	100	0.00
29	T*	Chloroform	20.000	22.143	-10.7	97	0.00
30	T	Bromochloromethane	20.000	23.182	-15.9	99	0.00
31	S	Dibromofluoromethane	20.000	20.576	-2.9	89	0.00
32	T	1,1,1-Trichloroethane	20.000	20.458	-2.3	89	0.00
33	S	1,2-Dichloroethane-d4	20.000	20.655	-3.3	93	-0.01
34	T	1,1-Dichloropropene	20.000	20.845	-4.2	91	0.00
35	T	Carbon Tetrachloride	20.000	21.025	-5.1	92	-0.01
36	MT	Benzene	20.000	20.992	-5.0	93	0.00
37	T	1,2-Dichloroethane	20.000	23.310	-16.5	102	0.00
38	MT	Trichloroethene	20.000	20.358	-1.8	91	0.00
39	T*	1,2-Dichloropropane	20.000	21.508	-7.5	93	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT02.D
Acq On : 16 Oct 2009 10:25 am
Operator : EMG
Sample : 0942156-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 16 12:34:16 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	T	Bromodichloromethane	20.000	22.936	-14.7	100	0.00
41	T	Methyl Methacrylate	20.000	21.633	-8.2	95	0.00
42	T	Dibromomethane	20.000	19.395	3.0	84	0.00
43	T	2-Chloroethyl vinyl ether	20.000	19.020	4.9	80	0.00
44	T	4-Methyl-2-Pentanone	100.000	109.989	-10.0	94	0.00
45	T	cis-1,3-Dichloropropene	20.000	20.718	-3.6	90	-0.01
46	MT*	Toluene	20.000	20.173	-0.9	91	-0.01
47	T	trans-1,3-Dichloropropene	20.000	19.939	0.3	86	-0.01
48	T	Ethyl Methacrylate	20.000	20.154	-0.8	88	0.00
49	T	1,1,2-Trichloroethane	20.000	20.336	-1.7	90	0.00
50	T	2-Hexanone	100.000	106.556	-6.6	92	-0.01
51	T	1,2-Dibromoethane	20.000	19.984	0.1	88	0.00
52	I	Chlorobenzene-d5	25.000	25.000	0.0	75	-0.01
53	S	Toluene-d8	20.000	23.423	-17.1	93	-0.01
54	T	Tetrachloroethene	20.000	18.722	6.4	69	0.00
55	T	1,3-Dichloropropane	20.000	23.315	-16.6	93	-0.01
56	T	Dibromochloromethane	20.000	22.823	-14.1	91	-0.01
57	M**	Chlorobenzene	20.000	21.112	-5.6	85	-0.01
58	T	1,1,1,2-Tetrachloroethane	20.000	21.878	-9.4	89	-0.01
59	T*	Ethylbenzene	20.000	21.326	-6.6	87	0.00
60	T	m & p Xylenes	40.000	42.488	-6.2	87	-0.01
61	T	o-Xylene	20.000	21.041	-5.2	86	-0.01
62	T	Styrene	20.000	20.786	-3.9	85	-0.01
63	T**	Bromoform	20.000	21.213	-6.1	84	0.00
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	71	-0.01
65	T	Isopropylbenzene	20.000	21.460	-7.3	81	-0.01
66	T**	1,1,2,2-Tetrachloroethane	20.000	22.651	-13.3	86	-0.01
67	S	Bromofluorobenzene	20.000	23.340	-16.7	95	-0.01
68	T	1,2,3-Trichloropropane	20.000	23.194	-16.0	86	-0.01
69	T	Bromobenzene	20.000	23.534	-17.7	89	-0.01
70	T	n-Propylbenzene	20.000	22.110	-10.5	85	-0.01
71	T	2-Chlorotoluene	20.000	22.502	-12.5	87	-0.01
72	T	1,3,5-Trimethylbenzene	20.000	21.311	-6.6	81	-0.01
73	T	4-Chlorotoluene	20.000	22.533	-12.7	87	-0.01
74	T	t-Butylbenzene	20.000	20.298	-1.5	78	-0.02
75	T	1,2,4-Trimethylbenzene	20.000	21.265	-6.3	80	-0.01
76	T	sec-Butylbenzene	20.000	20.523	-2.6	78	-0.01

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT02.D
Acq On : 16 Oct 2009 10:25 am
Operator : EMG
Sample : 0942156-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 16 12:34:16 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77 T	1,4-Isopropyltoluene	20.000	20.471	-2.4	77	-0.01
78 T	1,3-Dichlorobenzene	20.000	20.554	-2.8	79	-0.01
79 T	1,4-Dichlorobenzene	20.000	20.747	-3.7	80	-0.02
80 T	t-1,4-Dichloro-2-butene	20.000	24.170	-20.9#	91	-0.01
81 T	n-Butylbenzene	20.000	21.398	-7.0	79	-0.01
82 T	1,2-Dichlorobenzene	20.000	21.073	-5.4	80	-0.02
83 T	1,2-Dibromo-3-chloropropane	20.000	19.105	4.5	70	-0.01
84 T	1,2,4-Trichlorobenzene	20.000	19.254	3.7	61	-0.01
85 T	Hexachlorobutadiene	20.000	16.153	19.2	63	-0.01
86 T	Naphthalene	20.000	16.259	18.7	57	-0.01
87 T	1,2,3-Trichlorobenzene	20.000	17.658	11.7	59	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT10.D
Acq On : 16 Oct 2009 3:24 pm
Operator : EMG
Sample : 09J0523-11
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 19 10:57:45 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

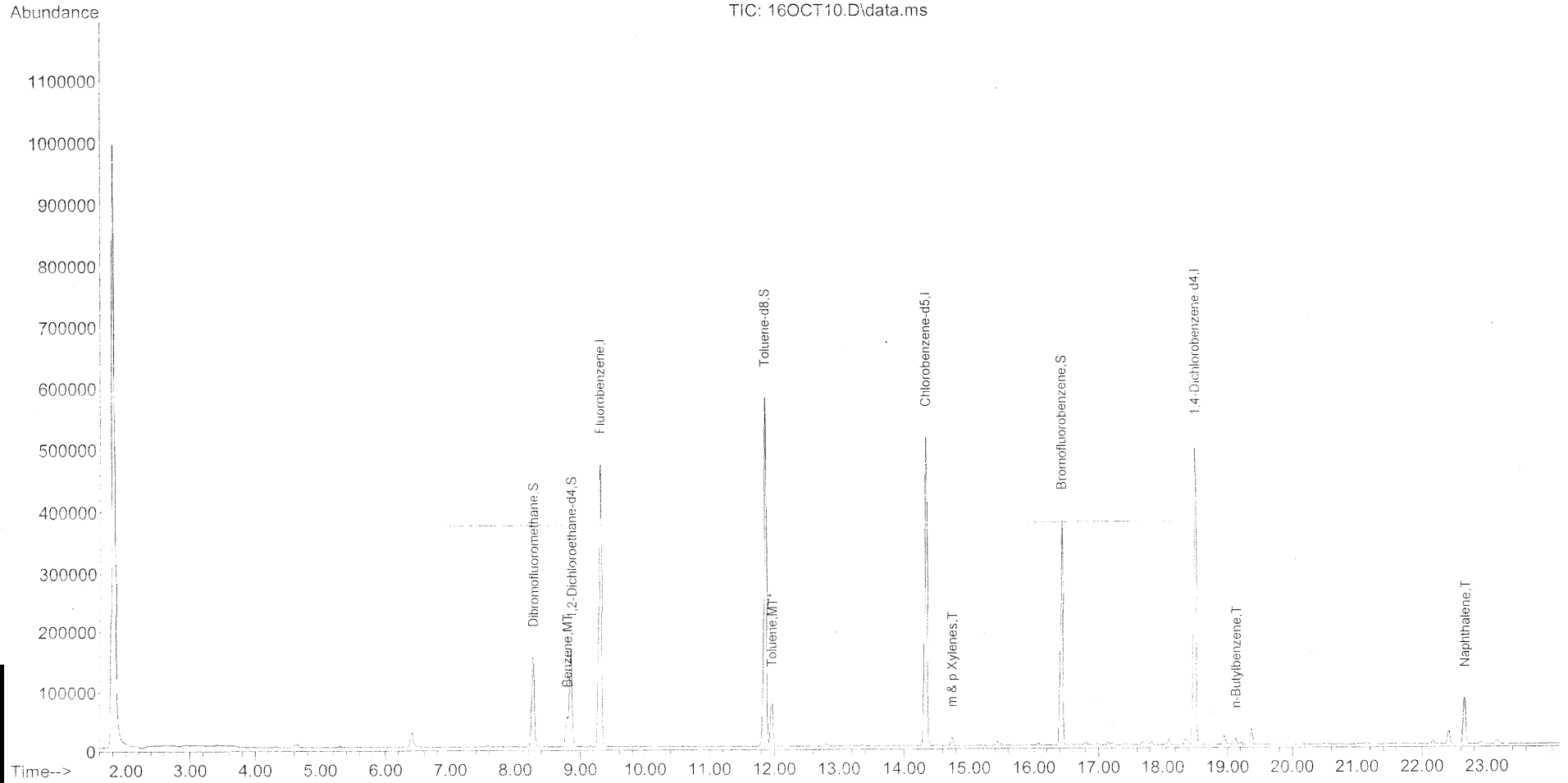
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.294	96	641819	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.327	117	465134	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.490	152	216711	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.265	111	144830	20.92 ug/L	-0.01
Spiked Amount 25.000	Range 80 - 120		Recovery =	83.68%	
33) 1,2-Dichloroethane-d4	8.848	65	161364	21.38 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	85.52%	
53) Toluene-d8	11.846	98	593698	23.27 ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery =	93.08%	
67) Bromofluorobenzene	16.417	95	213803	24.20 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery =	96.80%	
Target Compounds					Qvalue
5) Bromomethane	2.889	94	96	Below Cal #	59
10) Acetone	4.587	58	823	Below Cal #	70
17) Methylene Chloride	5.300	49	821	Below Cal #	69
27) Proprionitrile	7.792	54	57	Below Cal #	60
36) Benzene	8.793	78	65657	2.09 ug/L #	84
46) Toluene	11.955	91	95897	2.90 ug/L	99
54) Tetrachloroethene	12.798	166	1086	Below Cal #	48
60) m & p Xylenes	14.735	91	14091	0.57 ug/L #	74
81) n-Butylbenzene	19.126	91	10165	0.63 ug/L #	94
86) Naphthalene	22.652	128	109875	6.25 ug/L #	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT10.D
Acq On : 16 Oct 2009 3:24 pm
Operator : EMG
Sample : 09J0523-11
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 19 10:57:45 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT11.D
Acq On : 16 Oct 2009 4:01 pm
Operator : EMG
Sample : 09J0523-12
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 19 10:58:09 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

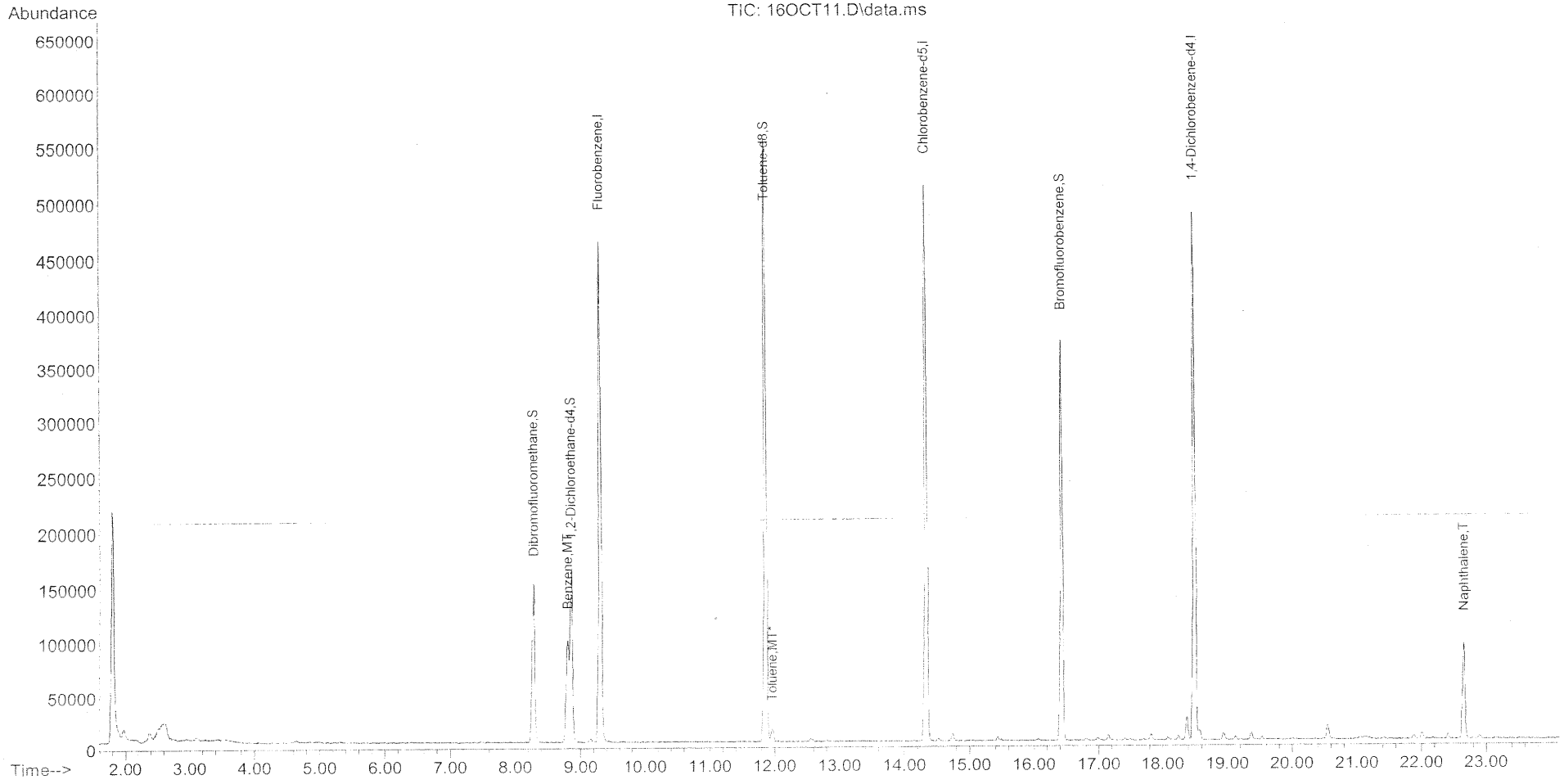
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	628687	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.326	117	458271	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.483	152	212364	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.275	111	140986	20.79	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 83.16%			
33) 1,2-Dichloroethane-d4	8.846	65	158535	21.44	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.76%			
53) Toluene-d8	11.850	98	576824	22.95	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 91.80%			
67) Bromofluorobenzene	16.421	95	204350	23.60	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.40%			
Target Compounds						Qvalue
5) Bromomethane	2.905	94	408	Below Cal	#	18
10) Acetone	4.580	58	50	Below Cal	#	57
17) Methylene Chloride	5.315	49	1032	Below Cal	#	75
36) Benzene	8.792	78	131942	4.29	ug/L #	87
46) Toluene	11.953	91	14463	0.45	ug/L #	97
54) Tetrachloroethene	12.797	166	214	Below Cal	#	52
86) Naphthalene	22.646	128	125188	7.27	ug/L #	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT11.D
Acq On : 16 Oct 2009 4:01 pm
Operator : EMG
Sample : 09J0523-12
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 19 10:58:09 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT12.D
Acq On : 16 Oct 2009 4:38 pm
Operator : EMG
Sample : 09J0523-13
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 19 10:58:40 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

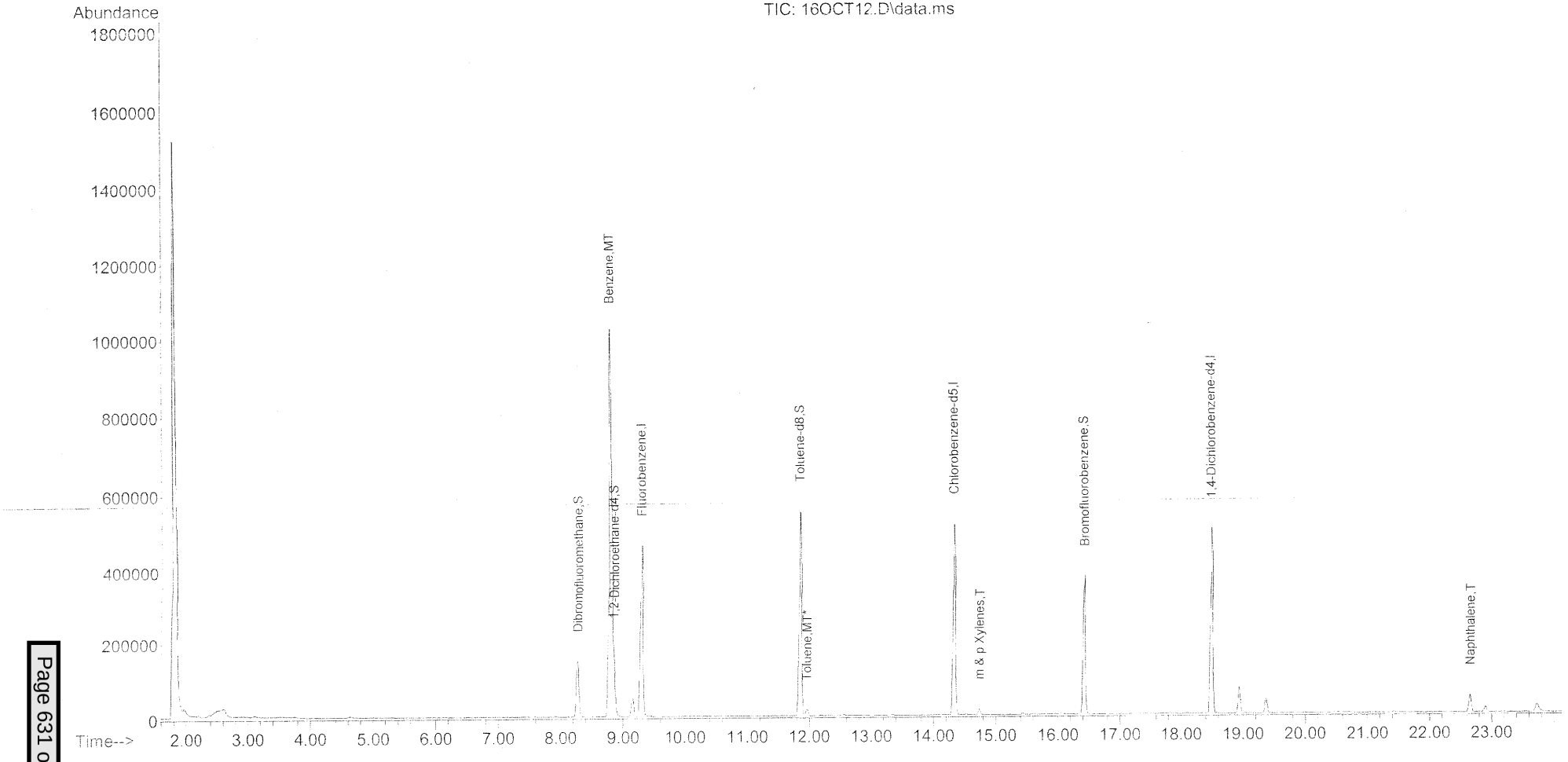
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	633429	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	461049	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	213910	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	141139	20.66	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 82.64%			
33) 1,2-Dichloroethane-d4	8.847	65	154688	20.77	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 83.08%			
53) Toluene-d8	11.845	98	581190	22.99	ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 91.96%			
67) Bromofluorobenzene	16.416	95	207728	23.82	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 95.28%			
Target Compounds						Qvalue
5) Bromomethane	2.889	94	196	Below Cal	#	18
10) Acetone	4.587	58	814	Below Cal	#	65
17) Methylene Chloride	5.305	49	392	Below Cal	#	62
36) Benzene	8.787	78	1432913	46.25	ug/L #	90
46) Toluene	11.960	91	16855	0.52	ug/L #	97
54) Tetrachloroethene	12.798	166	119	Below Cal	#	14
60) m & p Xylenes	14.735	91	14276	0.58	ug/L #	95
86) Naphthalene	22.652	128	63468	3.66	ug/L #	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT12.D
Acq On : 16 Oct 2009 4:38 pm
Operator : EMG
Sample : 09J0523-13
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 19 10:58:40 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



090809.M Mon Oct 19 10:58:43 2009

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT13.D
Acq On : 16 Oct 2009 5:15 pm
Operator : EMG
Sample : 09J0523-10RE1
Misc : 20,SS, 2.5mL/50mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 10:58:52 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

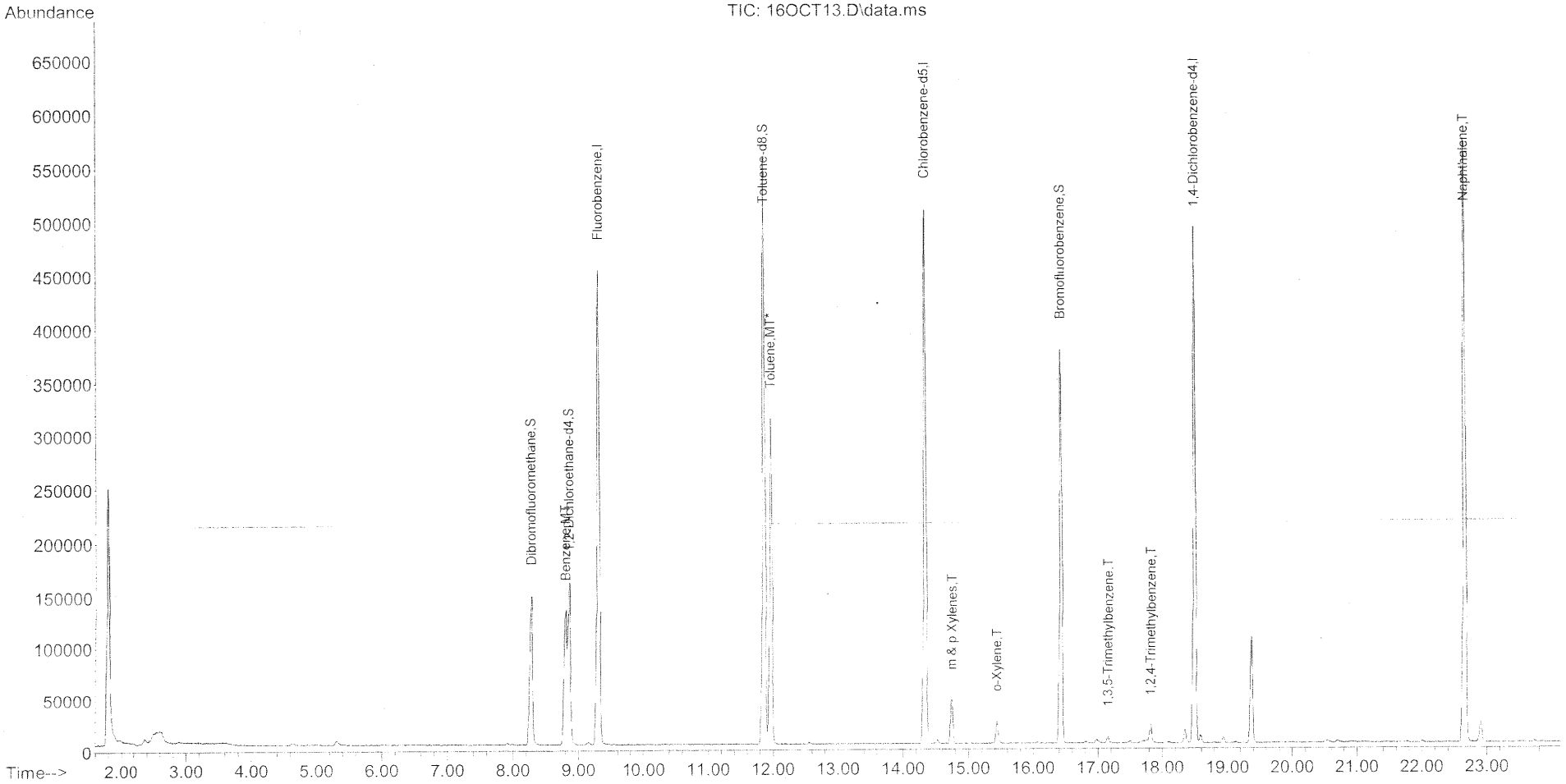
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.295	96	627906	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.329	117	452317	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.491	152	214105	25.00 ug/L	0.00
System Monitoring Compounds					
31) Dibromofluoromethane	8.267	111	138619	20.47 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	81.88%	
33) 1,2-Dichloroethane-d4	8.844	65	155385	21.04 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	84.16%	
53) Toluene-d8	11.847	98	576524	23.24 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery =	92.96%	
67) Bromofluorobenzene	16.418	95	209894	24.04 ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery =	96.16%	
Target Compounds					Qvalue
5) Bromomethane	2.885	94	305	Below Cal #	18
10) Acetone	4.589	58	183	Below Cal #	57
17) Methylene Chloride	5.307	49	5256	Below Cal #	86
36) Benzene	8.789	78	180531	5.88 ug/L #	88
46) Toluene	11.956	91	353310	10.92 ug/L	99
60) m & p Xylenes	14.737	91	39940	1.65 ug/L	97
61) o-Xylene	15.433	91	20250	0.80 ug/L #	92
72) 1,3,5-Trimethylbenzene	17.147	105	6583	0.32 ug/L #	87
75) 1,2,4-Trimethylbenzene	17.816	105	13384	0.66 ug/L #	94
86) Naphthalene	22.648	128	780796	44.94 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1609\
Data File : 16OCT13.D
Acq On : 16 Oct 2009 5:15 pm
Operator : EMG
Sample : 09J0523-10RE1
Misc : 20,SS, 2.5mL/50mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 10:58:52 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Injection Log

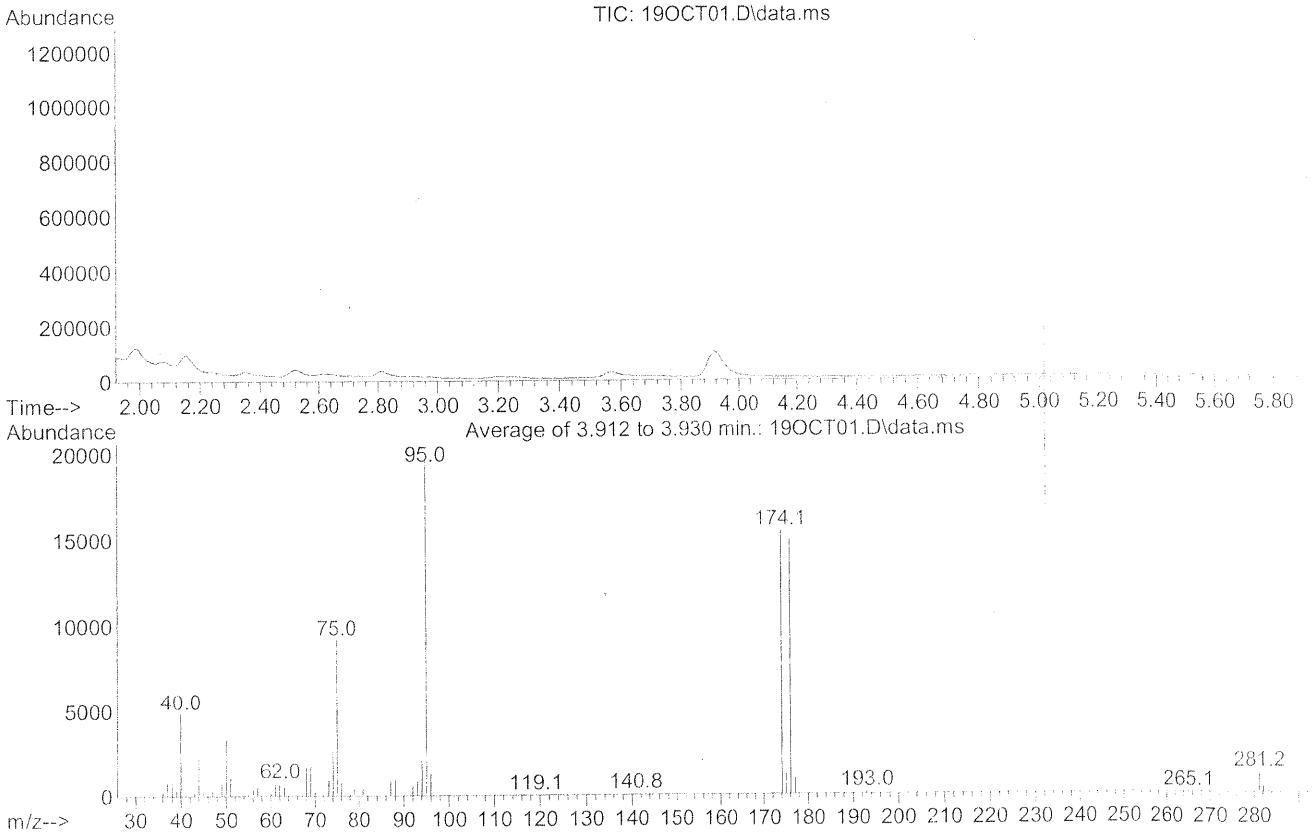
Data Directory: C:\msdchem\1\DATA\OCT1909\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
19OCT17.D No data found		0	0.000	N/A
2) 19OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	19 Oct 2009 9:45 am
3) 19OCT02.D 0943002-BS1	1, 20PPB 8260 CCV+ M	11	1.000	19 Oct 2009 10:23 am
4) 19OCT03.D 0943002-BLK1	1,DI WATER+ 1uLMI916	12	1.000	19 Oct 2009 11:00 am
5) 19OCT04.D 09J0778-03	1, [redacted], 5mL+ 1uLM pH<2	13	1.000	19 Oct 2009 11:37 am
6) 19OCT05.D 09J0778-01	1, [redacted], 5mL+ 1uLM pH<2	14	1.000	19 Oct 2009 12:14 pm
7) 19OCT06.D 09J0778-02	1, [redacted], 5mL+ 1uLM pH<2	15	1.000	19 Oct 2009 12:51 pm
8) 19OCT07.D 09J0778-04	1, [redacted], 5mL+ 1uLM pH<2	16	1.000	19 Oct 2009 1:28 pm
9) 19OCT08.D 0943002-MS1	1, 20PPB 8260 MS,5mL 09J0778-01	17	1.000	19 Oct 2009 2:08 pm
19OCT09.D 0943002-MSD1	1, 20PPB 8260 MSD,5m 09J0778-01	17	1.000	19 Oct 2009 2:44 pm
11) 19OCT10.D 09J0523-14	1,SS, 5mL+ 1uLMI9160 pH<2	18	1.000	19 Oct 2009 3:22 pm
12) 19OCT11.D 09J0523-15	1,SS, 5mL+ 1uLMI9160 pH<2	19	1.000	19 Oct 2009 3:59 pm
13) 19OCT12.D 09J0523-16	1,SS, 5mL+ 1uLMI9160 pH<2	20	1.000	19 Oct 2009 4:35 pm
14) 19OCT13.D 09J0523-17	1,SS, 5mL+ 1uLMI9160 pH<2	21	1.000	19 Oct 2009 5:12 pm
15) 19OCT14.D 09J0686-02	1, [redacted], 5mL+ 1u pH<2	22	1.000	19 Oct 2009 5:49 pm
16) 19OCT15.D 09J0687-02	1, [redacted], 5mL+ 1u pH<2	23	1.000	19 Oct 2009 6:27 pm
17) 19OCT16.D 09J0688-02	1, [redacted], 5mL+ 1u pH<2	24	1.000	19 Oct 2009 7:04 pm
18) 19OCT17.D 09J0689-02	1, [redacted], 5mL+ 1u pH<2	25	1.000	19 Oct 2009 7:59 pm

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT01.D
Acq On : 19 Oct 2009 9:45 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009



Spectrum Information: Average of 3.912 to 3.930 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	3323	PASS
75	95	30	80	46.7	9194	PASS
95	95	100	100	100.0	19688	PASS
96	95	5	9	6.8	1345	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	78.3	15424	PASS
175	174	5	9	7.9	1211	PASS
176	174	95	101	96.9	14940	PASS
177	176	5	9	6.2	928	PASS

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\OCT1909\19OCT01.D
Tune Time : 19 Oct 2009 9:45 am

Daily Calibration File : C:\msdchem\1\DATA\OCT1909\19OCT02.D

	DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
					703038	531379	268104

File	Sample	Surrogate Recovery %				Internal Standard Responses		
19OCT02.D	0943002-BS	94	93	99	90	703038	531379	268104
19OCT03.D	0943002-BLK	96	95	101	93	698517	523596	250543
19OCT04.D	09J0778-03	96	96	100	92	672903	508465	240699
19OCT05.D	09J0778-01	96	97	100	92	661795	502133	236740
19OCT06.D	09J0778-02	96	96	100	93	656743	494834	234623
19OCT07.D	09J0778-04	96	96	100	90	649076	489266	237814
19OCT08.D	0943002-MS	96	96	99	93	650508	499454	243874
19OCT09.D	0943002-MSD	95	99	102	95	647878	491812	238601
19OCT10.D	09J0523-14	96	99	101	95	632811	479702	223939
19OCT11.D	09J0523-15	95	99	101	95	632930	475131	221155
19OCT12.D	09J0523-16	98	100	101	94	615599	464755	216149
19OCT13.D	09J0523-17	96	99	100	94	615108	462811	216844
19OCT14.D	09J0686-02	97	101	102	93	604710	454712	219641
19OCT15.D	09J0687-02	97	100	102	94	602523	453632	216555
19OCT16.D	09J0688-02	96	100	101	93	599743	450450	218284
19OCT17.D	09J0689-02	96	102	101	93	609864	454480	217542

