LEGEND

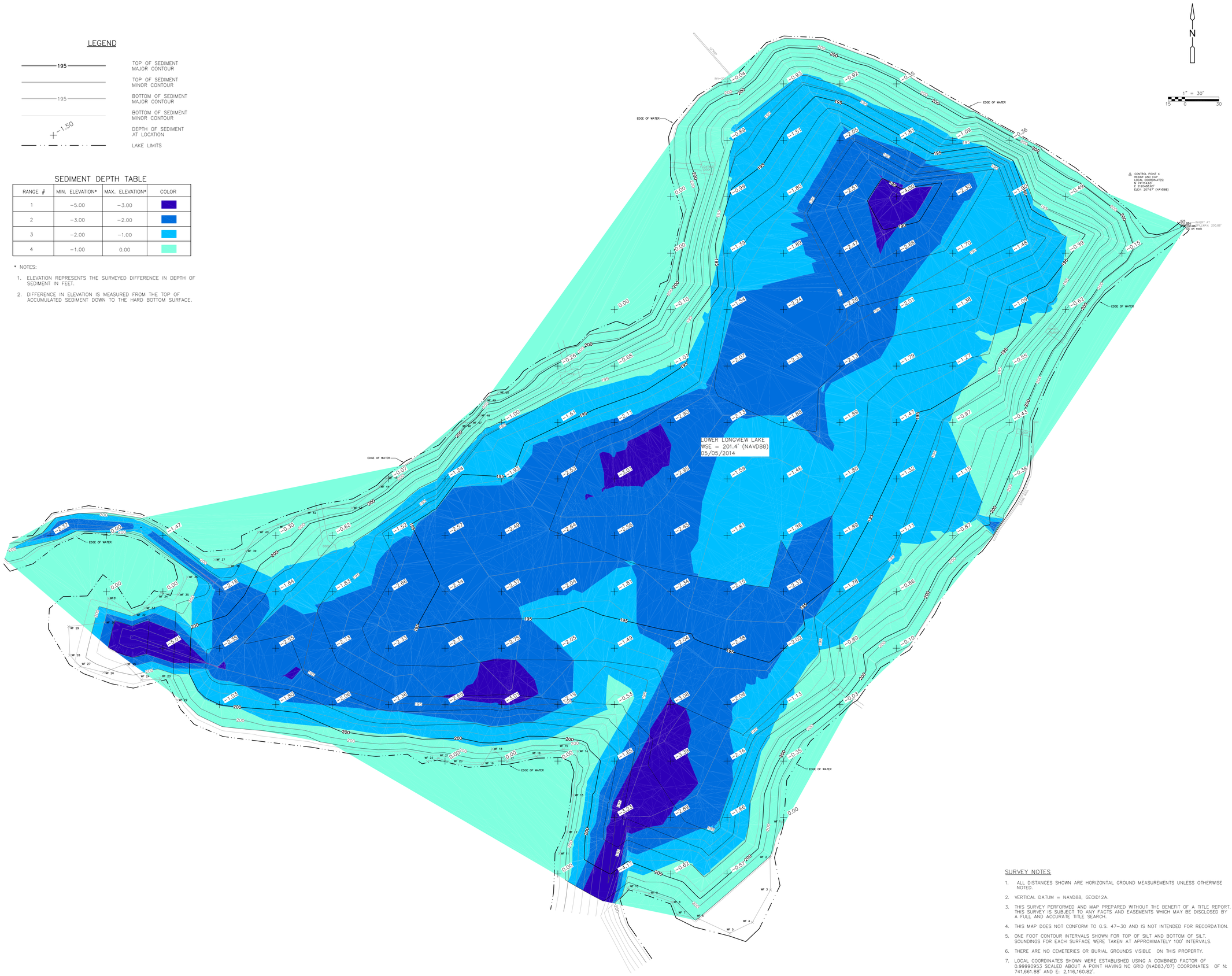
195	TOP OF SEDIMENT MAJOR CONTOUR
	TOP OF SEDIMENT MINOR CONTOUR
195	BOTTOM OF SEDIMENT MAJOR CONTOUR
	BOTTOM OF SEDIMENT MINOR CONTOUR
−1.50	DEPTH OF SEDIMENT AT LOCATION
	LAKE LIMITS

SEDIMENT DEPTH TABLE

RANGE #	MIN. ELEVATION*	MAX. ELEVATION*	COLOR
1	−5.00	−3.00	
2	−3.00	−2.00	
3	−2.00	−1.00	
4	−1.00	0.00	

* NOTES:

1. ELEVATION REPRESENTS THE SURVEYED DIFFERENCE IN DEPTH OF SEDIMENT IN FEET.
2. DIFFERENCE IN ELEVATION IS MEASURED FROM THE TOP OF ACCUMULATED SEDIMENT DOWN TO THE HARD BOTTOM SURFACE.



SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND MEASUREMENTS UNLESS OTHERWISE NOTED.
2. VERTICAL DATUM = NAVD88, GEOID12A.
3. THIS SURVEY PERFORMED AND MAP PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THIS SURVEY IS SUBJECT TO ANY FACTS AND EASEMENTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
4. THIS MAP DOES NOT CONFORM TO G.S. 47–30 AND IS NOT INTENDED FOR RECORDATION.
5. ONE FOOT CONTOUR INTERVALS SHOWN FOR TOP OF SILT AND BOTTOM OF SILT. SOUNDINGS FOR EACH SURFACE WERE TAKEN AT APPROXIMATELY 100' INTERVALS.
6. THERE ARE NO CEMETERIES OR BURIAL GROUNDS VISIBLE ON THIS PROPERTY.
7. LOCAL COORDINATES SHOWN WERE ESTABLISHED USING A COMBINED FACTOR OF 0.9999953 SCALED ABOUT A POINT HAVING NC GRID (NAD83/07) COORDINATES OF N: 741,661.88' AND E: 2,116,160.82'.
8. DATES OF SURVEY: 5/5/2014 THROUGH 5/9/2014.

CDM Smith

LOWER LONGVIEW LAKE EVALUATION

TOPOGRAPHIC MAP - SEDIMENT REMOVAL
JULY 2014

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Friday, May 9, 2014
CDM Smith, Inc. (CD004)
Attn: Aaron Weispfenning
5400 GLENWOOD AVE SUITE 300
RALEIGH, NC 27612-

RE: Laboratory Results for
Project Number: [none], Project Name/Desc: Lower Longview Lake Sediment
ENCO Workorder(s): C405065

Dear Aaron Weispfenning,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, April 24, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: #1 **Lab ID: C405065-01** **Sampled: 04/24/14 09:00** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 13:56
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 16:56
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 12:33
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 12:33
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 01:40
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 18:44

Client ID: #2 **Lab ID: C405065-02** **Sampled: 04/24/14 09:15** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 14:08
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 16:58
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 12:59
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 12:59
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 02:13
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 19:13

Client ID: #3 **Lab ID: C405065-03** **Sampled: 04/24/14 09:30** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 14:11
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 17:00
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 13:13
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 13:13
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 02:46
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 21:38

Client ID: #4 **Lab ID: C405065-04** **Sampled: 04/24/14 09:45** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 14:26
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 17:02
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 13:26
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 13:26
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 03:19
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 19:42

Client ID: #6 **Lab ID: C405065-05** **Sampled: 04/24/14 10:00** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 14:28
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 17:04
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 13:39
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 13:39
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 03:52
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 20:11

Client ID: #5 **Lab ID: C405065-06** **Sampled: 04/24/14 10:10** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/21/14		05/01/14	10:54	05/02/14 14:31
EPA 7471B	05/22/14		04/29/14	10:11	04/30/14 17:07
EPA 8081B	05/08/14	06/10/14	05/01/14	09:16	05/02/14 13:53
EPA 8082A	04/24/15	06/10/14	05/01/14	09:24	05/02/14 13:53
EPA 8260B	05/08/14		05/01/14	15:55	05/02/14 04:25
EPA 8270D	05/08/14	06/10/14	05/01/14	12:30	05/08/14 20:40

Client ID: Trip Blank **Lab ID: C405065-07** **Sampled: 04/24/14 09:00** **Received: 04/24/14 11:20**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	05/08/14		05/05/14	14:46	05/06/14 07:48

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

SAMPLE DETECTION SUMMARY

Client ID: #1 **Lab ID: C405065-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	1.81		0.139	0.696	mg/kg dry	EPA 6010C	
Barium - Total	12.2		0.139	0.696	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0332	J	0.0134	0.0696	mg/kg dry	EPA 6010C	
Chromium - Total	1.48		0.139	0.696	mg/kg dry	EPA 6010C	
Lead - Total	5.02		0.167	0.696	mg/kg dry	EPA 6010C	
Mercury - Total	0.0168	J	0.00960	0.0334	mg/kg dry	EPA 7471B	

Client ID: #2 **Lab ID: C405065-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.0080	J	0.0042	0.012	mg/kg dry	EPA 8260B	
Acetone	0.038		0.0040	0.012	mg/kg dry	EPA 8260B	
Arsenic - Total	2.57		0.234	1.17	mg/kg dry	EPA 6010C	
Barium - Total	31.2		0.234	1.17	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0630	J	0.0225	0.117	mg/kg dry	EPA 6010C	
Chromium - Total	7.74		0.234	1.17	mg/kg dry	EPA 6010C	
Lead - Total	12.1		0.281	1.17	mg/kg dry	EPA 6010C	

Client ID: #3 **Lab ID: C405065-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.042		0.0023	0.0065	mg/kg dry	EPA 8260B	
Acetone	0.13		0.0022	0.0065	mg/kg dry	EPA 8260B	
Arsenic - Total	0.595	J	0.129	0.647	mg/kg dry	EPA 6010C	
Barium - Total	11.3		0.129	0.647	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0320	J	0.0124	0.0647	mg/kg dry	EPA 6010C	
Carbon disulfide	0.0027	J	0.0027	0.0065	mg/kg dry	EPA 8260B	
Chromium - Total	1.01		0.129	0.647	mg/kg dry	EPA 6010C	
Lead - Total	3.05		0.155	0.647	mg/kg dry	EPA 6010C	
Mercury - Total	0.0183	J	0.00893	0.0311	mg/kg dry	EPA 7471B	

Client ID: #4 **Lab ID: C405065-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.028		0.0027	0.0076	mg/kg dry	EPA 8260B	
Acetone	0.12		0.0026	0.0076	mg/kg dry	EPA 8260B	
Arsenic - Total	0.754	J	0.152	0.761	mg/kg dry	EPA 6010C	
Barium - Total	10.4		0.152	0.761	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0283	J	0.0146	0.0761	mg/kg dry	EPA 6010C	
Chromium - Total	2.50		0.152	0.761	mg/kg dry	EPA 6010C	
Lead - Total	3.11		0.183	0.761	mg/kg dry	EPA 6010C	
Mercury - Total	0.0469		0.0105	0.0365	mg/kg dry	EPA 7471B	

Client ID: #6 **Lab ID: C405065-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.0042	J	0.0018	0.0051	mg/kg dry	EPA 8260B	
Acetone	0.021		0.0017	0.0051	mg/kg dry	EPA 8260B	
Arsenic - Total	0.601	J	0.126	0.632	mg/kg dry	EPA 6010C	
Barium - Total	6.77		0.126	0.632	mg/kg dry	EPA 6010C	
Chromium - Total	2.43		0.126	0.632	mg/kg dry	EPA 6010C	
Lead - Total	3.33		0.152	0.632	mg/kg dry	EPA 6010C	
Silver - Total	0.186	J	0.126	0.632	mg/kg dry	EPA 6010C	

Client ID: #5 **Lab ID: C405065-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.013		0.0020	0.0057	mg/kg dry	EPA 8260B	
Acetone	0.073		0.0019	0.0057	mg/kg dry	EPA 8260B	
Arsenic - Total	1.42		0.126	0.628	mg/kg dry	EPA 6010C	
Barium - Total	28.7		0.126	0.628	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0153	J	0.0120	0.0628	mg/kg dry	EPA 6010C	
Chromium - Total	9.91		0.126	0.628	mg/kg dry	EPA 6010C	
Lead - Total	5.67		0.151	0.628	mg/kg dry	EPA 6010C	
Mercury - Total	0.0327		0.00866	0.0301	mg/kg dry	EPA 7471B	
Selenium - Total	0.370	J	0.126	0.628	mg/kg dry	EPA 6010C	
Silver - Total	0.645		0.126	0.628	mg/kg dry	EPA 6010C	

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ANALYTICAL RESULTS

Description: #1 | **Lab Sample ID:** C405065-01 | **Received:** 04/24/14 11:20

Matrix: Sediment | **Sampled:** 04/24/14 09:00 | **Work Order:** C405065

Project: Lower Longview Lake Sediment | **Sampled By:** Aaron Weispfenning | **% Solids:** 71.85

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.032	U	mg/kg dry	1	0.032	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.028	U	mg/kg dry	1	0.028	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.029	U	mg/kg dry	1	0.029	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
1-Methylnaphthalene [90-12-0]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4-Dichlorophenol [120-83-2]^	0.033	U	mg/kg dry	1	0.033	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4-Dimethylphenol [105-67-9]^	0.060	U	mg/kg dry	1	0.060	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4-Dinitrophenol [51-28-5]^	0.060	U	mg/kg dry	1	0.060	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.043	U	mg/kg dry	1	0.043	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Chloronaphthalene [91-58-7]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Chlorophenol [95-57-8]^	0.035	U	mg/kg dry	1	0.035	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Methylnaphthalene [91-57-6]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Methylphenol [95-48-7]^	0.035	U	mg/kg dry	1	0.035	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Nitroaniline [88-74-4]^	0.042	U	mg/kg dry	1	0.042	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
2-Nitrophenol [88-75-5]^	0.043	U	mg/kg dry	1	0.043	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.14	U	mg/kg dry	1	0.14	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
3-Nitroaniline [99-09-2]^	0.050	U	mg/kg dry	1	0.050	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Chloroaniline [106-47-8]^	0.13	U	mg/kg dry	1	0.13	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Nitroaniline [100-01-6]^	0.074	U	mg/kg dry	1	0.074	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
4-Nitrophenol [100-02-7]^	0.043	U	mg/kg dry	1	0.043	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Acenaphthene [83-32-9]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Acenaphthylene [208-96-8]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Anthracene [120-12-7]^	0.053	U	mg/kg dry	1	0.053	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzidine [92-87-5]^	0.15	U	mg/kg dry	1	0.15	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzo(a)anthracene [56-55-3]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzo(a)pyrene [50-32-8]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.025	U	mg/kg dry	1	0.025	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.065	U	mg/kg dry	1	0.065	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzoic acid [65-85-0]^	0.21	U	mg/kg dry	1	0.21	2.4	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Benzyl alcohol [100-51-6]^	0.032	U	mg/kg dry	1	0.032	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.035	U	mg/kg dry	1	0.035	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.060	U	mg/kg dry	1	0.060	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.033	U	mg/kg dry	1	0.033	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.049	U	mg/kg dry	1	0.049	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Butylbenzylphthalate [85-68-7]^	0.056	U	mg/kg dry	1	0.056	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Chrysene [218-01-9]^	0.042	U	mg/kg dry	1	0.042	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.071	U	mg/kg dry	1	0.071	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Dibenzofuran [132-64-9]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Diethylphthalate [84-66-2]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	