(fails) - fails 12hr time check * - fails criteria

Created: Tue Oct 20 12:30:35 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT02.D
Acq On : 19 Oct 2009 10:23 am
Operator : EMG
Sample : 0943002-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 19 10:53:47 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	82	0.00
2	T	Dichlorodifluoromethane	20.000	28.584	-42.9#	122	0.00
3	T**	Chloromethane	20.000	18.370	8.1	85	0.00
4	T*	Vinyl Chloride	20.000	22.535	-12.7	101	0.00
5	T	Bromomethane	20.000	13.658	31.7#	58	0.00
6	T	Chloroethane	20.000	21.585	-7.9	147	0.01
7	T	Trichlorofluoromethane	20.000	24.180	-20.9#	104	0.00
8	T	Acrolein	100.000	63.910	36.1#	59	0.00
9	MT*	1,1-Dichloroethene	20.000	21.420	-7.1	94	0.00
10	T	Acetone	100.000	111.598	-11.6	97	0.00
11	T	Iodomethane	20.000	15.331	23.3#	57	0.00
12	T	Carbon Disulfide	20.000	19.229	3.9	87	0.00
13	T	Allyl Chloride	20.000	19.014	4.9	85	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	125	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	116	0.00
16	T	Acetonitrile	20.000	18.389	8.1	93	0.00
17	T	Methylene Chloride	20.000	17.892	10.5	80	0.00
18	T	Methyl tert-Butyl Ether	20.000	17.803	11.0	78	0.00
19	T	trans-1,2-Dichloroethene	20.000	21.347	-6.7	94	0.00
20	T	Acrylonitrile	20.000	21.204	-6.0	92	0.00
21	T**	1,1-Dichloroethane	20.000	21.371	-6.9	94	0.00
22	T	Chloroprene	20.000	22.188	-10.9	97	0.00
23	T	Vinyl Acetate	20.000	23.004	-15.0	98	0.00
24	T	2,2-Dichloropropane	20.000	19.519	2.4	88	0.00
25	T	cis-1,2-Dichloroethene	20.000	21.141	-5.7	92	0.00
26	T	2-Butanone	100.000	108.975	-9.0	96	0.00
27	T	Propionitrile	20.000	22.156	-10.8	93	0.00
28	T	Methacrylonitrile	20.000	21.048	-5.2	99	0.00
29	T*	Chloroform	20.000	21.553	-7.8	95	0.00
30	T	Bromochloromethane	20.000	22.683	-13.4	97	0.00
31	S	Dibromofluoromethane	20.000	23.413	-17.1	102	0.00
32	T	1,1,1-Trichloroethane	20.000	20.884	-4.4	92	0.00
33	S	1,2-Dichloroethane-d4	20.000	23.371	-16.9	106	0.00
34	T	1,1-Dichloropropene	20.000	20.610	-3.0	90	0.00
35	T	Carbon Tetrachloride	20.000	21.796	-9.0	96	0.00
36	MT	Benzene	20.000	20.466	-2.3	92	0.00
37	T	1,2-Dichloroethane	20.000	22.719	-13.6	100	0.00
38	MT	Trichloroethene	20.000	20.189	-0.9	91	0.00
39	T*	1,2-Dichloropropane	20.000	21.083	-5.4	92	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT02.D
Acq On : 19 Oct 2009 10:23 am
Operator : EMG
Sample : 0943002-BS1
Misc : 1, 20PPB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 19 10:53:47 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLL METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40 T	Bromodichloromethane	20.000	22.717	-13.6	100	0.00
41 T	Methyl Methacrylate	20.000	21.588	-7.9	95	0.00
42 T	Dibromomethane	20.000	19.037	4.8	83	0.00
43 T	2-Chloroethyl vinyl ether	20.000	18.226	8.9	78	-0.01
44 T	4-Methyl-2-Pentanone	100.000	109.974	-10.0	95	0.00
45 T	cis-1,3-Dichloropropene	20.000	20.761	-3.8	91	-0.01
46 MT*	Toluene	20.000	19.616	1.9	89	0.00
47 T	trans-1,3-Dichloropropene	20.000	20.028	-0.1	87	0.00
48 T	Ethyl Methacrylate	20.000	20.232	-1.2	89	0.00
49 T	1,1,2-Trichloroethane	20.000	20.139	-0.7	90	0.00
50 T	2-Hexanone	100.000	107.427	-7.4	94	0.00
51 T	1,2-Dibromoethane	20.000	20.013	-0.1	88	0.00
52 I	Chlorobenzene-d5	25.000	25.000	0.0	79	-0.01
53 S	Toluene-d8	20.000	24.857	-24.3#	103	0.00
54 T	Tetrachloroethene	20.000	18.527	7.4	72	0.00
55 T	1,3-Dichloropropane	20.000	22.018	-10.1	92	-0.01
56 T	Dibromochloromethane	20.000	22.182	-10.9	93	-0.01
57 M**	Chlorobenzene	20.000	20.163	-0.8	85	0.00
58 T	1,1,1,2-Tetrachloroethane	20.000	21.203	-6.0	90	-0.01
59 T*	Ethylbenzene	20.000	20.546	-2.7	88	0.00
60 T	m & p Xylenes	40.000	40.906	-2.3	88	-0.01
61 T	o-Xylene	20.000	20.129	-0.6	87	0.00
62 T	Styrene	20.000	19.717	1.4	85	-0.01
63 T**	Bromoform	20.000	20.792	-4.0	87	0.00
64 I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	76	-0.01
65 T	Isopropylbenzene	20.000	20.112	-0.6	82	0.00
66 T**	1,1,2,2-Tetrachloroethane	20.000	21.747	-8.7	89	-0.01
67 S	Bromofluorobenzene	20.000	22.419	-12.1	98	-0.01
68 T	1,2,3-Trichloropropane	20.000	21.940	-9.7	87	-0.01
69 T	Bromobenzene	20.000	21.864	-9.3	89	-0.01
70 T	n-Propylbenzene	20.000	20.855	-4.3	87	-0.01
71 T	2-Chlorotoluene	20.000	20.978	-4.9	87	-0.01
72 T	1,3,5-Trimethylbenzene	20.000	20.032	-0.2	82	-0.01
73 T	4-Chlorotoluene	20.000	20.726	-3.6	87	-0.01
74 T	t-Butylbenzene	20.000	19.230	3.8	79	-0.02
75 T	1,2,4-Trimethylbenzene	20.000	20.606	-3.0	83	-0.01
76 T	sec-Butylbenzene	20.000	19.458	2.7	80	-0.01

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT02.D
Acq On : 19 Oct 2009 10:23 am
Operator : EMG
Sample : 0943002-BS1
Misc : 1, 200PB 8260 CCV+ MI91601,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 19 10:53:47 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77	1,4-Isopropyltoluene	20.000	19.604	2.0	80	-0.01
78	1,3-Dichlorobenzene	20.000	19.100	4.5	79	-0.01
79	1,4-Dichlorobenzene	20.000	19.063	4.7	79	-0.02
80	t-1,4-Dichloro-2-butene	20.000	23.980	-19.9	97	-0.01
81	n-Butylbenzene	20.000	21.630	-8.1	86	-0.01
82	1,2-Dichlorobenzene	20.000	19.385	3.1	79	-0.01
83	1,2-Dibromo-3-chloropropane	20.000	17.735	11.3	70	-0.01
84	1,2,4-Trichlorobenzene	20.000	20.046	-0.2	69	0.00
85	Hexachlorobutadiene	20.000	14.654	26.7#	61	-0.01
86	Naphthalene	20.000	19.570	2.1	74	0.00
87	1,2,3-Trichlorobenzene	20.000	18.947	5.3	69	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT10.D
Acq On : 19 Oct 2009 3:22 pm
Operator : EMG
Sample : 09J0523-14
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 20 12:33:18 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

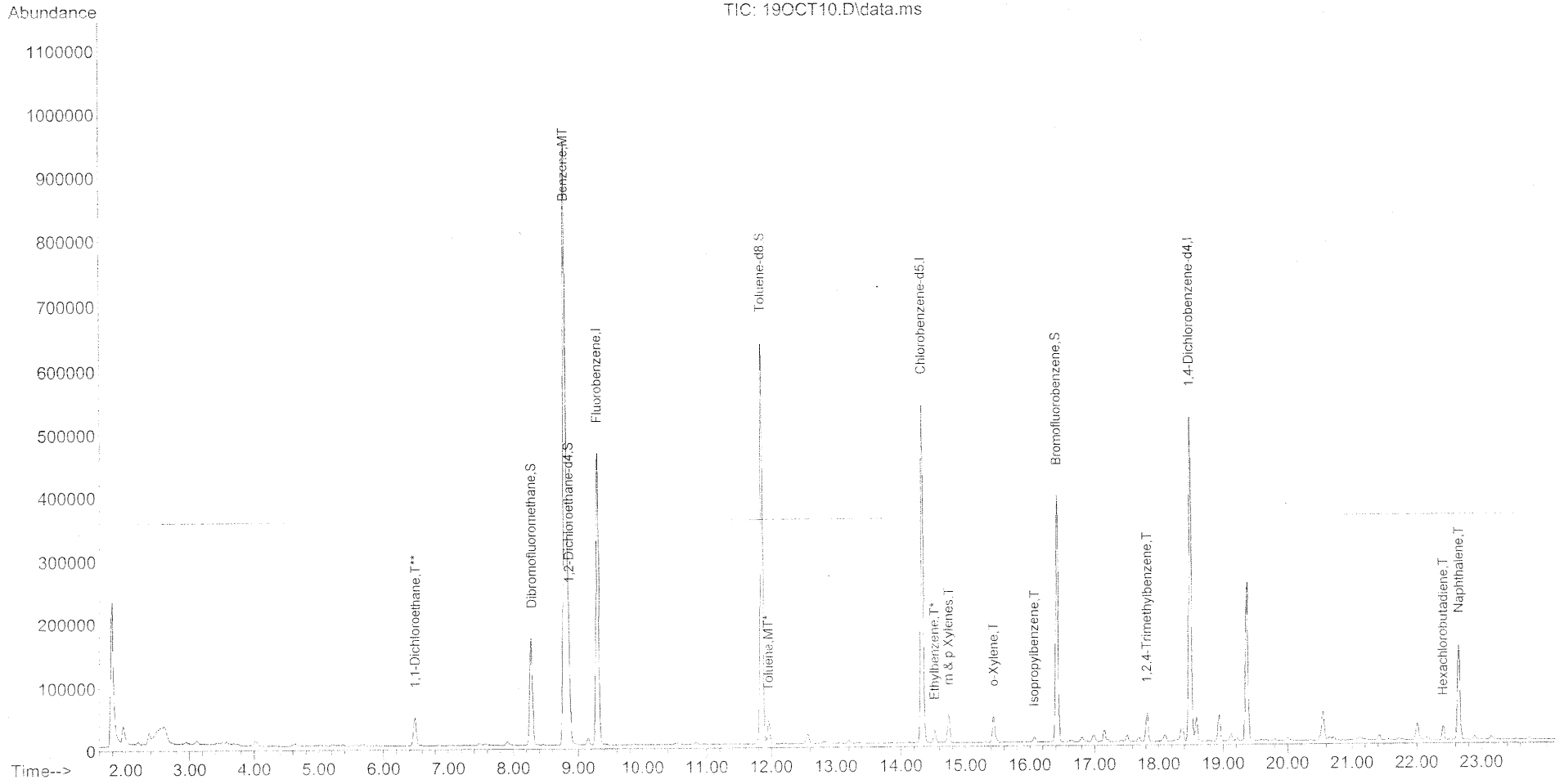
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.294	96	632811	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.327	117	479702	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	223939	25.00 ug/L	-0.02
System Monitoring Compounds					
31) Dibromofluoromethane	8.271	111	163882	24.02 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.08%		
33) 1,2-Dichloroethane-d4	8.848	65	184960	24.85 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 99.40%		
53) Toluene-d8	11.846	98	663852	25.23 ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.92%		
67) Bromofluorobenzene	16.417	95	216898	23.75 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 95.00%		
Target Compounds					Qvalue
5) Bromomethane	2.884	94	449	Below Cal #	18
10) Acetone	4.587	58	1100	Below Cal #	70
17) Methylene Chloride	5.305	49	1856	Below Cal #	60
21) 1,1-Dichloroethane	6.486	63	73154	5.60 ug/L #	95
27) Proprionitrile	7.792	54	138	Below Cal #	60
36) Benzene	8.788	78	1317546	42.57 ug/L #	90
46) Toluene	11.955	91	40356	1.24 ug/L	99
54) Tetrachloroethene	12.804	166	1433	Below Cal #	70
59) Ethylbenzene	14.518	91	24629	0.73 ug/L #	97
60) m & p Xylenes	14.735	91	42969	1.68 ug/L	95
61) o-Xylene	15.437	91	41650	1.56 ug/L #	92
65) Isopropylbenzene	16.063	105	10526	0.39 ug/L #	76
75) 1,2,4-Trimethylbenzene	17.815	105	40815	1.92 ug/L	98
85) Hexachlorobutadiene	22.402	225	7746	2.52 ug/L	96
86) Naphthalene	22.647	128	208149	11.46 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT10.D
Acq On : 19 Oct 2009 3:22 pm
Operator : EMG
Sample : 09J0523-14
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 20 12:33:18 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT11.D
Acq On : 19 Oct 2009 3:59 pm
Operator : EMG
Sample : 09J0523-15
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 20 12:33:57 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

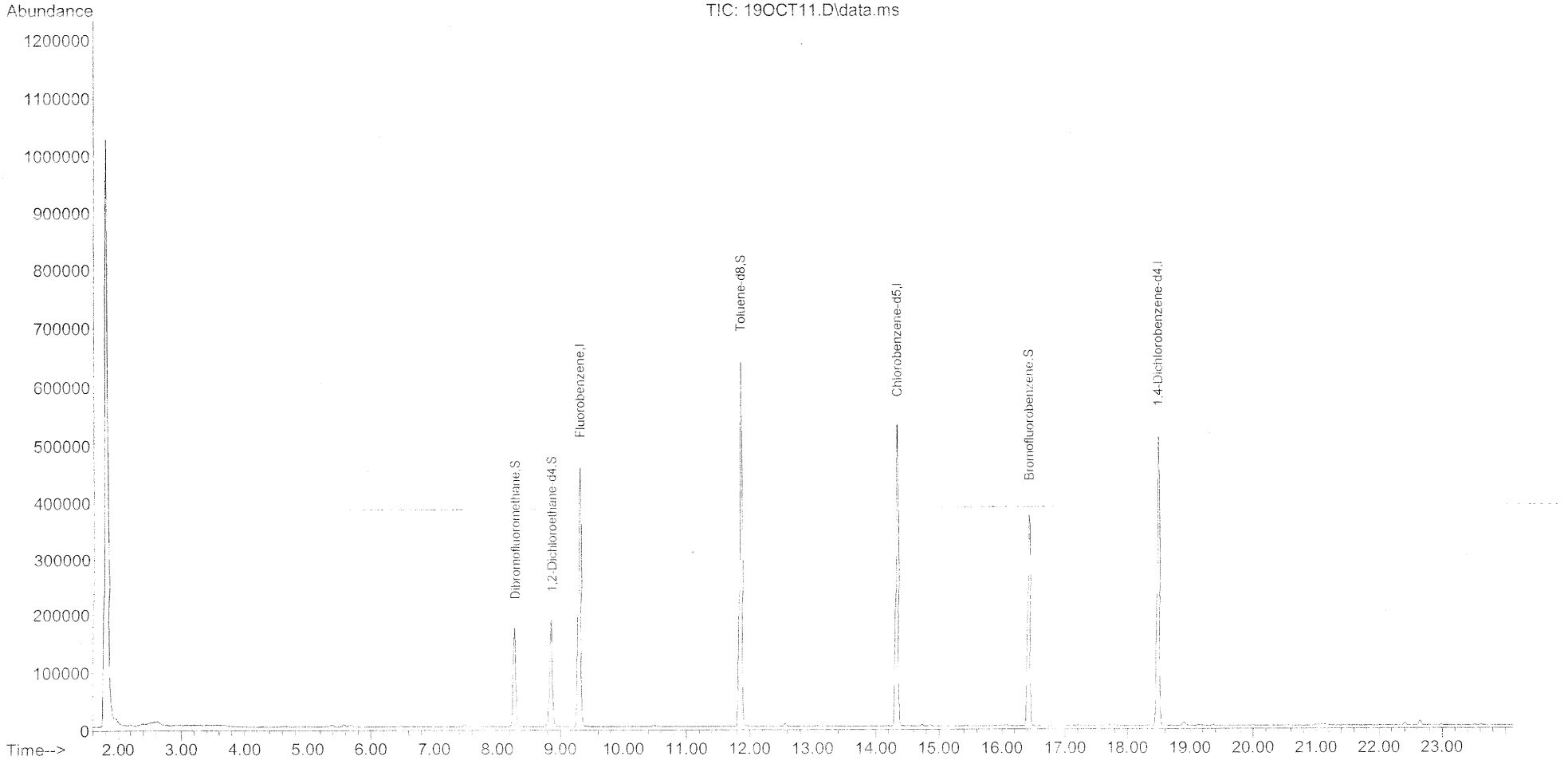
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.296	96	632930	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.329	117	475131	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.486	152	221155	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.268	111	162360	23.79	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.16%			
33) 1,2-Dichloroethane-d4	8.844	65	183960	24.72	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.88%			
53) Toluene-d8	11.848	98	660504	25.35	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 101.40%			
67) Bromofluorobenzene	16.419	95	214636	23.80	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 95.20%			
Target Compounds						Qvalue
5) Bromomethane	2.892	94	174	Below Cal	#	18
10) Acetone	4.584	58	110	Below Cal	#	57
17) Methylene Chloride	5.313	49	417	Below Cal	#	60
54) Tetrachloroethene	12.806	166	258	Below Cal	#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT11.D
Acq On : 19 Oct 2009 3:59 pm
Operator : EMG
Sample : 09J0523-15
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 20 12:33:57 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT12.D
Acq On : 19 Oct 2009 4:35 pm
Operator : EMG
Sample : 09J0523-16
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 20 12:34:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

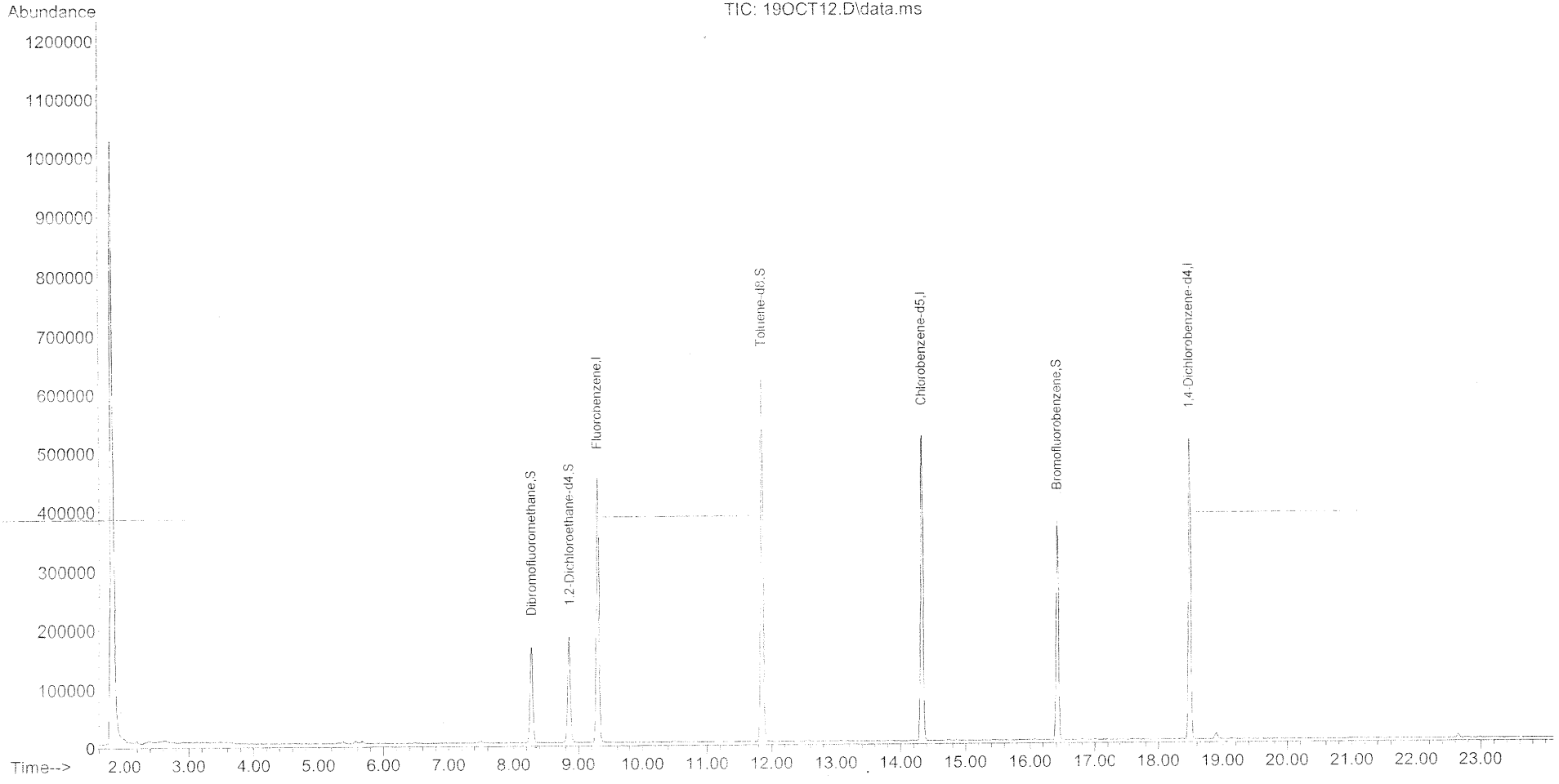
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.290	96	615599	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.329	117	464755	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.486	152	216149	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.267	111	161856	24.38	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 97.52%			
33) 1,2-Dichloroethane-d4	8.850	65	181193	25.03	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.12%			
53) Toluene-d8	11.848	98	641382	25.16	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.64%			
67) Bromofluorobenzene	16.419	95	207537	23.55	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.20%			
Target Compounds						Qvalue
5) Bromomethane	2.891	94	206	Below Cal	#	18
10) Acetone	4.611	58	211	Below Cal	#	57
17) Methylene Chloride	5.296	49	1373	Below Cal	#	84
54) Tetrachloroethene	12.795	166	109	Below Cal	#	14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT12.D
Acq On : 19 Oct 2009 4:35 pm
Operator : EMG
Sample : 09J0523-16
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 20 12:34:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT13.D
Acq On : 19 Oct 2009 5:12 pm
Operator : EMG
Sample : 09J0523-17
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 20 12:34:53 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

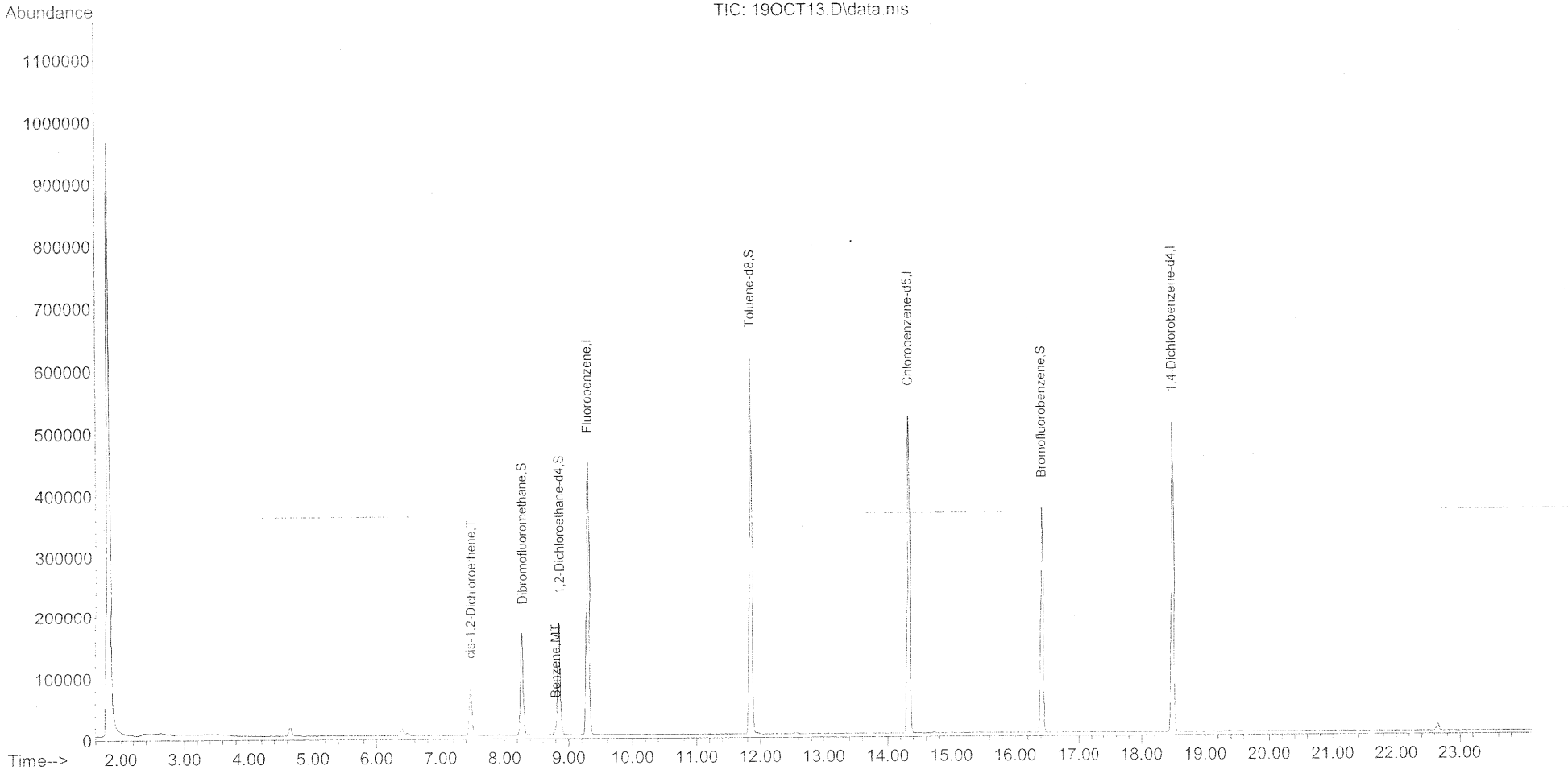
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.291	96	615108	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.324	117	462811	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.487	152	216844	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.268	111	158932	23.96	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.84%			
33) 1,2-Dichloroethane-d4	8.845	65	178932	24.74	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.96%			
53) Toluene-d8	11.848	98	635436	25.03	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.12%			
67) Bromofluorobenzene	16.413	95	206938	23.41	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 93.64%			
Target Compounds						Qvalue
5) Bromomethane	2.897	94	287	Below Cal	#	18
10) Acetone	4.579	58	102	Below Cal	#	57
17) Methylene Chloride	5.313	49	1125	Below Cal	#	50
25) cis-1,2-Dichloroethene	7.468	61	69815	7.10	ug/L	94
36) Benzene	8.796	78	11618	0.39	ug/L #	75
54) Tetrachloroethene	12.800	166	124	Below Cal	#	33

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT1909\
Data File : 19OCT13.D
Acq On : 19 Oct 2009 5:12 pm
Operator : EMG
Sample : 09J0523-17
Misc : 1,SS, 5mL+ 1uLMI91601,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 20 12:34:53 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\OCT2809\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1 28OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	28 Oct 2009 10:02 am
2) 28OCT02.D 0944073-BS1	1, 20PPB 8260 CCV+ M	11	1.000	28 Oct 2009 10:38 am
3) 28OCT03.D 0944073-BLK1	1,DI WATER+ 1uL MJ92	12	1.000	28 Oct 2009 11:16 am
4) 28OCT04.D 09J0523-18	1,SS, 5mL+ 1uL MJ921 pH<2	13	1.000	28 Oct 2009 11:52 am
5) 28OCT05.D 09J0523-19	1,SS, 5mL+ 1uL MJ921 pH<2	14	1.000	28 Oct 2009 12:30 pm
6) 28OCT06.D 09J0523-20	1,SS, 5mL+ 1uL MJ921 pH<2	15	1.000	28 Oct 2009 1:07 pm
7) 28OCT07.D 09J0523-21	1,SS, 5mL+ 1uL MJ921 pH<2	16	1.000	28 Oct 2009 1:44 pm
8) 28OCT08.D 0944073-MS1	09J0523-18 1, 20PPB 8260 MS,5mL	17	1.000	28 Oct 2009 2:21 pm
9) 28OCT09.D 0944073-MSD1	09J0523-18 1, 20PPB 8260 MSD,5m	17	1.000	28 Oct 2009 2:59 pm
28OCT10.D 09J0523-22	1,SS, 5mL+ 1uL MJ921 pH<2	18	1.000	28 Oct 2009 3:36 pm
11) 28OCT11.D 09J0523-23	1,SS, 5mL+ 1uL MJ921 pH<2	19	1.000	28 Oct 2009 4:14 pm
12) 28OCT12.D 09J0523-24	1,SS, 5mL+ 1uL MJ921 pH<2	20	1.000	28 Oct 2009 4:51 pm
13) 28OCT13.D 09J0523-25	1,SS, 5mL+ 1uL MJ921 pH<2	21	1.000	28 Oct 2009 5:28 pm
14) 28OCT14.D 09J0523-26	1,SS, 5mL+ 1uL MJ921 pH<2	22	1.000	28 Oct 2009 6:06 pm
15) 28OCT15.D 09J0523-27	1,SS, 5mL+ 1uL MJ921 pH<2	23	1.000	28 Oct 2009 6:43 pm
16) 28OCT16.D 09J0523-28	1,SS, 5mL+ 1uL MJ921 pH<2	24	1.000	28 Oct 2009 7:20 pm
17) 28OCT17.D 09J1010-01	1,[redacted], 5mL+ 1uL M pH<2	25	1.000	28 Oct 2009 7:57 pm
18) 28OCT18.D 09J1010-02	1,[redacted], 5mL+ 1uL M pH<2	26	1.000	28 Oct 2009 8:34 pm
28OCT19.D 1012-04	1,[redacted], 5mL+ 1uL M pH<2	27	1.000	28 Oct 2009 9:11 pm
20) 28OCT20.D 09J1012-05	1,[redacted], 5mL+ 1uL M pH<2	28	1.000	28 Oct 2009 9:49 pm

Benzene ↑ Relan@10X

Relan for Benzene campaign

OK

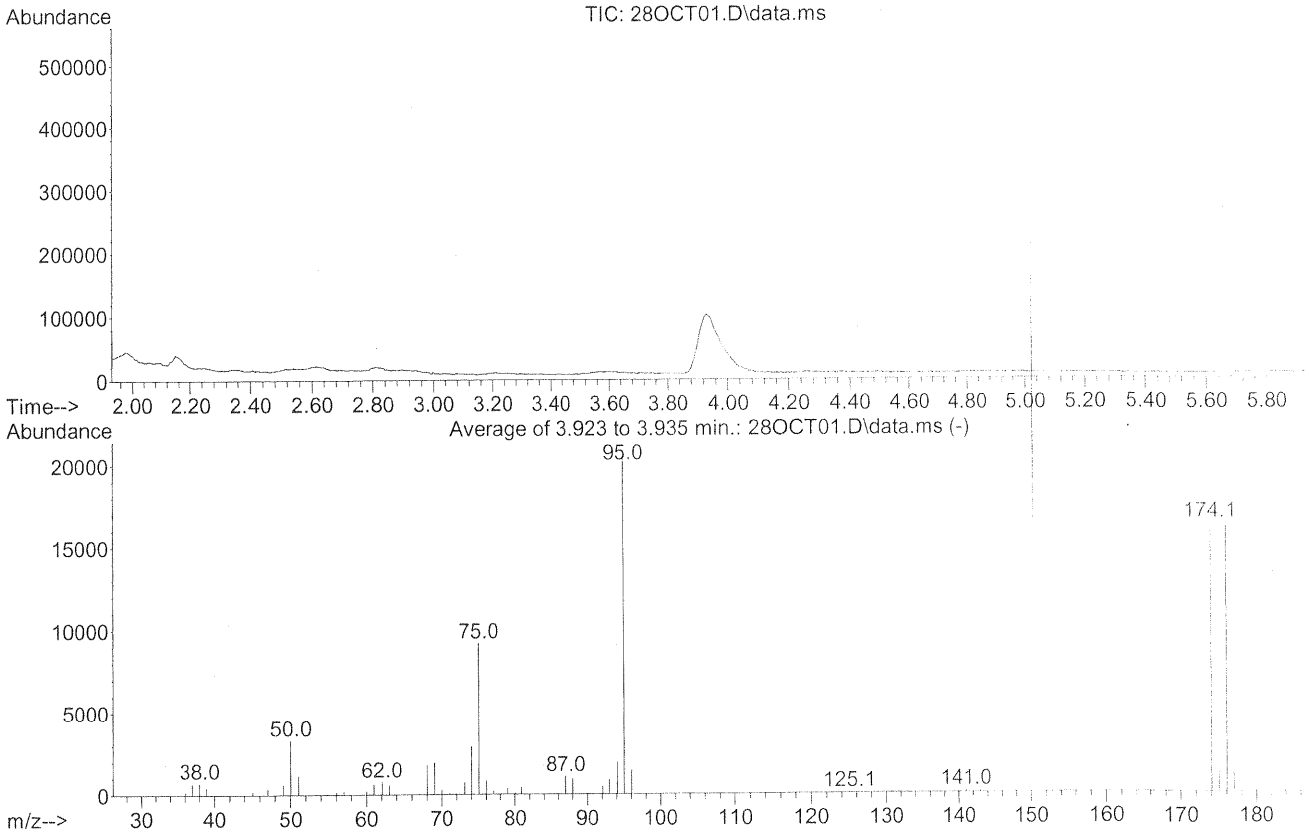
↑ for Some cmpds Relan@10X

Relan for campaign contamination

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT01.D
Acq On : 28 Oct 2009 10:02 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009



AutoFind: Scans 384, 385, 386; Background Corrected with Scan 371

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	3331	PASS
75	95	30	80	45.0	9198	PASS
95	95	100	100	100.0	20445	PASS
96	95	5	9	7.1	1461	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	79.8	16306	PASS
175	174	5	9	7.5	1221	PASS
176	174	95	101	99.3	16184	PASS
177	176	5	9	6.9	1120	PASS

Tune File : C:\msdchem\1\DATA\OCT2809\28OCT01.D
Tune Time : 28 Oct 2009 10:02 am

Daily Calibration File : C:\msdchem\1\DATA\OCT2809\28OCT02.D

	DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
					821566	595278	286219

File	Sample	Surrogate Recovery %				Internal Standard Responses		
28OCT02.D	0944073-BS	88	85	97	95	821566	595278	286219
28OCT03.D	0944073-BLK	91	86	100	96	789368	565900	267134
28OCT04.D	09J0523-18	91	89	99	94	763318	559170	268248
28OCT05.D	09J0523-19	90	89	101	94	745874	537595	263014
28OCT06.D	09J0523-20	90	88	101	96	734066	527421	250146
28OCT07.D	09J0523-21	90	89	101	95	726608	521922	249798
28OCT08.D	0944073-MS	90	88	99	96	718763	524487	255115
28OCT09.D	0944073-MSD	89	87	100	95	737330	525524	252060
28OCT10.D	09J0523-22	90	87	103	96	730742	514898	244684
28OCT11.D	09J0523-23	90	85	102	97	722362	519569	245766
28OCT15.D	09J0523-27	91	92	101	96	678415	490013	229428
28OCT16.D	09J0523-28	91	93	101	96	668192	478619	223795
28OCT17.D	09J1010-01	94	91	100	97	658988	474728	225271

(fails) - fails 12hr time check * - fails criteria

Created: Thu Oct 29 09:17:33 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT02.D
Acq On : 28 Oct 2009 10:38 am
Operator : EMG
Sample : 0944073-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:39:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	96	0.00
2	T	Dichlorodifluoromethane	20.000	28.281	-41.4#	141	0.00
3	T**	Chloromethane	20.000	19.032	4.8	103	0.00
4	T*	Vinyl Chloride	20.000	22.734	-13.7	119	0.00
5	T	Bromomethane	20.000	12.161	39.2#	61	0.01
6	T	Chloroethane	20.000	21.751	-8.8	173	0.00
7	T	Trichlorofluoromethane	20.000	22.000	-10.0	111	0.00
8	T	Acrolein	100.000	92.215	7.8	99	0.00
9	MT*	1,1-Dichloroethene	20.000	19.195	4.0	98	0.00
10	T	Acetone	100.000	113.272	-13.3	115	0.00
11	T	Iodomethane	20.000	23.622	-18.1	127	0.00
12	T	Carbon Disulfide	20.000	17.954	10.2	95	0.00
13	T	Allyl Chloride	20.000	18.848	5.8	99	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	244	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	124	0.00
16	T	Acetonitrile	20.000	16.240	18.8	96	0.00
17	T	Methylene Chloride	20.000	17.419	12.9	92	0.00
18	T	Methyl tert-Butyl Ether	20.000	18.259	8.7	93	0.00
19	T	trans-1,2-Dichloroethene	20.000	19.698	1.5	102	0.00
20	T	Acrylonitrile	20.000	20.882	-4.4	106	-0.01
21	T**	1,1-Dichloroethane	20.000	19.934	0.3	102	0.00
22	T	Chloroprene	20.000	20.543	-2.7	105	0.00
23	T	Vinyl Acetate	20.000	23.039	-15.2	114	0.00
24	T	2,2-Dichloropropane	20.000	19.013	4.9	101	0.00
25	T	cis-1,2-Dichloroethene	20.000	20.285	-1.4	103	0.00
26	T	2-Butanone	100.000	109.399	-9.4	113	0.00
27	T	Proprionitrile	20.000	21.789	-8.9	107	0.00
28	T	Methacrylonitrile	20.000	20.528	-2.6	113	0.00
29	T*	Chloroform	20.000	20.723	-3.6	107	0.00
30	T	Bromochloromethane	20.000	21.284	-6.4	107	0.00
31	S	Dibromofluoromethane	20.000	21.985	-9.9	112	0.00
32	T	1,1,1-Trichloroethane	20.000	19.361	3.2	100	0.00
33	S	1,2-Dichloroethane-d4	20.000	21.217	-6.1	113	0.00
34	T	1,1-Dichloropropene	20.000	19.812	0.9	102	0.00
35	T	Carbon Tetrachloride	20.000	20.443	-2.2	105	0.00
36	MT	Benzene	20.000	19.902	0.5	104	0.00
37	T	1,2-Dichloroethane	20.000	20.890	-4.5	108	0.00
38	MT	Trichloroethene	20.000	19.706	1.5	103	0.00
39	T*	1,2-Dichloropropane	20.000	20.172	-0.9	103	0.00

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT02.D
Acq On : 28 Oct 2009 10:38 am
Operator : EMG
Sample : 0944073-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:39:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	T	Bromodichloromethane	20.000	21.191	-6.0	109	0.00
41	T	Methyl Methacrylate	20.000	21.174	-5.9	109	0.00
42	T	Dibromomethane	20.000	18.774	6.1	96	0.00
43	T	2-Chloroethyl vinyl ether	20.000	18.481	7.6	92	0.00
44	T	4-Methyl-2-Pentanone	100.000	108.052	-8.1	109	0.00
45	T	cis-1,3-Dichloropropene	20.000	19.708	1.5	101	-0.01
46	MT*	Toluene	20.000	19.117	4.4	101	0.00
47	T	trans-1,3-Dichloropropene	20.000	19.357	3.2	98	-0.01
48	T	Ethyl Methacrylate	20.000	20.316	-1.6	104	0.00
49	T	1,1,2-Trichloroethane	20.000	19.296	3.5	100	0.00
50	T	2-Hexanone	100.000	107.214	-7.2	109	0.00
51	T	1,2-Dibromoethane	20.000	19.621	1.9	101	-0.01
52	I	Chlorobenzene-d5	25.000	25.000	0.0	89	-0.01
53	S	Toluene-d8	20.000	24.238	-21.2#	113	-0.01
54	T	Tetrachloroethene	20.000	17.490	12.6	76	0.00
55	T	1,3-Dichloropropane	20.000	22.070	-10.4	104	-0.01
56	T	Dibromochloromethane	20.000	21.994	-10.0	103	-0.01
57	M**	Chlorobenzene	20.000	20.872	-4.4	98	0.00
58	T	1,1,1,2-Tetrachloroethane	20.000	21.378	-6.9	102	-0.01
59	T*	Ethylbenzene	20.000	21.049	-5.2	101	0.00
60	T	m & p Xylenes	40.000	41.500	-3.8	100	-0.01
61	T	o-Xylene	20.000	20.534	-2.7	99	-0.01
62	T	Styrene	20.000	20.133	-0.7	97	-0.01
63	T**	Bromoform	20.000	21.536	-7.7	100	-0.01
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	81	-0.02
65	T	Isopropylbenzene	20.000	21.490	-7.4	94	-0.01
66	T**	1,1,2,2-Tetrachloroethane	20.000	23.656	-18.3	103	-0.01
67	S	Bromofluorobenzene	20.000	23.853	-19.3	111	-0.01
68	T	1,2,3-Trichloropropane	20.000	23.886	-19.4	102	-0.01
69	T	Bromobenzene	20.000	22.925	-14.6	99	-0.01
70	T	n-Propylbenzene	20.000	22.033	-10.2	98	-0.01
71	T	2-Chlorotoluene	20.000	22.010	-10.1	97	-0.01
72	T	1,3,5-Trimethylbenzene	20.000	20.620	-3.1	90	-0.01
73	T	4-Chlorotoluene	20.000	22.050	-10.3	98	-0.02
74	T	t-Butylbenzene	20.000	20.514	-2.6	91	-0.02
75	T	1,2,4-Trimethylbenzene	20.000	21.018	-5.1	91	-0.02
76	T	sec-Butylbenzene	20.000	20.611	-3.1	90	-0.02

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT02.D
Acq On : 28 Oct 2009 10:38 am
Operator : EMG
Sample : 0944073-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:39:23 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77 T	1,4-Isopropyltoluene	20.000	20.626	-3.1	89	-0.01
78 T	1,3-Dichlorobenzene	20.000	20.618	-3.1	91	-0.02
79 T	1,4-Dichlorobenzene	20.000	20.613	-3.1	92	-0.02
80 T	t-1,4-Dichloro-2-butene	20.000	26.135	-30.7#	113	-0.01
81 T	n-Butylbenzene	20.000	22.030	-10.2	93	-0.02
82 T	1,2-Dichlorobenzene	20.000	21.152	-5.8	92	-0.02
83 T	1,2-Dibromo-3-chloropropane	20.000	22.982	-14.9	98	-0.02
84 T	1,2,4-Trichlorobenzene	20.000	21.256	-6.3	78	-0.01
85 T	Hexachlorobutadiene	20.000	18.094	9.5	81	-0.02
86 T	Naphthalene	20.000	19.416	2.9	78	-0.02
87 T	1,2,3-Trichlorobenzene	20.000	20.174	-0.9	78	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT04.D
Acq On : 28 Oct 2009 11:52 am
Operator : EMG
Sample : 09J0523-18
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 28 17:50:38 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

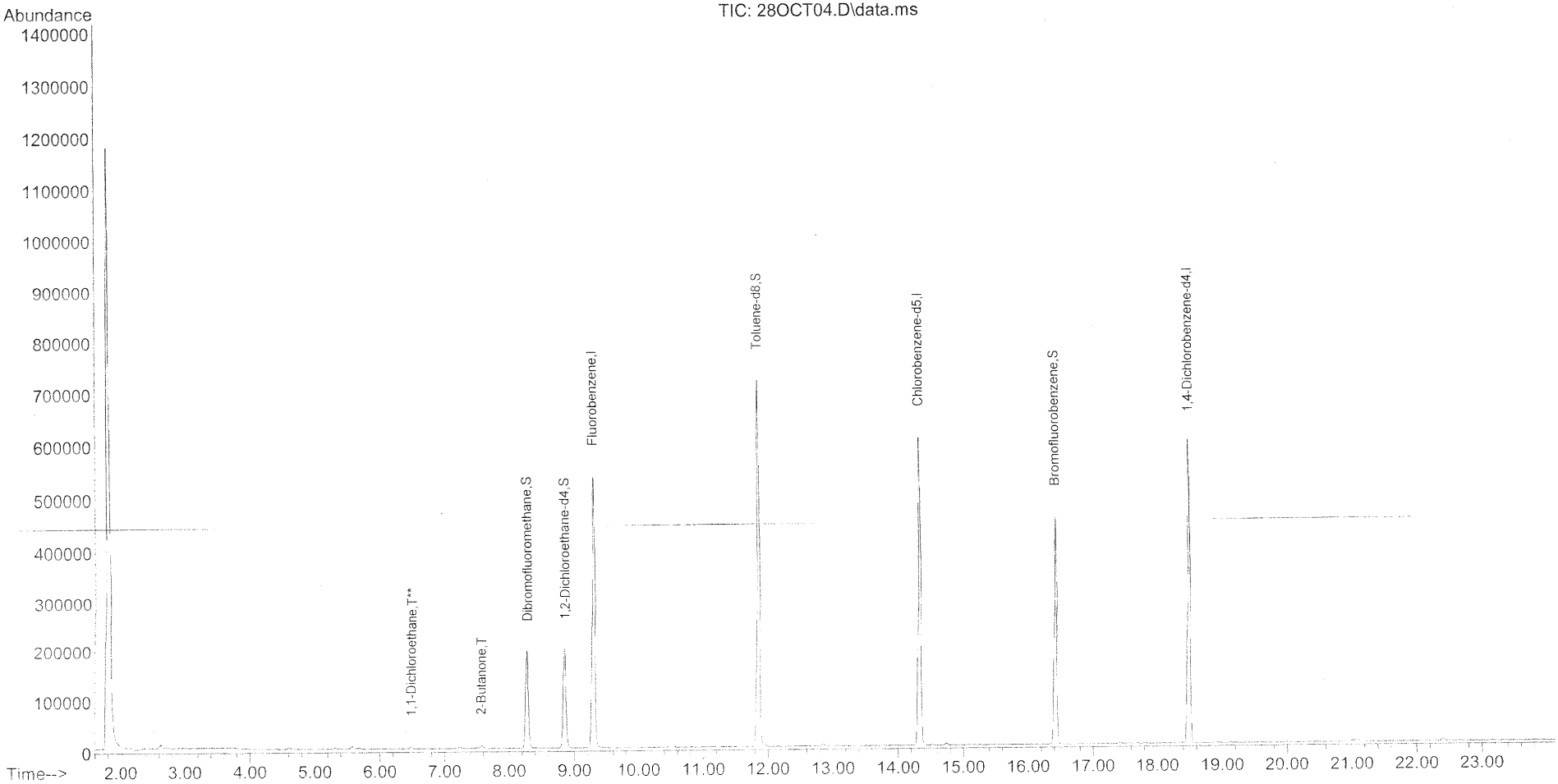
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.294	96	763318	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.327	117	559170	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	268248	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.271	111	186881	22.70 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.80%		
33) 1,2-Dichloroethane-d4	8.847	65	198982	22.17 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 88.68%		
53) Toluene-d8	11.851	98	759663	24.77 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 99.08%		
67) Bromofluorobenzene	16.416	95	257194	23.51 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.04%		
Target Compounds					Qvalue
5) Bromomethane	2.905	94	62	Below Cal #	18
10) Acetone	4.592	58	918	Below Cal #	57
17) Methylene Chloride	5.316	49	1275	Below Cal #	43
21) 1,1-Dichloroethane	6.486	63	5926	0.38 ug/L #	94
26) 2-Butanone	7.569	43	12169	2.40 ug/L #	94
54) Tetrachloroethene	12.809	166	424	Below Cal #	39

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT04.D
Acq On : 28 Oct 2009 11:52 am
Operator : EMG
Sample : 09J0523-18
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 28 17:50:38 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT05.D
Acq On : 28 Oct 2009 12:30 pm
Operator : EMG
Sample : 09J0523-19
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 28 17:51:02 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

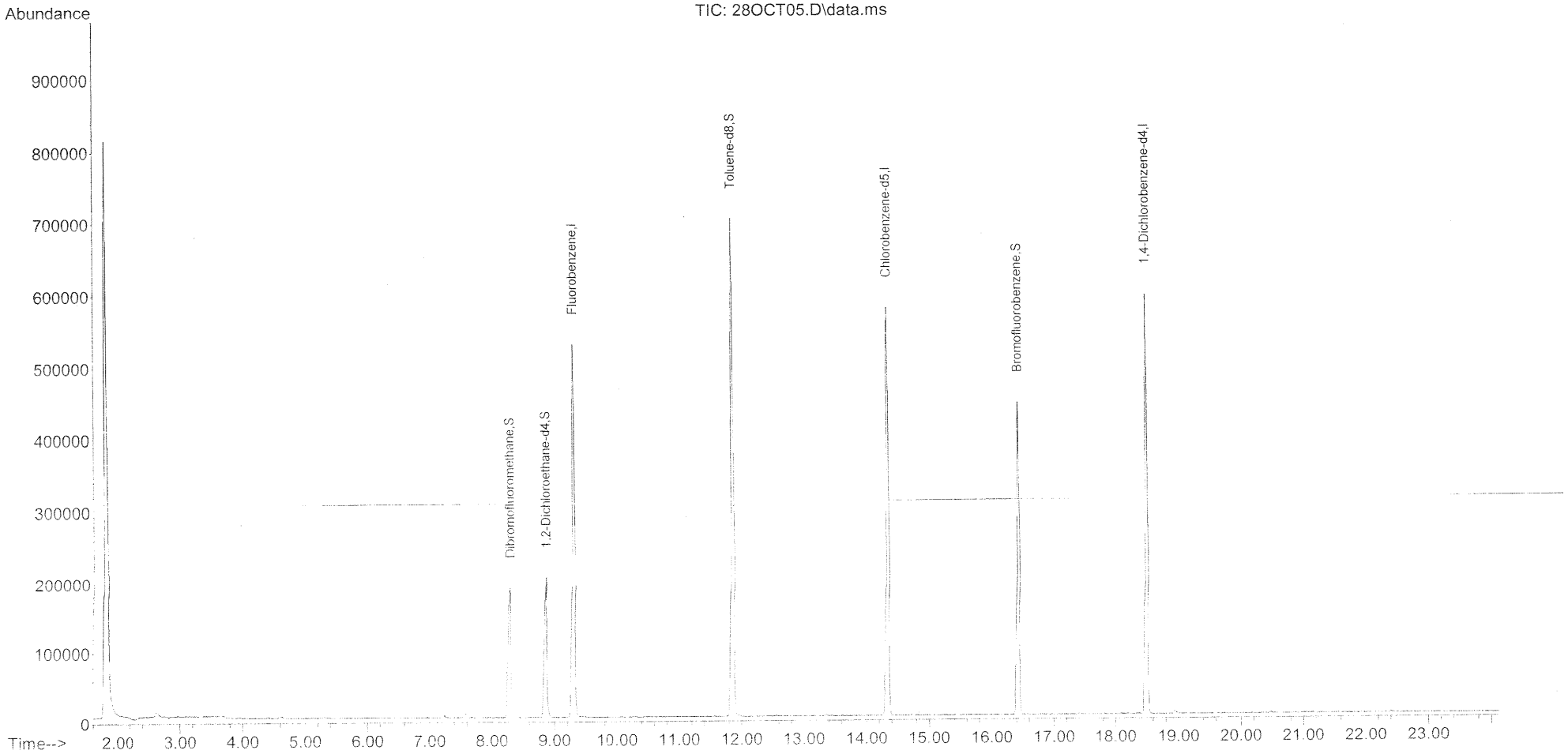
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.295	96	745874	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.328	117	537595	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.485	152	263014	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.272	111	180877	22.49 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 89.96%		
33) 1,2-Dichloroethane-d4	8.849	65	194515	22.18 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 88.72%		
53) Toluene-d8	11.847	98	741811	25.16 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.64%		
67) Bromofluorobenzene	16.418	95	252704	23.56 ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.24%		
Target Compounds					Qvalue
5) Bromomethane	2.896	94	153	Below Cal #	18
10) Acetone	4.605	58	1299	Below Cal #	63
17) Methylene Chloride	5.307	49	1298	Below Cal #	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT05.D
Acq On : 28 Oct 2009 12:30 pm
Operator : EMG
Sample : 09J0523-19
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 28 17:51:02 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT06.D
Acq On : 28 Oct 2009 1:07 pm
Operator : EMG
Sample : 09J0523-20
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 28 17:51:35 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

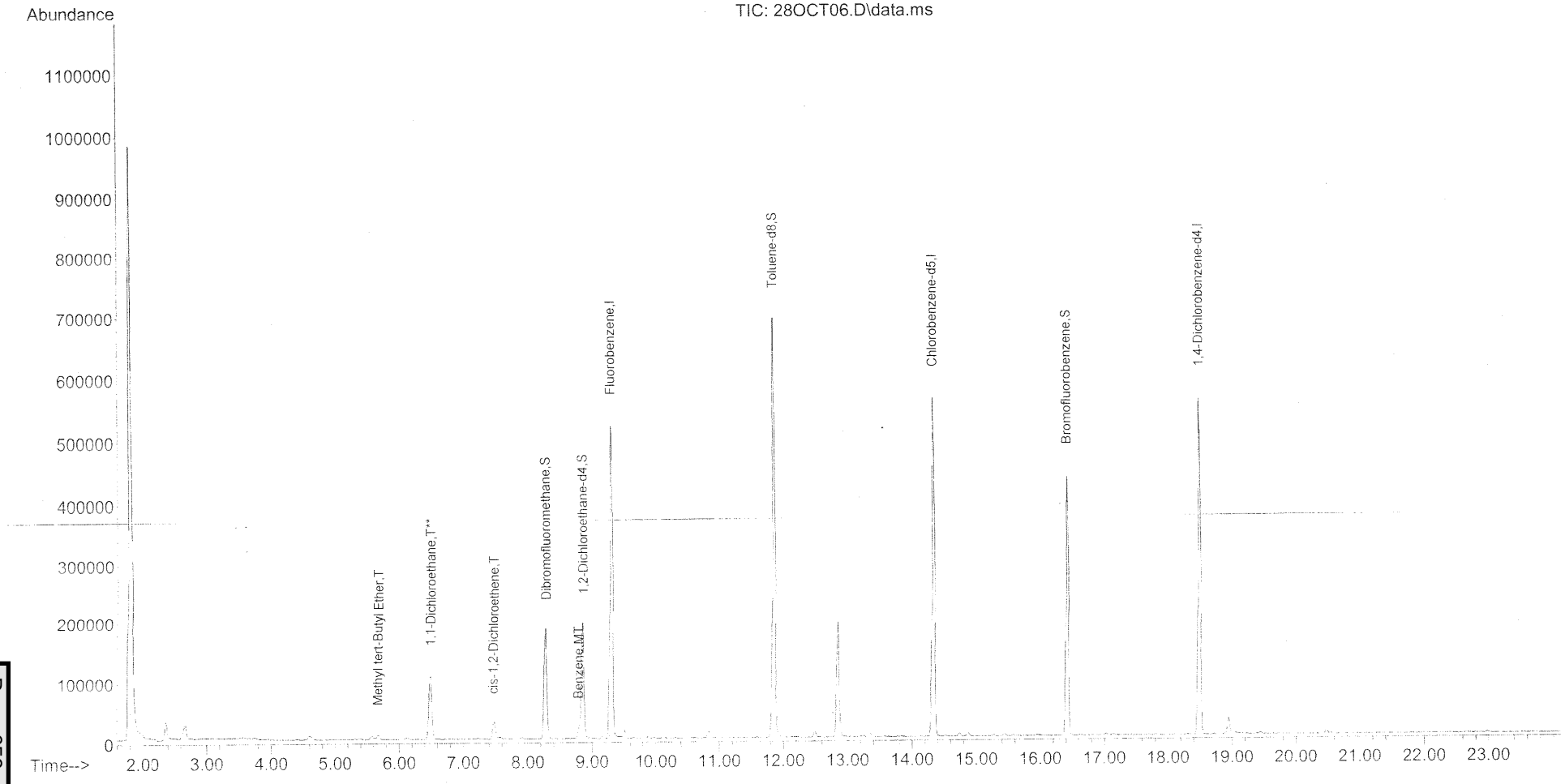
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.294	96	734066	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.327	117	527421	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	250146	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.271	111	177981	22.48 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 89.92%		
33) 1,2-Dichloroethane-d4	8.847	65	189283	21.93 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 87.72%		
53) Toluene-d8	11.851	98	732044	25.31 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 101.24%		
67) Bromofluorobenzene	16.416	95	245790	24.10 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 96.40%		
Target Compounds					Qvalue
5) Bromomethane	2.895	94	453	Below Cal #	18
17) Methylene Chloride	5.300	49	1777	Below Cal #	57
18) Methyl tert-Butyl Ether	5.670	73	9214	0.36 ug/L #	59
21) 1,1-Dichloroethane	6.486	63	169861	11.20 ug/L	98
25) cis-1,2-Dichloroethene	7.465	61	23048	1.96 ug/L	93
36) Benzene	8.788	78	12245	0.34 ug/L #	59
54) Tetrachloroethene	12.798	166	109	Below Cal #	50

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT06.D
Acq On : 28 Oct 2009 1:07 pm
Operator : EMG
Sample : 09J0523-20
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 28 17:51:35 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT07.D
Acq On : 28 Oct 2009 1:44 pm
Operator : EMG
Sample : 09J0523-21
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 17:51:48 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

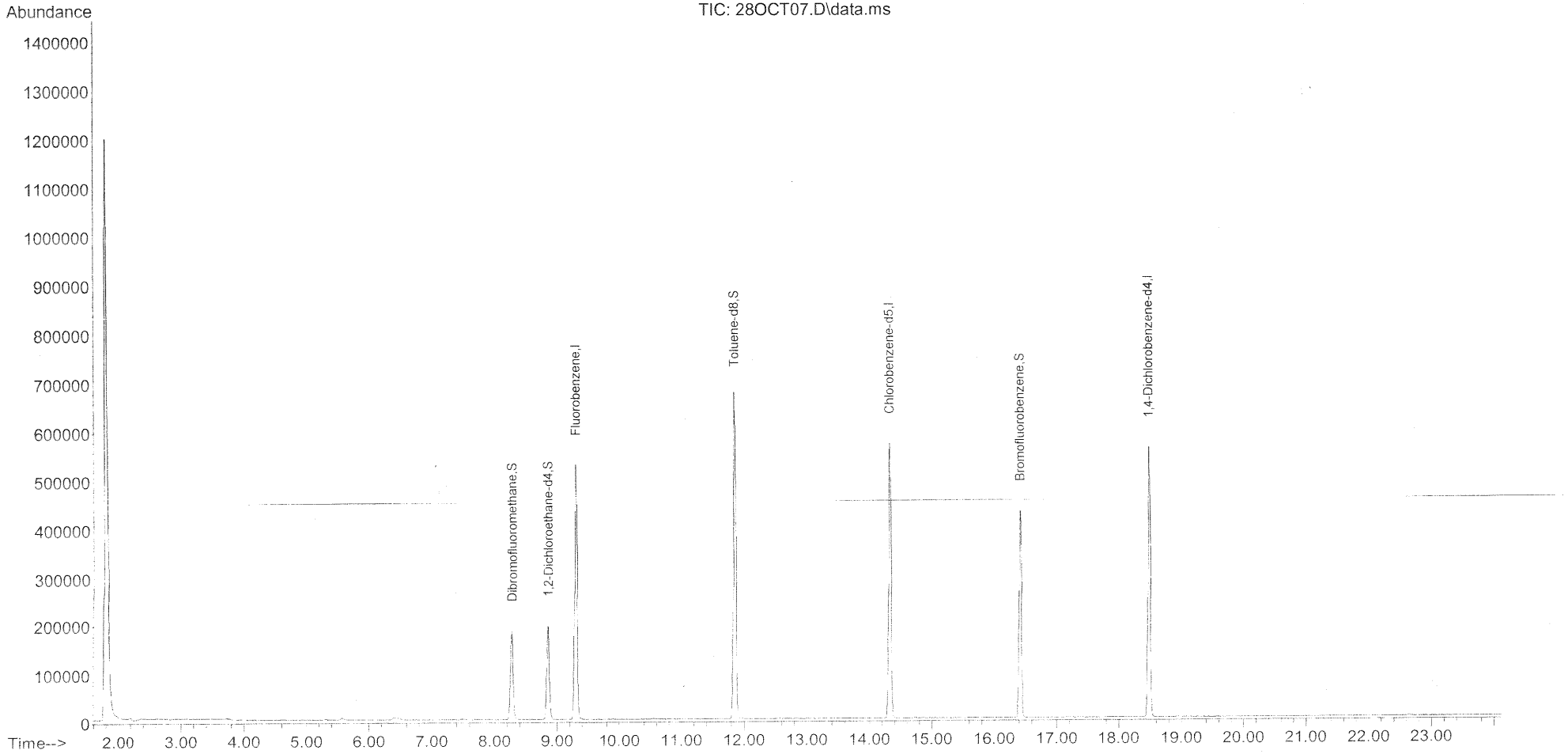
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.295	96	726608	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.328	117	521922	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.485	152	249798	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.272	111	176326	22.50	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.00%			
33) 1,2-Dichloroethane-d4	8.849	65	191115	22.37	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 89.48%			
53) Toluene-d8	11.852	98	720454	25.17	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.68%			
67) Bromofluorobenzene	16.418	95	241199	23.68	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 94.72%			
Target Compounds						Qvalue
5) Bromomethane	2.901	94	496	Below Cal	#	18
10) Acetone	4.604	58	541	Below Cal	#	57
17) Methylene Chloride	5.301	49	1100	Below Cal	#	62

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT07.D
Acq On : 28 Oct 2009 1:44 pm
Operator : EMG
Sample : 09J0523-21
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 17:51:48 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT10.D
Acq On : 28 Oct 2009 3:36 pm
Operator : EMG
Sample : 09J0523-22
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 28 17:53:01 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

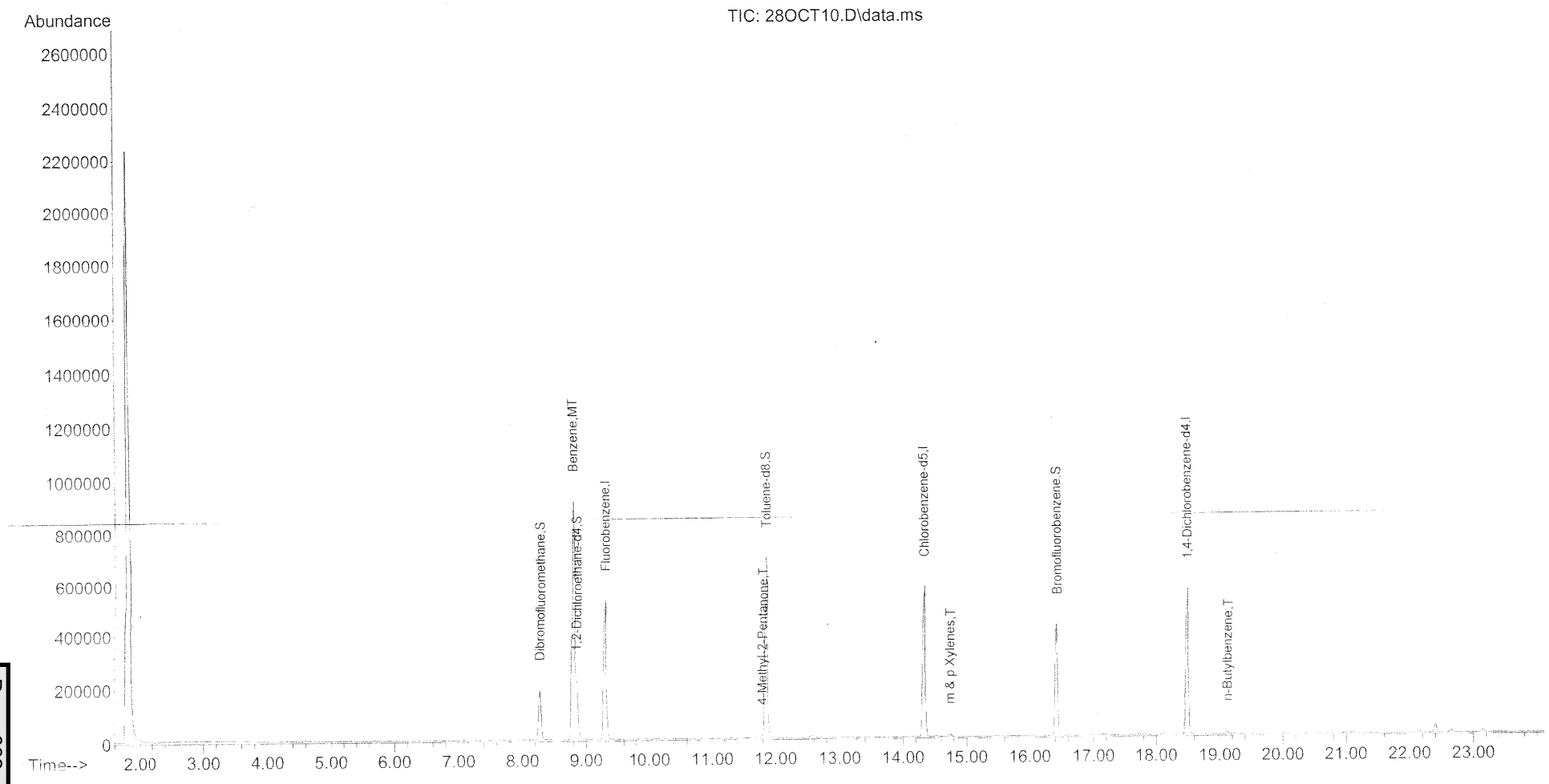
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.295	96	730742	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.329	117	514898	25.00 ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.486	152	244684	25.00 ug/L	-0.01
System Monitoring Compounds					
31) Dibromofluoromethane	8.272	111	177348	22.50 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.00%		
33) 1,2-Dichloroethane-d4	8.849	65	187414	21.81 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 87.24%		
53) Toluene-d8	11.847	98	723625	25.63 ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 102.52%		
67) Bromofluorobenzene	16.418	95	239244	23.98 ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 95.92%		
Target Compounds					Qvalue
5) Bromomethane	2.880	94	318	Below Cal #	31
10) Acetone	4.600	58	2379	Below Cal #	74
17) Methylene Chloride	5.301	49	1563	Below Cal #	59
27) Proprionitrile	7.805	54	72	Below Cal #	60
36) Benzene	8.795	78	1276052	35.70 ug/L #	88
44) 4-Methyl-2-Pentanone	11.793	43	8796	0.89 ug/L #	67
54) Tetrachloroethene	12.811	166	939	Below Cal #	32
60) m & p Xylenes	14.742	91	9754	0.35 ug/L #	94
81) n-Butylbenzene	19.128	91	12207	0.67 ug/L #	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT10.D
Acq On : 28 Oct 2009 3:36 pm
Operator : EMG
Sample : 09J0523-22
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 28 17:53:01 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT11.D
Acq On : 28 Oct 2009 4:14 pm
Operator : EMG
Sample : 09J0523-23
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 28 17:53:48 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