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ANALYTICAL RESULTS

Description: #1	**Lab Sample ID:** C405065-01	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 71.85

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Di-n-butylphthalate [84-74-2]^	0.057	U	mg/kg dry	1	0.057	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Di-n-octylphthalate [117-84-0]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Fluoranthene [206-44-0]^	0.050	U	mg/kg dry	1	0.050	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Fluorene [86-73-7]^	0.040	U	mg/kg dry	1	0.040	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Hexachlorobenzene [118-74-1]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Hexachlorobutadiene [87-68-3]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.054	U	mg/kg dry	1	0.054	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Hexachloroethane [67-72-1]^	0.029	U	mg/kg dry	1	0.029	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.065	U	mg/kg dry	1	0.065	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Isophorone [78-59-1]^	0.042	U	mg/kg dry	1	0.042	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Naphthalene [91-20-3]^	0.039	U	mg/kg dry	1	0.039	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Nitrobenzene [98-95-3]^	0.036	U	mg/kg dry	1	0.036	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.029	U	mg/kg dry	1	0.029	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.11	U	mg/kg dry	1	0.11	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.075	U	mg/kg dry	1	0.075	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Pentachlorophenol [87-86-5]^	0.046	U	mg/kg dry	1	0.046	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Phenanthrene [85-01-8]^	0.038	U	mg/kg dry	1	0.038	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Phenol [108-95-2]^	0.031	U	mg/kg dry	1	0.031	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Pyrene [129-00-0]^	0.053	U	mg/kg dry	1	0.053	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	
Pyridine [110-86-1]^	0.11	U	mg/kg dry	1	0.11	0.46	4E01010	EPA 8270D	05/08/14 18:44	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*4.0*	*1*	*4.64*	*85 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	
2-Fluorobiphenyl	*1.9*	*1*	*2.32*	*83 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	
2-Fluorophenol	*2.7*	*1*	*4.64*	*59 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	
Nitrobenzene-d5	*1.7*	*1*	*2.32*	*72 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	
Phenol-d5	*3.1*	*1*	*4.64*	*66 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	
Terphenyl-d14	*1.9*	*1*	*2.32*	*81 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 18:44*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
4,4'-DDE [72-55-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
4,4'-DDT [50-29-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Aldrin [309-00-2]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
alpha-BHC [319-84-6]^	0.0017	U	mg/kg dry	1	0.0017	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
beta-BHC [319-85-7]^	0.0024	U	mg/kg dry	1	0.0024	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Chlordane (tech) [12789-03-6]^	0.0016	U	mg/kg dry	1	0.0016	0.046	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Chlordane-alpha [5103-71-9]^	0.00086	U	mg/kg dry	1	0.00086	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Chlordane-gamma [5566-34-7]^	0.0010	U	mg/kg dry	1	0.0010	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
delta-BHC [319-86-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Endosulfan I [959-98-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Endosulfan II [33213-65-9]^	0.0013	U	mg/kg dry	1	0.0013	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Endosulfan sulfate [1031-07-8]^	0.0014	U	mg/kg dry	1	0.0014	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Endrin [72-20-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	

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ANALYTICAL RESULTS

Description: #1	**Lab Sample ID:** C405065-01	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 71.85

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Endrin ketone [53494-70-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Heptachlor [76-44-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Heptachlor epoxide [1024-57-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Isodrin [465-73-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Methoxychlor [72-43-5]^	0.0014	U	mg/kg dry	1	0.0014	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Mirex [2385-85-5]^	0.0014	U	mg/kg dry	1	0.0014	0.0024	4E01008	EPA 8081B	05/02/14 12:33	MWC	
Toxaphene [8001-35-2]^	0.014	U	mg/kg dry	1	0.014	0.024	4E01008	EPA 8081B	05/02/14 12:33	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.041*	*1*	*0.0464*	*88 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 12:33*	*MWC*	
Decachlorobiphenyl	*0.043*	*1*	*0.0464*	*93 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 12:33*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.011	U	mg/kg dry	1	0.011	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	
PCB-1221 [11104-28-2]^	0.0072	U	mg/kg dry	1	0.0072	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	
PCB-1232 [11141-16-5]^	0.017	U	mg/kg dry	1	0.017	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	
PCB-1248 [12672-29-6]^	0.0072	U	mg/kg dry	1	0.0072	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	
PCB-1254 [11097-69-1]^	0.0096	U	mg/kg dry	1	0.0096	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	
PCB-1260 [11096-82-5]^	0.018	U	mg/kg dry	1	0.018	0.024	4E01009	EPA 8082A	05/02/14 12:33	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.041*	*1*	*0.0464*	*88 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 12:33*	*MWC*	
Decachlorobiphenyl	*0.043*	*1*	*0.0464*	*93 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 12:33*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**1.81**		mg/kg dry	1	0.139	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Barium [7440-39-3]^	**12.2**		mg/kg dry	1	0.139	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Cadmium [7440-43-9]^	**0.0332**	J	mg/kg dry	1	0.0134	0.0696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Chromium [7440-47-3]^	**1.48**		mg/kg dry	1	0.139	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Lead [7439-92-1]^	**5.02**		mg/kg dry	1	0.167	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Mercury [7439-97-6]^	**0.0168**	J	mg/kg dry	1	0.00960	0.0334	4D29012	EPA 7471B	04/30/14 16:56	T1D	
Selenium [7782-49-2]^	0.139	U	mg/kg dry	1	0.139	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	
Silver [7440-22-4]^	0.139	U	mg/kg dry	1	0.139	0.696	4E01021	EPA 6010C	05/02/14 13:56	JDH	

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ANALYTICAL RESULTS

Description: #1	**Lab Sample ID:** C405065-01	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 71.85

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,1-Dichloroethane [75-34-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,1-Dichloroethene [75-35-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0015	U	mg/kg dry	1	0.0015	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0014	U	mg/kg dry	1	0.0014	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2-Dibromoethane [106-93-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2-Dichloroethane [107-06-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,2-Dichloropropane [78-87-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,3-Dichloropropane [142-28-9]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
2,2-Dichloropropane [594-20-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
2-Butanone [78-93-3]^	0.0029	U	mg/kg dry	1	0.0029	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0028	U	mg/kg dry	1	0.0028	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
2-Hexanone [591-78-6]^	0.0015	U	mg/kg dry	1	0.0015	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	
4-Chlorotoluene [106-43-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
4-Isopropyltoluene [99-87-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0023	U	mg/kg dry	1	0.0023	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	QV-01
Acetone [67-64-1]^	0.0028	U	mg/kg dry	1	0.0028	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Benzene [71-43-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Bromobenzene [108-86-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Bromochloromethane [74-97-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Bromoform [75-25-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Bromomethane [74-83-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Carbon disulfide [75-15-0]^	0.0034	U	mg/kg dry	1	0.0034	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Carbon Tetrachloride [56-23-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Chlorobenzene [108-90-7]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Chloroethane [75-00-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0081	4E01047	EPA 8260B	05/02/14 01:40	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Chloromethane [74-87-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Dibromochloromethane [124-48-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Dibromomethane [74-95-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #1	**Lab Sample ID:** C405065-01	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 71.85

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Hexachlorobutadiene [87-68-3]^	0.0015	U	mg/kg dry	1	0.0015	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Isopropylbenzene [98-82-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0016	U	mg/kg dry	1	0.0016	0.0032	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Methylene Chloride [75-09-2]^	0.0011	U	mg/kg dry	1	0.0011	0.0032	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Naphthalene [91-20-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
n-Butyl Benzene [104-51-8]^	0.0015	U	mg/kg dry	1	0.0015	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
n-Propyl Benzene [103-65-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
o-Xylene [95-47-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
sec-Butylbenzene [135-98-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Styrene [100-42-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
tert-Butylbenzene [98-06-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Tetrachloroethene [127-18-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Toluene [108-88-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0011	U	mg/kg dry	1	0.0011	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Trichloroethene [79-01-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Trichlorofluoromethane [75-69-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	
Vinyl chloride [75-01-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0016	4E01047	EPA 8260B	05/02/14 01:40	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0016	U	mg/kg dry	1	0.0016	0.0032	4E01047	EPA 8260B	05/02/14 01:40	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.079*	*1*	*0.0811*	*97 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 01:40*	*KAT*	
Dibromofluoromethane	*0.090*	*1*	*0.0811*	*111 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 01:40*	*KAT*	
Toluene-d8	*0.078*	*1*	*0.0811*	*96 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 01:40*	*KAT*	

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ANALYTICAL RESULTS

Description: #2 | **Lab Sample ID:** C405065-02 | **Received:** 04/24/14 11:20

Matrix: Sediment | **Sampled:** 04/24/14 09:15 | **Work Order:** C405065

Project: Lower Longview Lake Sediment | **Sampled By:** Aaron Weispfenning | **% Solids:** 42.69

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.054	U	mg/kg dry	1	0.054	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.047	U	mg/kg dry	1	0.047	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.049	U	mg/kg dry	1	0.049	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
1-Methylnaphthalene [90-12-0]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4-Dichlorophenol [120-83-2]^	0.056	U	mg/kg dry	1	0.056	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4-Dimethylphenol [105-67-9]^	0.10	U	mg/kg dry	1	0.10	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4-Dinitrophenol [51-28-5]^	0.10	U	mg/kg dry	1	0.10	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.073	U	mg/kg dry	1	0.073	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Chloronaphthalene [91-58-7]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Chlorophenol [95-57-8]^	0.059	U	mg/kg dry	1	0.059	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Methylnaphthalene [91-57-6]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Methylphenol [95-48-7]^	0.059	U	mg/kg dry	1	0.059	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Nitroaniline [88-74-4]^	0.070	U	mg/kg dry	1	0.070	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
2-Nitrophenol [88-75-5]^	0.073	U	mg/kg dry	1	0.073	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.23	U	mg/kg dry	1	0.23	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
3-Nitroaniline [99-09-2]^	0.084	U	mg/kg dry	1	0.084	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Chloroaniline [106-47-8]^	0.22	U	mg/kg dry	1	0.22	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Nitroaniline [100-01-6]^	0.12	U	mg/kg dry	1	0.12	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
4-Nitrophenol [100-02-7]^	0.073	U	mg/kg dry	1	0.073	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Acenaphthene [83-32-9]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Acenaphthylene [208-96-8]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Anthracene [120-12-7]^	0.089	U	mg/kg dry	1	0.089	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzidine [92-87-5]^	0.26	U	mg/kg dry	1	0.26	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzo(a)anthracene [56-55-3]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzo(a)pyrene [50-32-8]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.042	U	mg/kg dry	1	0.042	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.11	U	mg/kg dry	1	0.11	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzoic acid [65-85-0]^	0.35	U	mg/kg dry	1	0.35	4.0	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Benzyl alcohol [100-51-6]^	0.054	U	mg/kg dry	1	0.054	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.059	U	mg/kg dry	1	0.059	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.10	U	mg/kg dry	1	0.10	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.056	U	mg/kg dry	1	0.056	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.082	U	mg/kg dry	1	0.082	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Butylbenzylphthalate [85-68-7]^	0.094	U	mg/kg dry	1	0.094	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Chrysene [218-01-9]^	0.070	U	mg/kg dry	1	0.070	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.12	U	mg/kg dry	1	0.12	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Dibenzofuran [132-64-9]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Diethylphthalate [84-66-2]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	

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ANALYTICAL RESULTS

Description: #2	**Lab Sample ID:** C405065-02	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:15	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 42.69

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Di-n-butylphthalate [84-74-2]^	0.096	U	mg/kg dry	1	0.096	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Di-n-octylphthalate [117-84-0]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Fluoranthene [206-44-0]^	0.084	U	mg/kg dry	1	0.084	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Fluorene [86-73-7]^	0.068	U	mg/kg dry	1	0.068	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Hexachlorobenzene [118-74-1]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Hexachlorobutadiene [87-68-3]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.091	U	mg/kg dry	1	0.091	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Hexachloroethane [67-72-1]^	0.049	U	mg/kg dry	1	0.049	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.11	U	mg/kg dry	1	0.11	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Isophorone [78-59-1]^	0.070	U	mg/kg dry	1	0.070	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Naphthalene [91-20-3]^	0.066	U	mg/kg dry	1	0.066	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Nitrobenzene [98-95-3]^	0.061	U	mg/kg dry	1	0.061	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.049	U	mg/kg dry	1	0.049	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.19	U	mg/kg dry	1	0.19	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.13	U	mg/kg dry	1	0.13	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Pentachlorophenol [87-86-5]^	0.077	U	mg/kg dry	1	0.077	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Phenanthrene [85-01-8]^	0.063	U	mg/kg dry	1	0.063	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Phenol [108-95-2]^	0.052	U	mg/kg dry	1	0.052	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Pyrene [129-00-0]^	0.089	U	mg/kg dry	1	0.089	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	
Pyridine [110-86-1]^	0.19	U	mg/kg dry	1	0.19	0.77	4E01010	EPA 8270D	05/08/14 19:13	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*7.2*	*1*	*7.81*	*92 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	
2-Fluorobiphenyl	*3.4*	*1*	*3.90*	*88 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	
2-Fluorophenol	*5.0*	*1*	*7.81*	*64 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	
Nitrobenzene-d5	*3.0*	*1*	*3.90*	*77 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	
Phenol-d5	*5.6*	*1*	*7.81*	*72 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	
Terphenyl-d14	*3.4*	*1*	*3.90*	*88 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 19:13*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0017	U	mg/kg dry	1	0.0017	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
4,4'-DDE [72-55-9]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
4,4'-DDT [50-29-3]^	0.0019	U	mg/kg dry	1	0.0019	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Aldrin [309-00-2]^	0.0019	U	mg/kg dry	1	0.0019	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
alpha-BHC [319-84-6]^	0.0028	U	mg/kg dry	1	0.0028	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
beta-BHC [319-85-7]^	0.0040	U	mg/kg dry	1	0.0040	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Chlordane (tech) [12789-03-6]^	0.0026	U	mg/kg dry	1	0.0026	0.077	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Chlordane-alpha [5103-71-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Chlordane-gamma [5566-34-7]^	0.0017	U	mg/kg dry	1	0.0017	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
delta-BHC [319-86-8]^	0.0020	U	mg/kg dry	1	0.0020	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Dieldrin [60-57-1]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Endosulfan I [959-98-8]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Endosulfan II [33213-65-9]^	0.0022	U	mg/kg dry	1	0.0022	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Endosulfan sulfate [1031-07-8]^	0.0023	U	mg/kg dry	1	0.0023	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Endrin [72-20-8]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	

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ANALYTICAL RESULTS

Description: #2	**Lab Sample ID:** C405065-02	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:15	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 42.69