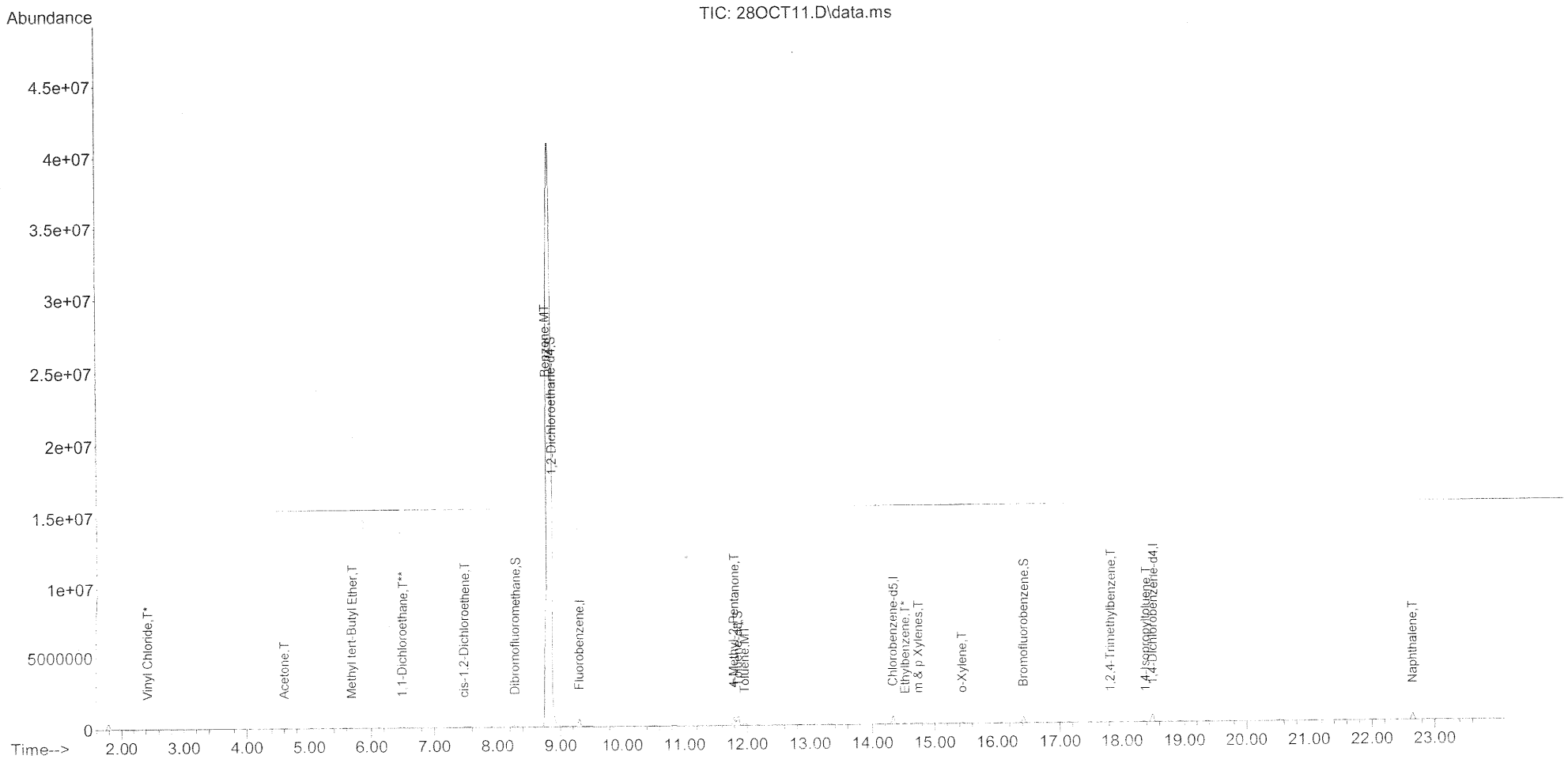
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	9.298	96	722362	25.00	ug/L		0.00
52) Chlorobenzene-d5	14.326	117	519569	25.00	ug/L		-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	245766	25.00	ug/L		-0.01
System Monitoring Compounds							
31) Dibromofluoromethane	8.275	111	174431	22.39	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 89.56%				
33) 1,2-Dichloroethane-d4	8.863	65	181405	21.36	ug/L		0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 85.44%				
53) Toluene-d8	11.850	98	730044	25.62	ug/L		0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 102.48%				
67) Bromofluorobenzene	16.415	95	244224	24.37	ug/L		-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 97.48%				
Target Compounds							Qvalue
4) Vinyl Chloride	2.420	62	12459	1.68	ug/L	#	93
5) Bromomethane	2.899	94	175	Below Cal		#	18
10) Acetone	4.597	58	11480	9.94	ug/L	#	60
17) Methylene Chloride	5.299	49	1050	Below Cal		#	73
18) Methyl tert-Butyl Ether	5.680	73	8306	0.33	ug/L	#	61
21) 1,1-Dichloroethane	6.490	63	113573	7.61	ug/L	#	83
25) cis-1,2-Dichloroethene	7.470	61	16127	1.40	ug/L	#	67
36) Benzene	8.770	78	58249674m	1648.70	ug/L		
44) 4-Methyl-2-Pentanone	11.785	43	602881	61.84	ug/L		94
46) Toluene	11.959	91	191821	5.15	ug/L		98
54) Tetrachloroethene	12.808	166	514	Below Cal			98
59) Ethylbenzene	14.522	91	50436	1.39	ug/L	#	97
60) m & p Xylenes	14.734	91	62813	2.26	ug/L		97
61) o-Xylene	15.436	91	68539	2.37	ug/L	#	93
75) 1,2,4-Trimethylbenzene	17.814	105	26752	1.15	ug/L	#	94
77) 1,4-Isopropyltoluene	18.374	119	12749	0.55	ug/L	#	93
86) Naphthalene	22.646	128	654396	32.82	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT11.D
Acq On : 28 Oct 2009 4:14 pm
Operator : EMG
Sample : 09J0523-23
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 28 17:53:48 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT15.D
Acq On : 28 Oct 2009 6:43 pm
Operator : EMG
Sample : 09J0523-27
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 29 09:12:39 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.294	96	678415	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	490013	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.485	152	229428	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.271	111	166147	22.71	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.84%			
33) 1,2-Dichloroethane-d4	8.848	65	184223	23.09	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.36%			
53) Toluene-d8	11.852	98	675330	25.13	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.52%			
67) Bromofluorobenzene	16.417	95	225320	24.09	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 96.36%			
Target Compounds						Qvalue
5) Bromomethane	2.901	94	213	Below Cal	#	18
17) Methylene Chloride	5.300	49	604	Below Cal	#	72

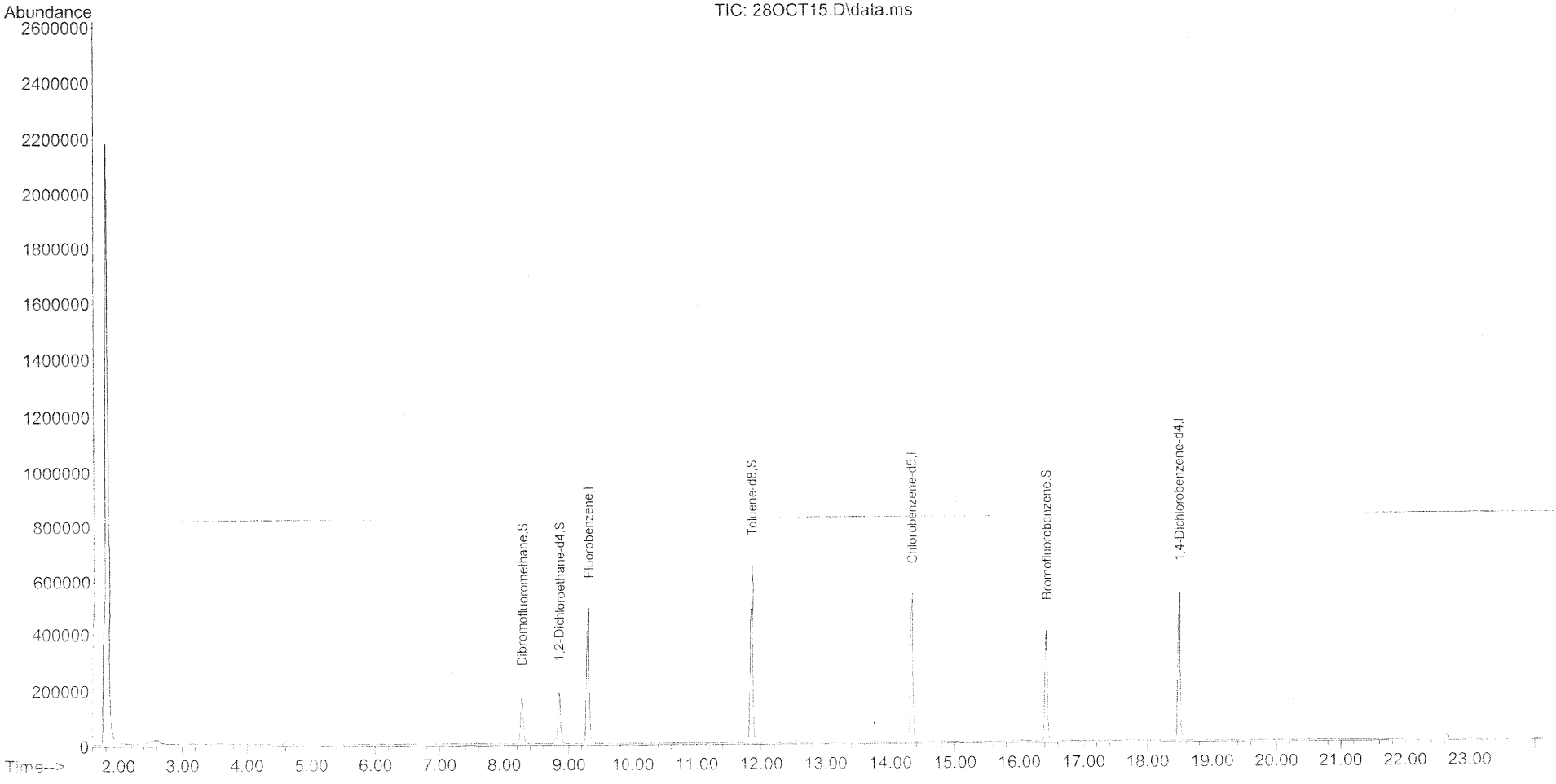
(#) = qualifier out of range (m) = manual integration (+) = signals summed

No compliance
OK

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT15.D
Acq On : 28 Oct 2009 6:43 pm
Operator : EMG
Sample : 09J0523-27
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 29 09:12:39 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT16.D
Acq On : 28 Oct 2009 7:20 pm
Operator : EMG
Sample : 09J0523-28
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 29 09:13:35 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

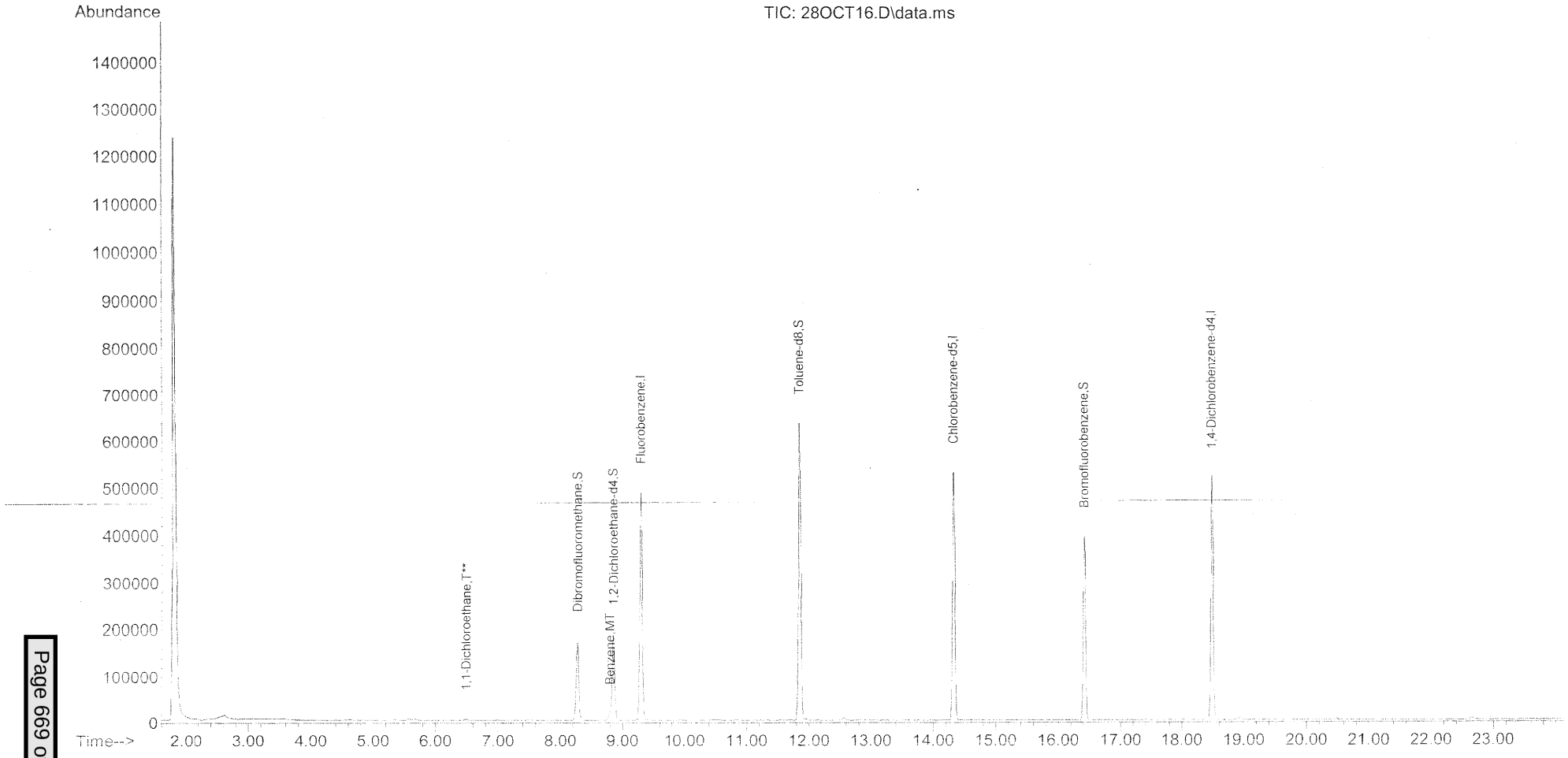
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.296	96	668192	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.329	117	478619	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.487	152	223795	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.273	111	163661	22.71	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.84%			
33) 1,2-Dichloroethane-d4	8.850	65	182321	23.20	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.80%			
53) Toluene-d8	11.848	98	664609	25.32	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 101.28%			
67) Bromofluorobenzene	16.413	95	218509	23.95	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 95.80%			
Target Compounds						Qvalue
5) Bromomethane	2.897	94	51	Below Cal	#	18
10) Acetone	4.579	58	256	Below Cal	#	57
17) Methylene Chloride	5.302	49	909	Below Cal	#	57
21) 1,1-Dichloroethane	6.483	63	5074	0.37	ug/L #	73
36) Benzene	8.796	78	18592	0.57	ug/L #	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2809\
Data File : 28OCT16.D
Acq On : 28 Oct 2009 7:20 pm
Operator : EMG
Sample : 09J0523-28
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 29 09:13:35 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Injection Log

Data Directory: C:\msdchem\1\DATA\OCT2909\

SampleName	MiscInfo	Vial	Multiplier	Injection Time
29OCT01.D 50ng BFB Tune	10uL MH91902/25mL	10	1.000	29 Oct 2009 9:19 am
2) 29OCT02.D 0944075-BS1	1, 20PPB 8260 CCV+ M	11	1.000	29 Oct 2009 9:56 am
3) 29OCT03.D 0944075-BLK1	1,DI WATER+ 1uL MJ92	12	1.000	29 Oct 2009 10:33 am
4) 29OCT04.D 09J1010-02	1, pH<2 [redacted], 5mL+ 1uL M	13	1.000	29 Oct 2009 11:10 am
5) 29OCT05.D 09J1012-04	1, pH<2 [redacted], 5mL+ 1uL M	14	1.000	29 Oct 2009 11:47 am
6) 29OCT06.D 09J1012-05	1, pH<2 [redacted], 5mL+ 1uL M	15	1.000	29 Oct 2009 12:24 pm
7) 29OCT07.D 09J1010-01RE1	100, pH<2 [redacted], 0.5mL/50	16	1.000	29 Oct 2009 1:03 pm
8) 29OCT08.D 09J0523-24	1,SS, pH<2 5mL+ 1uL MJ921	17	1.000	29 Oct 2009 1:40 pm
9) 29OCT09.D 09J0523-25	1,SS, pH<2 5mL+ 1uL MJ921	18	1.000	29 Oct 2009 2:17 pm
29OCT10.D 09J0523-26	1,SS, pH<2 5mL+ 1uL MJ921	19	1.000	29 Oct 2009 2:54 pm
11) 29OCT11.D 09J0523-29	1,SS, pH<2 5mL+ 1uL MJ921	20	1.000	29 Oct 2009 3:31 pm
12) 29OCT12.D 09J0523-30	1,SS, pH<2 5mL+ 1uL MJ921	21	1.000	29 Oct 2009 4:07 pm
13) 29OCT13.D 09J0523-31	1,SS, pH<2 5mL+ 1uL MJ921	22	1.000	29 Oct 2009 4:44 pm
14) 29OCT14.D 0944075-MS1	09J0523-31 1, 20PPB 8260 MS,5mL	23	1.000	29 Oct 2009 5:24 pm
15) 29OCT15.D 0944075-MSD1	09J0523-31 1, 20PPB 8260 MSD,5m	23	1.000	29 Oct 2009 6:01 pm
16) 29OCT16.D 09J0523-23RE1	pH<2 100,SS,0.5mL/50mL+ 1	24	1.000	29 Oct 2009 6:39 pm
17) 29OCT17.D 09J1132-01	pH<2 1000, [redacted] 5mL+ 1uL M	25	1.000	29 Oct 2009 7:15 pm
18) 29OCT18.D 09J1153-01	FLOW pH<2 1000, [redacted] 5mL+ 1uL M	26	1.000	29 Oct 2009 7:52 pm
29OCT19.D g BFB Tune	10uL MH91902/25mL	10	1.000	29 Oct 2009 8:29 pm
20) 29OCT20.D 0944078-BS1	50, 20PPB 8260 CCV+	27	1.000	29 Oct 2009 9:06 pm
21) 29OCT21.D				

2e Lan (e DUP

1576 Benzene
786 Toluene

1563 Benzene
525 Toluene

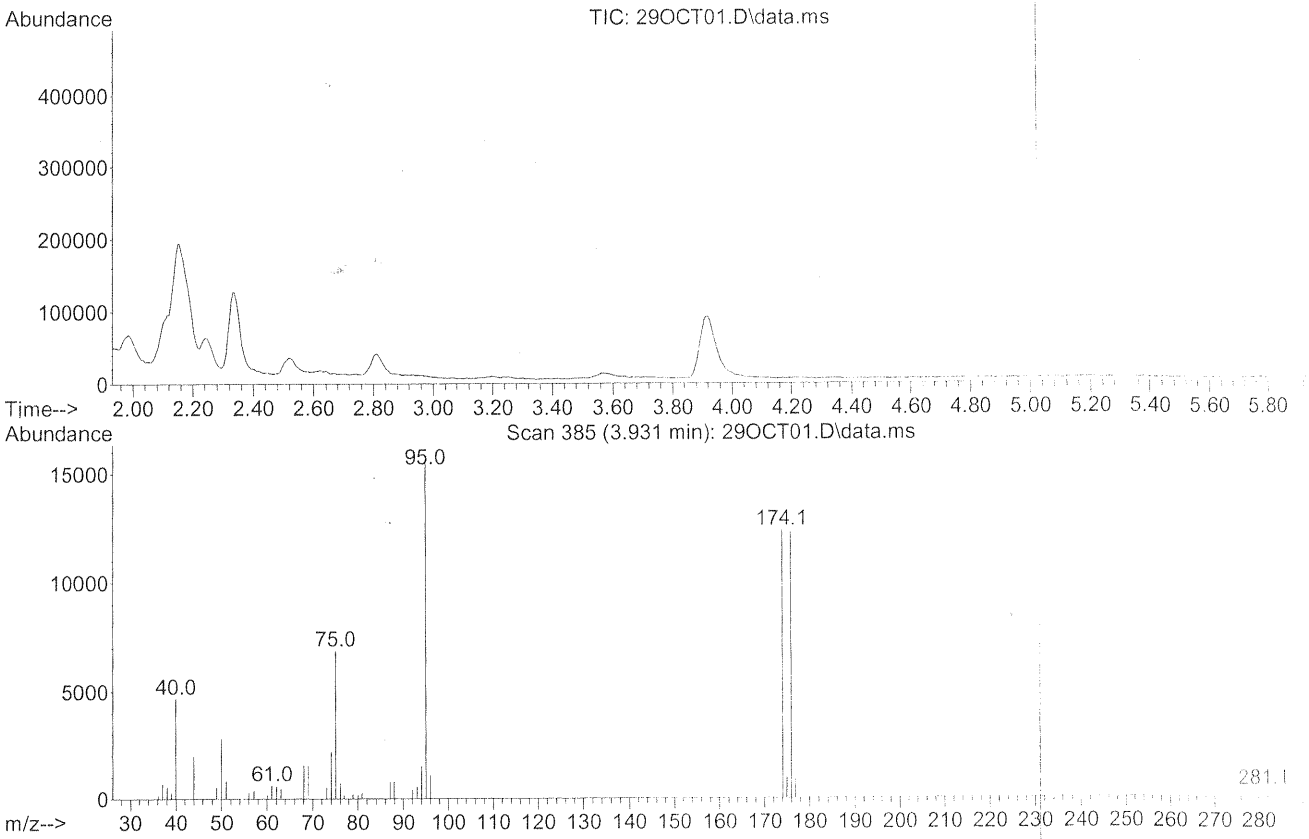
22) 29OCT22.D 09J1078-01	2.5, [redacted] 1mL/	29	1.000	29 Oct 2009	10:20 pm
23) 29OCT23.D [redacted]4078-MS1	2.5, 20PPB 8260 MS,1	30	1.000	29 Oct 2009	10:58 pm
24) 29OCT24.D 0944078-MSD1	2.5, 20PPB 8260 MSD,	31	1.000	29 Oct 2009	11:35 pm
25) 29OCT25.D 09J1011-01	50,[redacted] 1mL/50mL+	32	1.000	30 Oct 2009	12:12 am
26) 29OCT26.D 09J1012-01	50,[redacted] 1mL/50mL+	33	1.000	30 Oct 2009	12:49 am
27) 29OCT27.D 09J1012-02	50,[redacted] 1mL/50mL+	34	1.000	30 Oct 2009	1:26 am
28) 29OCT28.D 09J1012-03	50,[redacted] 1mL/50mL+	35	1.000	30 Oct 2009	2:03 am
29) 29OCT29.D 09J1109-01	2.5[redacted], 1mL/50mL+ 1	36	1.000	30 Oct 2009	9:51 am

Not used Lamont of Tune Time Window

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT01.D
Acq On : 29 Oct 2009 9:19 am
Operator : EMG
Sample : 50ng BFB Tune
Misc : 10uL MH91902/25mL
ALS Vial : 10 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\msdchem\1\METHODS\M090809.M
Title : GLI METHOD 8260A/624
Last Update : Wed Sep 09 11:21:21 2009



Spectrum Information: Scan 385

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	2810	PASS
75	95	30	80	44.1	6864	PASS
95	95	100	100	100.0	15563	PASS
96	95	5	9	7.0	1087	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	79.5	12377	PASS
175	174	5	9	7.6	939	PASS
176	174	95	101	99.5	12313	PASS
177	176	5	9	7.6	936	PASS

Tune File : C:\msdchem\1\DATA\OCT2909\29OCT01.D
Tune Time : 29 Oct 2009 9:19 am

Daily Calibration File : C:\msdchem\1\DATA\OCT2909\29OCT02.D

	DBFM	DCA4	TOL8	BFB	FLB	CLBD5	DCBD4
					669588	487736	235667
File	Sample	Surrogate Recovery %				Internal Standard Responses	
29OCT02.D	0944075-BS	90	91	100	96	669588	487736	235667
29OCT03.D	0944075-BL	90	90	102	95	665747	472096	223994
29OCT04.D	09J1010-02	92	92	102	96	640877	457731	215280
29OCT05.D	09J1012-04	91	94	98	98	638516	460871	211895
29OCT06.D	09J1012-05	92	94	101	100	626510	450030	205607
29OCT07.D	09J1010-01	92	94	102	99	613582	441033	205230
29OCT08.D	09J0523-24	91	94	101	100	616382	439904	201260
29OCT09.D	09J0523-25	92	96	101	101	600041	435335	199475
29OCT10.D	09J0523-26	92	95	103	98	595310	429026	201947
29OCT11.D	09J0523-29	93	96	103	99	599547	427230	197614
29OCT12.D	09J0523-30	93	96	102	98	601800	433725	199474
29OCT13.D	09J0523-31	93	97	100	100	598250	435036	197153
29OCT14.D	0944075-MS	93	94	100	97	597778	436013	206599
29OCT15.D	0944075-MS	92	95	103	97	604861	437705	213849
29OCT16.D	09J0523-23	92	96	102	96	603723	430552	201625

(fails) - fails 12hr time check * - fails criteria

Created: Fri Oct 30 10:35:49 2009 Instrument #1

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT02.D
Acq On : 29 Oct 2009 9:56 am
Operator : EMG
Sample : 0944075-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 29 10:21:21 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	78	0.00
2	T	Dichlorodifluoromethane	20.000	30.524	-52.6#	124	0.00
3	T**	Chloromethane	20.000	19.511	2.4	86	0.00
4	T*	Vinyl Chloride	20.000	24.304	-21.5#	104	0.00
5	T	Bromomethane	20.000	16.685	16.6	65	0.01
6	T	Chloroethane	20.000	20.923	-4.6	135	0.00
7	T	Trichlorofluoromethane	20.000	24.420	-22.1#	100	0.00
8	T	Acrolein	100.000	83.106	16.9	73	0.00
9	MT*	1,1-Dichloroethene	20.000	20.494	-2.5	86	0.00
10	T	Acetone	100.000	112.141	-12.1	92	0.00
11	T	Iodomethane	20.000	20.006	-0.0	80	0.00
12	T	Carbon Disulfide	20.000	18.605	7.0	80	0.00
13	T	Allyl Chloride	20.000	18.270	8.7	78	0.00
14	T	Isobutyl Alcohol	-1.000	0.000	0.0	21	0.00
15	T	Methyl Acetate	-1.000	0.000	0.0	111	0.00
16	T	Acetonitrile	20.000	15.020	24.9#	72	0.00
17	T	Methylene Chloride	20.000	17.116	14.4	73	0.00
18	T	Methyl tert-Butyl Ether	20.000	17.569	12.2	73	0.00
19	T	trans-1,2-Dichloroethene	20.000	20.297	-1.5	85	0.00
20	T	Acrylonitrile	20.000	21.470	-7.3	89	0.00
21	T**	1,1-Dichloroethane	20.000	21.075	-5.4	88	0.00
22	T	Chloroprene	20.000	21.511	-7.6	90	0.00
23	T	Vinyl Acetate	20.000	23.630	-18.1	96	0.00
24	T	2,2-Dichloropropane	20.000	18.417	7.9	79	0.00
25	T	cis-1,2-Dichloroethene	20.000	21.355	-6.8	89	0.00
26	T	2-Butanone	100.000	110.312	-10.3	93	0.00
27	T	Proprionitrile	20.000	22.293	-11.5	89	0.00
28	T	Methacrylonitrile	20.000	21.905	-9.5	98	0.00
29	T*	Chloroform	20.000	21.477	-7.4	90	0.00
30	T	Bromochloromethane	20.000	22.325	-11.6	91	0.00
31	S	Dibromofluoromethane	20.000	22.555	-12.8	94	0.00
32	T	1,1,1-Trichloroethane	20.000	20.202	-1.0	85	0.00
33	S	1,2-Dichloroethane-d4	20.000	22.798	-14.0	99	0.00
34	T	1,1-Dichloropropene	20.000	20.484	-2.4	86	0.00
35	T	Carbon Tetrachloride	20.000	21.498	-7.5	90	0.00
36	MT	Benzene	20.000	20.304	-1.5	87	0.00
37	T	1,2-Dichloroethane	20.000	22.345	-11.7	94	0.00
38	MT	Trichloroethene	20.000	20.532	-2.7	88	0.00
39	T*	1,2-Dichloropropane	20.000	20.330	-1.6	84	0.00

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT02.D
Acq On : 29 Oct 2009 9:56 am
Operator : EMG
Sample : 0944075-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 29 10:21:21 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	T	Bromodichloromethane	20.000	22.236	-11.2	93	-0.01
41	T	Methyl Methacrylate	20.000	21.981	-9.9	92	-0.01
42	T	Dibromomethane	20.000	18.019	9.9	75	0.00
43	T	2-Chloroethyl vinyl ether	20.000	16.178	19.1	66	-0.01
44	T	4-Methyl-2-Pentanone	100.000	113.135	-13.1	93	0.00
45	T	cis-1,3-Dichloropropene	20.000	20.136	-0.7	84	-0.01
46	MT*	Toluene	20.000	19.595	2.0	85	-0.01
47	T	trans-1,3-Dichloropropene	20.000	19.611	1.9	81	-0.01
48	T	Ethyl Methacrylate	20.000	20.200	-1.0	84	0.00
49	T	1,1,2-Trichloroethane	20.000	19.749	1.3	84	-0.01
50	T	2-Hexanone	100.000	111.342	-11.3	93	-0.01
51	T	1,2-Dibromoethane	20.000	19.810	1.0	83	-0.01
52	I	Chlorobenzene-d5	25.000	25.000	0.0	73	-0.01
53	S	Toluene-d8	20.000	24.984	-24.9#	95	-0.01
54	T	Tetrachloroethene	20.000	17.372	13.1	62	-0.01
55	T	1,3-Dichloropropane	20.000	22.395	-12.0	86	-0.01
56	T	Dibromochloromethane	20.000	21.954	-9.8	84	-0.02
57	M**	Chlorobenzene	20.000	20.510	-2.6	79	0.00
58	T	1,1,1,2-Tetrachloroethane	20.000	21.289	-6.4	83	-0.01
59	T*	Ethylbenzene	20.000	21.079	-5.4	83	0.00
60	T	m & p Xylenes	40.000	41.862	-4.7	82	-0.01
61	T	o-Xylene	20.000	20.576	-2.9	82	-0.01
62	T	Styrene	20.000	19.731	1.3	78	-0.01
63	T**	Bromoform	20.000	20.601	-3.0	79	-0.01
64	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	67	-0.02
65	T	Isopropylbenzene	20.000	21.298	-6.5	76	-0.01
66	T**	1,1,2,2-Tetrachloroethane	20.000	23.619	-18.1	85	-0.01
67	S	Bromofluorobenzene	20.000	24.098	-20.5#	92	-0.01
68	T	1,2,3-Trichloropropane	20.000	23.004	-15.0	81	-0.01
69	T	Bromobenzene	20.000	23.275	-16.4	83	-0.01
70	T	n-Propylbenzene	20.000	22.263	-11.3	81	-0.02
71	T	2-Chlorotoluene	20.000	22.400	-12.0	82	-0.02
72	T	1,3,5-Trimethylbenzene	20.000	21.063	-5.3	76	-0.02
73	T	4-Chlorotoluene	20.000	22.068	-10.3	81	-0.01
74	T	t-Butylbenzene	20.000	20.205	-1.0	73	-0.02
75	T	1,2,4-Trimethylbenzene	20.000	21.901	-9.5	78	-0.02
76	T	sec-Butylbenzene	20.000	20.537	-2.7	74	-0.01

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT02.D
Acq On : 29 Oct 2009 9:56 am
Operator : EMG
Sample : 0944075-BS1
Misc : 1, 20PPB 8260 CCV+ MJ92101,2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 29 10:21:21 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77 T	1,4-Isopropyltoluene	20.000	20.996	-5.0	75	-0.01
78 T	1,3-Dichlorobenzene	20.000	19.966	0.2	73	-0.02
79 T	1,4-Dichlorobenzene	20.000	20.115	-0.6	74	-0.02
80 T	t-1,4-Dichloro-2-butene	20.000	26.712	-33.6#	95	-0.01
81 T	n-Butylbenzene	20.000	24.002	-20.0#	84	-0.01
82 T	1,2-Dichlorobenzene	20.000	20.477	-2.4	73	-0.02
83 T	1,2-Dibromo-3-chloropropane	20.000	20.775	-3.9	73	-0.02
84 T	1,2,4-Trichlorobenzene	20.000	23.561	-17.8	71	-0.01
85 T	Hexachlorobutadiene	20.000	17.036	14.8	62	-0.02
86 T	Naphthalene	20.000	25.174	-25.9#	84	-0.02
87 T	1,2,3-Trichlorobenzene	20.000	23.016	-15.1	74	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT08.D
Acq On : 29 Oct 2009 1:40 pm
Operator : EMG
Sample : 09J0523-24
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 30 10:30:41 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

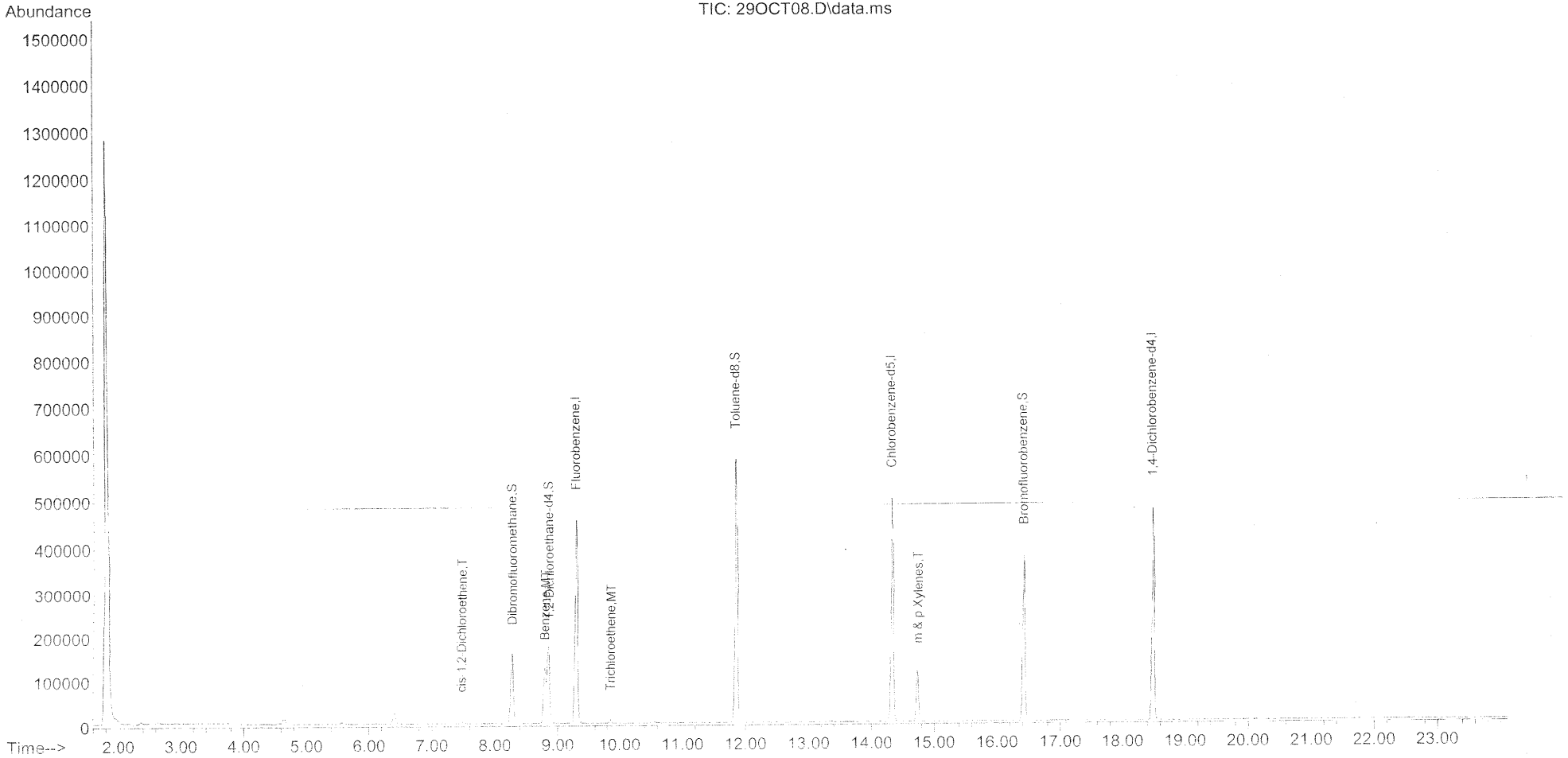
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	616382	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.326	117	439904	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	201260	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	150430	22.63	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 90.52%			
33) 1,2-Dichloroethane-d4	8.852	65	170744	23.56	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 94.24%			
53) Toluene-d8	11.851	98	606320	25.13	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.52%			
67) Bromofluorobenzene	16.416	95	204638	24.94	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 99.76%			
Target Compounds						Qvalue
5) Bromomethane	2.894	94	223	Below Cal	#	18
10) Acetone	4.586	58	424	Below Cal	#	57
17) Methylene Chloride	5.299	49	1151	Below Cal	#	56
25) cis-1,2-Dichloroethene	7.470	61	4048	0.41	ug/L #	85
36) Benzene	8.793	78	167573	5.56	ug/L #	88
38) Trichloroethene	9.854	95	4264	0.58	ug/L #	81
54) Tetrachloroethene	12.808	166	1156	Below Cal	#	61
60) m & p Xylenes	14.734	91	102499	4.36	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT08.D
Acq On : 29 Oct 2009 1:40 pm
Operator : EMG
Sample : 09J0523-24
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 30 10:30:41 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT09.D
Acq On : 29 Oct 2009 2:17 pm
Operator : EMG
Sample : 09J0523-25
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 30 10:30:59 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

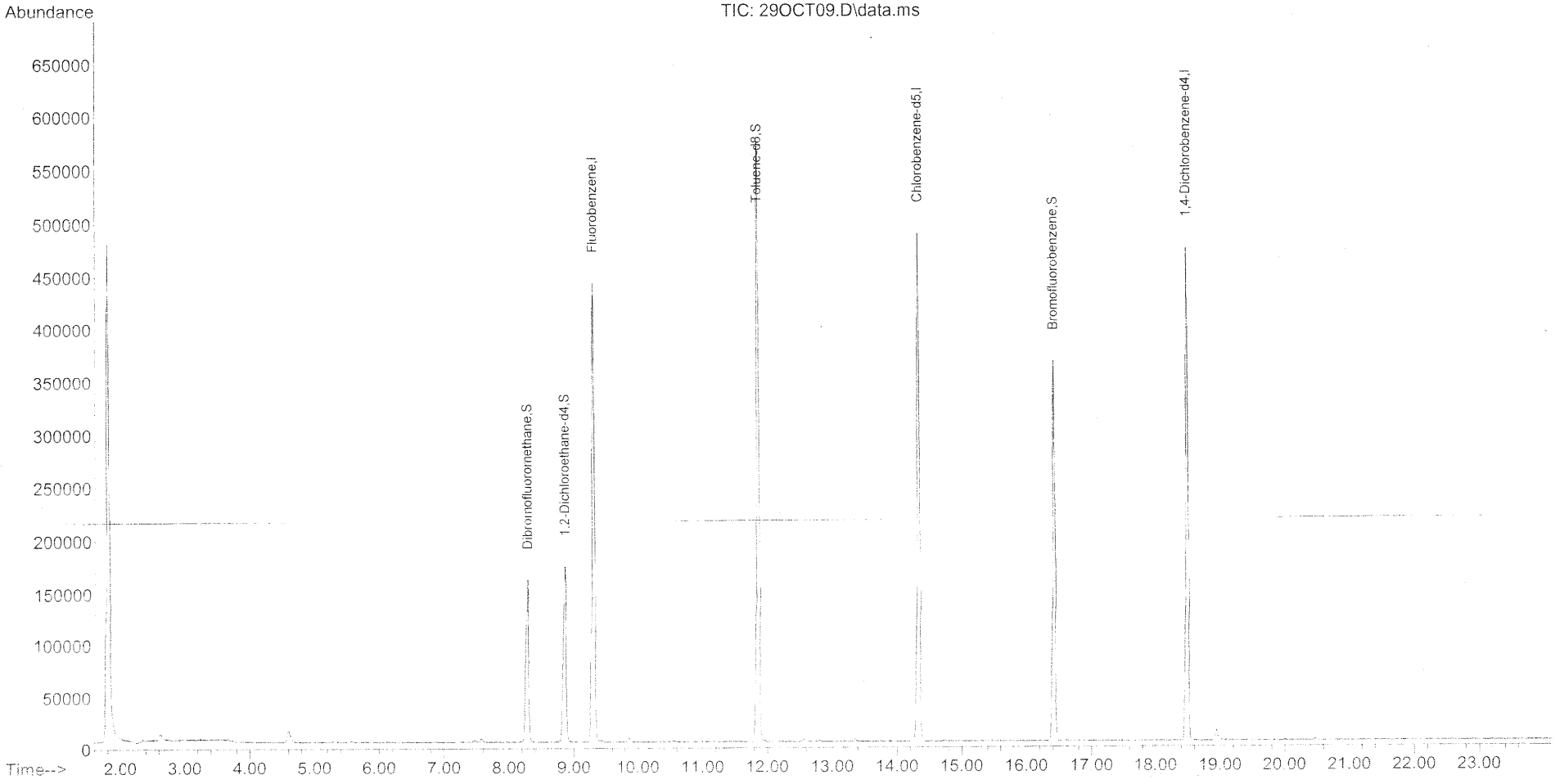
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.294	96	600041	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	435335	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.484	152	199475	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.271	111	148556	22.96	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 91.84%			
33) 1,2-Dichloroethane-d4	8.847	65	169845	24.07	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.28%			
53) Toluene-d8	11.845	98	600857	25.17	ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.68%			
67) Bromofluorobenzene	16.416	95	204706	25.17	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 100.68%			
Target Compounds						Qvalue
5) Bromomethane	2.889	94	266	Below Cal	#	18
17) Methylene Chloride	5.300	49	541	Below Cal	#	43
54) Tetrachloroethene	12.803	166	224	Below Cal	#	5

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT09.D
Acq On : 29 Oct 2009 2:17 pm
Operator : EMG
Sample : 09J0523-25
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 30 10:30:59 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT10.D
Acq On : 29 Oct 2009 2:54 pm
Operator : EMG
Sample : 09J0523-26
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 29 16:10:40 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

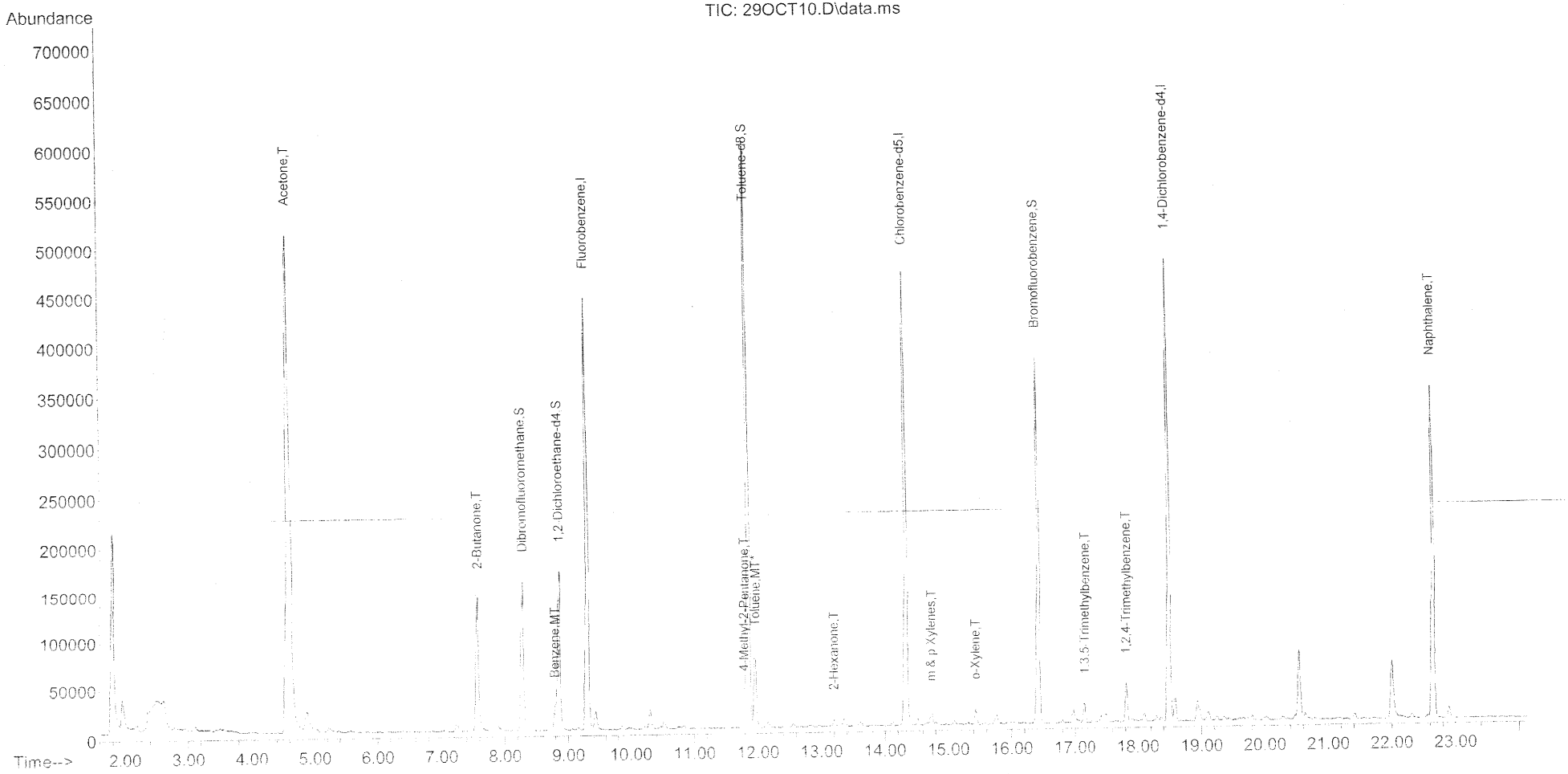
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	9.294	96	595310	25.00	ug/L		0.00
52) Chlorobenzene-d5	14.327	117	429026	25.00	ug/L		-0.01
64) 1,4-Dichlorobenzene-d4	18.485	152	201947	25.00	ug/L		-0.02
System Monitoring Compounds							
31) Dibromofluoromethane	8.271	111	147780	23.02	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.08%				
33) 1,2-Dichloroethane-d4	8.848	65	165821	23.69	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 94.76%				
53) Toluene-d8	11.846	98	607424	25.82	ug/L		-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 103.28%				
67) Bromofluorobenzene	16.417	95	201246	24.44	ug/L		-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 97.76%				
Target Compounds							Qvalue
5) Bromomethane	2.901	94	222	Below Cal		#	18
10) Acetone	4.582	58	347332	443.14	ug/L	#	90
17) Methylene Chloride	5.300	49	662	Below Cal		#	72
26) 2-Butanone	7.564	43	269402	68.01	ug/L		96
27) Proprionitrile	7.803	54	280	Below Cal		#	60
36) Benzene	8.788	78	31964	1.10	ug/L	#	76
44) 4-Methyl-2-Pentanone	11.786	43	25795	3.21	ug/L		96
46) Toluene	11.960	91	84567	2.76	ug/L		99
50) 2-Hexanone	13.196	43	7063	1.22	ug/L	#	80
54) Tetrachloroethene	12.804	166	108	Below Cal		#	1
60) m & p Xylenes	14.730	91	14042	0.61	ug/L		96
61) o-Xylene	15.432	91	14658	0.61	ug/L	#	92
72) 1,3,5-Trimethylbenzene	17.151	105	18054	0.93	ug/L	#	76
75) 1,2,4-Trimethylbenzene	17.815	105	34772	1.81	ug/L		95
86) Naphthalene	22.647	128	465031	28.38	ug/L	#	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT10.D
Acq On : 29 Oct 2009 2:54 pm
Operator : EMG
Sample : 09J0523-26
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 29 16:10:40 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT11.D
Acq On : 29 Oct 2009 3:31 pm
Operator : EMG
Sample : 09J0523-29
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 30 10:32:22 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

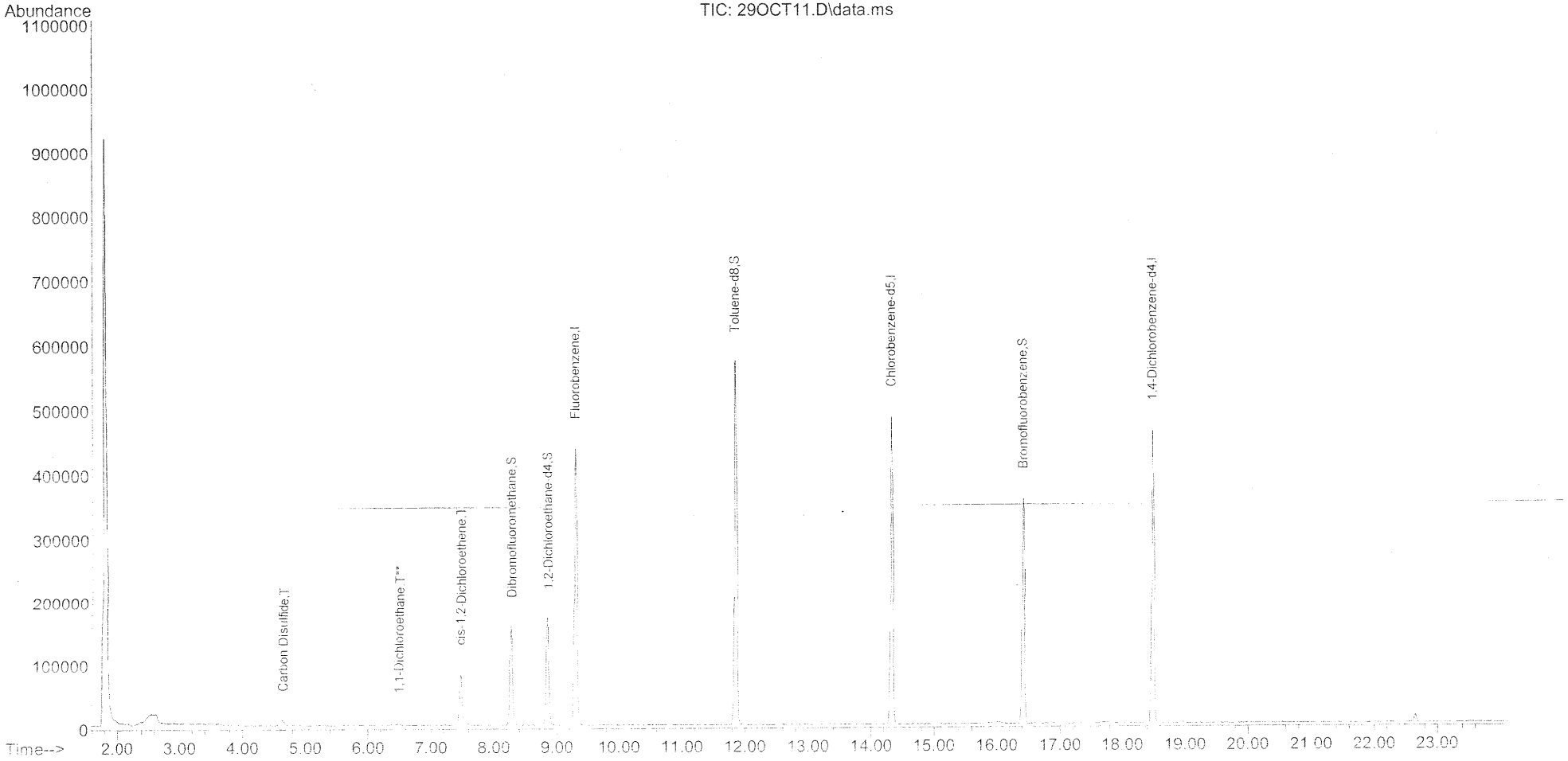
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.293	96	599547	25.00 ug/L	0.00
52) Chlorobenzene-d5	14.326	117	427230	25.00 ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.483	152	197614	25.00 ug/L	-0.02
System Monitoring Compounds					
31) Dibromofluoromethane	8.270	111	149932	23.19 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.76%		
33) 1,2-Dichloroethane-d4	8.847	65	169050	23.98 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.92%		
53) Toluene-d8	11.845	98	600847	25.64 ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 102.56%		
67) Bromofluorobenzene	16.416	95	199836	24.80 ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 99.20%		
Target Compounds					Qvalue
5) Bromomethane	2.883	94	263	Below Cal #	18
12) Carbon Disulfide	4.646	76	14619	0.75 ug/L #	86
17) Methylene Chloride	5.305	49	359	Below Cal #	1
21) 1,1-Dichloroethane	6.491	63	6339	0.51 ug/L #	89
25) cis-1,2-Dichloroethene	7.470	61	74692	7.80 ug/L	94
54) Tetrachloroethene	12.808	166	611	Below Cal #	33

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT11.D
Acq On : 29 Oct 2009 3:31 pm
Operator : EMG
Sample : 09J0523-29
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 30 10:32:22 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT12.D
Acq On : 29 Oct 2009 4:07 pm
Operator : EMG
Sample : 09J0523-30
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 30 10:33:06 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

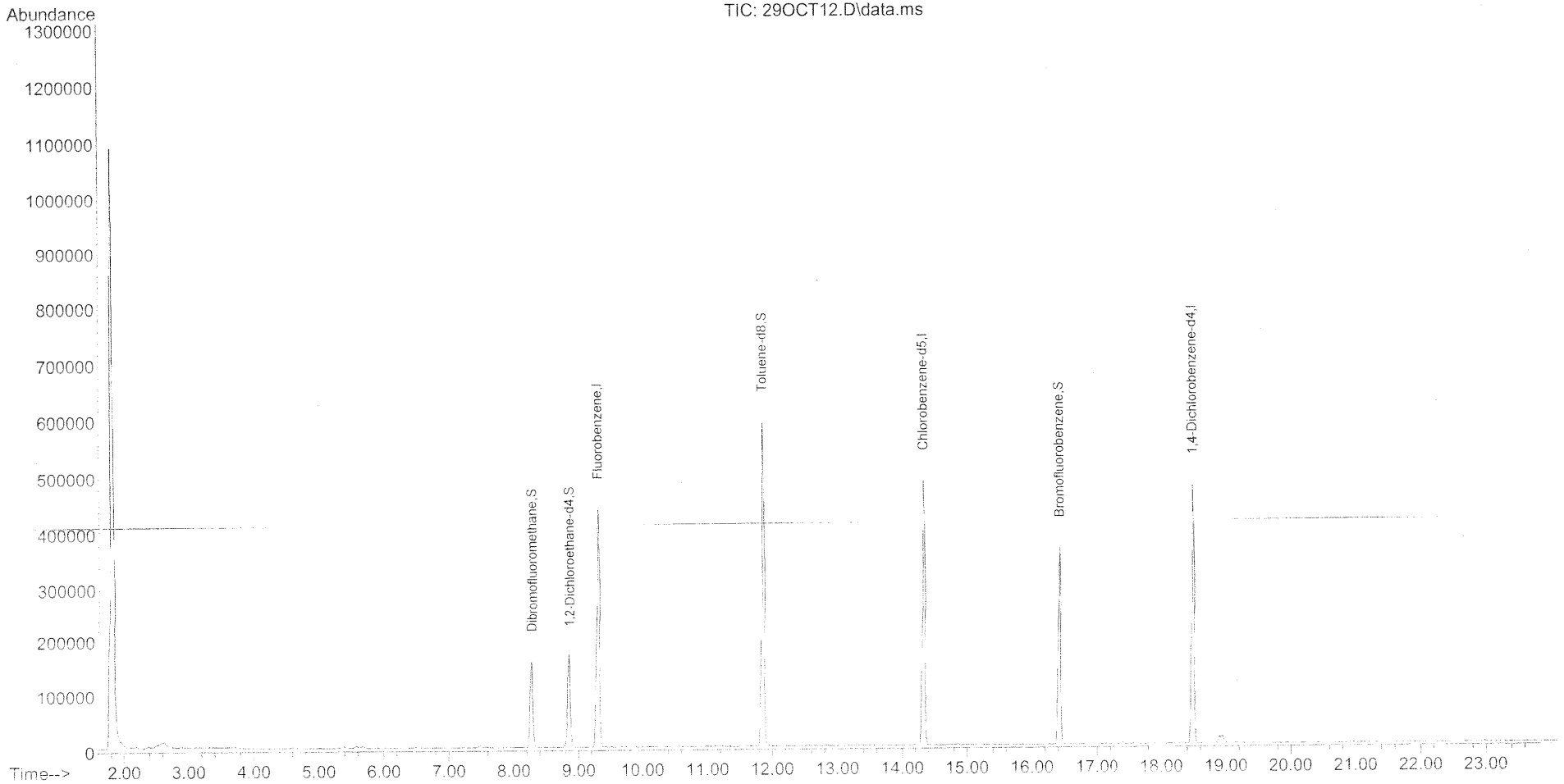
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.293	96	601800	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.326	117	433725	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.483	152	199474	25.00	ug/L	-0.02
System Monitoring Compounds						
31) Dibromofluoromethane	8.270	111	150230	23.15	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.60%			
33) 1,2-Dichloroethane-d4	8.846	65	169409	23.94	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.76%			
53) Toluene-d8	11.850	98	607830	25.55	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 102.20%			
67) Bromofluorobenzene	16.415	95	199033	24.47	ug/L	-0.01
Spiked Amount 25.000	Range 60 - 149		Recovery = 97.88%			
Target Compounds						Qvalue
5) Bromomethane	2.894	94	65	Below Cal	#	18
10) Acetone	4.591	58	867	Below Cal	#	73
17) Methylene Chloride	5.310	49	739	Below Cal	#	64
54) Tetrachloroethene	12.802	166	351	Below Cal	#	38

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT12.D
Acq On : 29 Oct 2009 4:07 pm
Operator : EMG
Sample : 09J0523-30
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 30 10:33:06 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT13.D
Acq On : 29 Oct 2009 4:44 pm
Operator : EMG
Sample : 09J0523-31
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 30 10:33:42 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

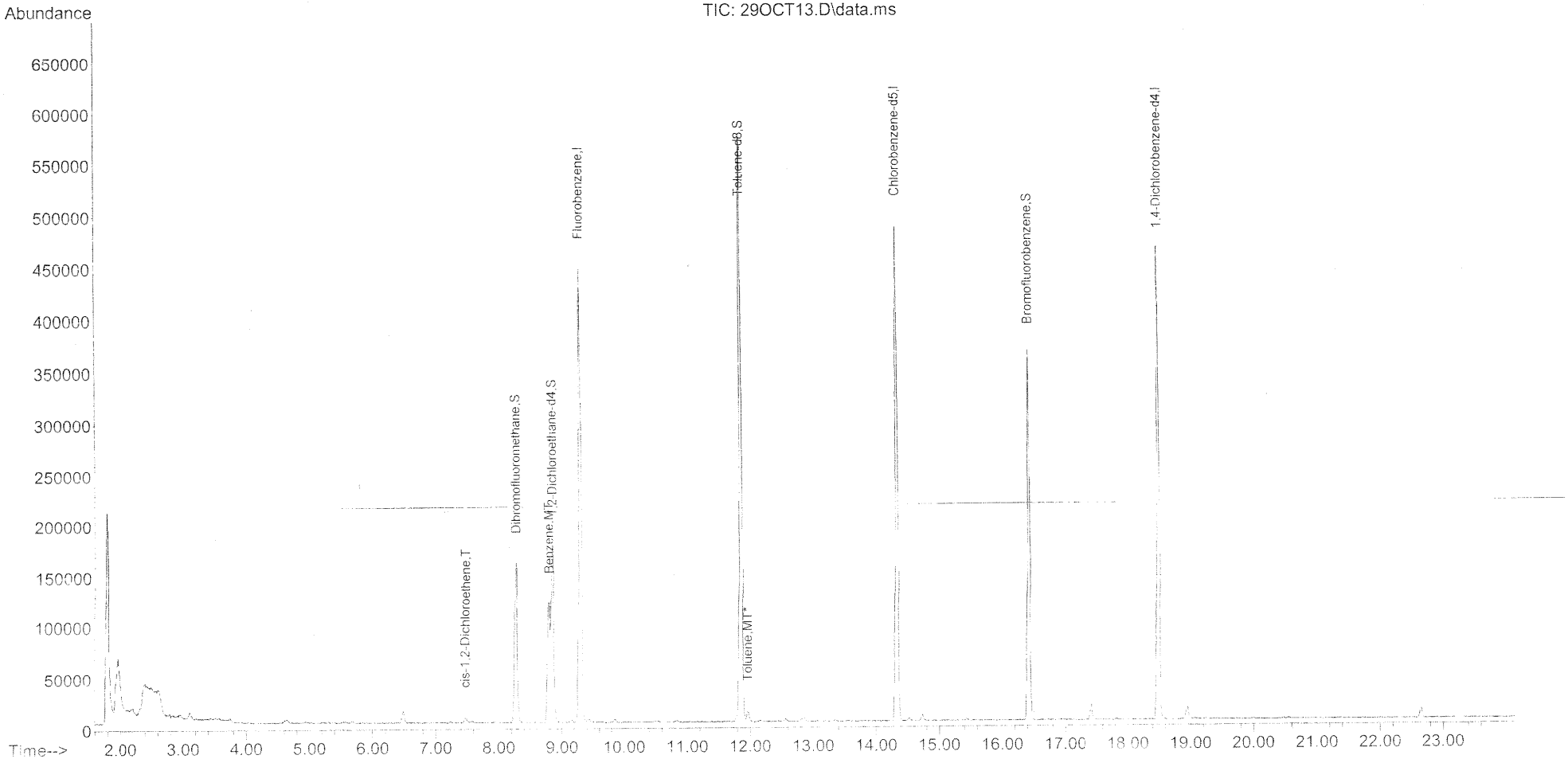
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.294	96	598250	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.327	117	435036	25.00	ug/L	-0.01
64) 1,4-Dichlorobenzene-d4	18.489	152	197153	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.271	111	150500	23.33	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 93.32%			
33) 1,2-Dichloroethane-d4	8.847	65	170563	24.24	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.96%			
53) Toluene-d8	11.846	98	599245	25.12	ug/L	-0.01
Spiked Amount 25.000	Range 75 - 120		Recovery = 100.48%			
67) Bromofluorobenzene	16.422	95	200795	24.98	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 99.92%			
Target Compounds						Qvalue
5) Bromomethane	2.900	94	133	Below Cal	#	18
10) Acetone	4.581	58	357	Below Cal	#	57
17) Methylene Chloride	5.300	49	461	Below Cal	#	29
25) cis-1,2-Dichloroethene	7.471	61	4549	0.48	ug/L #	88
36) Benzene	8.793	78	158606	5.42	ug/L #	87
46) Toluene	11.960	91	11532	0.37	ug/L #	97
54) Tetrachloroethene	12.809	166	872	Below Cal	#	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT13.D
Acq On : 29 Oct 2009 4:44 pm
Operator : EMG
Sample : 09J0523-31
Misc : 1,SS, 5mL+ 1uL MJ92101,2
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 30 10:33:42 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT16.D
Acq On : 29 Oct 2009 6:39 pm
Operator : EMG
Sample : 09J0523-23RE1
Misc : 100,SS,0.5mL/50mL+ 1uL MJ92101,2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 30 10:34:58 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration

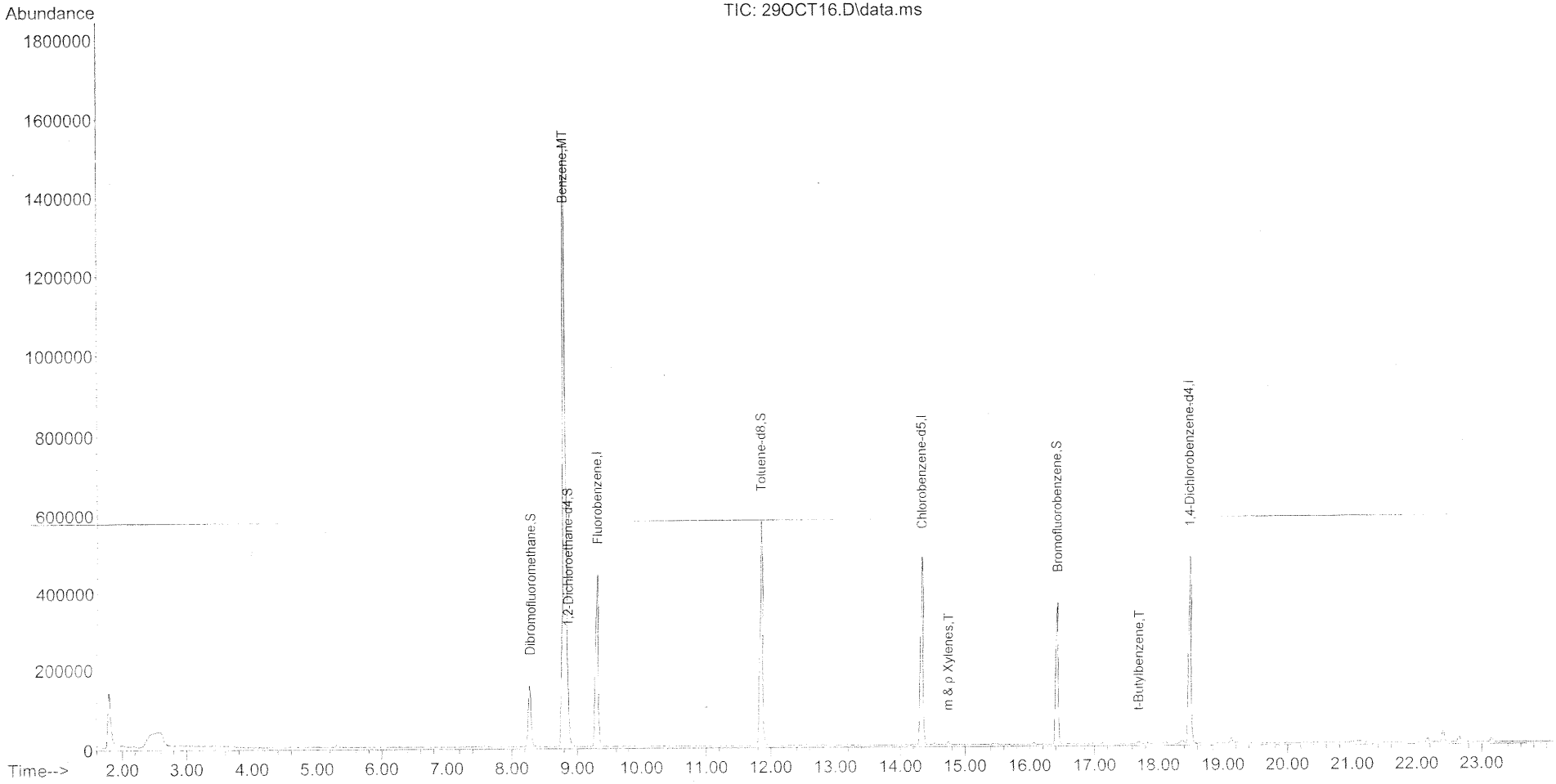
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.296	96	603723	25.00	ug/L	0.00
52) Chlorobenzene-d5	14.330	117	430552	25.00	ug/L	0.00
64) 1,4-Dichlorobenzene-d4	18.487	152	201625	25.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	8.273	111	150123	23.06	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 92.24%			
33) 1,2-Dichloroethane-d4	8.845	65	169645	23.90	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.60%			
53) Toluene-d8	11.848	98	599800	25.40	ug/L	0.00
Spiked Amount 25.000	Range 75 - 120		Recovery = 101.60%			
67) Bromofluorobenzene	16.419	95	197906	24.07	ug/L	0.00
Spiked Amount 25.000	Range 60 - 149		Recovery = 96.28%			
Target Compounds						Qvalue
5) Bromomethane	2.886	94	156	Below Cal	#	18
10) Acetone	4.601	58	1694	Below Cal	#	57
17) Methylene Chloride	5.302	49	3862	Below Cal	#	79
27) Proprionitrile	7.800	54	133	Below Cal	#	60
36) Benzene	8.790	78	2109066	71.43	ug/L #	92
54) Tetrachloroethene	12.801	166	1314	Below Cal	#	68
60) m & p Xylenes	14.738	91	7860	0.34	ug/L #	80
74) t-Butylbenzene	17.698	119	5281	0.33	ug/L #	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\OCT2909\
Data File : 29OCT16.D
Acq On : 29 Oct 2009 6:39 pm
Operator : EMG
Sample : 09J0523-23RE1
Misc : 100,SS,0.5mL/50mL+ 1uL MJ92101,2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 30 10:34:58 2009
Quant Method : C:\msdchem\1\METHODS\M090809.M
Quant Title : GLI METHOD 8260A/624
QLast Update : Wed Sep 09 11:21:21 2009
Response via : Initial Calibration



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COVER LETTER

January 07, 2010
Report No.: 09L0484

Russ Becker
Severstal Sparrows Point
1430 Sparrows Point Blvd
Sparrows Point, MD 21219
RE: Landfill

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 12/08/2009 14:10.

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
- Case Narative
- Test Results
- QC Summary
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody
- Data



Final report reviewed by: Michael D. Arbaugh/Customer Services Manager — 1/7/2010 Report issue date

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

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.

Microbac Laboratories, Inc.