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0019	U	mg/kg dry	1	0.0019	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Endrin ketone [53494-70-5]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
gamma-BHC [58-89-9]^	0.0026	U	mg/kg dry	1	0.0026	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Heptachlor [76-44-8]^	0.0019	U	mg/kg dry	1	0.0019	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Heptachlor epoxide [1024-57-3]^	0.0018	U	mg/kg dry	1	0.0018	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Isodrin [465-73-6]^	0.0017	U	mg/kg dry	1	0.0017	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Methoxychlor [72-43-5]^	0.0023	U	mg/kg dry	1	0.0023	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Mirex [2385-85-5]^	0.0023	U	mg/kg dry	1	0.0023	0.0040	4E01008	EPA 8081B	05/02/14 12:59	MWC	
Toxaphene [8001-35-2]^	0.024	U	mg/kg dry	1	0.024	0.040	4E01008	EPA 8081B	05/02/14 12:59	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.082*	*1*	*0.0781*	*105 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 12:59*	*MWC*	
Decachlorobiphenyl	*0.089*	*1*	*0.0781*	*114 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 12:59*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.018	U	mg/kg dry	1	0.018	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	
PCB-1221 [11104-28-2]^	0.012	U	mg/kg dry	1	0.012	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	
PCB-1232 [11141-16-5]^	0.028	U	mg/kg dry	1	0.028	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	
PCB-1248 [12672-29-6]^	0.012	U	mg/kg dry	1	0.012	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	
PCB-1254 [11097-69-1]^	0.016	U	mg/kg dry	1	0.016	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	
PCB-1260 [11096-82-5]^	0.030	U	mg/kg dry	1	0.030	0.040	4E01009	EPA 8082A	05/02/14 12:59	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.082*	*1*	*0.0781*	*105 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 12:59*	*MWC*	
Decachlorobiphenyl	*0.089*	*1*	*0.0781*	*114 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 12:59*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**2.57**		mg/kg dry	1	0.234	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Barium [7440-39-3]^	**31.2**		mg/kg dry	1	0.234	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Cadmium [7440-43-9]^	**0.0630**	J	mg/kg dry	1	0.0225	0.117	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Chromium [7440-47-3]^	**7.74**		mg/kg dry	1	0.234	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Lead [7439-92-1]^	**12.1**		mg/kg dry	1	0.281	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Mercury [7439-97-6]^	0.0147	U	mg/kg dry	1	0.0147	0.0511	4D29012	EPA 7471B	04/30/14 16:58	T1D	
Selenium [7782-49-2]^	0.234	U	mg/kg dry	1	0.234	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	
Silver [7440-22-4]^	0.234	U	mg/kg dry	1	0.234	1.17	4E01021	EPA 6010C	05/02/14 14:08	JDH	

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ANALYTICAL RESULTS

Description: #2	**Lab Sample ID:** C405065-02	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:15	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 42.69

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,1-Dichloroethane [75-34-3]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,1-Dichloroethene [75-35-4]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0021	U	mg/kg dry	1	0.0021	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0020	U	mg/kg dry	1	0.0020	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0016	U	mg/kg dry	1	0.0016	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2-Dibromoethane [106-93-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2-Dichloroethane [107-06-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,2-Dichloropropane [78-87-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,3-Dichloropropane [142-28-9]^	0.0009	U	mg/kg dry	1	0.0009	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
2,2-Dichloropropane [594-20-7]^	0.0009	U	mg/kg dry	1	0.0009	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
2-Butanone [78-93-3]^	**0.0080**	J	mg/kg dry	1	0.0042	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0040	U	mg/kg dry	1	0.0040	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
2-Hexanone [591-78-6]^	0.0021	U	mg/kg dry	1	0.0021	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	
4-Chlorotoluene [106-43-4]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
4-Isopropyltoluene [99-87-6]^	0.0018	U	mg/kg dry	1	0.0018	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0033	U	mg/kg dry	1	0.0033	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	QV-01
Acetone [67-64-1]^	**0.038**		mg/kg dry	1	0.0040	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Benzene [71-43-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Bromobenzene [108-86-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Bromochloromethane [74-97-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Bromoform [75-25-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Bromomethane [74-83-9]^	0.0021	U	mg/kg dry	1	0.0021	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Carbon disulfide [75-15-0]^	0.0049	U	mg/kg dry	1	0.0049	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Carbon Tetrachloride [56-23-5]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Chlorobenzene [108-90-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Chloroethane [75-00-3]^	0.0013	U	mg/kg dry	1	0.0013	0.012	4E01047	EPA 8260B	05/02/14 02:13	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Chloromethane [74-87-3]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0012	U	mg/kg dry	1	0.0012	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Dibromochloromethane [124-48-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Dibromomethane [74-95-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #2	**Lab Sample ID:** C405065-02	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:15	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 42.69

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Hexachlorobutadiene [87-68-3]^	0.0021	U	mg/kg dry	1	0.0021	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Isopropylbenzene [98-82-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0023	U	mg/kg dry	1	0.0023	0.0047	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Methylene Chloride [75-09-2]^	0.0016	U	mg/kg dry	1	0.0016	0.0047	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Naphthalene [91-20-3]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
n-Butyl Benzene [104-51-8]^	0.0021	U	mg/kg dry	1	0.0021	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
n-Propyl Benzene [103-65-1]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
o-Xylene [95-47-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
sec-Butylbenzene [135-98-8]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Styrene [100-42-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
tert-Butylbenzene [98-06-6]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Tetrachloroethene [127-18-4]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Toluene [108-88-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0016	U	mg/kg dry	1	0.0016	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Trichloroethene [79-01-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Trichlorofluoromethane [75-69-4]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	
Vinyl chloride [75-01-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4E01047	EPA 8260B	05/02/14 02:13	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0023	U	mg/kg dry	1	0.0023	0.0047	4E01047	EPA 8260B	05/02/14 02:13	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.10*	*1*	*0.107*	*98 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 02:13*	*KAT*	
Dibromofluoromethane	*0.12*	*1*	*0.107*	*112 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 02:13*	*KAT*	
Toluene-d8	*0.10*	*1*	*0.107*	*93 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 02:13*	*KAT*	

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ANALYTICAL RESULTS

Description: #3	**Lab Sample ID:** C405065-03	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:30	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 77.24

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.030	U	mg/kg dry	1	0.030	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.026	U	mg/kg dry	1	0.026	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.027	U	mg/kg dry	1	0.027	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
1-Methylnaphthalene [90-12-0]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4-Dichlorophenol [120-83-2]^	0.031	U	mg/kg dry	1	0.031	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4-Dimethylphenol [105-67-9]^	0.056	U	mg/kg dry	1	0.056	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4-Dinitrophenol [51-28-5]^	0.056	U	mg/kg dry	1	0.056	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.040	U	mg/kg dry	1	0.040	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Chloronaphthalene [91-58-7]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Chlorophenol [95-57-8]^	0.032	U	mg/kg dry	1	0.032	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Methylnaphthalene [91-57-6]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Methylphenol [95-48-7]^	0.032	U	mg/kg dry	1	0.032	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Nitroaniline [88-74-4]^	0.039	U	mg/kg dry	1	0.039	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
2-Nitrophenol [88-75-5]^	0.040	U	mg/kg dry	1	0.040	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.13	U	mg/kg dry	1	0.13	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
3-Nitroaniline [99-09-2]^	0.047	U	mg/kg dry	1	0.047	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Chloroaniline [106-47-8]^	0.12	U	mg/kg dry	1	0.12	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Nitroaniline [100-01-6]^	0.069	U	mg/kg dry	1	0.069	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
4-Nitrophenol [100-02-7]^	0.040	U	mg/kg dry	1	0.040	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Acenaphthene [83-32-9]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Acenaphthylene [208-96-8]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Anthracene [120-12-7]^	0.049	U	mg/kg dry	1	0.049	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzidine [92-87-5]^	0.14	U	mg/kg dry	1	0.14	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzo(a)anthracene [56-55-3]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzo(a)pyrene [50-32-8]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.023	U	mg/kg dry	1	0.023	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.061	U	mg/kg dry	1	0.061	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzoic acid [65-85-0]^	0.19	U	mg/kg dry	1	0.19	2.2	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Benzyl alcohol [100-51-6]^	0.030	U	mg/kg dry	1	0.030	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.032	U	mg/kg dry	1	0.032	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.056	U	mg/kg dry	1	0.056	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.031	U	mg/kg dry	1	0.031	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.045	U	mg/kg dry	1	0.045	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Butylbenzylphthalate [85-68-7]^	0.052	U	mg/kg dry	1	0.052	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Chrysene [218-01-9]^	0.039	U	mg/kg dry	1	0.039	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.066	U	mg/kg dry	1	0.066	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Dibenzofuran [132-64-9]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Diethylphthalate [84-66-2]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	

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ANALYTICAL RESULTS

Description: #3	**Lab Sample ID:** C405065-03	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:30	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 77.24

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Di-n-butylphthalate [84-74-2]^	0.053	U	mg/kg dry	1	0.053	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Di-n-octylphthalate [117-84-0]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Fluoranthene [206-44-0]^	0.047	U	mg/kg dry	1	0.047	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Fluorene [86-73-7]^	0.038	U	mg/kg dry	1	0.038	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Hexachlorobenzene [118-74-1]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Hexachlorobutadiene [87-68-3]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.050	U	mg/kg dry	1	0.050	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Hexachloroethane [67-72-1]^	0.027	U	mg/kg dry	1	0.027	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.061	U	mg/kg dry	1	0.061	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Isophorone [78-59-1]^	0.039	U	mg/kg dry	1	0.039	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Naphthalene [91-20-3]^	0.036	U	mg/kg dry	1	0.036	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Nitrobenzene [98-95-3]^	0.034	U	mg/kg dry	1	0.034	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.027	U	mg/kg dry	1	0.027	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.10	U	mg/kg dry	1	0.10	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.070	U	mg/kg dry	1	0.070	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Pentachlorophenol [87-86-5]^	0.043	U	mg/kg dry	1	0.043	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Phenanthrene [85-01-8]^	0.035	U	mg/kg dry	1	0.035	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Phenol [108-95-2]^	0.028	U	mg/kg dry	1	0.028	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Pyrene [129-00-0]^	0.049	U	mg/kg dry	1	0.049	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	
Pyridine [110-86-1]^	0.11	U	mg/kg dry	1	0.11	0.43	4E01010	EPA 8270D	05/08/14 21:38	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*3.6*	*1*	*4.32*	*84 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	
2-Fluorobiphenyl	*1.7*	*1*	*2.16*	*80 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	
2-Fluorophenol	*2.6*	*1*	*4.32*	*59 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	
Nitrobenzene-d5	*1.5*	*1*	*2.16*	*71 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	
Phenol-d5	*2.9*	*1*	*4.32*	*66 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	
Terphenyl-d14	*1.7*	*1*	*2.16*	*80 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 21:38*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00093	U	mg/kg dry	1	0.00093	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
4,4'-DDE [72-55-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
4,4'-DDT [50-29-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Aldrin [309-00-2]^	0.0010	U	mg/kg dry	1	0.0010	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
alpha-BHC [319-84-6]^	0.0016	U	mg/kg dry	1	0.0016	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
beta-BHC [319-85-7]^	0.0022	U	mg/kg dry	1	0.0022	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Chlordane (tech) [12789-03-6]^	0.0015	U	mg/kg dry	1	0.0015	0.043	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Chlordane-alpha [5103-71-9]^	0.00080	U	mg/kg dry	1	0.00080	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Chlordane-gamma [5566-34-7]^	0.00093	U	mg/kg dry	1	0.00093	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Dieldrin [60-57-1]^	0.00098	U	mg/kg dry	1	0.00098	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Endosulfan I [959-98-8]^	0.00098	U	mg/kg dry	1	0.00098	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Endrin [72-20-8]^	0.00098	U	mg/kg dry	1	0.00098	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	

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ANALYTICAL RESULTS

Description: #3	**Lab Sample ID:** C405065-03	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:30	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 77.24

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Endrin ketone [53494-70-5]^	0.00097	U	mg/kg dry	1	0.00097	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
gamma-BHC [58-89-9]^	0.0014	U	mg/kg dry	1	0.0014	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Heptachlor [76-44-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Heptachlor epoxide [1024-57-3]^	0.00097	U	mg/kg dry	1	0.00097	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Isodrin [465-73-6]^	0.00093	U	mg/kg dry	1	0.00093	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Methoxychlor [72-43-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Mirex [2385-85-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0022	4E01008	EPA 8081B	05/02/14 13:13	MWC	
Toxaphene [8001-35-2]^	0.013	U	mg/kg dry	1	0.013	0.022	4E01008	EPA 8081B	05/02/14 13:13	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.040*	*1*	*0.0432*	*94 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 13:13*	*MWC*	
Decachlorobiphenyl	*0.039*	*1*	*0.0432*	*90 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 13:13*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.010	U	mg/kg dry	1	0.010	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	
PCB-1221 [11104-28-2]^	0.0067	U	mg/kg dry	1	0.0067	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	
PCB-1232 [11141-16-5]^	0.016	U	mg/kg dry	1	0.016	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	
PCB-1248 [12672-29-6]^	0.0067	U	mg/kg dry	1	0.0067	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	
PCB-1254 [11097-69-1]^	0.0089	U	mg/kg dry	1	0.0089	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	
PCB-1260 [11096-82-5]^	0.017	U	mg/kg dry	1	0.017	0.022	4E01009	EPA 8082A	05/02/14 13:13	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.040*	*1*	*0.0432*	*94 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 13:13*	*MWC*	
Decachlorobiphenyl	*0.039*	*1*	*0.0432*	*90 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 13:13*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**0.595**	J	mg/kg dry	1	0.129	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Barium [7440-39-3]^	**11.3**		mg/kg dry	1	0.129	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Cadmium [7440-43-9]^	**0.0320**	J	mg/kg dry	1	0.0124	0.0647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Chromium [7440-47-3]^	**1.01**		mg/kg dry	1	0.129	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Lead [7439-92-1]^	**3.05**		mg/kg dry	1	0.155	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Mercury [7439-97-6]^	**0.0183**	J	mg/kg dry	1	0.00893	0.0311	4D29012	EPA 7471B	04/30/14 17:00	T1D	
Selenium [7782-49-2]^	0.129	U	mg/kg dry	1	0.129	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	
Silver [7440-22-4]^	0.129	U	mg/kg dry	1	0.129	0.647	4E01021	EPA 6010C	05/02/14 14:11	JDH	

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ANALYTICAL RESULTS

Description: #3	**Lab Sample ID:** C405065-03	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:30	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 77.24

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,1-Dichloroethene [75-35-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,3-Dichloropropane [142-28-9]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
2,2-Dichloropropane [594-20-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
2-Butanone [78-93-3]^	**0.042**		mg/kg dry	1	0.0023	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0022	U	mg/kg dry	1	0.0022	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
2-Hexanone [591-78-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	
4-Chlorotoluene [106-43-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
4-Isopropyltoluene [99-87-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0018	U	mg/kg dry	1	0.0018	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	QV-01
Acetone [67-64-1]^	**0.13**		mg/kg dry	1	0.0022	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Bromobenzene [108-86-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Bromochloromethane [74-97-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Bromomethane [74-83-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Carbon disulfide [75-15-0]^	**0.0027**	J	mg/kg dry	1	0.0027	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Carbon Tetrachloride [56-23-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Chloroethane [75-00-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0065	4E01047	EPA 8260B	05/02/14 02:46	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Dibromomethane [74-95-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #3	**Lab Sample ID:** C405065-03	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:30	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 77.24

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Hexachlorobutadiene [87-68-3]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Isopropylbenzene [98-82-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0013	U	mg/kg dry	1	0.0013	0.0026	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Methylene Chloride [75-09-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0026	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Naphthalene [91-20-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
n-Butyl Benzene [104-51-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
n-Propyl Benzene [103-65-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
o-Xylene [95-47-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
sec-Butylbenzene [135-98-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Styrene [100-42-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
tert-Butylbenzene [98-06-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Toluene [108-88-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Trichlorofluoromethane [75-69-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	
Vinyl chloride [75-01-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4E01047	EPA 8260B	05/02/14 02:46	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0013	U	mg/kg dry	1	0.0013	0.0026	4E01047	EPA 8260B	05/02/14 02:46	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.065*	*1*	*0.0665*	*98 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 02:46*	*KAT*	
Dibromofluoromethane	*0.073*	*1*	*0.0665*	*110 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 02:46*	*KAT*	
Toluene-d8	*0.062*	*1*	*0.0665*	*94 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 02:46*	*KAT*	

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ANALYTICAL RESULTS

Description: #4	**Lab Sample ID:** C405065-04	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:45	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 65.67

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.035	U	mg/kg dry	1	0.035	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.030	U	mg/kg dry	1	0.030	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.032	U	mg/kg dry	1	0.032	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
1-Methylnaphthalene [90-12-0]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4-Dichlorophenol [120-83-2]^	0.037	U	mg/kg dry	1	0.037	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4-Dimethylphenol [105-67-9]^	0.065	U	mg/kg dry	1	0.065	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4-Dinitrophenol [51-28-5]^	0.065	U	mg/kg dry	1	0.065	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.047	U	mg/kg dry	1	0.047	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Chloronaphthalene [91-58-7]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Chlorophenol [95-57-8]^	0.038	U	mg/kg dry	1	0.038	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Methylnaphthalene [91-57-6]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Methylphenol [95-48-7]^	0.038	U	mg/kg dry	1	0.038	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Nitroaniline [88-74-4]^	0.046	U	mg/kg dry	1	0.046	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
2-Nitrophenol [88-75-5]^	0.047	U	mg/kg dry	1	0.047	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.15	U	mg/kg dry	1	0.15	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
3-Nitroaniline [99-09-2]^	0.055	U	mg/kg dry	1	0.055	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Chloroaniline [106-47-8]^	0.14	U	mg/kg dry	1	0.14	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Nitroaniline [100-01-6]^	0.081	U	mg/kg dry	1	0.081	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
4-Nitrophenol [100-02-7]^	0.047	U	mg/kg dry	1	0.047	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Acenaphthene [83-32-9]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Acenaphthylene [208-96-8]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Anthracene [120-12-7]^	0.058	U	mg/kg dry	1	0.058	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzidine [92-87-5]^	0.17	U	mg/kg dry	1	0.17	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzo(a)anthracene [56-55-3]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzo(a)pyrene [50-32-8]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.027	U	mg/kg dry	1	0.027	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.072	U	mg/kg dry	1	0.072	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzoic acid [65-85-0]^	0.23	U	mg/kg dry	1	0.23	2.6	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Benzyl alcohol [100-51-6]^	0.035	U	mg/kg dry	1	0.035	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.038	U	mg/kg dry	1	0.038	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.065	U	mg/kg dry	1	0.065	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.037	U	mg/kg dry	1	0.037	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.053	U	mg/kg dry	1	0.053	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Butylbenzylphthalate [85-68-7]^	0.061	U	mg/kg dry	1	0.061	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Chrysene [218-01-9]^	0.046	U	mg/kg dry	1	0.046	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.078	U	mg/kg dry	1	0.078	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Dibenzofuran [132-64-9]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Diethylphthalate [84-66-2]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	

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ANALYTICAL RESULTS

Description: #4	**Lab Sample ID:** C405065-04	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:45	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 65.67

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Di-n-butylphthalate [84-74-2]^	0.062	U	mg/kg dry	1	0.062	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Di-n-octylphthalate [117-84-0]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Fluoranthene [206-44-0]^	0.055	U	mg/kg dry	1	0.055	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Fluorene [86-73-7]^	0.044	U	mg/kg dry	1	0.044	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Hexachlorobenzene [118-74-1]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Hexachlorobutadiene [87-68-3]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.059	U	mg/kg dry	1	0.059	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Hexachloroethane [67-72-1]^	0.032	U	mg/kg dry	1	0.032	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.072	U	mg/kg dry	1	0.072	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Isophorone [78-59-1]^	0.046	U	mg/kg dry	1	0.046	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Naphthalene [91-20-3]^	0.043	U	mg/kg dry	1	0.043	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Nitrobenzene [98-95-3]^	0.040	U	mg/kg dry	1	0.040	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.032	U	mg/kg dry	1	0.032	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.12	U	mg/kg dry	1	0.12	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.082	U	mg/kg dry	1	0.082	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Pentachlorophenol [87-86-5]^	0.050	U	mg/kg dry	1	0.050	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Phenanthrene [85-01-8]^	0.041	U	mg/kg dry	1	0.041	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Phenol [108-95-2]^	0.033	U	mg/kg dry	1	0.033	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Pyrene [129-00-0]^	0.058	U	mg/kg dry	1	0.058	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	
Pyridine [110-86-1]^	0.12	U	mg/kg dry	1	0.12	0.50	4E01010	EPA 8270D	05/08/14 19:42	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*4.6*	*1*	*5.08*	*90 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	
2-Fluorobiphenyl	*2.1*	*1*	*2.54*	*83 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	
2-Fluorophenol	*3.1*	*1*	*5.08*	*61 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	
Nitrobenzene-d5	*1.9*	*1*	*2.54*	*73 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	
Phenol-d5	*3.4*	*1*	*5.08*	*68 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	
Terphenyl-d14	*2.1*	*1*	*2.54*	*81 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 19:42*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
4,4'-DDE [72-55-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
4,4'-DDT [50-29-3]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Aldrin [309-00-2]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
alpha-BHC [319-84-6]^	0.0018	U	mg/kg dry	1	0.0018	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
beta-BHC [319-85-7]^	0.0026	U	mg/kg dry	1	0.0026	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Chlordane (tech) [12789-03-6]^	0.0017	U	mg/kg dry	1	0.0017	0.050	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Chlordane-alpha [5103-71-9]^	0.00094	U	mg/kg dry	1	0.00094	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Dieldrin [60-57-1]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Endosulfan I [959-98-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Endosulfan II [33213-65-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Endosulfan sulfate [1031-07-8]^	0.0015	U	mg/kg dry	1	0.0015	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Endrin [72-20-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	

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ANALYTICAL RESULTS

Description: #4	**Lab Sample ID:** C405065-04	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:45	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 65.67

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Endrin ketone [53494-70-5]^	0.0011	U	mg/kg dry	1	0.0011	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
gamma-BHC [58-89-9]^	0.0017	U	mg/kg dry	1	0.0017	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Heptachlor [76-44-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Heptachlor epoxide [1024-57-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Isodrin [465-73-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Methoxychlor [72-43-5]^	0.0015	U	mg/kg dry	1	0.0015	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Mirex [2385-85-5]^	0.0015	U	mg/kg dry	1	0.0015	0.0026	4E01008	EPA 8081B	05/02/14 13:26	MWC	
Toxaphene [8001-35-2]^	0.015	U	mg/kg dry	1	0.015	0.026	4E01008	EPA 8081B	05/02/14 13:26	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.052*	*1*	*0.0508*	*103 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 13:26*	*MWC*	
Decachlorobiphenyl	*0.045*	*1*	*0.0508*	*88 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 13:26*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.012	U	mg/kg dry	1	0.012	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	
PCB-1221 [11104-28-2]^	0.0079	U	mg/kg dry	1	0.0079	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	
PCB-1232 [11141-16-5]^	0.018	U	mg/kg dry	1	0.018	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	
PCB-1248 [12672-29-6]^	0.0079	U	mg/kg dry	1	0.0079	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	
PCB-1254 [11097-69-1]^	0.011	U	mg/kg dry	1	0.011	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	
PCB-1260 [11096-82-5]^	0.020	U	mg/kg dry	1	0.020	0.026	4E01009	EPA 8082A	05/02/14 13:26	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.052*	*1*	*0.0508*	*103 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 13:26*	*MWC*	
Decachlorobiphenyl	*0.045*	*1*	*0.0508*	*88 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 13:26*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**0.754**	J	mg/kg dry	1	0.152	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Barium [7440-39-3]^	**10.4**		mg/kg dry	1	0.152	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Cadmium [7440-43-9]^	**0.0283**	J	mg/kg dry	1	0.0146	0.0761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Chromium [7440-47-3]^	**2.50**		mg/kg dry	1	0.152	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Lead [7439-92-1]^	**3.11**		mg/kg dry	1	0.183	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Mercury [7439-97-6]^	**0.0469**		mg/kg dry	1	0.0105	0.0365	4D29012	EPA 7471B	04/30/14 17:02	T1D	
Selenium [7782-49-2]^	0.152	U	mg/kg dry	1	0.152	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	
Silver [7440-22-4]^	0.152	U	mg/kg dry	1	0.152	0.761	4E01021	EPA 6010C	05/02/14 14:26	JDH	

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ANALYTICAL RESULTS

Description: #4	**Lab Sample ID:** C405065-04	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:45	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 65.67

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,1-Dichloroethane [75-34-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,1-Dichloroethene [75-35-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0014	U	mg/kg dry	1	0.0014	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0013	U	mg/kg dry	1	0.0013	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2-Dibromoethane [106-93-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2-Dichloroethane [107-06-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,2-Dichloropropane [78-87-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,3-Dichloropropane [142-28-9]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
2,2-Dichloropropane [594-20-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
2-Butanone [78-93-3]^	**0.028**		mg/kg dry	1	0.0027	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0026	U	mg/kg dry	1	0.0026	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
2-Hexanone [591-78-6]^	0.0014	U	mg/kg dry	1	0.0014	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	
4-Chlorotoluene [106-43-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
4-Isopropyltoluene [99-87-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0021	U	mg/kg dry	1	0.0021	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	QV-01
Acetone [67-64-1]^	**0.12**		mg/kg dry	1	0.0026	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Benzene [71-43-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Bromobenzene [108-86-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Bromochloromethane [74-97-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Bromoform [75-25-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Bromomethane [74-83-9]^	0.0014	U	mg/kg dry	1	0.0014	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Carbon disulfide [75-15-0]^	0.0032	U	mg/kg dry	1	0.0032	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Carbon Tetrachloride [56-23-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Chlorobenzene [108-90-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Chloroethane [75-00-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0076	4E01047	EPA 8260B	05/02/14 03:19	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Chloromethane [74-87-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Dibromochloromethane [124-48-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Dibromomethane [74-95-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #4	**Lab Sample ID:** C405065-04	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 09:45	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 65.67

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Hexachlorobutadiene [87-68-3]^	0.0014	U	mg/kg dry	1	0.0014	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Isopropylbenzene [98-82-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0015	U	mg/kg dry	1	0.0015	0.0030	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Methylene Chloride [75-09-2]^	0.0011	U	mg/kg dry	1	0.0011	0.0030	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Naphthalene [91-20-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
n-Butyl Benzene [104-51-8]^	0.0014	U	mg/kg dry	1	0.0014	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
n-Propyl Benzene [103-65-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
o-Xylene [95-47-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
sec-Butylbenzene [135-98-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Styrene [100-42-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
tert-Butylbenzene [98-06-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Tetrachloroethene [127-18-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Toluene [108-88-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0011	U	mg/kg dry	1	0.0011	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Trichloroethene [79-01-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Trichlorofluoromethane [75-69-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	
Vinyl chloride [75-01-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4E01047	EPA 8260B	05/02/14 03:19	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0015	U	mg/kg dry	1	0.0015	0.0030	4E01047	EPA 8260B	05/02/14 03:19	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.073*	*1*	*0.0769*	*94 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 03:19*	*KAT*	
Dibromofluoromethane	*0.085*	*1*	*0.0769*	*111 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 03:19*	*KAT*	
Toluene-d8	*0.075*	*1*	*0.0769*	*98 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 03:19*	*KAT*	

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ANALYTICAL RESULTS

Description: #6	**Lab Sample ID:** C405065-05	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.08

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.029	U	mg/kg dry	1	0.029	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.025	U	mg/kg dry	1	0.025	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.027	U	mg/kg dry	1	0.027	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
1-Methylnaphthalene [90-12-0]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4-Dichlorophenol [120-83-2]^	0.030	U	mg/kg dry	1	0.030	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4-Dimethylphenol [105-67-9]^	0.054	U	mg/kg dry	1	0.054	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4-Dinitrophenol [51-28-5]^	0.054	U	mg/kg dry	1	0.054	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.039	U	mg/kg dry	1	0.039	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Chloronaphthalene [91-58-7]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Chlorophenol [95-57-8]^	0.032	U	mg/kg dry	1	0.032	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Methylnaphthalene [91-57-6]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Methylphenol [95-48-7]^	0.032	U	mg/kg dry	1	0.032	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Nitroaniline [88-74-4]^	0.038	U	mg/kg dry	1	0.038	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
2-Nitrophenol [88-75-5]^	0.039	U	mg/kg dry	1	0.039	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.12	U	mg/kg dry	1	0.12	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
3-Nitroaniline [99-09-2]^	0.046	U	mg/kg dry	1	0.046	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Chloroaniline [106-47-8]^	0.12	U	mg/kg dry	1	0.12	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Nitroaniline [100-01-6]^	0.067	U	mg/kg dry	1	0.067	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
4-Nitrophenol [100-02-7]^	0.039	U	mg/kg dry	1	0.039	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Acenaphthene [83-32-9]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Acenaphthylene [208-96-8]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Anthracene [120-12-7]^	0.048	U	mg/kg dry	1	0.048	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzidine [92-87-5]^	0.14	U	mg/kg dry	1	0.14	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzo(a)anthracene [56-55-3]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzo(a)pyrene [50-32-8]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.023	U	mg/kg dry	1	0.023	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.059	U	mg/kg dry	1	0.059	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzoic acid [65-85-0]^	0.19	U	mg/kg dry	1	0.19	2.1	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Benzyl alcohol [100-51-6]^	0.029	U	mg/kg dry	1	0.029	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.032	U	mg/kg dry	1	0.032	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.054	U	mg/kg dry	1	0.054	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.030	U	mg/kg dry	1	0.030	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.044	U	mg/kg dry	1	0.044	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Butylbenzylphthalate [85-68-7]^	0.051	U	mg/kg dry	1	0.051	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Chrysene [218-01-9]^	0.038	U	mg/kg dry	1	0.038	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.064	U	mg/kg dry	1	0.064	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Dibenzofuran [132-64-9]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Diethylphthalate [84-66-2]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	