Baltimore Division

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
GL-18S	09L0484-01	Ground Water	Grab	12/08/2009 12:30	12/08/2009 14:10
GL-18D	09L0484-02	Ground Water	Grab	12/08/2009 13:10	12/08/2009 14:10

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

CASE NARRATIVE

Severstal Sparrows Point
Landfill
Russ Becker
1430 Sparrows Point Blvd
Sparrows Point , MD 21219

2 sample(s) were received by Melanie C. Duszynski of Microbac laboratories, Baltimore Division on 12/8/2009 2:10:00 PM and sample(s) condition(s) were checked and found to be acceptable unless otherwise noted in the 'Cooler Receipt Log' or 'Statement of Qualifications' sections of this report. The samples were logged into the LIMS by Melanie C. Duszynski on 12/8/2009 4:16:00 PM and compared to the client DQO. Any deviations from the client DQO and method specific quality control requirements are noted in the 'Statement of Data Qualifications'.

Other Notes/Comments:

None.

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**210**	4.0	mg CaCO3/L	120909 1240	120909 1240	VAS	Sm (20) 2320B	
Chloride	**240**	5.0	mg/L	120909 1020	120909 1203	LCR	SM (20) 4500Cl-C	D
COD, Total	**170**	20	mg/L	121109 0658	121109 1114	LCR	EPA410.4/HACH8000	D
Ammonia as N	**33**	1.0	mg/L	120909 0930	121009 1352	VAS	SM(20)4500NH3-G	D
Nitrite as N	ND	0.012	mg/L	120809 1812	120809 1812	LBG	EPA 353.2	
Nitrate as N	ND	0.050	mg/L	120909 0848	120909 0848	LBG	EPA 353.2	
Nitrate/Nitrite as N	ND	0.050	mg/L	120909 0848	120909 0848	VAS	EPA 353.2	
Sulfate as SO4	**1100**	100	mg/L	121109 0700	121109 1012	LCR	ASTM D516-02	D
Total Dissolved Solids	**1800**	20	mg/L	121009 0730	121009 0730	LCR	SM (20) 2540 C	
Turbidity	**2.1**	0.10	NTU	120909 1215	120909 1215	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	120909 1037	120909 1711	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**860**	1.3	mg/L	120909 0812	121109 1326	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Arsenic	**0.011**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Barium	**0.034**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	120909 0812	121109 1310	APS	EPA 200.7/6010B	
Calcium	**340**	0.50	mg/L	120909 0812	121109 1326	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Cobalt	ND	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Chromium	**0.0046**	0.0025	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Copper	**0.0051**	0.0020	mg/L	120909 0812	120909 1551	PBK	EPA 200.8/6020	
Iron	**1.0**	0.0050	mg/L	120909 0812	121109 1310	APS	EPA 200.7/6010B	
Potassium	**130**	0.10	mg/L	120909 0812	121109 1326	APS	EPA 200.7/6010B	
Magnesium	ND	0.010	mg/L	120909 0812	121109 1310	APS	EPA 200.7/6010B	
Manganese	**0.038**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Sodium	**140**	10	mg/L	120909 0812	121109 1326	APS	EPA 200.7/6010B	
Nickel	**0.028**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Lead	**0.0050**	0.0020	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Antimony	ND	0.0050	mg/L	120909 0812	120909 1906	PRM	EPA 200.8/6020	
Selenium	**0.012**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Vanadium	**0.023**	0.0050	mg/L	120909 0812	120909 1551	PRM	EPA 200.8/6020	
Zinc	**0.078**	0.020	mg/L	120909 0812	120909 1906	PRM	EPA 200.8/6020	

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Dichlorodifluoromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Chloromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Vinyl chloride	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Bromomethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Chloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Trichlorofluoromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Acrolein	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1-Dichloroethene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Acetone	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Iodomethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Carbon disulfide	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Allyl Chloride (3-Chloropropylene)	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Acetonitrile	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Methylene Chloride	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Methyl-tert-Butyl Ether	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
trans-1,2-Dichloroethene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Acrylonitrile	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1-Dichloroethane	**32**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
Chloroprene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Vinyl acetate	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
2,2-Dichloropropane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
cis-1,2-Dichloroethene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
2-Butanone (MEK)	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Propionitrile (Ethyl Cyanide)	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Methacrylonitrile	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Chloroform	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Bromochloromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1,1-Trichloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Carbon Tetrachloride	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Benzene	**910**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
1,2-Dichloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Trichloroethene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2-Dichloropropane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Bromodichloromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Methyl Methacrylate	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Dibromomethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
2-Chloroethyl Vinyl Ether	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Methyl Isobutyl Ketone	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
cis-1,3-Dichloropropene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Toluene	**360**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
trans-1,3-Dichloropropene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Ethyl Methacrylate	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1,2-Trichloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
2-Hexanone (MBK)	ND	25	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2-Dibromoethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Tetrachloroethene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,3-Dichloropropane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Dibromochloromethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Chlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Ethylbenzene	**7.2**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
m,p-Xylenes	**82**	10	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
o-Xylene	**41**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
Styrene	**7.7**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
Bromoform	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Isopropylbenzene (Cumene)	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2,3-Trichloropropane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Bromobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Propylbenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
2-Chlorotoluene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,3,5-Trimethylbenzene	**12**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
4-Chlorotoluene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
tert-Butylbenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2,4-Trimethylbenzene	**39**	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
sec-Butylbenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
4-Isopropyltoluene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,3-Dichlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,4-Dichlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Butylbenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2-Dichlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
1,2,4-Trichlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Hexachlorobutadiene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Naphthalene	**5400**	50	ug/L	121109 1611	121109 1611	EMG	EPA 8260B	D
1,2,3-Trichlorobenzene	ND	5.0	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	U, D
Total Xylenes	**120**	15	ug/L	121109 1154	121109 1154	EMG	EPA 8260B	D
Surrogate: Dibromofluoromethane		*91.4%*	*80-120*	*121109 1154*	*121109 1154*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*88.6%*	*80-120*	*121109 1154*	*121109 1154*		*EPA 8260B*	
Surrogate: Toluene-d8		*97.0%*	*75-120*	*121109 1154*	*121109 1154*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*96.6%*	*60-149*	*121109 1154*	*121109 1154*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Pyridine	**58**	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	D
Aniline	**44**	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Phenol	**270**	270	ug/L	120909 1140	121009 1050	RIS	EPA 8270C	D
Acetophenone	0.0		ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D

The results in this report apply to the samples analyzed in accordance with the chain of

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Baltimore Division
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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; 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
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2-Methylphenol	**310**	270	ug/L	120909 1140	121009 1050	RIS	EPA 8270C	D
Hexachloroethane	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	**580**	270	ug/L	120909 1140	121009 1050	RIS	EPA 8270C	D
Nitrobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	**610**	270	ug/L	120909 1140	121009 1050	RIS	EPA 8270C	D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Naphthalene	**1900**	270	ug/L	120909 1140	121009 1050	RIS	EPA 8270C	D
Hexachlorobutadiene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2-Methylnaphthalene	**46**	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	D
Hexachlorocyclopentadiene	ND	11	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	V6, U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Acenaphthylene	**6.7**	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	D
Dimethylphthalate	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; 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
Phenanthrene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Anthracene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Di-n-butylphthalate	**5.5**	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	D
Fluoranthene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	120909 1140	120909 2327	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*41.0%*	*0.974-78.2*	*120909 1140*	*120909 2327*		*EPA 8270C*	
Surrogate: Phenol-d5		*31.4%*	*0-57.5*	*120909 1140*	*120909 2327*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*97.3%*	*15.3-131*	*120909 1140*	*120909 2327*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*76.6%*	*3.75-142*	*120909 1140*	*120909 2327*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*106%*	*12.5-139*	*120909 1140*	*120909 2327*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*76.6%*	*16.6-136*	*120909 1140*	*120909 2327*		*EPA 8270C*	

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18S

09L0484-01 (Ground Water) Sampled: 12/08/2009 12:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Field Sampling/Testing

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Conductivity	**2000**	0.0	umhos/cm	120809 1230	120809 1230	JWH	EPA 120.1	Z10a
pH	**10.5**	1.00	pH Units	120809 1230	120809 1230	JWH	SM (20) 4500-H B	Z10

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Wet Chemistry								
Alkalinity	**80**	1.0	mg CaCO3/L	120909 1240	120909 1240	VAS	Sm (20) 2320B	
Chloride	**2100**	25	mg/L	120909 1020	120909 1203	LCR	SM (20) 4500Cl-C	D
COD, Total	**41**	10	mg/L	121109 0658	121109 1116	LCR	EPA410.4/HACH8000	
Ammonia as N	**3.2**	0.10	mg/L	120909 0930	121009 1352	VAS	SM(20)4500NH3-G	
Nitrite as N	ND	0.012	mg/L	120809 1812	120809 1812	LBG	EPA 353.2	
Nitrate as N	**0.14**	0.10	mg/L	120909 0848	120909 0848	LBG	EPA 353.2	
Nitrate/Nitrite as N	**0.14**	0.10	mg/L	120909 0848	120909 0848	VAS	EPA 353.2	
Sulfate as SO4	**140**	10	mg/L	121109 0700	121109 1012	LCR	ASTM D516-02	D
Total Dissolved Solids	**2600**	40	mg/L	121009 0730	121009 0731	LCR	SM (20) 2540 C	
Turbidity	**200**	0.10	NTU	120909 1215	120909 1215	VAS	EPA 180.1	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	120909 1037	120909 1713	APS	EPA 245.1/7470A	
Metals, Total by EPA 200/6000 Series Methods								
Hardness (as CaCO3)	**700**	0.54	mg/L	120909 0812	121109 1335	APS	SM (20) 2340B	
Silver	ND	0.0020	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Arsenic	**0.0071**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Barium	**0.93**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Beryllium	ND	0.0010	mg/L	120909 0812	121109 1319	APS	EPA 200.7/6010B	
Calcium	**85**	0.050	mg/L	120909 0812	121109 1319	APS	EPA 200.7/6010B	
Cadmium	ND	0.00050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Cobalt	**0.030**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Chromium	ND	0.0025	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Copper	**0.017**	0.0020	mg/L	120909 0812	120909 1555	PBK	EPA 200.8/6020	
Iron	**310**	0.050	mg/L	120909 0812	121109 1335	APS	EPA 200.7/6010B	
Potassium	**9.5**	0.010	mg/L	120909 0812	121109 1319	APS	EPA 200.7/6010B	
Magnesium	**120**	0.10	mg/L	120909 0812	121109 1335	APS	EPA 200.7/6010B	
Manganese	**14**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Sodium	**670**	10	mg/L	120909 0812	121109 1335	APS	EPA 200.7/6010B	
Nickel	**0.012**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Lead	ND	0.0020	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Metals, Total by EPA 200/6000 Series Methods								
Antimony	ND	0.0050	mg/L	120909 0812	120909 1910	PRM	EPA 200.8/6020	
Selenium	**0.030**	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Thallium	ND	0.0020	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Vanadium	ND	0.0050	mg/L	120909 0812	120909 1555	PRM	EPA 200.8/6020	
Zinc	ND	0.020	mg/L	120909 0812	120909 1910	PRM	EPA 200.8/6020	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Chloromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Vinyl chloride	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Bromomethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Chloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Trichlorofluoromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Acrolein	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1-Dichloroethene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Acetone	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Iodomethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Carbon disulfide	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Acetonitrile	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Methylene Chloride	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Methyl-tert-Butyl Ether	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
trans-1,2-Dichloroethene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Acrylonitrile	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1-Dichloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Chloroprene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Vinyl acetate	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
2,2-Dichloropropane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
cis-1,2-Dichloroethene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
2-Butanone (MEK)	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Propionitrile (Ethyl Cyanide)	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Methacrylonitrile	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Chloroform	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Bromochloromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1,1-Trichloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
1,1-Dichloropropene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Carbon Tetrachloride	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Benzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2-Dichloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Trichloroethene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2-Dichloropropane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Bromodichloromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Methyl Methacrylate	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Dibromomethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Methyl Isobutyl Ketone	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
cis-1,3-Dichloropropene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Toluene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
trans-1,3-Dichloropropene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Ethyl Methacrylate	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1,2-Trichloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
2-Hexanone (MBK)	ND	5.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2-Dibromoethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Tetrachloroethene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,3-Dichloropropane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Dibromochloromethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Chlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Ethylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
m,p-Xylenes	ND	2.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
o-Xylene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Styrene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Bromoform	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Isopropylbenzene (Cumene)	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2,3-Trichloropropane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Bromobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Propylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
2-Chlorotoluene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,3,5-Trimethylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
4-Chlorotoluene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
tert-Butylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2,4-Trimethylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
sec-Butylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
4-Isopropyltoluene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,3-Dichlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,4-Dichlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Butylbenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2-Dichlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2,4-Trichlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Hexachlorobutadiene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Naphthalene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
1,2,3-Trichlorobenzene	ND	1.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Total Xylenes	ND	3.0	ug/L	121109 1115	121109 1115	EMG	EPA 8260B	U
Surrogate: Dibromofluoromethane		*93.0%*	*80-120*	*121109 1115*	*121109 1115*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*93.0%*	*80-120*	*121109 1115*	*121109 1115*		*EPA 8260B*	
Surrogate: Toluene-d8		*98.4%*	*75-120*	*121109 1115*	*121109 1115*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*94.5%*	*60-149*	*121109 1115*	*121109 1115*		*EPA 8260B*	

Acid and Base/Neutral Extractables by EPA Method 8270C

N-Nitrosodimethylamine	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Pyridine	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Aniline	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Bis(2-Chloroethyl)ether	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Phenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Acetophenone	0.0		ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2-Chlorophenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
1,3-Dichlorobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
1,4-Dichlorobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
1,2-Dichlorobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Pentachloroethane	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Bis(2-chloroisopropyl)ether	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; 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
2-Methylphenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Hexachloroethane	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4-Methylphenol, 3-Methylphenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Nitrobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Isophorone	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2-Nitrophenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,4-Dimethylphenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
bis(2-Chloroethoxy)methane	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,4-Dichlorophenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
1,2,4-Trichlorobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Naphthalene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Hexachlorobutadiene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4-Chloro-3-methylphenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2-Methylnaphthalene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Hexachlorocyclopentadiene	ND	11	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	V6, U, D
2,4,6-Trichlorophenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,4,5-Trichlorophenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2-Chloronaphthalene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Acenaphthylene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Dimethylphthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,6-Dinitrotoluene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Acenaphthene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,4-Dinitrophenol	ND	11	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Dibenzofuran	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
2,4-Dinitrotoluene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4-Nitrophenol	ND	11	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Fluorene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4-Chlorophenyl-phenylether	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Diethylphthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4,6-Dinitro-2-methylphenol	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
4-Bromophenyl-phenylether	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Hexachlorobenzene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Pentachlorophenol	ND	11	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Phenanthrene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Anthracene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

GL-18D

09L0484-02 (Ground Water) Sampled: 12/08/2009 13:10; 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
Di-n-butylphthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Fluoranthene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Pyrene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Butylbenzylphthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
3,3´-Dichlorobenzidine	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Benz(a)anthracene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Chrysene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Bis(2-Ethylhexyl)phthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Di-n-octylphthalate	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Benzo[b]fluoranthene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Benzo[k]fluoranthene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Benzo[a]pyrene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Indeno[1,2,3-cd]pyrene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Dibenz[a,h]anthracene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Benzo[g,h,i]perylene	ND	5.3	ug/L	120909 1140	121009 0004	RIS	EPA 8270C	U, D
Surrogate: 2-Fluorophenol		*31.0%*	*0.974-78.2*	*120909 1140*	*121009 0004*		*EPA 8270C*	
Surrogate: Phenol-d5		*21.1%*	*0-57.5*	*120909 1140*	*121009 0004*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*59.0%*	*15.3-131*	*120909 1140*	*121009 0004*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*62.5%*	*3.75-142*	*120909 1140*	*121009 0004*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*74.8%*	*12.5-139*	*120909 1140*	*121009 0004*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*62.5%*	*16.6-136*	*120909 1140*	*121009 0004*		*EPA 8270C*	

Field Sampling/Testing

Conductivity	**5300**	0.0	umhos/cm	120809 1310	120809 1310	JWH	EPA 120.1	Z10c
pH	**5.40**	1.00	pH Units	120809 1310	120809 1310	JWH	SM (20) 4500-H B	Z10b

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950144 - WetChem_Prep										
Blank (0950144-BLK1)				Prepared & Analyzed: 12/08/2009						
Nitrite as N	ND	0.012	mg/L							
LCS (0950144-BS1)				Prepared & Analyzed: 12/08/2009						
Nitrite as N	0.528	0.012	mg/L	0.5000		106	90-110			
Duplicate (0950144-DUP1)		**Source: 09L0484-01**		Prepared & Analyzed: 12/08/2009						
Nitrite as N	ND	0.012	mg/L		ND				20	
Matrix Spike (0950144-MS1)		**Source: 09L0484-01**		Prepared & Analyzed: 12/08/2009						
Nitrite as N	0.195	0.012	mg/L	0.2500	ND	77.9	80-120			M5
Batch 0950155 - NO3_Prep										
Blank (0950155-BLK1)				Prepared & Analyzed: 12/09/2009						
Nitrate/Nitrite as N	ND	0.050	mg/L							
LCS (0950155-BS1)				Prepared & Analyzed: 12/09/2009						
Nitrate/Nitrite as N	2.51	0.050	mg/L	2.500		100	90-110			
Duplicate (0950155-DUP1)		**Source: 09L0484-02**		Prepared & Analyzed: 12/09/2009						
Nitrate/Nitrite as N	0.129	0.10	mg/L		0.139			7.92		
Matrix Spike (0950155-MS1)		**Source: 09L0484-02**		Prepared & Analyzed: 12/09/2009						
Nitrate/Nitrite as N	6.67	0.10	mg/L	6.000	0.139	109	80-120			
Batch 0950157 - NH3_Prep										
Blank (0950157-BLK1)				Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	ND	0.10	mg/L							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950157 - NH3_Prep										
LCS (0950157-BS1)				Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	2.26	0.10	mg/L	2.000		113	85-115			
Duplicate (0950157-DUP1)		**Source: 09L0499-01**		Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	0.198	0.10	mg/L		0.197			0.507	20	
Duplicate (0950157-DUP2)		**Source: 09L0290-01**		Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	0.135	0.10	mg/L		0.187			32.4	20	R1
Matrix Spike (0950157-MS1)		**Source: 09L0499-01**		Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	2.08	0.10	mg/L	2.000	0.197	94.4	80-120			
Matrix Spike (0950157-MS2)		**Source: 09L0290-01**		Prepared: 12/09/2009 Analyzed: 12/10/2009						
Ammonia as N	2.35	0.10	mg/L	2.000	0.187	108	80-120			
Batch 0950172 - Cl_Titration_Prep										
Blank (0950172-BLK1)				Prepared & Analyzed: 12/09/2009						
Chloride	ND	1.0	mg/L							
LCS (0950172-BS1)				Prepared & Analyzed: 12/09/2009						
Chloride	50.0	1.0	mg/L	50.00		100	94-108			
Duplicate (0950172-DUP1)		**Source: 09L0232-01**		Prepared & Analyzed: 12/09/2009						
Chloride	4.00	1.0	mg/L		4.00			0.00	11	
Matrix Spike (0950172-MS1)		**Source: 09L0232-01**		Prepared & Analyzed: 12/09/2009						
Chloride	29.0	1.0	mg/L	25.00	4.00	100	89-112			

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Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950186 - WetChem_Prep										
Blank (0950186-BLK1)				Prepared & Analyzed: 12/09/2009						
Turbidity	ND	0.10	NTU							
LCS (0950186-BS1)				Prepared & Analyzed: 12/09/2009						
Turbidity	10.5		NTU	10.00		105	80-120		5	
Duplicate (0950186-DUP1)	**Source: 09L0509-01**			Prepared & Analyzed: 12/09/2009						
Turbidity	3.28	0.10	NTU		3.29			0.304	5	
Batch 0950188 - Alkalinity_Prep										
Blank (0950188-BLK1)				Prepared & Analyzed: 12/09/2009						
Alkalinity	ND	1.0	mg CaCO3/L							
LCS (0950188-BS1)				Prepared & Analyzed: 12/09/2009						
Alkalinity	48.0	1.0	mg CaCO3/L	50.00		96.0	91-108			
Duplicate (0950188-DUP1)	**Source: 09L0323-01**			Prepared & Analyzed: 12/09/2009						
Alkalinity	240	4.0	mg CaCO3/L		240			0.00	18	
Alkalinity, Bicarbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Carbonate (As CaCO3)	ND	1.0	"		ND				18	
Alkalinity, Hydroxide (As CaCO3)	ND	1.0	"		ND				18	
Matrix Spike (0950188-MS1)	**Source: 09L0323-01**			Prepared & Analyzed: 12/09/2009						
Alkalinity	324	4.0	mg CaCO3/L	80.00	240	105	83-114			
Batch 0950209 - WetChem_TDS_Prep										
Blank (0950209-BLK1)				Prepared & Analyzed: 12/10/2009						
Total Dissolved Solids	ND	10	mg/L							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950209 - WetChem_TDS_Prep										
LCS (0950209-BS1)				Prepared & Analyzed: 12/10/2009						
Total Dissolved Solids	20000	100	mg/L	20000		102	90-111			
Duplicate (0950209-DUP1)		**Source: 09L0582-01**		Prepared & Analyzed: 12/10/2009						
Total Dissolved Solids	340	10	mg/L		340			1.18	10	
Batch 0950288 - COD_Prep										
Blank (0950288-BLK1)				Prepared & Analyzed: 12/11/2009						
COD, Total	ND	10	mg/L							
Blank (0950288-BLK2)				Prepared & Analyzed: 12/11/2009						
COD, Total	ND	10	mg/L							
LCS (0950288-BS1)				Prepared & Analyzed: 12/11/2009						
COD, Total	38.7		mg/L	40.04		96.7	82-119			
LCS (0950288-BS2)				Prepared & Analyzed: 12/11/2009						
COD, Total	38.7		mg/L	40.04		96.7	82-119			
Duplicate (0950288-DUP1)		**Source: 09L0581-01**		Prepared & Analyzed: 12/11/2009						
COD, Total	ND	10	mg/L		ND				15	
Duplicate (0950288-DUP2)		**Source: 09L0558-01**		Prepared & Analyzed: 12/11/2009						
COD, Total	15.5	10	mg/L		15.2			2.08	15	
Matrix Spike (0950288-MS1)		**Source: 09L0581-01**		Prepared & Analyzed: 12/11/2009						
COD, Total	48.6	10	mg/L	50.05	ND	97.1	82-116		15	

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Wet Chemistry - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950288 - COD_Prep										
Matrix Spike (0950288-MS2)	**Source: 09L0558-01**			Prepared & Analyzed: 12/11/2009						
COD, Total	61.0	10	mg/L	50.05	15.2	91.6	82-116		15	
Batch 0950294 - WetCem_SO4_Prep										
Blank (0950294-BLK1)				Prepared & Analyzed: 12/11/2009						
Sulfate as SO4	ND	1.0	mg/L							
LCS (0950294-BS1)				Prepared & Analyzed: 12/11/2009						
Sulfate as SO4	20.2	1.0	mg/L	20.00		101	80-120			
Duplicate (0950294-DUP1)	**Source: 09L0484-01**			Prepared & Analyzed: 12/11/2009						
Sulfate as SO4	1150	100	mg/L		1140			0.797	20	D
Matrix Spike (0950294-MS1)	**Source: 09L0484-01**			Prepared & Analyzed: 12/11/2009						
Sulfate as SO4	3060	100	mg/L	2000	1140	96.1	80-120		20	D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Mercury, Total by EPA 200/7000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950153 - Metals_Hg_Prep										
Blank (0950153-BLK1)				Prepared & Analyzed: 12/09/2009						
Mercury	ND	0.00020	mg/L							
LCS (0950153-BS1)				Prepared & Analyzed: 12/09/2009						
Mercury	0.00216	0.00020	mg/L	0.002022		107	85-115			
Duplicate (0950153-DUP1)		**Source: 09L0439-01**		Prepared & Analyzed: 12/09/2009						
Mercury	0.0000490	0.00020	mg/L		ND				20	
Matrix Spike (0950153-MS1)		**Source: 09L0439-01**		Prepared & Analyzed: 12/09/2009						
Mercury	0.00199	0.00020	mg/L	0.002022	ND	98.6	70-130		20	
Matrix Spike Dup (0950153-MSD1)		**Source: 09L0439-01**		Prepared & Analyzed: 12/09/2009						
Mercury	0.00199	0.00020	mg/L	0.002022	ND	98.3	70-130	0.294	20	
Batch M9L1004 - 0950153										
Instrument Blank (M9L1004-IBL1)				Prepared & Analyzed: 12/09/2009						
Mercury	ND	0.00020	ug/L							

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950142 - EPA 200.2 ICPMS										
Blank (0950142-BLK1)				Prepared & Analyzed: 12/09/2009						
Antimony	ND	0.0010	mg/L							
Arsenic	ND	0.0010	"							
Barium	ND	0.0010	"							
Cadmium	ND	0.00010	"							
Chromium	ND	0.00050	"							
Cobalt	ND	0.0010	"							
Copper	ND	0.00040	"							
Lead	ND	0.00040	"							
Manganese	ND	0.0010	"							
Nickel	ND	0.0010	"							
Selenium	ND	0.0010	"							
Silver	ND	0.00040	"							
Thallium	ND	0.00040	"							
Vanadium	ND	0.0010	"							
Zinc	ND	0.0040	"							
Blank (0950142-BLK2)				Prepared & Analyzed: 12/09/2009						
Antimony	ND	0.0050	mg/L							
Copper	ND	0.0020	"							
Zinc	ND	0.020	"							
LCS (0950142-BS1)				Prepared & Analyzed: 12/09/2009						
Antimony	0.219	0.0050	mg/L	0.2000		109	85-115		20	
Arsenic	0.198	0.0050	"	0.2000		99.2	85-115		20	
Barium	0.200	0.0050	"	0.2000		99.9	85-115		20	
Cadmium	0.200	0.00050	"	0.2000		99.8	85-115		20	
Chromium	0.192	0.0025	"	0.2000		95.8	85-115		20	
Cobalt	0.218	0.0050	"	0.2000		109	85-115		20	
Copper	0.216	0.0020	"	0.2000		108	85-115		20	
Lead	0.192	0.0020	"	0.2000		96.2	85-115		20	
Manganese	0.210	0.0050	"	0.2000		105	85-115		20	
Nickel	0.214	0.0050	"	0.2000		107	85-115		20	
Selenium	0.203	0.0050	"	0.2000		102	85-115		20	
Silver	0.103	0.0020	"	0.1000		103	85-115		20	
Thallium	0.190	0.0020	"	0.2000		94.8	85-115		20	
Vanadium	0.185	0.0050	"	0.2000		92.4	85-115		20	
Zinc	0.217	0.020	"	0.2000		109	85-115		20	

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950142 - EPA 200.2 ICPMS										
LCS (0950142-BS2)				Prepared & Analyzed: 12/09/2009						
Antimony	0.223	0.0050	mg/L	0.2000		111	85-115		20	
Copper	0.197	0.0020	"	0.2000		98.7	85-115		20	
Zinc	0.196	0.020	"	0.2000		98.2	85-115		20	
Duplicate (0950142-DUP1)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Arsenic	ND	0.0050	"		ND				20	
Barium	0.00335	0.0050	"		0.00289			14.7	20	
Cadmium	ND	0.00050	"		ND				20	
Chromium	0.00193	0.0025	"		ND				20	
Cobalt	ND	0.0050	"		ND				20	
Copper	0.00459	0.0020	"		0.00340			29.6	20	
Lead	0.000491	0.0020	"		ND				20	
Manganese	0.0107	0.0050	"		0.00974			9.37	20	
Nickel	0.000825	0.0050	"		ND				20	
Selenium	0.00188	0.0050	"		ND				20	
Silver	ND	0.0020	"		ND				20	
Thallium	ND	0.0020	"		ND				20	
Vanadium	ND	0.0050	"		ND				20	
Zinc	0.123	0.020	"		0.106			15.1	20	
Duplicate (0950142-DUP2)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	ND	0.0050	mg/L		ND				20	
Copper	0.00369	0.0020	"		0.00340			7.98	20	
Zinc	0.106	0.020	"		0.106			0.289	20	
Matrix Spike (0950142-MS1)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	0.232	0.0050	mg/L	0.2000	ND	116	70-130		20	
Arsenic	0.216	0.0050	"	0.2000	ND	108	70-130		20	
Barium	0.205	0.0050	"	0.2000	0.00289	101	70-130		20	
Cadmium	0.216	0.00050	"	0.2000	ND	108	70-130		20	
Chromium	0.194	0.0025	"	0.2000	ND	97.0	70-130		20	
Cobalt	0.217	0.0050	"	0.2000	ND	108	70-130		20	
Copper	0.224	0.0020	"	0.2000	0.00340	110	70-130		20	
Lead	0.197	0.0020	"	0.2000	ND	98.5	70-130		20	
Manganese	0.218	0.0050	"	0.2000	0.00974	104	70-130		20	
Nickel	0.214	0.0050	"	0.2000	ND	107	70-130		20	
Selenium	0.238	0.0050	"	0.2000	ND	119	70-130		20	
Silver	0.102	0.0020	"	0.1000	ND	102	70-130		20	
Thallium	0.187	0.0020	"	0.2000	ND	93.4	70-130		20	
Vanadium	0.190	0.0050	"	0.2000	ND	94.8	70-130		20	
Zinc	0.370	0.020	"	0.2000	0.106	132	70-130		20	

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950142 - EPA 200.2 ICPMS										
Matrix Spike (0950142-MS2)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	0.234	0.0050	mg/L	0.2000	ND	117	70-130		20	
Copper	0.206	0.0020	"	0.2000	0.00340	102	70-130		20	
Zinc	0.320	0.020	"	0.2000	0.106	107	70-130		20	
Matrix Spike Dup (0950142-MSD1)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	0.229	0.0050	mg/L	0.2000	ND	114	70-130	1.66	20	
Arsenic	0.215	0.0050	"	0.2000	ND	108	70-130	0.419	20	
Barium	0.205	0.0050	"	0.2000	0.00289	101	70-130	0.306	20	
Cadmium	0.214	0.00050	"	0.2000	ND	107	70-130	1.13	20	
Chromium	0.191	0.0025	"	0.2000	ND	95.4	70-130	1.67	20	
Cobalt	0.214	0.0050	"	0.2000	ND	107	70-130	1.61	20	
Copper	0.220	0.0020	"	0.2000	0.00340	108	70-130	1.51	20	
Lead	0.195	0.0020	"	0.2000	ND	97.5	70-130	1.06	20	
Manganese	0.214	0.0050	"	0.2000	0.00974	102	70-130	1.81	20	
Nickel	0.210	0.0050	"	0.2000	ND	105	70-130	1.71	20	
Selenium	0.235	0.0050	"	0.2000	ND	117	70-130	1.28	20	
Silver	0.100	0.0020	"	0.1000	ND	100	70-130	1.80	20	
Thallium	0.186	0.0020	"	0.2000	ND	93.2	70-130	0.206	20	
Vanadium	0.187	0.0050	"	0.2000	ND	93.5	70-130	1.37	20	
Zinc	0.362	0.020	"	0.2000	0.106	128	70-130	2.27	20	
Matrix Spike Dup (0950142-MSD2)		**Source: 09L0294-01**		Prepared & Analyzed: 12/09/2009						
Antimony	0.233	0.0050	mg/L	0.2000	ND	117	70-130	0.512	20	
Copper	0.208	0.0020	"	0.2000	0.00340	103	70-130	0.982	20	
Zinc	0.315	0.020	"	0.2000	0.106	104	70-130	1.66	20	
Batch 0950296 - EPA 200.2 ICP										
Blank (0950296-BLK1)				Prepared: 12/09/2009 Analyzed: 12/11/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Metals, Total by EPA 200/6000 Series Methods - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950296 - EPA 200.2 ICP										
LCS (0950296-BS1)				Prepared: 12/09/2009 Analyzed: 12/11/2009						
Beryllium	0.204	0.0010	mg/L	0.2000		102	85-115		20	
Calcium	2.10	0.050	"	2.000		105	85-115		20	
Iron	1.00	0.0050	"	1.000		100	85-115		20	
Magnesium	2.07	0.010	"	2.000		103	85-115		20	
Potassium	2.09	0.010	"	2.000		105	85-115		20	
Sodium	2.10	1.0	"	2.000		105	85-115		20	
Post Spike (0950296-PS1)		**Source: 09L0484-01**		Prepared & Analyzed: 12/11/2009						
Beryllium	1.06		mg/L	1.000	0.000242	106	90-110			
Calcium	350		"	10.00	344	60.2	90-110			
Iron	6.24		"	5.000	1.03	104	90-110			
Magnesium	9.16		"	10.00	-1.29	104	90-110			
Potassium	0.00		"	10.00	129	NR	90-110			
Sodium	167		"	10.00	141	256	90-110			
Post Spike (0950296-PS2)		**Source: 09L0484-01**		Prepared & Analyzed: 12/11/2009						
Beryllium	1.02		mg/L	1.000	0.0000242	102	90-110			
Calcium	43.8		"	10.00	34.4	93.8	90-110			
Iron	5.20		"	5.000	0.103	102	90-110			
Magnesium	10.2		"	10.00	-0.129	103	90-110			
Potassium	22.8		"	10.00	12.9	98.7	90-110			
Sodium	24.2		"	10.00	14.1	101	90-110			
Batch M9L1104 - 0950296										
Instrument Blank (M9L1104-IBL1)				Prepared & Analyzed: 12/11/2009						
Beryllium	ND	0.0010	mg/L							
Calcium	ND	0.050	"							
Iron	ND	0.0050	"							
Magnesium	ND	0.010	"							
Potassium	ND	0.010	"							
Sodium	ND	1.0	"							

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Blank (0950182-BLK1)				Prepared & Analyzed: 12/11/2009						
Dichlorodifluoromethane	ND	1.0	ug/L							U
Chloromethane	ND	1.0	"							U
Vinyl chloride	ND	1.0	"							U
Bromomethane	ND	1.0	"							U
Chloroethane	ND	1.0	"							U
Trichlorofluoromethane	ND	1.0	"							U
Acrolein	ND	5.0	"							U
1,1-Dichloroethene	ND	1.0	"							U
Acetone	ND	5.0	"							U
Iodomethane	ND	1.0	"							U
Carbon disulfide	ND	1.0	"							U
Allyl Chloride (3-Chloropropylene)	ND	1.0	"							U
Acetonitrile	ND	5.0	"							U
Methylene Chloride	ND	1.0	"							U
Methyl-tert-Butyl Ether	ND	1.0	"							U
trans-1,2-Dichloroethene	ND	1.0	"							U
Acrylonitrile	ND	5.0	"							U
1,1-Dichloroethane	ND	1.0	"							U
Chloroprene	ND	1.0	"							U
Vinyl acetate	ND	1.0	"							U
2,2-Dichloropropane	ND	1.0	"							U
cis-1,2-Dichloroethene	ND	1.0	"							U
2-Butanone (MEK)	ND	5.0	"							U
Propionitrile (Ethyl Cyanide)	ND	5.0	"							U
Methacrylonitrile	ND	5.0	"							U
Chloroform	ND	1.0	"							U
Bromochloromethane	ND	1.0	"							U
1,1,1-Trichloroethane	ND	1.0	"							U
1,1-Dichloropropene	ND	1.0	"							U
Carbon Tetrachloride	ND	1.0	"							U
Benzene	ND	1.0	"							U
1,2-Dichloroethane	ND	1.0	"							U
Trichloroethene	ND	1.0	"							U
1,2-Dichloropropane	ND	1.0	"							U
Bromodichloromethane	ND	1.0	"							U
Methyl Methacrylate	ND	1.0	"							U
Dibromomethane	ND	1.0	"							U
2-Chloroethyl Vinyl Ether	ND	1.0	"							U
Methyl Isobutyl Ketone	ND	5.0	"							U
cis-1,3-Dichloropropene	ND	1.0	"							U
Toluene	ND	1.0	"							U

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Blank (0950182-BLK1)				Prepared & Analyzed: 12/11/2009						
trans-1,3-Dichloropropene	ND	1.0	ug/L							U
Ethyl Methacrylate	ND	1.0	"							U
1,1,2-Trichloroethane	ND	1.0	"							U
2-Hexanone (MBK)	ND	5.0	"							U
1,2-Dibromoethane	ND	1.0	"							U
Tetrachloroethene	ND	1.0	"							U
1,3-Dichloropropane	ND	1.0	"							U
Dibromochloromethane	ND	1.0	"							U
Chlorobenzene	ND	1.0	"							U
1,1,1,2-Tetrachloroethane	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
m,p-Xylenes	ND	2.0	"							U
o-Xylene	ND	1.0	"							U
Styrene	ND	1.0	"							U
Bromoform	ND	1.0	"							U
Isopropylbenzene (Cumene)	ND	1.0	"							U
1,1,2,2-Tetrachloroethane	ND	1.0	"							U
1,2,3-Trichloropropane	ND	1.0	"							U
Bromobenzene	ND	1.0	"							U
Propylbenzene	ND	1.0	"							U
2-Chlorotoluene	ND	1.0	"							U
1,3,5-Trimethylbenzene	ND	1.0	"							U
4-Chlorotoluene	ND	1.0	"							U
tert-Butylbenzene	ND	1.0	"							U
1,2,4-Trimethylbenzene	ND	1.0	"							U
sec-Butylbenzene	ND	1.0	"							U
4-Isopropyltoluene	ND	1.0	"							U
1,3-Dichlorobenzene	ND	1.0	"							U
1,4-Dichlorobenzene	ND	1.0	"							U
trans-1,4-Dichloro-2-butene	ND	1.0	"							U
Butylbenzene	ND	1.0	"							U
1,2-Dichlorobenzene	ND	1.0	"							U
1,2-Dibromo-3-chloropropane	ND	1.0	"							U
1,2,4-Trichlorobenzene	ND	1.0	"							U
Hexachlorobutadiene	ND	1.0	"							U
Naphthalene	ND	1.0	"							U
1,2,3-Trichlorobenzene	ND	1.0	"							U
Total Xylenes	ND	3.0	"							U
Surrogate: Dibromofluoromethane	*23.0*		*"*	*25.00*		*91.9*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.7*		*"*	*25.00*		*90.7*	*80-120*			
Surrogate: Toluene-d8	*24.5*		*"*	*25.00*		*97.8*	*75-120*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Blank (0950182-BLK1)				Prepared & Analyzed: 12/11/2009						
Surrogate: 4-Bromofluorobenzene	*24.1*		*ug/L*	*25.00*		*96.4*	*60-149*			
LCS (0950182-BS1)				Prepared & Analyzed: 12/11/2009						
Dichlorodifluoromethane	25.0	1.0	ug/L	20.00		125	27-127			
Chloromethane	19.2	1.0	"	20.00		96.0	62.5-141			
Vinyl chloride	21.2	1.0	"	20.00		106	65.3-143			
Bromomethane	19.4	1.0	"	20.00		97.2	56-180			
Chloroethane	20.9	1.0	"	20.00		105	62.3-161			
Trichlorofluoromethane	21.1	1.0	"	20.00		106	35-157			
Acrolein	59.3	5.0	"	100.0		59.3	26.6-169			
1,1-Dichloroethene	21.1	1.0	"	20.00		106	64.6-138			
Acetone	93.0	5.0	"	100.0		93.0	35-159			
Iodomethane	14.2	1.0	"	20.00		70.8	70-130			
Carbon disulfide	19.8	1.0	"	20.00		98.8	48-142			
Allyl Chloride (3-Chloropropylene)	21.0	1.0	"	20.00		105	70-130			
Acetonitrile	18.9	5.0	"	20.00		94.6	70-130			
Methylene Chloride	20.2	1.0	"	20.00		101	64.7-139			
Methyl-tert-Butyl Ether	19.9	1.0	"	20.00		99.5	34-133			
trans-1,2-Dichloroethene	20.0	1.0	"	20.00		100	75.1-127			
Acrylonitrile	18.6	5.0	"	20.00		93.1	67.2-148			
1,1-Dichloroethane	19.8	1.0	"	20.00		98.8	72.2-135			
Chloroprene	20.2	1.0	"	20.00		101	70-130			
Vinyl acetate	19.3	1.0	"	20.00		96.4	70-154			
2,2-Dichloropropane	21.8	1.0	"	20.00		109	37-129			
cis-1,2-Dichloroethene	19.2	1.0	"	20.00		95.8	72-126			
2-Butanone (MEK)	93.2	5.0	"	100.0		93.2	45-128			
Propionitrile (Ethyl Cyanide)	19.0	5.0	"	20.00		94.9	70-130			
Methacrylonitrile	21.0	5.0	"	20.00		105	70-130			
Chloroform	19.0	1.0	"	20.00		94.8	76.1-135			
Bromochloromethane	19.8	1.0	"	20.00		98.8	73-126			
1,1,1-Trichloroethane	20.5	1.0	"	20.00		102	67.1-139			
1,1-Dichloropropene	21.6	1.0	"	20.00		108	70-130			
Carbon Tetrachloride	21.4	1.0	"	20.00		107	63.3-142			
Benzene	19.6	1.0	"	20.00		98.2	72-132			
1,2-Dichloroethane	20.1	1.0	"	20.00		101	72.9-139			
Trichloroethene	18.9	1.0	"	20.00		94.6	73.7-130			
1,2-Dichloropropane	21.0	1.0	"	20.00		105	71.3-137			
Bromodichloromethane	20.0	1.0	"	20.00		100	74.5-136			
Methyl Methacrylate	21.6	1.0	"	20.00		108	70-130			
Dibromomethane	19.3	1.0	"	20.00		96.6	66-125			
2-Chloroethyl Vinyl Ether	16.9	1.0	"	20.00		84.6	42.5-161			

The results in this report apply to the samples analyzed in accordance with the chain of

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
LCS (0950182-BS1)				Prepared & Analyzed: 12/11/2009						
Methyl Isobutyl Ketone	104	5.0	ug/L	100.0		104	41-143			
cis-1,3-Dichloropropene	20.7	1.0	"	20.00		104	74.6-124			
Toluene	20.2	1.0	"	20.00		101	72.4-132			
trans-1,3-Dichloropropene	19.4	1.0	"	20.00		96.9	72.1-124			
Ethyl Methacrylate	19.3	1.0	"	20.00		96.6	70-130			
1,1,2-Trichloroethane	19.3	1.0	"	20.00		96.4	75.6-140			
2-Hexanone (MBK)	104	5.0	"	100.0		104	43-147			
1,2-Dibromoethane	19.7	1.0	"	20.00		98.6	70-130			
Tetrachloroethene	19.2	1.0	"	20.00		96.2	69.9-125			
1,3-Dichloropropane	20.3	1.0	"	20.00		102	70-130			
Dibromochloromethane	20.2	1.0	"	20.00		101	69.9-134			
Chlorobenzene	19.7	1.0	"	20.00		98.6	67.3-133			
1,1,1,2-Tetrachloroethane	21.2	1.0	"	20.00		106	76-123			
Ethylbenzene	20.7	1.0	"	20.00		103	70.6-131			
m,p-Xylenes	41.8	2.0	"	40.00		104	71-123			
o-Xylene	20.9	1.0	"	20.00		105	80-119			
Styrene	21.0	1.0	"	20.00		105	79-117			
Bromoform	20.2	1.0	"	20.00		101	68.8-130			
Isopropylbenzene (Cumene)	22.0	1.0	"	20.00		110	70-130			
1,1,2,2-Tetrachloroethane	20.4	1.0	"	20.00		102	69.1-143			
1,2,3-Trichloropropane	20.1	1.0	"	20.00		101	70-130			
Bromobenzene	20.6	1.0	"	20.00		103	70-130			
Propylbenzene	22.2	1.0	"	20.00		111	70-130			
2-Chlorotoluene	20.9	1.0	"	20.00		104	70-130			
1,3,5-Trimethylbenzene	21.8	1.0	"	20.00		109	70-130			
4-Chlorotoluene	20.6	1.0	"	20.00		103	70-130			
tert-Butylbenzene	22.2	1.0	"	20.00		111	70-130			
1,2,4-Trimethylbenzene	21.6	1.0	"	20.00		108	70-130			
sec-Butylbenzene	22.5	1.0	"	20.00		112	70-130			
4-Isopropyltoluene	20.2	1.0	"	20.00		101	70-130			
1,3-Dichlorobenzene	20.0	1.0	"	20.00		99.8	74-125			
1,4-Dichlorobenzene	19.6	1.0	"	20.00		98.1	75-122			
trans-1,4-Dichloro-2-butene	21.4	1.0	"	20.00		107	70-130			
Butylbenzene	20.2	1.0	"	20.00		101	70-130			
1,2-Dichlorobenzene	20.5	1.0	"	20.00		103	74-124			
1,2-Dibromo-3-chloropropane	19.0	1.0	"	20.00		95.0	70-130			
1,2,4-Trichlorobenzene	19.7	1.0	"	20.00		98.4	45-134			
Hexachlorobutadiene	19.2	1.0	"	20.00		95.8	33-154			
Naphthalene	19.3	1.0	"	20.00		96.7	22-148			
1,2,3-Trichlorobenzene	19.4	1.0	"	20.00		97.1	70-130			
Surrogate: Dibromofluoromethane	*22.6*		*"*	*25.00*		*90.6*	*80-120*			

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
LCS (0950182-BS1)				Prepared & Analyzed: 12/11/2009						
Surrogate: 1,2-Dichloroethane-d4	*22.5*		*ug/L*	*25.00*		*90.0*	*80-120*			
Surrogate: Toluene-d8	*24.3*		*"*	*25.00*		*97.2*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*"*	*25.00*		*96.5*	*60-149*			
Matrix Spike (0950182-MS1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
Dichlorodifluoromethane	101	5.0	ug/L	100.0	ND	101				D
Chloromethane	84.8	5.0	"	100.0	ND	84.8				D
Vinyl chloride	94.4	5.0	"	100.0	ND	94.4				D
Bromomethane	81.2	5.0	"	100.0	ND	81.2				D
Chloroethane	103	5.0	"	100.0	7.35	96.0				D
Trichlorofluoromethane	90.2	5.0	"	100.0	ND	90.2				D
Acrolein	312	25	"	500.0	ND	62.4				D
1,1-Dichloroethene	91.6	5.0	"	100.0	ND	91.6	18.7-178		22.3	D
Acetone	1770	25	"	500.0	1300	92.9				D
Iodomethane	51.8	5.0	"	100.0	ND	51.8				D
Carbon disulfide	87.4	5.0	"	100.0	ND	87.4				D
Allyl Chloride (3-Chloropropylene)	91.1	5.0	"	100.0	ND	91.1				D
Acetonitrile	87.4	25	"	100.0	ND	87.4				D
Methylene Chloride	101	5.0	"	100.0	3.70	97.2				D
Methyl-tert-Butyl Ether	86.8	5.0	"	100.0	ND	86.8				D
trans-1,2-Dichloroethene	92.7	5.0	"	100.0	ND	92.7				D
Acrylonitrile	84.6	25	"	100.0	ND	84.6				D
1,1-Dichloroethane	93.6	5.0	"	100.0	2.55	91.0				D
Chloroprene	88.5	5.0	"	100.0	ND	88.5				D
Vinyl acetate	88.6	5.0	"	100.0	ND	88.6				D
2,2-Dichloropropane	87.4	5.0	"	100.0	ND	87.4				D
cis-1,2-Dichloroethene	90.0	5.0	"	100.0	ND	90.0				D
2-Butanone (MEK)	764	25	"	500.0	328	87.2				D
Propionitrile (Ethyl Cyanide)	84.3	25	"	100.0	ND	84.3				D
Methacrylonitrile	94.6	25	"	100.0	ND	94.6				D
Chloroform	89.2	5.0	"	100.0	ND	89.2				D
Bromochloromethane	90.8	5.0	"	100.0	ND	90.8				D
1,1,1-Trichloroethane	90.6	5.0	"	100.0	ND	90.6				D
1,1-Dichloropropene	92.2	5.0	"	100.0	ND	92.2				D
Carbon Tetrachloride	92.0	5.0	"	100.0	ND	92.0				D
Benzene	93.8	5.0	"	100.0	ND	93.8	65.6-159		15.1	D
1,2-Dichloroethane	93.2	5.0	"	100.0	ND	93.2				D
Trichloroethene	84.6	5.0	"	100.0	ND	84.6	71-158		15.2	D
1,2-Dichloropropane	94.8	5.0	"	100.0	ND	94.8				D
Bromodichloromethane	93.1	5.0	"	100.0	ND	93.1				D
Methyl Methacrylate	96.8	5.0	"	100.0	ND	96.8				D
Dibromomethane	86.6	5.0	"	100.0	ND	86.6				D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Matrix Spike (0950182-MS1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
2-Chloroethyl Vinyl Ether	7.90	5.0	ug/L	100.0	7.25	0.650				D
Methyl Isobutyl Ketone	671	25	"	500.0	186	96.9				D
cis-1,3-Dichloropropene	91.5	5.0	"	100.0	ND	91.5				D
Toluene	382	5.0	"	100.0	280	102	60.8-171		17.1	D
trans-1,3-Dichloropropene	87.4	5.0	"	100.0	ND	87.4				D
Ethyl Methacrylate	86.3	5.0	"	100.0	ND	86.3				D
1,1,2-Trichloroethane	87.6	5.0	"	100.0	ND	87.6				D
2-Hexanone (MBK)	462	25	"	500.0	ND	92.5				D
1,2-Dibromoethane	89.4	5.0	"	100.0	ND	89.4				D
Tetrachloroethene	70.6	5.0	"	100.0	ND	70.6				D
1,3-Dichloropropane	94.6	5.0	"	100.0	ND	94.6				D
Dibromochloromethane	94.0	5.0	"	100.0	ND	94.0				D
Chlorobenzene	90.8	5.0	"	100.0	ND	90.8	76.5-147		13.6	D
1,1,1,2-Tetrachloroethane	96.7	5.0	"	100.0	ND	96.7				D
Ethylbenzene	104	5.0	"	100.0	7.90	96.1				D
m,p-Xylenes	223	10	"	200.0	27.0	97.9				D
o-Xylene	109	5.0	"	100.0	8.50	101				D
Styrene	98.2	5.0	"	100.0	ND	98.2				D
Bromoform	93.6	5.0	"	100.0	ND	93.6				D
Isopropylbenzene (Cumene)	95.4	5.0	"	100.0	ND	95.4				D
1,1,2,2-Tetrachloroethane	90.9	5.0	"	100.0	ND	90.9				D
1,2,3-Trichloropropane	90.7	5.0	"	100.0	ND	90.7				D
Bromobenzene	92.1	5.0	"	100.0	ND	92.1				D
Propylbenzene	96.4	5.0	"	100.0	ND	96.4				D
2-Chlorotoluene	94.4	5.0	"	100.0	ND	94.4				D
1,3,5-Trimethylbenzene	96.4	5.0	"	100.0	ND	96.4				D
4-Chlorotoluene	92.4	5.0	"	100.0	ND	92.4				D
tert-Butylbenzene	96.6	5.0	"	100.0	ND	96.6				D
1,2,4-Trimethylbenzene	99.7	5.0	"	100.0	2.80	96.9				D
sec-Butylbenzene	95.4	5.0	"	100.0	ND	95.4				D
4-Isopropyltoluene	87.8	5.0	"	100.0	ND	87.8				D
1,3-Dichlorobenzene	89.1	5.0	"	100.0	ND	89.1				D
1,4-Dichlorobenzene	87.7	5.0	"	100.0	ND	87.7				D
trans-1,4-Dichloro-2-butene	95.0	5.0	"	100.0	ND	95.0				D
Butylbenzene	86.0	5.0	"	100.0	ND	86.0				D
1,2-Dichlorobenzene	88.6	5.0	"	100.0	ND	88.6				D
1,2-Dibromo-3-chloropropane	83.0	5.0	"	100.0	ND	83.0				D
1,2,4-Trichlorobenzene	85.2	5.0	"	100.0	ND	85.2				D
Hexachlorobutadiene	81.6	5.0	"	100.0	ND	81.6				D
Naphthalene	84.8	5.0	"	100.0	ND	84.8				D
1,2,3-Trichlorobenzene	84.0	5.0	"	100.0	ND	84.0				D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Matrix Spike (0950182-MS1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
Surrogate: Dibromofluoromethane	*23.0*		*ug/L*	*25.00*		*91.8*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.8*		*"*	*25.00*		*91.0*	*80-120*			
Surrogate: Toluene-d8	*24.1*		*"*	*25.00*		*96.6*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*"*	*25.00*		*95.2*	*60-149*			
Matrix Spike Dup (0950182-MSD1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
Dichlorodifluoromethane	93.3	5.0	ug/L	100.0	ND	93.3		7.63		D
Chloromethane	80.1	5.0	"	100.0	ND	80.1		5.76		D
Vinyl chloride	89.4	5.0	"	100.0	ND	89.4		5.55		D
Bromomethane	92.4	5.0	"	100.0	ND	92.4		12.9		D
Chloroethane	108	5.0	"	100.0	7.35	101		4.31		D
Trichlorofluoromethane	84.2	5.0	"	100.0	ND	84.2		6.88		D
Acrolein	321	25	"	500.0	ND	64.1		2.77		D
1,1-Dichloroethene	85.5	5.0	"	100.0	ND	85.5	18.7-178	6.94	22.3	D
Acetone	1790	25	"	500.0	1300	98.3		1.52		D
Iodomethane	52.9	5.0	"	100.0	ND	52.9		2.20		D
Carbon disulfide	81.1	5.0	"	100.0	ND	81.1		7.42		D
Allyl Chloride (3-Chloropropylene)	88.2	5.0	"	100.0	ND	88.2		3.29		D
Acetonitrile	85.2	25	"	100.0	ND	85.2		2.55		D
Methylene Chloride	96.8	5.0	"	100.0	3.70	93.0		4.15		D
Methyl-tert-Butyl Ether	86.8	5.0	"	100.0	ND	86.8		0.00		D
trans-1,2-Dichloroethene	86.3	5.0	"	100.0	ND	86.3		7.15		D
Acrylonitrile	87.6	25	"	100.0	ND	87.6		3.54		D
1,1-Dichloroethane	87.8	5.0	"	100.0	2.55	85.2		6.39		D
Chloroprene	82.6	5.0	"	100.0	ND	82.6		6.96		D
Vinyl acetate	89.3	5.0	"	100.0	ND	89.3		0.787		D
2,2-Dichloropropane	81.7	5.0	"	100.0	ND	81.7		6.80		D
cis-1,2-Dichloroethene	88.2	5.0	"	100.0	ND	88.2		1.91		D
2-Butanone (MEK)	792	25	"	500.0	328	92.8		3.60		D
Propionitrile (Ethyl Cyanide)	85.5	25	"	100.0	ND	85.5		1.41		D
Methacrylonitrile	94.2	25	"	100.0	ND	94.2		0.424		D
Chloroform	85.5	5.0	"	100.0	ND	85.5		4.24		D
Bromochloromethane	89.3	5.0	"	100.0	ND	89.3		1.72		D
1,1,1-Trichloroethane	85.6	5.0	"	100.0	ND	85.6		5.67		D
1,1-Dichloropropene	86.2	5.0	"	100.0	ND	86.2		6.73		D
Carbon Tetrachloride	87.0	5.0	"	100.0	ND	87.0		5.59		D
Benzene	90.6	5.0	"	100.0	ND	90.6	65.6-159	3.53	15.1	D
1,2-Dichloroethane	91.8	5.0	"	100.0	ND	91.8		1.51		D
Trichloroethene	79.6	5.0	"	100.0	ND	79.6	71-158	5.97	15.2	D
1,2-Dichloropropane	93.2	5.0	"	100.0	ND	93.2		1.75		D
Bromodichloromethane	89.6	5.0	"	100.0	ND	89.6		3.78		D
Methyl Methacrylate	97.2	5.0	"	100.0	ND	97.2		0.309		D

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Matrix Spike Dup (0950182-MSD1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
Dibromomethane	83.6	5.0	ug/L	100.0	ND	83.6		3.59		D
2-Chloroethyl Vinyl Ether	7.80	5.0	"	100.0	7.25	0.550		1.27		D
Methyl Isobutyl Ketone	686	25	"	500.0	186	99.8		2.13		D
cis-1,3-Dichloropropene	88.6	5.0	"	100.0	ND	88.6		3.28		D
Toluene	366	5.0	"	100.0	280	86.1	60.8-171	4.17	17.1	D
trans-1,3-Dichloropropene	87.0	5.0	"	100.0	ND	87.0		0.459		D
Ethyl Methacrylate	87.3	5.0	"	100.0	ND	87.3		1.15		D
1,1,2-Trichloroethane	85.8	5.0	"	100.0	ND	85.8		2.19		D
2-Hexanone (MBK)	472	25	"	500.0	ND	94.4		2.09		D
1,2-Dibromoethane	88.7	5.0	"	100.0	ND	88.7		0.786		D
Tetrachloroethene	66.8	5.0	"	100.0	ND	66.8		5.60		D
1,3-Dichloropropane	92.1	5.0	"	100.0	ND	92.1		2.68		D
Dibromochloromethane	92.4	5.0	"	100.0	ND	92.4		1.82		D
Chlorobenzene	86.7	5.0	"	100.0	ND	86.7	76.5-147	4.62	13.6	D
1,1,1,2-Tetrachloroethane	93.8	5.0	"	100.0	ND	93.8		3.04		D
Ethylbenzene	98.3	5.0	"	100.0	7.90	90.4		5.64		D
m,p-Xylenes	210	10	"	200.0	27.0	91.3		6.15		D
o-Xylene	104	5.0	"	100.0	8.50	95.4		4.98		D
Styrene	92.8	5.0	"	100.0	ND	92.8		5.71		D
Bromoform	91.8	5.0	"	100.0	ND	91.8		1.94		D
Isopropylbenzene (Cumene)	92.0	5.0	"	100.0	ND	92.0		3.74		D
1,1,2,2-Tetrachloroethane	91.8	5.0	"	100.0	ND	91.8		0.931		D
1,2,3-Trichloropropane	89.7	5.0	"	100.0	ND	89.7		1.11		D
Bromobenzene	91.8	5.0	"	100.0	ND	91.8		0.381		D
Propylbenzene	93.4	5.0	"	100.0	ND	93.4		3.21		D
2-Chlorotoluene	92.0	5.0	"	100.0	ND	92.0		2.52		D
1,3,5-Trimethylbenzene	93.8	5.0	"	100.0	ND	93.8		2.73		D
4-Chlorotoluene	90.4	5.0	"	100.0	ND	90.4		2.24		D
tert-Butylbenzene	91.7	5.0	"	100.0	ND	91.7		5.20		D
1,2,4-Trimethylbenzene	98.5	5.0	"	100.0	2.80	95.7		1.21		D
sec-Butylbenzene	93.4	5.0	"	100.0	ND	93.4		2.12		D
4-Isopropyltoluene	84.2	5.0	"	100.0	ND	84.2		4.30		D
1,3-Dichlorobenzene	87.1	5.0	"	100.0	ND	87.1		2.27		D
1,4-Dichlorobenzene	86.6	5.0	"	100.0	ND	86.6		1.20		D
trans-1,4-Dichloro-2-butene	95.1	5.0	"	100.0	ND	95.1		0.158		D
Butylbenzene	86.4	5.0	"	100.0	ND	86.4		0.464		D
1,2-Dichlorobenzene	90.4	5.0	"	100.0	ND	90.4		1.95		D
1,2-Dibromo-3-chloropropane	85.6	5.0	"	100.0	ND	85.6		3.14		D
1,2,4-Trichlorobenzene	91.8	5.0	"	100.0	ND	91.8		7.46		D
Hexachlorobutadiene	87.6	5.0	"	100.0	ND	87.6		7.21		D
Naphthalene	95.4	5.0	"	100.0	ND	95.4		11.8		D

The results in this report apply to the samples analyzed in accordance with the chain of

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

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Volatile Organic Compounds by EPA Method 8260B - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950182 - EPA 5030B										
Matrix Spike Dup (0950182-MSD1)	**Source: 09L0511-01**			Prepared & Analyzed: 12/11/2009						
1,2,3-Trichlorobenzene	91.7	5.0	ug/L	100.0	ND	91.7		8.82		D
Surrogate: Dibromofluoromethane	*22.9*		*"*	*25.00*		*91.7*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*22.7*		*"*	*25.00*		*91.0*	*80-120*			
Surrogate: Toluene-d8	*24.2*		*"*	*25.00*		*96.8*	*75-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*"*	*25.00*		*96.3*	*60-149*			

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
Blank (0950207-BLK1)				Prepared & Analyzed: 12/09/2009						
N-Nitrosodimethylamine	ND	5.0	ug/L							U
Pyridine	ND	5.0	"							U
Aniline	ND	5.0	"							U
Bis(2-Chloroethyl)ether	ND	5.0	"							U
Phenol	ND	5.0	"							U
Acetophenone	0.00		"							U
2-Chlorophenol	ND	5.0	"							U
1,3-Dichlorobenzene	ND	5.0	"							U
1,4-Dichlorobenzene	ND	5.0	"							U
1,2-Dichlorobenzene	ND	5.0	"							U
Pentachloroethane	ND	5.0	"							U
Bis(2-chloroisopropyl)ether	ND	5.0	"							U
2-Methylphenol	ND	5.0	"							U
Hexachloroethane	ND	5.0	"							U
4-Methylphenol, 3-Methylphenol	ND	5.0	"							U
Nitrobenzene	ND	5.0	"							U
Isophorone	ND	5.0	"							U
2-Nitrophenol	ND	5.0	"							U
2,4-Dimethylphenol	ND	5.0	"							U
bis(2-Chloroethoxy)methane	ND	5.0	"							U
2,4-Dichlorophenol	ND	5.0	"							U
1,2,4-Trichlorobenzene	ND	5.0	"							U
Naphthalene	ND	5.0	"							U
Hexachlorobutadiene	ND	5.0	"							U
4-Chloro-3-methylphenol	ND	5.0	"							U
2-Methylnaphthalene	ND	5.0	"							U
Hexachlorocyclopentadiene	ND	10	"							V6, U
2,4,6-Trichlorophenol	ND	5.0	"							U
2,4,5-Trichlorophenol	ND	5.0	"							U
2-Chloronaphthalene	ND	5.0	"							U
Acenaphthylene	ND	5.0	"							U
Dimethylphthalate	ND	5.0	"							U
2,6-Dinitrotoluene	ND	5.0	"							U
Acenaphthene	ND	5.0	"							U
2,4-Dinitrophenol	ND	10	"							U
Dibenzofuran	ND	5.0	"							U
2,4-Dinitrotoluene	ND	5.0	"							U
4-Nitrophenol	ND	10	"							U
Fluorene	ND	5.0	"							U
4-Chlorophenyl-phenylether	ND	5.0	"							U
Diethylphthalate	ND	5.0	"							U

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
Blank (0950207-BLK1)				Prepared & Analyzed: 12/09/2009						
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L							U
4-Bromophenyl-phenylether	ND	5.0	"							U
Hexachlorobenzene	ND	5.0	"							U
Pentachlorophenol	ND	10	"							U
Phenanthrene	ND	5.0	"							U
Anthracene	ND	5.0	"							U
Di-n-butylphthalate	ND	5.0	"							U
Fluoranthene	ND	5.0	"							U
Pyrene	ND	5.0	"							U
Butylbenzylphthalate	ND	5.0	"							U
3,3´-Dichlorobenzidine	ND	5.0	"							U
Benz(a)anthracene	ND	5.0	"							U
Chrysene	ND	5.0	"							U
Bis(2-Ethylhexyl)phthalate	ND	5.0	"							U
Di-n-octylphthalate	ND	5.0	"							U
Benzo[b]fluoranthene	ND	5.0	"							U
Benzo[k]fluoranthene	ND	5.0	"							U
Benzo[a]pyrene	ND	5.0	"							U
Indeno[1,2,3-cd]pyrene	ND	5.0	"							U
Dibenz[a,h]anthracene	ND	5.0	"							U
Benzo[g,h,i]perylene	ND	5.0	"							U
Surrogate: 2-Fluorophenol	*29.2*		*"*	*75.00*		*38.9*	*0.974-78.2*			
Surrogate: Phenol-d5	*19.0*		*"*	*75.00*		*25.3*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*33.2*		*"*	*50.00*		*66.5*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*33.5*		*"*	*50.00*		*67.1*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*64.8*		*"*	*75.00*		*86.4*	*12.5-139*			
Surrogate: Terphenyl-d14	*37.5*		*"*	*50.00*		*74.9*	*16.6-136*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS1)				Prepared & Analyzed: 12/09/2009						
N-Nitrosodimethylamine	19.4	5.0	ug/L	50.00		38.9				
Pyridine	12.2	5.0	"	50.00		24.3				
Aniline	31.4	5.0	"	50.00		62.8				
Bis(2-Chloroethyl)ether	42.0	5.0	"	50.00		84.0				
Phenol	19.1	5.0	"	50.00		38.2	11-113			
2-Chlorophenol	38.0	5.0	"	50.00		76.1	13-109			
1,4-Dichlorobenzene	39.6	5.0	"	50.00		79.2	34-111			
Bis(2-chloroisopropyl)ether	39.2	5.0	"	50.00		78.5				
2-Methylphenol	36.3	5.0	"	50.00		72.6				
Hexachloroethane	34.0	5.0	"	50.00		68.0				
4-Methylphenol, 3-Methylphenol	31.7	5.0	"	50.00		63.5				
Nitrobenzene	43.2	5.0	"	50.00		86.5				
Isophorone	40.8	5.0	"	50.00		81.5				
2-Nitrophenol	46.3	5.0	"	50.00		92.6				
2,4-Dimethylphenol	43.7	5.0	"	50.00		87.3	0-200			
bis(2-Chloroethoxy)methane	42.8	5.0	"	50.00		85.6				
2,4-Dichlorophenol	41.7	5.0	"	50.00		83.4	0-200			
1,2,4-Trichlorobenzene	42.1	5.0	"	50.00		84.1	23-126			
Naphthalene	41.7	5.0	"	50.00		83.5				
Hexachlorobutadiene	47.0	5.0	"	50.00		94.0				
4-Chloro-3-methylphenol	46.2	5.0	"	50.00		92.4	16-127			
2-Methylnaphthalene	47.0	5.0	"	50.00		94.0				
Hexachlorocyclopentadiene	28.8	10	"	50.00		57.7				V6
2,4,6-Trichlorophenol	49.4	5.0	"	50.00		98.9	0-200			
2,4,5-Trichlorophenol	49.3	5.0	"	50.00		98.7				
2-Chloronaphthalene	45.0	5.0	"	50.00		89.9				
Acenaphthylene	45.2	5.0	"	50.00		90.4				
Dimethylphthalate	45.8	5.0	"	50.00		91.6				
2,6-Dinitrotoluene	47.1	5.0	"	50.00		94.2	0-200			
Acenaphthene	44.7	5.0	"	50.00		89.3	36-123			
2,4-Dinitrophenol	37.2	10	"	50.00		74.3	0-200			
Dibenzofuran	46.6	5.0	"	50.00		93.3				
2,4-Dinitrotoluene	52.0	5.0	"	50.00		104	24-123			
4-Nitrophenol	22.6	10	"	50.00		45.2	0.5-121			
Fluorene	44.8	5.0	"	50.00		89.5				
4-Chlorophenyl-phenylether	44.4	5.0	"	50.00		88.8				
Diethylphthalate	43.9	5.0	"	50.00		87.9				
4,6-Dinitro-2-methylphenol	51.2	5.0	"	50.00		102				
4-Bromophenyl-phenylether	46.6	5.0	"	50.00		93.3				
Hexachlorobenzene	49.6	5.0	"	50.00		99.1				
Pentachlorophenol	64.6	10	"	50.00		129	12-103			L2