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ANALYTICAL RESULTS

Description: #6	**Lab Sample ID:** C405065-05	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.08

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Di-n-butylphthalate [84-74-2]^	0.052	U	mg/kg dry	1	0.052	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Di-n-octylphthalate [117-84-0]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Fluoranthene [206-44-0]^	0.046	U	mg/kg dry	1	0.046	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Fluorene [86-73-7]^	0.037	U	mg/kg dry	1	0.037	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Hexachlorobenzene [118-74-1]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Hexachlorobutadiene [87-68-3]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.049	U	mg/kg dry	1	0.049	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Hexachloroethane [67-72-1]^	0.027	U	mg/kg dry	1	0.027	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.059	U	mg/kg dry	1	0.059	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Isophorone [78-59-1]^	0.038	U	mg/kg dry	1	0.038	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Naphthalene [91-20-3]^	0.035	U	mg/kg dry	1	0.035	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Nitrobenzene [98-95-3]^	0.033	U	mg/kg dry	1	0.033	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.027	U	mg/kg dry	1	0.027	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.10	U	mg/kg dry	1	0.10	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.068	U	mg/kg dry	1	0.068	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Pentachlorophenol [87-86-5]^	0.042	U	mg/kg dry	1	0.042	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Phenanthrene [85-01-8]^	0.034	U	mg/kg dry	1	0.034	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Phenol [108-95-2]^	0.028	U	mg/kg dry	1	0.028	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Pyrene [129-00-0]^	0.048	U	mg/kg dry	1	0.048	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	
Pyridine [110-86-1]^	0.10	U	mg/kg dry	1	0.10	0.42	4E01010	EPA 8270D	05/08/14 20:11	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*3.9*	*1*	*4.22*	*94 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	
2-Fluorobiphenyl	*1.9*	*1*	*2.11*	*91 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	
2-Fluorophenol	*2.9*	*1*	*4.22*	*68 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	
Nitrobenzene-d5	*1.7*	*1*	*2.11*	*82 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	
Phenol-d5	*3.1*	*1*	*4.22*	*74 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	
Terphenyl-d14	*1.9*	*1*	*2.11*	*90 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 20:11*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00091	U	mg/kg dry	1	0.00091	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
4,4'-DDE [72-55-9]^	0.00097	U	mg/kg dry	1	0.00097	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
4,4'-DDT [50-29-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Aldrin [309-00-2]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
alpha-BHC [319-84-6]^	0.0015	U	mg/kg dry	1	0.0015	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
beta-BHC [319-85-7]^	0.0021	U	mg/kg dry	1	0.0021	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Chlordane (tech) [12789-03-6]^	0.0014	U	mg/kg dry	1	0.0014	0.042	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Chlordane-alpha [5103-71-9]^	0.00078	U	mg/kg dry	1	0.00078	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Chlordane-gamma [5566-34-7]^	0.00091	U	mg/kg dry	1	0.00091	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Dieldrin [60-57-1]^	0.00096	U	mg/kg dry	1	0.00096	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Endosulfan I [959-98-8]^	0.00096	U	mg/kg dry	1	0.00096	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Endrin [72-20-8]^	0.00096	U	mg/kg dry	1	0.00096	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	

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ANALYTICAL RESULTS

Description: #6	**Lab Sample ID:** C405065-05	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.08

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Endrin ketone [53494-70-5]^	0.00095	U	mg/kg dry	1	0.00095	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
gamma-BHC [58-89-9]^	0.0014	U	mg/kg dry	1	0.0014	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Heptachlor [76-44-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Heptachlor epoxide [1024-57-3]^	0.00095	U	mg/kg dry	1	0.00095	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Isodrin [465-73-6]^	0.00091	U	mg/kg dry	1	0.00091	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Methoxychlor [72-43-5]^	0.0012	U	mg/kg dry	1	0.0012	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Mirex [2385-85-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0021	4E01008	EPA 8081B	05/02/14 13:39	MWC	
Toxaphene [8001-35-2]^	0.013	U	mg/kg dry	1	0.013	0.021	4E01008	EPA 8081B	05/02/14 13:39	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.039*	*1*	*0.0422*	*93 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 13:39*	*MWC*	
Decachlorobiphenyl	*0.043*	*1*	*0.0422*	*103 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 13:39*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.0097	U	mg/kg dry	1	0.0097	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	
PCB-1221 [11104-28-2]^	0.0066	U	mg/kg dry	1	0.0066	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	
PCB-1232 [11141-16-5]^	0.015	U	mg/kg dry	1	0.015	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	
PCB-1248 [12672-29-6]^	0.0066	U	mg/kg dry	1	0.0066	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	
PCB-1254 [11097-69-1]^	0.0087	U	mg/kg dry	1	0.0087	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	
PCB-1260 [11096-82-5]^	0.016	U	mg/kg dry	1	0.016	0.021	4E01009	EPA 8082A	05/02/14 13:39	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.039*	*1*	*0.0422*	*93 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 13:39*	*MWC*	
Decachlorobiphenyl	*0.043*	*1*	*0.0422*	*103 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 13:39*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**0.601**	J	mg/kg dry	1	0.126	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Barium [7440-39-3]^	**6.77**		mg/kg dry	1	0.126	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Cadmium [7440-43-9]^	0.0121	U	mg/kg dry	1	0.0121	0.0632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Chromium [7440-47-3]^	**2.43**		mg/kg dry	1	0.126	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Lead [7439-92-1]^	**3.33**		mg/kg dry	1	0.152	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Mercury [7439-97-6]^	0.00770	U	mg/kg dry	1	0.00770	0.0268	4D29012	EPA 7471B	04/30/14 17:04	T1D	
Selenium [7782-49-2]^	0.126	U	mg/kg dry	1	0.126	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	
Silver [7440-22-4]^	**0.186**	J	mg/kg dry	1	0.126	0.632	4E01021	EPA 6010C	05/02/14 14:28	JDH	

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ANALYTICAL RESULTS

Description: #6	**Lab Sample ID:** C405065-05	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.08

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,1-Dichloroethene [75-35-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,3-Dichloropropane [142-28-9]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
2,2-Dichloropropane [594-20-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
2-Butanone [78-93-3]^	**0.0042**	J	mg/kg dry	1	0.0018	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0017	U	mg/kg dry	1	0.0017	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
2-Hexanone [591-78-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	
4-Chlorotoluene [106-43-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
4-Isopropyltoluene [99-87-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0014	U	mg/kg dry	1	0.0014	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	QV-01
Acetone [67-64-1]^	**0.021**		mg/kg dry	1	0.0017	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Bromobenzene [108-86-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Bromomethane [74-83-9]^	0.0009	U	mg/kg dry	1	0.0009	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Carbon disulfide [75-15-0]^	0.0022	U	mg/kg dry	1	0.0022	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Carbon Tetrachloride [56-23-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0051	4E01047	EPA 8260B	05/02/14 03:52	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Dibromomethane [74-95-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #6	**Lab Sample ID:** C405065-05	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:00	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.08

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Hexachlorobutadiene [87-68-3]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Methylene Chloride [75-09-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0021	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Naphthalene [91-20-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
n-Butyl Benzene [104-51-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
n-Propyl Benzene [103-65-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
o-Xylene [95-47-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
sec-Butylbenzene [135-98-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
tert-Butylbenzene [98-06-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4E01047	EPA 8260B	05/02/14 03:52	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01047	EPA 8260B	05/02/14 03:52	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.050*	*1*	*0.0513*	*97 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 03:52*	*KAT*	
Dibromofluoromethane	*0.057*	*1*	*0.0513*	*111 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 03:52*	*KAT*	
Toluene-d8	*0.049*	*1*	*0.0513*	*95 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 03:52*	*KAT*	

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ANALYTICAL RESULTS

Description: #5 | **Lab Sample ID:** C405065-06 | **Received:** 04/24/14 11:20
Matrix: Sediment | **Sampled:** 04/24/14 10:10 | **Work Order:** C405065
Project: Lower Longview Lake Sediment | **Sampled By:** Aaron Weispfenning | **% Solids:** 79.68

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
1,2-Dichlorobenzene [95-50-1]^	0.029	U	mg/kg dry	1	0.029	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
1,3-Dichlorobenzene [541-73-1]^	0.025	U	mg/kg dry	1	0.025	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
1,4-Dichlorobenzene [106-46-7]^	0.026	U	mg/kg dry	1	0.026	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
1-Methylnaphthalene [90-12-0]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4,5-Trichlorophenol [95-95-4]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4,6-Trichlorophenol [88-06-2]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4-Dichlorophenol [120-83-2]^	0.030	U	mg/kg dry	1	0.030	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4-Dimethylphenol [105-67-9]^	0.054	U	mg/kg dry	1	0.054	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4-Dinitrophenol [51-28-5]^	0.054	U	mg/kg dry	1	0.054	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,4-Dinitrotoluene [121-14-2]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2,6-Dinitrotoluene [606-20-2]^	0.039	U	mg/kg dry	1	0.039	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Chloronaphthalene [91-58-7]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Chlorophenol [95-57-8]^	0.031	U	mg/kg dry	1	0.031	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Methylnaphthalene [91-57-6]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Methylphenol [95-48-7]^	0.031	U	mg/kg dry	1	0.031	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Nitroaniline [88-74-4]^	0.038	U	mg/kg dry	1	0.038	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
2-Nitrophenol [88-75-5]^	0.039	U	mg/kg dry	1	0.039	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	0.12	U	mg/kg dry	1	0.12	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
3-Nitroaniline [99-09-2]^	0.045	U	mg/kg dry	1	0.045	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Bromophenyl-phenylether [101-55-3]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Chloro-3-methylphenol [59-50-7]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Chloroaniline [106-47-8]^	0.12	U	mg/kg dry	1	0.12	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Nitroaniline [100-01-6]^	0.067	U	mg/kg dry	1	0.067	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
4-Nitrophenol [100-02-7]^	0.039	U	mg/kg dry	1	0.039	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Acenaphthene [83-32-9]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Acenaphthylene [208-96-8]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Anthracene [120-12-7]^	0.048	U	mg/kg dry	1	0.048	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzidine [92-87-5]^	0.14	U	mg/kg dry	1	0.14	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzo(a)anthracene [56-55-3]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzo(a)pyrene [50-32-8]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzo(b)fluoranthene [205-99-2]^	0.023	U	mg/kg dry	1	0.023	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzo(g,h,i)perylene [191-24-2]^	0.059	U	mg/kg dry	1	0.059	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzo(k)fluoranthene [207-08-9]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzoic acid [65-85-0]^	0.19	U	mg/kg dry	1	0.19	2.1	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Benzyl alcohol [100-51-6]^	0.029	U	mg/kg dry	1	0.029	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	0.031	U	mg/kg dry	1	0.031	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	0.054	U	mg/kg dry	1	0.054	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.030	U	mg/kg dry	1	0.030	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.044	U	mg/kg dry	1	0.044	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Butylbenzylphthalate [85-68-7]^	0.050	U	mg/kg dry	1	0.050	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Chrysene [218-01-9]^	0.038	U	mg/kg dry	1	0.038	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	0.064	U	mg/kg dry	1	0.064	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Dibenzofuran [132-64-9]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Diethylphthalate [84-66-2]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	

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ANALYTICAL RESULTS

Description: #5	**Lab Sample ID:** C405065-06	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:10	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.68

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dimethylphthalate [131-11-3]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Di-n-butylphthalate [84-74-2]^	0.051	U	mg/kg dry	1	0.051	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Di-n-octylphthalate [117-84-0]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Fluoranthene [206-44-0]^	0.045	U	mg/kg dry	1	0.045	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Fluorene [86-73-7]^	0.036	U	mg/kg dry	1	0.036	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Hexachlorobenzene [118-74-1]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Hexachlorobutadiene [87-68-3]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Hexachlorocyclopentadiene [77-47-4]^	0.049	U	mg/kg dry	1	0.049	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Hexachloroethane [67-72-1]^	0.026	U	mg/kg dry	1	0.026	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.059	U	mg/kg dry	1	0.059	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Isophorone [78-59-1]^	0.038	U	mg/kg dry	1	0.038	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Naphthalene [91-20-3]^	0.035	U	mg/kg dry	1	0.035	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Nitrobenzene [98-95-3]^	0.033	U	mg/kg dry	1	0.033	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
N-Nitrosodimethylamine [62-75-9]^	0.026	U	mg/kg dry	1	0.026	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	0.10	U	mg/kg dry	1	0.10	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.068	U	mg/kg dry	1	0.068	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Pentachlorophenol [87-86-5]^	0.041	U	mg/kg dry	1	0.041	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Phenanthrene [85-01-8]^	0.034	U	mg/kg dry	1	0.034	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Phenol [108-95-2]^	0.028	U	mg/kg dry	1	0.028	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Pyrene [129-00-0]^	0.048	U	mg/kg dry	1	0.048	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	
Pyridine [110-86-1]^	0.10	U	mg/kg dry	1	0.10	0.41	4E01010	EPA 8270D	05/08/14 20:40	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*4.0*	*1*	*4.18*	*95 %*	*28-130*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	
2-Fluorobiphenyl	*1.9*	*1*	*2.09*	*90 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	
2-Fluorophenol	*2.9*	*1*	*4.18*	*69 %*	*49-126*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	
Nitrobenzene-d5	*1.8*	*1*	*2.09*	*84 %*	*50-117*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	
Phenol-d5	*3.2*	*1*	*4.18*	*75 %*	*56-120*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	
Terphenyl-d14	*1.8*	*1*	*2.09*	*87 %*	*36-151*	*4E01010*	*EPA 8270D*	*05/08/14 20:40*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00090	U	mg/kg dry	1	0.00090	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
4,4'-DDE [72-55-9]^	0.00097	U	mg/kg dry	1	0.00097	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
4,4'-DDT [50-29-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Aldrin [309-00-2]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
alpha-BHC [319-84-6]^	0.0015	U	mg/kg dry	1	0.0015	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
beta-BHC [319-85-7]^	0.0021	U	mg/kg dry	1	0.0021	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Chlordane (tech) [12789-03-6]^	0.0014	U	mg/kg dry	1	0.0014	0.041	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Chlordane-alpha [5103-71-9]^	0.00078	U	mg/kg dry	1	0.00078	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Chlordane-gamma [5566-34-7]^	0.00090	U	mg/kg dry	1	0.00090	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Dieldrin [60-57-1]^	0.00095	U	mg/kg dry	1	0.00095	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Endosulfan I [959-98-8]^	0.00095	U	mg/kg dry	1	0.00095	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	1	0.0013	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Endrin [72-20-8]^	0.00095	U	mg/kg dry	1	0.00095	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	

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ANALYTICAL RESULTS

Description: #5	**Lab Sample ID:** C405065-06	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:10	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.68

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Endrin aldehyde [7421-93-4]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Endrin ketone [53494-70-5]^	0.00094	U	mg/kg dry	1	0.00094	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
gamma-BHC [58-89-9]^	0.0014	U	mg/kg dry	1	0.0014	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Heptachlor [76-44-8]^	0.00099	U	mg/kg dry	1	0.00099	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Heptachlor epoxide [1024-57-3]^	0.00094	U	mg/kg dry	1	0.00094	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Isodrin [465-73-6]^	0.00090	U	mg/kg dry	1	0.00090	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Methoxychlor [72-43-5]^	0.0012	U	mg/kg dry	1	0.0012	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Mirex [2385-85-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0021	4E01008	EPA 8081B	05/02/14 13:53	MWC	
Toxaphene [8001-35-2]^	0.013	U	mg/kg dry	1	0.013	0.021	4E01008	EPA 8081B	05/02/14 13:53	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.043*	*1*	*0.0418*	*102 %*	*59-137*	*4E01008*	*EPA 8081B*	*05/02/14 13:53*	*MWC*	
Decachlorobiphenyl	*0.036*	*1*	*0.0418*	*86 %*	*60-140*	*4E01008*	*EPA 8081B*	*05/02/14 13:53*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.0097	U	mg/kg dry	1	0.0097	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	
PCB-1221 [11104-28-2]^	0.0065	U	mg/kg dry	1	0.0065	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	
PCB-1232 [11141-16-5]^	0.015	U	mg/kg dry	1	0.015	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	
PCB-1248 [12672-29-6]^	0.0065	U	mg/kg dry	1	0.0065	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	
PCB-1254 [11097-69-1]^	0.0087	U	mg/kg dry	1	0.0087	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	
PCB-1260 [11096-82-5]^	0.016	U	mg/kg dry	1	0.016	0.021	4E01009	EPA 8082A	05/02/14 13:53	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.046*	*1*	*0.0418*	*111 %*	*44-168*	*4E01009*	*EPA 8082A*	*05/02/14 13:53*	*MWC*	
Decachlorobiphenyl	*0.042*	*1*	*0.0418*	*101 %*	*51-154*	*4E01009*	*EPA 8082A*	*05/02/14 13:53*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	**1.42**		mg/kg dry	1	0.126	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Barium [7440-39-3]^	**28.7**		mg/kg dry	1	0.126	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Cadmium [7440-43-9]^	**0.0153**	J	mg/kg dry	1	0.0120	0.0628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Chromium [7440-47-3]^	**9.91**		mg/kg dry	1	0.126	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Lead [7439-92-1]^	**5.67**		mg/kg dry	1	0.151	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Mercury [7439-97-6]^	**0.0327**		mg/kg dry	1	0.00866	0.0301	4D29012	EPA 7471B	04/30/14 17:07	T1D	
Selenium [7782-49-2]^	**0.370**	J	mg/kg dry	1	0.126	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	
Silver [7440-22-4]^	**0.645**		mg/kg dry	1	0.126	0.628	4E01021	EPA 6010C	05/02/14 14:31	JDH	

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ANALYTICAL RESULTS

Description: #5	**Lab Sample ID:** C405065-06	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:10	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.68

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QV-02
1,1-Dichloropropene [563-58-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2,3-Trichlorobenzene [87-61-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2,3-Trichloropropane [96-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2,4-Trimethylbenzene [95-63-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,3,5-Trimethylbenzene [108-67-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,3-Dichloropropane [142-28-9]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
2,2-Dichloropropane [594-20-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
2-Butanone [78-93-3]^	**0.013**		mg/kg dry	1	0.0020	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0019	U	mg/kg dry	1	0.0019	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	QV-02
2-Chlorotoluene [95-49-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
2-Hexanone [591-78-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	
4-Chlorotoluene [106-43-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
4-Isopropyltoluene [99-87-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0016	U	mg/kg dry	1	0.0016	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	QV-01
Acetone [67-64-1]^	**0.073**		mg/kg dry	1	0.0019	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Bromobenzene [108-86-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QL-02
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Bromomethane [74-83-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Carbon disulfide [75-15-0]^	0.0024	U	mg/kg dry	1	0.0024	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0057	4E01047	EPA 8260B	05/02/14 04:25	KAT	QL-02, QV-02
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QV-01
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QL-02
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Dibromomethane [74-95-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QL-02, QV-01

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ANALYTICAL RESULTS

Description: #5	**Lab Sample ID:** C405065-06	**Received:** 04/24/14 11:20
Matrix: Sediment	**Sampled:** 04/24/14 10:10	**Work Order:** C405065
Project: Lower Longview Lake Sediment	**Sampled By:** Aaron Weispfenning	**% Solids:** 79.68

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Hexachlorobutadiene [87-68-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
m,p-Xylenes [108-38-3/106-42-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Methylene Chloride [75-09-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0023	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Naphthalene [91-20-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
n-Butyl Benzene [104-51-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
n-Propyl Benzene [103-65-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
o-Xylene [95-47-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
sec-Butylbenzene [135-98-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
tert-Butylbenzene [98-06-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4E01047	EPA 8260B	05/02/14 04:25	KAT	QL-02, QV-01
Xylenes (Total) [1330-20-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4E01047	EPA 8260B	05/02/14 04:25	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.058*	*1*	*0.0566*	*102 %*	*71-126*	*4E01047*	*EPA 8260B*	*05/02/14 04:25*	*KAT*	
Dibromofluoromethane	*0.067*	*1*	*0.0566*	*118 %*	*72-133*	*4E01047*	*EPA 8260B*	*05/02/14 04:25*	*KAT*	
Toluene-d8	*0.055*	*1*	*0.0566*	*97 %*	*80-123*	*4E01047*	*EPA 8260B*	*05/02/14 04:25*	*KAT*	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C405065-07 | **Received:** 04/24/14 11:20

Matrix: Water | **Sampled:** 04/24/14 09:00 | **Work Order:** C405065

Project: Lower Longview Lake Sediment | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,1-Dichloropropene [563-58-6]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2,3-Trichloropropane [96-18-4]^	0.23	U	ug/L	1	0.23	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2,4-Trimethylbenzene [95-63-6]^	0.10	U	ug/L	1	0.10	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,3,5-Trimethylbenzene [108-67-8]^	0.30	U	ug/L	1	0.30	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,3-Dichloropropane [142-28-9]^	0.16	U	ug/L	1	0.16	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
2,2-Dichloropropane [594-20-7]^	0.28	U	ug/L	1	0.28	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
2-Chloroethyl Vinyl Ether [110-75-8]^	1.1	U	ug/L	1	1.1	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
2-Chlorotoluene [95-49-8]^	0.081	U	ug/L	1	0.081	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
4-Chlorotoluene [106-43-4]^	0.068	U	ug/L	1	0.068	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
4-Isopropyltoluene [99-87-6]^	0.085	U	ug/L	1	0.085	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Bromobenzene [108-86-1]^	0.16	U	ug/L	1	0.16	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Dibromomethane [74-95-3]^	0.27	U	ug/L	1	0.27	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Hexachlorobutadiene [87-68-3]^	0.22	U	ug/L	1	0.22	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C405065-07 | **Received:** 04/24/14 11:20

Matrix: Water | **Sampled:** 04/24/14 09:00 | **Work Order:** C405065

Project: Lower Longview Lake Sediment | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
m,p-Xylenes [108-38-3/106-42-3]^	0.17	U	ug/L	1	0.17	2.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Naphthalene [91-20-3]^	0.11	U	ug/L	1	0.11	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
n-Butyl Benzene [104-51-8]^	0.058	U	ug/L	1	0.058	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
n-Propyl Benzene [103-65-1]^	0.12	U	ug/L	1	0.12	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
sec-Butylbenzene [135-98-8]^	0.10	U	ug/L	1	0.10	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
tert-Butylbenzene [98-06-6]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4E05031	EPA 8260B	05/06/14 07:48	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*102 %*	*51-122*	*4E05031*	*EPA 8260B*	*05/06/14 07:48*	*MSZ*	
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*68-117*	*4E05031*	*EPA 8260B*	*05/06/14 07:48*	*MSZ*	
Toluene-d8	*52*	*1*	*50.0*	*104 %*	*67-127*	*4E05031*	*EPA 8260B*	*05/06/14 07:48*	*MSZ*	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E05031 - EPA 5030B_MS

Blank (4E05031-BLK1) Prepared: 05/05/2014 14:46 Analyzed: 05/06/2014 00:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.15	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.10	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.30	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,3-Dichloropropane	0.16	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2,2-Dichloropropane	0.28	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.1	U	5.0	ug/L							
2-Chlorotoluene	0.081	U	1.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Chlorotoluene	0.068	U	1.0	ug/L							
4-Isopropyltoluene	0.085	U	1.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromobenzene	0.16	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Hexachlorobutadiene	0.22	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E05031 - EPA 5030B_MS - Continued

Blank (4E05031-BLK1) Continued Prepared: 05/05/2014 14:46 Analyzed: 05/06/2014 00:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
m,p-Xylenes	0.17	U	2.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
Naphthalene	0.11	U	1.0	ug/L							
n-Butyl Benzene	0.058	U	1.0	ug/L							
n-Propyl Benzene	0.12	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
sec-Butylbenzene	0.10	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
tert-Butylbenzene	0.17	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

LCS (4E05031-BS1) Prepared: 05/05/2014 14:46 Analyzed: 05/06/2014 00:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		97	75-133			
Benzene	19		1.0	ug/L	20.0		96	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		96	83-117			
Toluene	17		1.0	ug/L	20.0		87	71-118			
Trichloroethene	19		1.0	ug/L	20.0		94	74-119			
4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*99*	*51-122*			
Dibromofluoromethane	*49*			*ug/L*	*50.0*		*98*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*103*	*67-127*			

Matrix Spike (4E05031-MS1) Prepared: 05/05/2014 14:46 Analyzed: 05/06/2014 01:22

Source: C404858-12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.21 U	124	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	106	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.17 U	105	83-117			
Toluene	20		1.0	ug/L	20.0	0.14 U	99	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	106	74-119			
4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*103*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*102*	*67-127*			

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E05031 - EPA 5030B_MS - Continued

Matrix Spike Dup (4E05031-MSD1) Prepared: 05/05/2014 14:46 Analyzed: 05/06/2014 01:52

Source: C404858-12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	117	75-133	6	20	
Benzene	21		1.0	ug/L	20.0	0.15 U	105	81-134	0.8	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.17 U	105	83-117	0.05	16	
Toluene	19		1.0	ug/L	20.0	0.14 U	96	71-118	3	17	
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	103	74-119	3	22	
4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*100*	*51-122*			
Dibromofluoromethane	*49*			*ug/L*	*50.0*		*99*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4E01010 - EPA 3550C_MS

Blank (4E01010-BLK1) Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 16:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	0.026	U	0.33	mg/kg wet							
1,2-Dichlorobenzene	0.023	U	0.33	mg/kg wet							
1,3-Dichlorobenzene	0.020	U	0.33	mg/kg wet							
1,4-Dichlorobenzene	0.021	U	0.33	mg/kg wet							
1-Methylnaphthalene	0.027	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.027	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.027	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.024	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.043	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.043	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.028	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.031	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.028	U	0.33	mg/kg wet							
2-Chlorophenol	0.025	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.033	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.028	U	0.33	mg/kg wet							
2-Methylphenol	0.025	U	0.33	mg/kg wet							
2-Nitroaniline	0.030	U	0.33	mg/kg wet							
2-Nitrophenol	0.031	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.026	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.098	U	0.33	mg/kg wet							
3-Nitroaniline	0.036	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.027	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.033	U	0.33	mg/kg wet							
4-Chloroaniline	0.093	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.026	U	0.33	mg/kg wet							
4-Nitroaniline	0.053	U	0.33	mg/kg wet							
4-Nitrophenol	0.031	U	0.33	mg/kg wet							
Acenaphthene	0.028	U	0.33	mg/kg wet							
Acenaphthylene	0.028	U	0.33	mg/kg wet							
Anthracene	0.038	U	0.33	mg/kg wet							
Benzidine	0.11	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.028	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4E01010 - EPA 3550C_MS - Continued

Blank (4E01010-BLK1) Continued Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 16:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	0.033	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.018	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.047	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.033	U	0.33	mg/kg wet							
Benzoic acid	0.15	U	1.7	mg/kg wet							
Benzyl alcohol	0.023	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.025	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.043	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.024	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.035	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.040	U	0.33	mg/kg wet							
Chrysene	0.030	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.051	U	0.33	mg/kg wet							
Dibenzofuran	0.027	U	0.33	mg/kg wet							
Diethylphthalate	0.028	U	0.33	mg/kg wet							
Dimethylphthalate	0.033	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.041	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.033	U	0.33	mg/kg wet							
Fluoranthene	0.036	U	0.33	mg/kg wet							
Fluorene	0.029	U	0.33	mg/kg wet							
Hexachlorobenzene	0.026	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.026	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.039	U	0.33	mg/kg wet							
Hexachloroethane	0.021	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.047	U	0.33	mg/kg wet							
Isophorone	0.030	U	0.33	mg/kg wet							
Naphthalene	0.028	U	0.33	mg/kg wet							
Nitrobenzene	0.026	U	0.33	mg/kg wet							
N-Nitrosodimethylamine	0.021	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.081	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.054	U	0.33	mg/kg wet							
Pentachlorophenol	0.033	U	0.33	mg/kg wet							
Phenanthrene	0.027	U	0.33	mg/kg wet							
Phenol	0.022	U	0.33	mg/kg wet							
Pyrene	0.038	U	0.33	mg/kg wet							
Pyridine	0.082	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*2.5*			*mg/kg wet*	*3.33*		*76*	*28-130*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*56-120*			
2-Fluorophenol	*2.2*			*mg/kg wet*	*3.33*		*67*	*49-126*			
Nitrobenzene-d5	*1.4*			*mg/kg wet*	*1.67*		*83*	*50-117*			
Phenol-d5	*2.4*			*mg/kg wet*	*3.33*		*72*	*56-120*			
Terphenyl-d14	*1.3*			*mg/kg wet*	*1.67*		*76*	*36-151*			

LCS (4E01010-BS1) Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 17:16

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	1.4		0.33	mg/kg wet	1.67		84	51-121			
1,4-Dichlorobenzene	1.3		0.33	mg/kg wet	1.67		79	48-118			
2,4-Dinitrotoluene	1.4		0.33	mg/kg wet	1.67		85	63-127			

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4E01010 - EPA 3550C_MS - Continued

LCS (4E01010-BS1) Continued Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 17:16