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS1)				Prepared & Analyzed: 12/09/2009						
Phenanthrene	46.2	5.0	ug/L	50.00		92.4				
Anthracene	48.8	5.0	"	50.00		97.7				
Di-n-butylphthalate	48.0	5.0	"	50.00		96.1				
Fluoranthene	50.8	5.0	"	50.00		102				
Pyrene	47.1	5.0	"	50.00		94.1	31-121			
Butylbenzylphthalate	49.1	5.0	"	50.00		98.2				
3,3´-Dichlorobenzidine	119	5.0	"	50.00		238				L2
Benz(a)anthracene	49.6	5.0	"	50.00		99.3				
Chrysene	51.1	5.0	"	50.00		102				
Bis(2-Ethylhexyl)phthalate	48.0	5.0	"	50.00		96.0				
Di-n-octylphthalate	46.1	5.0	"	50.00		92.1				
Benzo[b]fluoranthene	49.6	5.0	"	50.00		99.3				
Benzo[k]fluoranthene	46.2	5.0	"	50.00		92.4				
Benzo[a]pyrene	48.7	5.0	"	50.00		97.4				
Indeno[1,2,3-cd]pyrene	54.7	5.0	"	50.00		109				
Dibenz[a,h]anthracene	55.5	5.0	"	50.00		111				
Benzo[g,h,i]perylene	59.4	5.0	"	50.00		119				
Surrogate: 2-Fluorophenol	*32.9*		*"*	*75.00*		*43.9*	*0.974-78.2*			
Surrogate: Phenol-d5	*22.3*		*"*	*75.00*		*29.7*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*39.7*		*"*	*50.00*		*79.4*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*37.4*		*"*	*50.00*		*74.7*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*72.9*		*"*	*75.00*		*97.2*	*12.5-139*			
Surrogate: Terphenyl-d14	*42.4*		*"*	*50.00*		*84.9*	*16.6-136*			
LCS (0950207-BS2)				Prepared & Analyzed: 12/09/2009						
N-Nitrosodimethylamine	23.3	5.0	ug/L	50.00		46.6				
Pyridine	6.27	5.0	"	50.00		12.5				
Aniline	23.7	5.0	"	50.00		47.5				
Bis(2-Chloroethyl)ether	35.8	5.0	"	50.00		71.6				
Phenol	19.7	5.0	"	50.00		39.5	11-113			
2-Chlorophenol	35.5	5.0	"	50.00		71.0	13-109			
1,4-Dichlorobenzene	32.6	5.0	"	50.00		65.2	34-111			
Bis(2-chloroisopropyl)ether	35.2	5.0	"	50.00		70.3				
2-Methylphenol	34.2	5.0	"	50.00		68.4				
Hexachloroethane	28.8	5.0	"	50.00		57.6				
4-Methylphenol, 3-Methylphenol	30.0	5.0	"	50.00		60.1				
Nitrobenzene	38.4	5.0	"	50.00		76.7				
Isophorone	34.6	5.0	"	50.00		69.2				
2-Nitrophenol	40.7	5.0	"	50.00		81.5				
2,4-Dimethylphenol	39.1	5.0	"	50.00		78.2	0-200			
bis(2-Chloroethoxy)methane	37.8	5.0	"	50.00		75.5				
2,4-Dichlorophenol	35.6	5.0	"	50.00		71.2	0-200			

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1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS2)				Prepared & Analyzed: 12/09/2009						
1,2,4-Trichlorobenzene	35.6	5.0	ug/L	50.00		71.2	23-126			
Naphthalene	36.0	5.0	"	50.00		72.0				
Hexachlorobutadiene	39.3	5.0	"	50.00		78.6				
4-Chloro-3-methylphenol	39.8	5.0	"	50.00		79.5	16-127			
2-Methylnaphthalene	50.0	5.0	"	50.00		100				
Hexachlorocyclopentadiene	23.5	10	"	50.00		47.0				V6
2,4,6-Trichlorophenol	42.6	5.0	"	50.00		85.3	0-200			
2,4,5-Trichlorophenol	40.8	5.0	"	50.00		81.6				
2-Chloronaphthalene	38.3	5.0	"	50.00		76.6				
Acenaphthylene	38.0	5.0	"	50.00		75.9				
Dimethylphthalate	38.6	5.0	"	50.00		77.3				
2,6-Dinitrotoluene	39.4	5.0	"	50.00		78.8	0-200			
Acenaphthene	37.2	5.0	"	50.00		74.5	36-123			
2,4-Dinitrophenol	23.7	10	"	50.00		47.5	0-200			
Dibenzofuran	39.4	5.0	"	50.00		78.7				
2,4-Dinitrotoluene	43.4	5.0	"	50.00		86.8	24-123			
4-Nitrophenol	20.9	10	"	50.00		41.8	0.5-121			
Fluorene	38.0	5.0	"	50.00		76.1				
4-Chlorophenyl-phenylether	38.3	5.0	"	50.00		76.6				
Diethylphthalate	37.9	5.0	"	50.00		75.8				
4,6-Dinitro-2-methylphenol	41.3	5.0	"	50.00		82.6				
4-Bromophenyl-phenylether	39.6	5.0	"	50.00		79.3				
Hexachlorobenzene	40.4	5.0	"	50.00		80.8				
Pentachlorophenol	51.3	10	"	50.00		103	12-103			
Phenanthrene	38.2	5.0	"	50.00		76.4				
Anthracene	40.3	5.0	"	50.00		80.6				
Di-n-butylphthalate	38.7	5.0	"	50.00		77.4				
Fluoranthene	41.3	5.0	"	50.00		82.6				
Pyrene	39.4	5.0	"	50.00		78.7	31-121			
Butylbenzylphthalate	40.9	5.0	"	50.00		81.8				
3,3´-Dichlorobenzidine	89.9	5.0	"	50.00		180				
Benz(a)anthracene	40.8	5.0	"	50.00		81.5				
Chrysene	41.0	5.0	"	50.00		82.0				
Bis(2-Ethylhexyl)phthalate	39.2	5.0	"	50.00		78.4				
Di-n-octylphthalate	38.3	5.0	"	50.00		76.6				
Benzo[b]fluoranthene	40.1	5.0	"	50.00		80.3				
Benzo[k]fluoranthene	37.5	5.0	"	50.00		75.1				
Benzo[a]pyrene	39.2	5.0	"	50.00		78.4				
Indeno[1,2,3-cd]pyrene	44.8	5.0	"	50.00		89.6				
Dibenz[a,h]anthracene	45.9	5.0	"	50.00		91.7				
Benzo[g,h,i]perylene	48.3	5.0	"	50.00		96.5				

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS2)				Prepared & Analyzed: 12/09/2009						
Surrogate: 2-Fluorophenol	*33.6*		*ug/L*	*75.00*		*44.8*	*0.974-78.2*			
Surrogate: Phenol-d5	*23.9*		*"*	*75.00*		*31.9*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*36.9*		*"*	*50.00*		*73.7*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*34.7*		*"*	*50.00*		*69.4*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*62.7*		*"*	*75.00*		*83.5*	*12.5-139*			
Surrogate: Terphenyl-d14	*37.4*		*"*	*50.00*		*74.8*	*16.6-136*			
LCS (0950207-BS3)				Prepared & Analyzed: 12/09/2009						
N-Nitrosodimethylamine	19.7	5.0	ug/L	50.00		39.3				
Pyridine	ND	5.0	"	50.00						U
Aniline	19.3	5.0	"	50.00		38.5				
Bis(2-Chloroethyl)ether	24.6	5.0	"	50.00		49.1				
Phenol	15.0	5.0	"	50.00		30.1	11-113			
2-Chlorophenol	27.1	5.0	"	50.00		54.3	13-109			
1,4-Dichlorobenzene	26.2	5.0	"	50.00		52.3	34-111			
Bis(2-chloroisopropyl)ether	27.0	5.0	"	50.00		54.0				
2-Methylphenol	26.2	5.0	"	50.00		52.5				
Hexachloroethane	22.8	5.0	"	50.00		45.7				
4-Methylphenol, 3-Methylphenol	23.0	5.0	"	50.00		46.1				
Nitrobenzene	29.9	5.0	"	50.00		59.8				
Isophorone	28.3	5.0	"	50.00		56.7				
2-Nitrophenol	31.9	5.0	"	50.00		63.8				
2,4-Dimethylphenol	30.1	5.0	"	50.00		60.2	0-200			
bis(2-Chloroethoxy)methane	28.8	5.0	"	50.00		57.5				
2,4-Dichlorophenol	26.5	5.0	"	50.00		53.0	0-200			
1,2,4-Trichlorobenzene	27.9	5.0	"	50.00		55.8	23-126			
Naphthalene	28.0	5.0	"	50.00		56.0				
Hexachlorobutadiene	30.9	5.0	"	50.00		61.8				
4-Chloro-3-methylphenol	31.0	5.0	"	50.00		62.1	16-127			
2-Methylnaphthalene	39.0	5.0	"	50.00		77.9				
Hexachlorocyclopentadiene	20.2	10	"	50.00		40.4				V6
2,4,6-Trichlorophenol	33.3	5.0	"	50.00		66.5	0-200			
2,4,5-Trichlorophenol	32.6	5.0	"	50.00		65.1				
2-Chloronaphthalene	29.0	5.0	"	50.00		57.9				
Acenaphthylene	29.8	5.0	"	50.00		59.5				
Dimethylphthalate	31.4	5.0	"	50.00		62.7				
2,6-Dinitrotoluene	32.0	5.0	"	50.00		64.1	0-200			
Acenaphthene	29.4	5.0	"	50.00		58.7	36-123			
2,4-Dinitrophenol	22.6	10	"	50.00		45.2	0-200			
Dibenzofuran	31.5	5.0	"	50.00		63.0				
2,4-Dinitrotoluene	36.0	5.0	"	50.00		72.1	24-123			
4-Nitrophenol	17.1	10	"	50.00		34.2	0.5-121			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS3)				Prepared & Analyzed: 12/09/2009						
Fluorene	30.8	5.0	ug/L	50.00		61.6				
4-Chlorophenyl-phenylether	31.3	5.0	"	50.00		62.5				
Diethylphthalate	31.6	5.0	"	50.00		63.1				
4,6-Dinitro-2-methylphenol	35.8	5.0	"	50.00		71.6				
4-Bromophenyl-phenylether	31.9	5.0	"	50.00		63.7				
Hexachlorobenzene	32.6	5.0	"	50.00		65.2				
Pentachlorophenol	47.8	10	"	50.00		95.7	12-103			
Phenanthrene	31.7	5.0	"	50.00		63.4				
Anthracene	33.7	5.0	"	50.00		67.4				
Di-n-butylphthalate	32.7	5.0	"	50.00		65.4				
Fluoranthene	35.0	5.0	"	50.00		70.1				
Pyrene	34.4	5.0	"	50.00		68.7	31-121			
Butylbenzylphthalate	34.9	5.0	"	50.00		69.8				
3,3´-Dichlorobenzidine	74.5	5.0	"	50.00		149				
Benz(a)anthracene	34.0	5.0	"	50.00		68.0				
Chrysene	34.1	5.0	"	50.00		68.1				
Bis(2-Ethylhexyl)phthalate	32.1	5.0	"	50.00		64.2				
Di-n-octylphthalate	31.9	5.0	"	50.00		63.8				
Benzo[b]fluoranthene	32.4	5.0	"	50.00		64.9				
Benzo[k]fluoranthene	33.2	5.0	"	50.00		66.4				
Benzo[a]pyrene	32.9	5.0	"	50.00		65.7				
Indeno[1,2,3-cd]pyrene	36.9	5.0	"	50.00		73.8				
Dibenz[a,h]anthracene	37.5	5.0	"	50.00		75.0				
Benzo[g,h,i]perylene	39.4	5.0	"	50.00		78.7				
Surrogate: 2-Fluorophenol	*27.6*		*"*	*75.00*		*36.7*	*0.974-78.2*			
Surrogate: Phenol-d5	*19.1*		*"*	*75.00*		*25.5*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*30.5*		*"*	*50.00*		*61.1*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*28.7*		*"*	*50.00*		*57.5*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*56.5*		*"*	*75.00*		*75.4*	*12.5-139*			
Surrogate: Terphenyl-d14	*34.1*		*"*	*50.00*		*68.1*	*16.6-136*			

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Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS4)				Prepared & Analyzed: 12/09/2009						
N-Nitrosodimethylamine	22.7	5.0	ug/L	50.00		45.5				
Pyridine	7.28	5.0	"	50.00		14.6				
Aniline	23.5	5.0	"	50.00		47.0				
Bis(2-Chloroethyl)ether	30.0	5.0	"	50.00		60.0				
Phenol	17.9	5.0	"	50.00		35.7	11-113			
2-Chlorophenol	33.6	5.0	"	50.00		67.2	13-109			
1,4-Dichlorobenzene	31.9	5.0	"	50.00		63.8	34-111			
Bis(2-chloroisopropyl)ether	33.6	5.0	"	50.00		67.1				
2-Methylphenol	31.7	5.0	"	50.00		63.4				
Hexachloroethane	28.4	5.0	"	50.00		56.7				
4-Methylphenol, 3-Methylphenol	27.6	5.0	"	50.00		55.3				
Nitrobenzene	36.8	5.0	"	50.00		73.7				
Isophorone	34.2	5.0	"	50.00		68.4				
2-Nitrophenol	38.8	5.0	"	50.00		77.6				
2,4-Dimethylphenol	36.2	5.0	"	50.00		72.4	0-200			
bis(2-Chloroethoxy)methane	35.5	5.0	"	50.00		71.0				
2,4-Dichlorophenol	32.2	5.0	"	50.00		64.4	0-200			
1,2,4-Trichlorobenzene	34.8	5.0	"	50.00		69.6	23-126			
Naphthalene	34.5	5.0	"	50.00		69.1				
Hexachlorobutadiene	38.1	5.0	"	50.00		76.2				
4-Chloro-3-methylphenol	35.1	5.0	"	50.00		70.2	16-127			
2-Methylnaphthalene	46.0	5.0	"	50.00		92.1				
Hexachlorocyclopentadiene	24.4	10	"	50.00		48.7				V6
2,4,6-Trichlorophenol	39.6	5.0	"	50.00		79.1	0-200			
2,4,5-Trichlorophenol	38.7	5.0	"	50.00		77.5				
2-Chloronaphthalene	35.9	5.0	"	50.00		71.9				
Acenaphthylene	36.1	5.0	"	50.00		72.1				
Dimethylphthalate	36.8	5.0	"	50.00		73.6				
2,6-Dinitrotoluene	37.2	5.0	"	50.00		74.4	0-200			
Acenaphthene	35.2	5.0	"	50.00		70.4	36-123			
2,4-Dinitrophenol	26.1	10	"	50.00		52.2	0-200			
Dibenzofuran	36.9	5.0	"	50.00		73.8				
2,4-Dinitrotoluene	41.2	5.0	"	50.00		82.4	24-123			
4-Nitrophenol	19.9	10	"	50.00		39.8	0.5-121			
Fluorene	36.6	5.0	"	50.00		73.2				
4-Chlorophenyl-phenylether	36.9	5.0	"	50.00		73.8				
Diethylphthalate	37.0	5.0	"	50.00		74.0				
4,6-Dinitro-2-methylphenol	40.3	5.0	"	50.00		80.7				
4-Bromophenyl-phenylether	37.3	5.0	"	50.00		74.6				
Hexachlorobenzene	38.3	5.0	"	50.00		76.6				
Pentachlorophenol	53.0	10	"	50.00		106	12-103			L2

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
LCS (0950207-BS4)				Prepared & Analyzed: 12/09/2009						
Phenanthrene	36.0	5.0	ug/L	50.00		72.1				
Anthracene	38.5	5.0	"	50.00		77.1				
Di-n-butylphthalate	39.0	5.0	"	50.00		77.9				
Fluoranthene	40.6	5.0	"	50.00		81.3				
Pyrene	36.4	5.0	"	50.00		72.8	31-121			
Butylbenzylphthalate	39.0	5.0	"	50.00		78.0				
3,3´-Dichlorobenzidine	82.1	5.0	"	50.00		164				
Benz(a)anthracene	38.2	5.0	"	50.00		76.4				
Chrysene	39.1	5.0	"	50.00		78.2				
Bis(2-Ethylhexyl)phthalate	37.2	5.0	"	50.00		74.3				
Di-n-octylphthalate	37.5	5.0	"	50.00		75.1				
Benzo[b]fluoranthene	36.6	5.0	"	50.00		73.1				
Benzo[k]fluoranthene	38.0	5.0	"	50.00		76.0				
Benzo[a]pyrene	37.9	5.0	"	50.00		75.7				
Indeno[1,2,3-cd]pyrene	42.6	5.0	"	50.00		85.1				
Dibenz[a,h]anthracene	43.6	5.0	"	50.00		87.1				
Benzo[g,h,i]perylene	45.4	5.0	"	50.00		90.7				
Surrogate: 2-Fluorophenol	*32.9*		"	*75.00*		*43.9*	*0.974-78.2*			
Surrogate: Phenol-d5	*22.4*		"	*75.00*		*29.8*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*35.6*		"	*50.00*		*71.2*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*33.0*		"	*50.00*		*66.1*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*60.1*		"	*75.00*		*80.1*	*12.5-139*			
Surrogate: Terphenyl-d14	*35.8*		"	*50.00*		*71.5*	*16.6-136*			
Matrix Spike (0950207-MS1)	**Source: 09L0484-02**			Prepared: 12/09/2009 Analyzed: 12/10/2009						
N-Nitrosodimethylamine	19.7	5.3	ug/L	52.63	ND	37.4				D
Pyridine	19.7	5.3	"	52.63	ND	37.4				D
Aniline	41.0	5.3	"	52.63	ND	77.9				D
Bis(2-Chloroethyl)ether	41.1	5.3	"	52.63	ND	78.0				D
Phenol	17.5	5.3	"	52.63	ND	33.3	12-110		42	D
2-Chlorophenol	35.8	5.3	"	52.63	ND	68.0	27-123		40	D
1,4-Dichlorobenzene	38.2	5.3	"	52.63	ND	72.5	36-97		28	D
Bis(2-chloroisopropyl)ether	37.1	5.3	"	52.63	ND	70.5				D
2-Methylphenol	34.6	5.3	"	52.63	ND	65.8				D
Hexachloroethane	32.5	5.3	"	52.63	ND	61.8				D
4-Methylphenol, 3-Methylphenol	28.9	5.3	"	52.63	ND	54.9				D
Nitrobenzene	42.1	5.3	"	52.63	ND	80.0				D
Isophorone	35.8	5.3	"	52.63	ND	68.0				D
2-Nitrophenol	45.4	5.3	"	52.63	ND	86.2				D
2,4-Dimethylphenol	42.3	5.3	"	52.63	ND	80.3				D
bis(2-Chloroethoxy)methane	40.8	5.3	"	52.63	ND	77.5				D
2,4-Dichlorophenol	39.4	5.3	"	52.63	ND	74.9				D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
Matrix Spike (0950207-MS1)	**Source: 09L0484-02**			Prepared: 12/09/2009 Analyzed: 12/10/2009						
1,2,4-Trichlorobenzene	39.7	5.3	ug/L	52.63	ND	75.5	39-98		28	D
Naphthalene	40.8	5.3	"	52.63	ND	77.5				D
Hexachlorobutadiene	43.5	5.3	"	52.63	ND	82.7				D
4-Chloro-3-methylphenol	40.9	5.3	"	52.63	ND	77.7	23-97			D
2-Methylnaphthalene	53.2	5.3	"	52.63	ND	101				D
Hexachlorocyclopentadiene	27.4	11	"	52.63	ND	52.0				V6, D
2,4,6-Trichlorophenol	46.7	5.3	"	52.63	ND	88.8				D
2,4,5-Trichlorophenol	47.0	5.3	"	52.63	ND	89.3				D
2-Chloronaphthalene	42.2	5.3	"	52.63	ND	80.2				D
Acenaphthylene	41.9	5.3	"	52.63	ND	79.6				D
Dimethylphthalate	41.8	5.3	"	52.63	ND	79.4				D
2,6-Dinitrotoluene	41.6	5.3	"	52.63	ND	79.0				D
Acenaphthene	40.1	5.3	"	52.63	ND	76.1	46-118		31	D
2,4-Dinitrophenol	40.0	11	"	52.63	ND	76.0				D
Dibenzofuran	43.4	5.3	"	52.63	ND	82.5				D
2,4-Dinitrotoluene	46.1	5.3	"	52.63	ND	87.6	24-96		38	D
4-Nitrophenol	18.4	11	"	52.63	ND	35.0	10-80		50	D
Fluorene	41.3	5.3	"	52.63	ND	78.4				D
4-Chlorophenyl-phenylether	41.0	5.3	"	52.63	ND	77.9				D
Diethylphthalate	40.0	5.3	"	52.63	ND	75.9				D
4,6-Dinitro-2-methylphenol	47.3	5.3	"	52.63	ND	89.8				D
4-Bromophenyl-phenylether	41.9	5.3	"	52.63	ND	79.7				D
Hexachlorobenzene	45.4	5.3	"	52.63	ND	86.2				D
Pentachlorophenol	60.1	11	"	52.63	ND	114	9-103		50	M2, D
Phenanthrene	42.3	5.3	"	52.63	ND	80.3				D
Anthracene	45.0	5.3	"	52.63	ND	85.5				D
Di-n-butylphthalate	45.5	5.3	"	52.63	ND	86.5				D
Fluoranthene	45.0	5.3	"	52.63	ND	85.6				D
Pyrene	44.8	5.3	"	52.63	ND	85.1	26-127		31	D
Butylbenzylphthalate	45.7	5.3	"	52.63	ND	86.7				D
3,3´-Dichlorobenzidine	96.3	5.3	"	52.63	ND	183				D
Benz(a)anthracene	44.7	5.3	"	52.63	ND	85.0				D
Chrysene	45.7	5.3	"	52.63	ND	86.9				D
Bis(2-Ethylhexyl)phthalate	43.8	5.3	"	52.63	ND	83.2				D
Di-n-octylphthalate	42.2	5.3	"	52.63	ND	80.1				D
Benzo[b]fluoranthene	45.0	5.3	"	52.63	ND	85.5				D
Benzo[k]fluoranthene	41.4	5.3	"	52.63	ND	78.7				D
Benzo[a]pyrene	42.9	5.3	"	52.63	ND	81.4				D
Indeno[1,2,3-cd]pyrene	48.8	5.3	"	52.63	ND	92.7				D
Dibenz[a,h]anthracene	50.2	5.3	"	52.63	ND	95.4				D
Benzo[g,h,i]perylene	52.5	5.3	"	52.63	ND	99.7				D

The results in this report apply to the samples analyzed in accordance with the chain of

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

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
Matrix Spike (0950207-MS1)	**Source: 09L0484-02**			Prepared: 12/09/2009 Analyzed: 12/10/2009						
Surrogate: 2-Fluorophenol	*31.4*		*ug/L*	*78.95*		*39.8*	*0.974-78.2*			
Surrogate: Phenol-d5	*24.6*		*"*	*78.95*		*31.1*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*42.0*		*"*	*52.63*		*79.8*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*39.1*		*"*	*52.63*		*74.3*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*72.3*		*"*	*78.95*		*91.6*	*12.5-139*			
Surrogate: Terphenyl-d14	*40.3*		*"*	*52.63*		*76.7*	*16.6-136*			
Matrix Spike Dup (0950207-MSD1)	**Source: 09L0484-02**			Prepared: 12/09/2009 Analyzed: 12/10/2009						
N-Nitrosodimethylamine	23.2	5.2	ug/L	52.08	ND	44.6		16.5		D
Pyridine	21.1	5.2	"	52.08	ND	40.6		7.11		D
Aniline	41.5	5.2	"	52.08	ND	79.7		1.34		D
Bis(2-Chloroethyl)ether	38.8	5.2	"	52.08	ND	74.4		5.80		D
Phenol	18.1	5.2	"	52.08	ND	34.7	12-110	3.01	42	D
2-Chlorophenol	34.6	5.2	"	52.08	ND	66.3	27-123	3.55	40	D
1,4-Dichlorobenzene	34.5	5.2	"	52.08	ND	66.2	36-97	10.2	28	D
Bis(2-chloroisopropyl)ether	35.3	5.2	"	52.08	ND	67.9		4.81		D
2-Methylphenol	33.8	5.2	"	52.08	ND	64.9		2.49		D
Hexachloroethane	29.8	5.2	"	52.08	ND	57.3		8.57		D
4-Methylphenol, 3-Methylphenol	29.0	5.2	"	52.08	ND	55.7		0.363		D
Nitrobenzene	37.7	5.2	"	52.08	ND	72.4		11.0		D
Isophorone	34.3	5.2	"	52.08	ND	65.9		4.06		D
2-Nitrophenol	41.5	5.2	"	52.08	ND	79.7		8.88		D
2,4-Dimethylphenol	38.7	5.2	"	52.08	ND	74.3		8.84		D
bis(2-Chloroethoxy)methane	36.8	5.2	"	52.08	ND	70.6		10.3		D
2,4-Dichlorophenol	35.2	5.2	"	52.08	ND	67.6		11.2		D
1,2,4-Trichlorobenzene	35.8	5.2	"	52.08	ND	68.7	39-98	10.4	28	D
Naphthalene	36.9	5.2	"	52.08	ND	70.9		9.94		D
Hexachlorobutadiene	38.8	5.2	"	52.08	ND	74.5		11.4		D
4-Chloro-3-methylphenol	40.4	5.2	"	52.08	ND	77.6	23-97	1.18		D
2-Methylnaphthalene	50.0	5.2	"	52.08	ND	96.0		6.20		D
Hexachlorocyclopentadiene	26.6	10	"	52.08	ND	51.2		2.68		V6, D
2,4,6-Trichlorophenol	43.2	5.2	"	52.08	ND	82.9		7.87		D
2,4,5-Trichlorophenol	43.3	5.2	"	52.08	ND	83.1		8.21		D
2-Chloronaphthalene	38.1	5.2	"	52.08	ND	73.1		10.3		D
Acenaphthylene	38.5	5.2	"	52.08	ND	74.0		8.34		D
Dimethylphthalate	40.2	5.2	"	52.08	ND	77.1		3.91		D
2,6-Dinitrotoluene	39.9	5.2	"	52.08	ND	76.7		4.00		D
Acenaphthene	38.0	5.2	"	52.08	ND	73.0	46-118	5.23	31	D
2,4-Dinitrophenol	29.9	10	"	52.08	ND	57.4		28.8		D
Dibenzofuran	40.7	5.2	"	52.08	ND	78.1		6.50		D
2,4-Dinitrotoluene	45.4	5.2	"	52.08	ND	87.2	24-96	1.53	38	D
4-Nitrophenol	19.3	10	"	52.08	ND	37.1	10-80	4.78	50	D

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Acid and Base/Neutral Extractables by EPA Method 8270C - Quality Control Summary

Microbac Laboratories, Inc., Baltimore Division

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0950207 - EPA 625										
Matrix Spike Dup (0950207-MSD1)	**Source: 09L0484-02**			Prepared: 12/09/2009 Analyzed: 12/10/2009						
Fluorene	39.6	5.2	ug/L	52.08	ND	76.0		4.18		D
4-Chlorophenyl-phenylether	38.9	5.2	"	52.08	ND	74.7		5.24		D
Diethylphthalate	39.3	5.2	"	52.08	ND	75.5		1.60		D
4,6-Dinitro-2-methylphenol	46.4	5.2	"	52.08	ND	89.1		1.83		D
4-Bromophenyl-phenylether	39.1	5.2	"	52.08	ND	75.1		6.94		D
Hexachlorobenzene	42.3	5.2	"	52.08	ND	81.1		7.14		D
Pentachlorophenol	51.3	10	"	52.08	ND	98.5	9-103	15.7	50	D
Phenanthrene	40.5	5.2	"	52.08	ND	77.7		4.31		D
Anthracene	42.9	5.2	"	52.08	ND	82.5		4.67		D
Di-n-butylphthalate	42.1	5.2	"	52.08	ND	80.9		7.76		D
Fluoranthene	44.0	5.2	"	52.08	ND	84.5		2.36		D
Pyrene	43.0	5.2	"	52.08	ND	82.6	26-127	4.03	31	D
Butylbenzylphthalate	43.4	5.2	"	52.08	ND	83.2		5.16		D
3,3´-Dichlorobenzidine	96.0	5.2	"	52.08	ND	184		0.372		D
Benz(a)anthracene	42.8	5.2	"	52.08	ND	82.1		4.52		D
Chrysene	43.7	5.2	"	52.08	ND	83.9		4.49		D
Bis(2-Ethylhexyl)phthalate	42.0	5.2	"	52.08	ND	80.6		4.25		D
Di-n-octylphthalate	40.3	5.2	"	52.08	ND	77.4		4.45		D
Benzo[b]fluoranthene	43.2	5.2	"	52.08	ND	82.9		4.23		D
Benzo[k]fluoranthene	39.0	5.2	"	52.08	ND	74.9		5.97		D
Benzo[a]pyrene	41.8	5.2	"	52.08	ND	80.3		2.41		D
Indeno[1,2,3-cd]pyrene	46.2	5.2	"	52.08	ND	88.7		5.46		D
Dibenz[a,h]anthracene	48.2	5.2	"	52.08	ND	92.5		4.09		D
Benzo[g,h,i]perylene	48.9	5.2	"	52.08	ND	93.8		7.10		D
Surrogate: 2-Fluorophenol	*32.6*		"	*78.12*		*41.7*	*0.974-78.2*			
Surrogate: Phenol-d5	*25.3*		"	*78.12*		*32.4*	*0-57.5*			
Surrogate: Nitrobenzene-d5	*36.8*		"	*52.08*		*70.7*	*15.3-131*			
Surrogate: 2-Fluorobiphenyl	*34.4*		"	*52.08*		*66.0*	*3.75-142*			
Surrogate: 2,4,6-Tribromophenol	*65.2*		"	*78.12*		*83.4*	*12.5-139*			
Surrogate: Terphenyl-d14	*37.1*		"	*52.08*		*71.2*	*16.6-136*			

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CERTIFICATE OF ANALYSIS

Severstal Sparrows Point	Project: Landfill	Report: 09L0484
1430 Sparrows Point Blvd	Project Number: Landfill	Reported: 01/07/2010 08:09
Sparrows Point, MD 21219	Project Manager: Russ Becker	

Notes and Definitions

Z10c	5310
Z10b	5.4
Z10a	1950
Z10	10.5
V6	CCV recovery was below acceptance limits. The reported result is estimated.
U	Sample concentration is less than the MDL.
D	Sample Diluted
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Certifications

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.

- A2LA (Microbiology): 410.02
- A2LA (Environmental): 410.01
- A2LA (ELLAP): 410.01
- CPSC: 1115
- Maryland: 109
- Pennsylvania: 68-00339
- USDA: S-53726
- Virginia: 00152

The results in this report apply to the samples analyzed in accordance with the chain of

Cooler Receipt Log

Cooler ID: Default Cooler

Cooler Temp: 3.90 °C

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

Work Order Number: 09L0484 **Results due: 10 Work day**

Severstal **Site** – Landfill **Groundwater Samples** **Temperature Blank.** 3.9 °C

Contact: Russ Becker Field Technician: JH

Telephone: (410) 388-6622 email: russ.becker@intlsteel.com

1230 1310

SAMPLE PARAMETERS	*METHODS*	*CONTAINER TYPE*	*# CONT*	GL-08 S	GL-08 D	GL-18 S	GL-18 D	GL-03 S	GL-03 D	GL-17 S	GL-17 D	GL-20	GL-02 S	GL-02 D	GL-16 S	GL-16 D
Volatiles (8260)	8260	2 VOA's w/HCl	2			x	x									
Semi-Volatiles	8270	3 amber liters Cool 4°C	3			↓	↓									
Metals (Sb, As, Ba, Be, Cd, Cr, Ca, Co, Fe, Pb, Ni, Mg, Mn, Hg, K, Se, Ag, Na, Tl, V, Zn, Hardness	200.7, 200.8	1 plastic pint w/HNO3	1			↓	↓									
PH, Specific Conductance	SM (20) 4500 H&B, 2510 B	In field	0			↓	↓									
Alkalinity, Cl, Turb., Sulfate, TDS	SM (20)2320B, 4500Cl-C, 180.1, 375.4, SM (20) 2540C	1 Plastic ½ Gallon Cool 4°C	1			↓	↓									
Nitrate, COD, Ammonia	353.2, 410.4, SM (20) 4500 NH3 B&D	1 plastic ltr w/H2SO4	1			↓	↓									

Relinquished By (signature)/Date & Time: 12-8-9 1410

Received By (signature)/Date & Time: Melanie Dunzelt 12/8/09 1410

1.) CLP-Like QC Package

2.) Run MS/MSD on samples indicated by Field Personnel.

Severstal.070209

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-18 Deep Tag: _____

Date of Purging: 12-8-9 Start Time: 1255 Finish Time: 1310 Weather: 45-50°
Date of Collection: 12-8-9 Time of Collection: 1310

Well Status:

Good _____ Grout _____
Good _____ Casing _____
Good _____ Lock _____
Good _____ Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	18.81
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	21.91

Number of minutes purged	0	3	6	9	12	Sample Reading 15	
Temperature (°C)	18.7	18.5	17.9	17.7	17.7	17.6	
pH	7.91	7.45	6.10	5.44	5.42	5.41	
Specific Conductance (umhos/cm)	6125	5980	5570	5370	5310	5310	
Dissolved Oxygen (mg/l)						—	
Oxidation Reduction (eH)	91.6	87.1	77.3	77.4	75.6	75.4	

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor none
Color Clear

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 12 / 8 / 09. (Tech – JH)

HQN:groundisg.doc.white

Report #_____

Microbac Laboratories, Inc.
Groundwater Monitoring Report

Client: **Severstal** Site: **Landfill**
Well **I.D.**: GL-18 Shallow Tag: _____

Date of Purging: 12-8-09 Start Time: 1215 Finish Time: 1230 Weather: 45-50°
Date of Collection: 12-8-09 Time of Collection: 1230

Well Status:

Good _____	Grout _____
Good _____	Casing _____
Good _____	Lock _____
Good _____	Obstructions _____

Diameter of Well Casing (inches)	2
Depth Measurements Performed (PVC/Metal)	PVC
Depth to Water from Top of Casing (0.01 ft.) prior to purging	6.94
Depth to Bottom from Top of Casing (0.01 ft.)	----------
Depth of Water in the Well (gallon)	----------
Volume of water in the Well (gallon)	----------
Depth to Water from Top of Casing (0.01 ft.) after purging	----------
Depth to Water from Top of Casing (0.01 ft.) at time of sampling	8.52

	0	3	6	9	12	Sample Reading 15
Number of minutes purged						
Temperature (°C)	19.7	19.4	18.7	17.9	17.8	17.6
pH	9.53	9.84	10.15	10.38	10.45	10.49
Specific Conductance (umhos/cm)	1870	1900	1930	1950	1940	1950
Dissolved Oxygen (mg/l)	----	----	----	----	----	----
Oxidation Reduction (eH)	-91.4	-99.7	-110.4	-116.3	-117.0	-117.3

Purging Equipment
Peristaltic Pump ✓
Bladder Pump _____

Well Observation
Odor Yes
Color Yellow Tint

Rate of Purge 115 **milliliters / minute**

Comments: _____

Reference SOP Field-014
Readings were performed on date of sampling 12 / 8 / 09. (Tech – JH)