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	1.3		0.33	mg/kg wet	1.67		80	56-120			
4-Chloro-3-methylphenol	1.4		0.33	mg/kg wet	1.67		83	59-121			
4-Nitrophenol	1.3		0.33	mg/kg wet	1.67		80	73-147			
Acenaphthene	1.3		0.33	mg/kg wet	1.67		80	64-131			
N-Nitroso-di-n-propylamine	1.4		0.33	mg/kg wet	1.67		82	55-135			
Pentachlorophenol	1.3		0.33	mg/kg wet	1.67		75	45-117			
Phenol	1.4		0.33	mg/kg wet	1.67		82	54-121			
Pyrene	1.4		0.33	mg/kg wet	1.67		87	65-146			
2,4,6-Tribromophenol	*3.3*			*mg/kg wet*	*3.33*		*100*	*28-130*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*56-120*			
2-Fluorophenol	*2.3*			*mg/kg wet*	*3.33*		*70*	*49-126*			
Nitrobenzene-d5	*1.4*			*mg/kg wet*	*1.67*		*83*	*50-117*			
Phenol-d5	*2.6*			*mg/kg wet*	*3.33*		*77*	*56-120*			
Terphenyl-d14	*1.5*			*mg/kg wet*	*1.67*		*88*	*36-151*			

Matrix Spike (4E01010-MS1) Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 17:45

Source: C405065-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	2.9		0.77	mg/kg dry	3.90	0.061 U	75	51-121			
1,4-Dichlorobenzene	2.7		0.77	mg/kg dry	3.90	0.049 U	69	48-118			
2,4-Dinitrotoluene	3.3		0.77	mg/kg dry	3.90	0.066 U	83	63-127			
2-Chlorophenol	2.8		0.77	mg/kg dry	3.90	0.059 U	72	56-120			
4-Chloro-3-methylphenol	3.2		0.77	mg/kg dry	3.90	0.077 U	81	59-121			
4-Nitrophenol	3.6		0.77	mg/kg dry	3.90	0.073 U	93	73-147			
Acenaphthene	2.9		0.77	mg/kg dry	3.90	0.066 U	74	64-131			
N-Nitroso-di-n-propylamine	2.9		0.77	mg/kg dry	3.90	0.19 U	75	55-135			
Pentachlorophenol	3.6		0.77	mg/kg dry	3.90	0.077 U	91	45-117			
Phenol	2.9		0.77	mg/kg dry	3.90	0.052 U	75	54-121			
Pyrene	3.3		0.77	mg/kg dry	3.90	0.089 U	85	65-146			
2,4,6-Tribromophenol	*7.9*			*mg/kg dry*	*7.81*		*102*	*28-130*			
2-Fluorobiphenyl	*3.2*			*mg/kg dry*	*3.90*		*81*	*56-120*			
2-Fluorophenol	*4.9*			*mg/kg dry*	*7.81*		*63*	*49-126*			
Nitrobenzene-d5	*2.9*			*mg/kg dry*	*3.90*		*74*	*50-117*			
Phenol-d5	*5.5*			*mg/kg dry*	*7.81*		*70*	*56-120*			
Terphenyl-d14	*3.4*			*mg/kg dry*	*3.90*		*88*	*36-151*			

Matrix Spike Dup (4E01010-MSD1) Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 18:14

Source: C405065-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	2.9		0.77	mg/kg dry	3.90	0.061 U	76	51-121	0.9	10	
1,4-Dichlorobenzene	2.7		0.77	mg/kg dry	3.90	0.049 U	69	48-118	0.3	13	
2,4-Dinitrotoluene	3.0		0.77	mg/kg dry	3.90	0.066 U	77	63-127	7	10	
2-Chlorophenol	2.8		0.77	mg/kg dry	3.90	0.059 U	72	56-120	0.7	11	
4-Chloro-3-methylphenol	3.1		0.77	mg/kg dry	3.90	0.077 U	80	59-121	2	10	
4-Nitrophenol	3.2		0.77	mg/kg dry	3.90	0.073 U	82	73-147	13	10	QM-11
Acenaphthene	2.9		0.77	mg/kg dry	3.90	0.066 U	75	64-131	1	19	
N-Nitroso-di-n-propylamine	3.0		0.77	mg/kg dry	3.90	0.19 U	77	55-135	1	10	
Pentachlorophenol	3.2		0.77	mg/kg dry	3.90	0.077 U	83	45-117	10	10	

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4E01010 - EPA 3550C_MS - Continued

Matrix Spike Dup (4E01010-MSD1) Continued Prepared: 05/01/2014 09:30 Analyzed: 05/08/2014 18:14

Source: C405065-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phenol	3.0		0.77	mg/kg dry	3.90	0.052 U	76	54-121	2	13	
Pyrene	3.2		0.77	mg/kg dry	3.90	0.089 U	81	65-146	6	50	
2,4,6-Tribromophenol	*7.5*			*mg/kg dry*	*7.81*		*96*	*28-130*			
2-Fluorobiphenyl	*3.3*			*mg/kg dry*	*3.90*		*85*	*56-120*			
2-Fluorophenol	*5.0*			*mg/kg dry*	*7.81*		*63*	*49-126*			
Nitrobenzene-d5	*2.9*			*mg/kg dry*	*3.90*		*75*	*50-117*			
Phenol-d5	*5.6*			*mg/kg dry*	*7.81*		*72*	*56-120*			
Terphenyl-d14	*3.2*			*mg/kg dry*	*3.90*		*83*	*36-151*			

Organochlorine Pesticides by GC - Quality Control

Batch 4E01008 - EPA 3550C

Blank (4E01008-BLK1) Prepared: 05/01/2014 09:16 Analyzed: 05/02/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00072	U	0.0017	mg/kg wet							
4,4'-DDE	0.00077	U	0.0017	mg/kg wet							
4,4'-DDT	0.00080	U	0.0017	mg/kg wet							
Aldrin	0.00081	U	0.0017	mg/kg wet							
alpha-BHC	0.0012	U	0.0017	mg/kg wet							
beta-BHC	0.0017	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0011	U	0.033	mg/kg wet							
Chlordane-alpha	0.00062	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00072	U	0.0017	mg/kg wet							
delta-BHC	0.00084	U	0.0017	mg/kg wet							
Dieldrin	0.00076	U	0.0017	mg/kg wet							
Endosulfan I	0.00076	U	0.0017	mg/kg wet							
Endosulfan II	0.00096	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.0010	U	0.0017	mg/kg wet							
Endrin	0.00076	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00080	U	0.0017	mg/kg wet							
Endrin ketone	0.00075	U	0.0017	mg/kg wet							
gamma-BHC	0.0011	U	0.0017	mg/kg wet							
Heptachlor	0.00079	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00075	U	0.0017	mg/kg wet							
Isodrin	0.00072	U	0.0017	mg/kg wet							
Methoxychlor	0.00098	U	0.0017	mg/kg wet							
Mirex	0.0010	U	0.0017	mg/kg wet							
Toxaphene	0.010	U	0.017	mg/kg wet							
2,4,5,6-TCMX	*0.032*			*mg/kg wet*	*0.0333*		*97*	*59-137*			
Decachlorobiphenyl	*0.030*			*mg/kg wet*	*0.0333*		*91*	*60-140*			

LCS (4E01008-BS1) Prepared: 05/01/2014 09:16 Analyzed: 05/02/2014 11:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.034		0.0017	mg/kg wet	0.0333		102	38-142			
Dieldrin	0.033		0.0017	mg/kg wet	0.0333		99	51-129			
Endrin	0.034		0.0017	mg/kg wet	0.0333		101	51-126			

QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4E01008 - EPA 3550C - Continued

LCS (4E01008-BS1) Continued Prepared: 05/01/2014 09:16 Analyzed: 05/02/2014 11:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5,6-TCMX	*0.032*			*mg/kg wet*	*0.0333*		*95*	*59-137*			
Decachlorobiphenyl	*0.031*			*mg/kg wet*	*0.0333*		*92*	*60-140*			

Matrix Spike (4E01008-MS1) Prepared: 05/01/2014 09:16 Analyzed: 05/02/2014 11:26

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.051		0.0024	mg/kg dry	0.0464	0.0011 U	110	38-142			
Dieldrin	0.046		0.0024	mg/kg dry	0.0464	0.0011 U	99	51-129			
Endrin	0.048		0.0024	mg/kg dry	0.0464	0.0011 U	103	51-126			
2,4,5,6-TCMX	*0.044*			*mg/kg dry*	*0.0464*		*94*	*59-137*			
Decachlorobiphenyl	*0.051*			*mg/kg dry*	*0.0464*		*109*	*60-140*			

Matrix Spike Dup (4E01008-MSD1) Prepared: 05/01/2014 09:16 Analyzed: 05/02/2014 11:40

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.050		0.0024	mg/kg dry	0.0464	0.0011 U	108	38-142	2	42	
Dieldrin	0.046		0.0024	mg/kg dry	0.0464	0.0011 U	100	51-129	0.6	40	
Endrin	0.048		0.0024	mg/kg dry	0.0464	0.0011 U	104	51-126	0.6	33	
2,4,5,6-TCMX	*0.043*			*mg/kg dry*	*0.0464*		*92*	*59-137*			
Decachlorobiphenyl	*0.043*			*mg/kg dry*	*0.0464*		*93*	*60-140*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4E01009 - EPA 3550C

Blank (4E01009-BLK1) Prepared: 05/01/2014 09:24 Analyzed: 05/02/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.0077	U	0.017	mg/kg wet							
PCB-1221	0.0052	U	0.017	mg/kg wet							
PCB-1232	0.012	U	0.017	mg/kg wet							
PCB-1248	0.0052	U	0.017	mg/kg wet							
PCB-1254	0.0069	U	0.017	mg/kg wet							
PCB-1260	0.013	U	0.017	mg/kg wet							
2,4,5,6-TCMX	*0.032*			*mg/kg wet*	*0.0333*		*97*	*44-168*			
Decachlorobiphenyl	*0.030*			*mg/kg wet*	*0.0333*		*91*	*51-154*			

LCS (4E01009-BS1) Prepared: 05/01/2014 09:24 Analyzed: 05/02/2014 11:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.37		0.017	mg/kg wet	0.333		112	18-178			
PCB-1260	0.35		0.017	mg/kg wet	0.333		105	59-144			
2,4,5,6-TCMX	*0.040*			*mg/kg wet*	*0.0333*		*120*	*44-168*			
Decachlorobiphenyl	*0.037*			*mg/kg wet*	*0.0333*		*112*	*51-154*			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4E01009 - EPA 3550C - Continued

Matrix Spike (4E01009-MS1) Prepared: 05/01/2014 09:24 Analyzed: 05/02/2014 12:06

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.56	P	0.024	mg/kg dry	0.464	0.011 U	121	18-178			
PCB-1260	0.57		0.024	mg/kg dry	0.464	0.018 U	123	59-144			
2,4,5,6-TCMX	*0.057*			*mg/kg dry*	*0.0464*		*123*	*44-168*			
Decachlorobiphenyl	*0.057*			*mg/kg dry*	*0.0464*		*123*	*51-154*			

Matrix Spike Dup (4E01009-MSD1) Prepared: 05/01/2014 09:24 Analyzed: 05/02/2014 12:20

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.48	P	0.024	mg/kg dry	0.464	0.011 U	104	18-178	15	42	
PCB-1260	0.48		0.024	mg/kg dry	0.464	0.018 U	102	59-144	18	36	
2,4,5,6-TCMX	*0.048*			*mg/kg dry*	*0.0464*		*104*	*44-168*			
Decachlorobiphenyl	*0.047*			*mg/kg dry*	*0.0464*		*102*	*51-154*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D29012 - EPA 7471B

Blank (4D29012-BLK1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D29012-BS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.635		0.0240	mg/kg wet	0.600		106	80-120			

Matrix Spike (4D29012-MS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:27

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.738		0.0273	mg/kg dry	0.641	0.0345	110	80-120			

Matrix Spike Dup (4D29012-MSD1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:29

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.804		0.0273	mg/kg dry	0.684	0.0345	113	80-120	9	20	

Post Spike (4D29012-PS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:32

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.90		0.200	ug/L	5.00	0.244	113	75-125			

Batch 4E01021 - EPA 3050B

Blank (4E01021-BLK1) Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 13:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4E01021 - EPA 3050B - Continued

Blank (4E01021-BLK1) Continued Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 13:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							
Selenium	0.100	U	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							

LCS (4E01021-BS1) Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 13:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	9.56		0.500	mg/kg wet	9.90		97	80-120			
Barium	9.58		0.500	mg/kg wet	9.90		97	80-120			
Cadmium	0.945		0.0500	mg/kg wet	0.990		95	80-120			
Chromium	9.61		0.500	mg/kg wet	9.90		97	80-120			
Lead	9.50		0.500	mg/kg wet	9.90		96	80-120			
Selenium	9.08		0.500	mg/kg wet	9.90		92	80-120			
Silver	9.80		0.500	mg/kg wet	9.90		99	80-120			

Matrix Spike (4E01021-MS1) Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 13:58

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	14.4		0.696	mg/kg dry	13.5	1.81	93	75-125			
Barium	28.8		0.696	mg/kg dry	13.5	12.2	123	75-125			
Cadmium	1.34		0.0696	mg/kg dry	1.35	0.0332	97	75-125			
Chromium	15.0		0.696	mg/kg dry	13.5	1.48	100	75-125			
Lead	19.7		0.696	mg/kg dry	13.5	5.02	108	75-125			
Selenium	12.3		0.696	mg/kg dry	13.5	0.139 U	91	75-125			
Silver	13.1		0.696	mg/kg dry	13.5	0.139 U	97	75-125			

Matrix Spike Dup (4E01021-MSD1) Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 14:01

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	13.7		0.696	mg/kg dry	13.5	1.81	88	75-125	5	20	
Barium	25.5		0.696	mg/kg dry	13.5	12.2	98	75-125	12	20	
Cadmium	1.31		0.0696	mg/kg dry	1.35	0.0332	95	75-125	2	20	
Chromium	14.9		0.696	mg/kg dry	13.5	1.48	99	75-125	0.9	20	
Lead	17.6		0.696	mg/kg dry	13.5	5.02	93	75-125	11	20	
Selenium	12.3		0.696	mg/kg dry	13.5	0.139 U	91	75-125	0.2	20	
Silver	12.9		0.696	mg/kg dry	13.5	0.139 U	95	75-125	2	20	

Post Spike (4E01021-PS1) Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 14:03

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.219		0.0100	mg/L	0.200	0.0273	96	80-120			
Barium	0.371		0.0100	mg/L	0.200	0.184	94	80-120			
Cadmium	0.0198		0.00100	mg/L	0.0200	0.000501	97	80-120			
Chromium	0.213		0.0100	mg/L	0.200	0.0223	95	80-120			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4E01021 - EPA 3050B - Continued

Post Spike (4E01021-PS1) Continued Prepared: 05/01/2014 10:54 Analyzed: 05/02/2014 14:03

Source: C405065-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Lead	0.267		0.0100	mg/L	0.200	0.0758	96	80-120			
Selenium	0.192		0.0100	mg/L	0.200	-0.000907	96	80-120			
Silver	0.192		0.0100	mg/L	0.200	0.000887	96	80-120			

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E01047 - EPA 5030B_MS

Blank (4E01047-BLK1) Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 20:10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloropropene	0.0005	U	0.0010	mg/kg wet							
1,2,3-Trichlorobenzene	0.0009	U	0.0010	mg/kg wet							
1,2,3-Trichloropropane	0.0003	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2,4-Trimethylbenzene	0.0007	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3,5-Trimethylbenzene	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2,2-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Chloroethyl Vinyl Ether	0.0017	U	0.0050	mg/kg wet							QV-02
2-Chlorotoluene	0.0005	U	0.0010	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Chlorotoluene	0.0006	U	0.0010	mg/kg wet							
4-Isopropyltoluene	0.0008	U	0.0010	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							QV-01
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromobenzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							QL-02
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							QL-02, QV-02

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E01047 - EPA 5030B_MS - Continued

Blank (4E01047-BLK1) Continued Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 20:10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							QV-01
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							QL-02
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dibromomethane	0.0004	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							QV-01
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Hexachlorobutadiene	0.0009	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
m,p-Xylenes	0.0010	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Naphthalene	0.0006	U	0.0010	mg/kg wet							
n-Butyl Benzene	0.0009	U	0.0010	mg/kg wet							
n-Propyl Benzene	0.0006	U	0.0010	mg/kg wet							
o-Xylene	0.0005	U	0.0010	mg/kg wet							
sec-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
tert-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							QV-01
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.049*			*mg/kg wet*	*0.0500*		*97*	*71-126*			
Dibromofluoromethane	*0.056*			*mg/kg wet*	*0.0500*		*112*	*72-133*			
Toluene-d8	*0.048*			*mg/kg wet*	*0.0500*		*97*	*80-123*			

LCS (4E01047-BS1) Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 18:28

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.021		0.0010	mg/kg wet	0.0200		106	61-124			
Benzene	0.022		0.0010	mg/kg wet	0.0200		110	59-133			
Chlorobenzene	0.021		0.0010	mg/kg wet	0.0200		105	69-121			
Toluene	0.021		0.0010	mg/kg wet	0.0200		104	66-119			
Trichloroethene	0.022		0.0010	mg/kg wet	0.0200		108	71-122			
4-Bromofluorobenzene	*0.047*			*mg/kg wet*	*0.0500*		*94*	*71-126*			
Dibromofluoromethane	*0.055*			*mg/kg wet*	*0.0500*		*109*	*72-133*			
Toluene-d8	*0.046*			*mg/kg wet*	*0.0500*		*93*	*80-123*			

Matrix Spike (4E01047-MS1) Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 19:02

Source: A402354-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.020		0.0012	mg/kg dry	0.0241	0.0007 U	85	61-124			

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4E01047 - EPA 5030B_MS - Continued

Matrix Spike (4E01047-MS1) Continued Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 19:02

Source: A402354-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	0.023		0.0012	mg/kg dry	0.0241	0.0005 U	93	59-133			
Chlorobenzene	0.020		0.0012	mg/kg dry	0.0241	0.0006 U	84	69-121			
Toluene	0.021		0.0012	mg/kg dry	0.0241	0.0006 U	89	66-119			
Trichloroethene	0.022		0.0012	mg/kg dry	0.0241	0.0006 U	91	71-122			
4-Bromofluorobenzene	*0.057*			*mg/kg dry*	*0.0603*		*95*	*71-126*			
Dibromofluoromethane	*0.064*			*mg/kg dry*	*0.0603*		*106*	*72-133*			
Toluene-d8	*0.059*			*mg/kg dry*	*0.0603*		*97*	*80-123*			

Matrix Spike Dup (4E01047-MSD1) Prepared: 05/01/2014 15:55 Analyzed: 05/01/2014 19:36

Source: A402354-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.019		0.0012	mg/kg dry	0.0241	0.0007 U	78	61-124	8	23	
Benzene	0.020		0.0012	mg/kg dry	0.0241	0.0005 U	85	59-133	9	19	
Chlorobenzene	0.019		0.0012	mg/kg dry	0.0241	0.0006 U	77	69-121	9	18	
Toluene	0.019		0.0012	mg/kg dry	0.0241	0.0006 U	80	66-119	11	21	
Trichloroethene	0.020		0.0012	mg/kg dry	0.0241	0.0006 U	81	71-122	11	26	
4-Bromofluorobenzene	*0.059*			*mg/kg dry*	*0.0603*		*98*	*71-126*			
Dibromofluoromethane	*0.064*			*mg/kg dry*	*0.0603*		*107*	*72-133*			
Toluene-d8	*0.058*			*mg/kg dry*	*0.0603*		*97*	*80-123*			

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FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-11	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CDM Smith, Inc. (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: Lower Longview Lake Sediment
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM Smith	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Analyses: 8260B

Preservation (See Codes) (Combine as necessary)

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C405065

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers		8260B									Sample Comments
	#1	4-24-14	900	G	SE	5	X	X									
	#2	4-24-14	915	G	SE	5	X	X									
	#3	4-24-14	930	G	SE	5	X	X									
	#4	4-24-14	945	G	SE	5	X	X									
	#6	4-24-14	1000	G	SE	5	X	X									
	#5	4-24-14	1010	G	SE	5	X	X									
	Trip Blank	—	—	—	WA	2		X									

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 4-24-14 1120	Received By: [signature]	Date/Time: 4/24/14 1120
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: Red 2.2		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

CLIENT	City of Raleigh	COMPUTED BY / DATE	R.H.	06/30/14
PROJECT	Lower Longview Lake Evaluation	CHECKED BY / DATE	M.J.B	07/01/14
DETAIL	Lake Stormwater Treatment Capacity	REVISION NO. / DATE	-	-
PROJECT NO.	6679.103888	REVIEWED BY / DATE	-	-

Calculation Description: Lower Longview Lake Stormwater Treatment Capacity

1.0 Objective

Determine capacity and expected lifetime of Lower Longview Lake to reduce pollutants in influent runoff as a wet detention pond.

2.0 Procedure

Determine watershed percent impervious area and lake average depth, use table from BMP manual to determine surface area to drainage area ratio for permanent pool. Determine the available storage volume for the lake and compare it to the volume required for the standard level of treatment for the watershed. Then estimate an annual sedimentation rate and determine the time until the lake fills in and will require dredging to maintain this treatment level.

3.0 References / Data Sources

1.) NCDENR Stormwater BMP Manual, 2009
NCDENR Stormwater BMP Manual, Wet Detention Pond Chapter, 2009.
http://portal.ncdenr.org/c/document_library/get_file?uuid=ba49404a-b76e-4ed4-bf09-80a12ab39a29&groupId=38364

2.) Bathymetric Survey by McKim and Creed, May 2014 in CAD, file name: vt101-53440005.dwg

2.) GIS data from Wake County GIS Website
http://www.wakegov.com/gis/services/pages/data.aspx

4.0 Assumptions / Limitations

1.) Lake normal water surface elevation (or permanent pool) is 201.4 ft as indicated on survey.
2.) Hard bottom surveyed by M&C indicates the maximum depth and volume of sediment removal.

5.0 Calculations

5.1 Determine the lake volume for existing and dredged conditions

Determine the stage-storage relationship of the lake from the survey by McKim & Creed in May 2014.

(Refer to stage-storage data sheet, Attachment 1) Stage-Storage'!A1

Calculate the lake volume based on the stage-storage relationship.

The volume of Lower Longview Lake is 40.4 acre feet.

Calculate the average depth based on the total volume and surface area.

The average depth (total volume 40.4 acre ft/ 7.9 acres) = 5.1 ft

5.2 Determine the watershed percent impervious surface area

Delineate the upper and lower lake drainage areas using 2' topographic contours.

The lower lake drainage area is 707.8 acres with 324.1 in upper lake drainage area.

Calculate the impervious surface area of the watershed using GIS data.

The lower lake drainage area is 24.9% impervious surfaces including the upper lake drainage.

5.3 Determine the Surface Area to Drainage Area ratio for the lake

Using the average depth and percent impervious cover, determine the appropriate SA/DA ratio to achieve the standard 85% TSS removal.

Determine the SA/DA ratio for the existing lake.

The SA/DA ratio is 7.9 acres/707.8 acres = 0.011

The SA/DA ratios are reported as percentages, therefore 0.011 = 1.1%

5.4 Determine the required Surface Area to Drainage Area Ratio for the lake

Enter average depth of 5.1 ft and impervious percentage of 24.9% into Table 10-1 of the NCDENR BMP Manual (Refer to Attachment 2). Round the depth down to 5.0 ft and interpolate between impervious values.

SA to DA Table 10.1'!A1

The resulting SA/DA ratio is found by interpolating between 0.70 and 0.97 to obtain 0.84%.

5.5 Compare the Surface Area to Drainage Area Ratio for the lake to the Required Ratio

The existing surface area to drainage area ratio of 1.1% is greater than the required 0.84%.

5.6 Determine the average sedimentation rate of the lake

Determine the volume of sediment accumulated based on the survey.

The volume of accumulated sediment from the survey is the difference between the top of sediment and hard bottom surfaces equal to 12.6 acre ft.

Estimate the average sedimentation rate over the 69 years since the lake was constructed.

12.6 acre ft/ 69 years = 0.18 acre ft/year

This sedimentation rate is verified through comparison of regional sedimentation rates applied to the watershed area provided in the recent study by Petryniak and Loveless, 2013.

http://nicholasinstitute.duke.edu/sites/default/files/strategic-faculty-advisor-board/sedimentation_paper_a_petryniak_a_loveless_6-13_final.pdf

5.7 Determine the number of years until sediment removal maintenance is required

Determine the volume reduction that will require maintenance in the future based on the SA/DA ratio from the NCDENR BMP manual.

To account for the sedimentation of the lake at the point where the capacity equals the required capacity, the average depth will be approximately 3.0 ft. This 2 ft of sedimentation across the lake equates to 15.8 acre ft of sediment.

At a sedimentation rate of 0.18 acre ft/year, it will take an estimated (15.8 acre ft/0.18 acre ft/yr) = 88 years to reach the standard capacity. It will take another 13 years to reduce the volume by 10% (0.1 x 23.7 acft = 2.4 acft) at which time sediment removal would be required to maintain the treatment volume.

Therefore, lake capacity maintenance is not expected to be required for over 100 years (88+13=101). This does not account for the sediment removal occurring in the upper lake.

6.0 Conclusions

Lower Longview Lake has more than adequate capacity to treat the influent runoff from its watershed. Continued lake sedimentation will result in lake volume reduction that will take over 100 years until maintenance dredging is required.

Stage-Storage Tables used to determine the lake volumes for existing and dredged conditions

Lower Longview Lake Existing Condition

Stage/Storage Data for Lower Longview Lake from hydrographic survey conducted by McKim and Creed in May 2014.
Bottom of pond (top of sediment) contours in yellow and green linetypes on survey CAD file: vt101-53440005.dwg

Elevation (ft)	Stage (ft)	Area (sf)	Incr. Vol (cf)	Acc. Vol (cf)	Acc. Vol (ac-ft)
189	0	0			
190	1	1,763	882	882	0.02
191	2	7,956	4,860	5,741	0.13
192	3	17,845	12,901	18,642	0.43
193	4	42,799	30,322	48,964	1.12
194	5	89,006	65,903	114,866	2.64
195	6	137,394	113,200	228,066	5.24
196	7	177,023	157,209	385,275	8.84
197	8	210,859	193,941	579,216	13.3
198	9	235,702	223,281	802,496	18.4
199	10	261,496	248,599	1,051,095	24.1
200	11	286,908	274,202	1,325,297	30.4
201	12	318,471	302,690	1,627,987	37.4
201.4	12.4	344,725	132,639	1,760,626	**40.4**

Surface Area
7.91 acres

Water surface elevation

Lower Longview Lake Proposed Condition (Dredged)

Stage/Storage Data for Lower Longview Lake from hydrographic survey conducted by McKim and Creed in May 2014.
Hard bottom of pond (below sediment) contours in red and gray linetypes on survey CAD file: vt101-53440005.dwg

Elevation (ft)	Stage (ft)	Area (sf)	Incr. Vol (cf)	Acc. Vol (cf)	Acc. Vol (ac-ft)	
186	0	92				
187	1	1,596	844	844	0.02	
188	2	4,824	3,210	4,054	0.09	
189	3	9,854	7,339	11,393	0.26	
190	4	17,383	13,619	25,012	0.57	
191	5	47,592	32,488	57,499	1.32	
192	6	85,180	66,386	123,885	2.84	
193	7	134,071	109,626	233,511	5.36	
194	8	172,990	153,531	387,041	8.89	
195	9	200,877	186,934	573,975	13.2	
196	10	224,768	212,823	786,797	18.1	
197	11	245,657	235,213	1,022,010	23.5	
198	12	265,916	255,787	1,277,796	29.3	
199	13	287,320	276,618	1,554,414	35.7	
200	14	308,597	297,959	1,852,373	42.5	
201	15	330,858	319,728	2,172,100	49.9	
201.4	15.4	344,725	135,117	2,307,217	**53.0**	Water surface elevation

http://portal.ncdenr.org/c/document_library/get_file?uuid=ba49404a-b76e-4ed4-bf09-80a12ab39a29&groupId=38364

Table 10-1

Surface Area to Drainage Area Ratio for Permanent Pool Sizing to Achieve *85 Percent* TSS Pollutant Removal Efficiency in the *Mountain and Piedmont* Regions, Adapted from Driscoll, 1986

Percent Impervious Cover	Permanent Pool Average Depth (ft)						
	3.0	4.0	5.0	6.0	7.0	8.0	9.0
10%	0.59	0.49	0.43	0.35	0.31	0.29	0.26
20%	0.97	0.79	0.70	0.59	0.51	0.46	0.44
30%	1.34	1.08	0.97	0.83	0.70	0.64	0.62
40%	1.73	1.43	1.25	1.05	0.90	0.82	0.77
50%	2.06	1.73	1.50	1.30	1.09	1.00	0.92
60%	2.40	2.03	1.71	1.51	1.29	1.18	1.10
70%	2.88	2.40	2.07	1.79	1.54	1.35	1.26
80%	3.36	2.78	2.38	2.10	1.86	1.60	1.42
90%	3.74	3.10	2.66	2.34	2.11	1.83	1.67

Table 10-3

Surface Area to Drainage Area Ratio for Permanent Pool Sizing to Achieve *90 Percent* TSS Pollutant Removal Efficiency in the *Mountain and Piedmont* Regions, Adapted from Driscoll, 1986

Percent Impervious Cover	Permanent Pool Average Depth (ft)												
	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
10%	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
20%	1.5	1.3	1.1	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7
30%	1.9	1.8	1.7	1.5	1.4	1.4	1.3	1.1	1.0	1.0	1.0	0.9	0.9
40%	2.5	2.3	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.3	1.2	1.1
50%	3.0	2.8	2.5	2.3	2.0	1.9	1.9	1.8	1.7	1.6	1.6	1.5	1.5
60%	3.5	3.2	2.8	2.7	2.5	2.4	2.2	2.1	1.9	1.9	1.8	1.8	1.7
70%	4.0	3.7	3.3	3.1	2.8	2.7	2.5	2.4	2.2	2.1	2.0	2.0	1.9
80%	4.5	4.1	3.8	3.5	3.3	3.0	2.8	2.7	2.6	2.4	2.3	2.1	2.0
90%	5.0	4.5	4.0	3.8	3.5	3.3	3.0	2.9	2.8	2.7	2.6	2.5	2.4