



May 7, 2014

Mr. Tom Alworth  
Deputy Commissioner  
New York State Office of Parks, Recreation, and Historic Preservation  
625 Broadway, 2nd Floor  
Albany, New York 12238

**Re: Buffalo Harbor State Park Data Summary  
Erie County, Buffalo, New York**

Dear Mr. Alworth:

Attached please find the Buffalo Harbor State Park Preliminary Data Summary Report.

As you know this is a preliminary report and Ecology and Environment Engineering, P.C. will provide a final report in the September/October 2014 time frame.

Sincerely,

ECOLOGY AND ENVIRONMENT ENGINEERING, P.C.

Thomas R. Heins, P.E.  
Project Director

Attachments

## **Buffalo Harbor State Park Data Summary Erie County, Buffalo, New York**

Ecology and Environment Engineering, P.C. (EEEEPC), under contract to the New York State Office of Parks, Recreation, and Historic Preservation (ORPHP), conducted sampling of the Buffalo Harbor State Park (BHSP) property, located in Erie County, Buffalo, New York. The BHSP sampling area includes an existing beach and greenspace area (see Figure 1). This letter provides the analytical data obtained and the evaluation of these data.

Numerous investigations of the area were conducted beginning in the 1980s. Historical reports were reviewed and considered in the evaluation of the BHSP investigation area. Based on the review of those reports, a Sampling Analysis Plan (SAP) was prepared by EEEPC and submitted to OPRHP, the Erie County Department of Health (ECDOH), New York State Department of Health (NYSDOH), the New York State Department of Environmental Conservation (NYSDEC), Erie Canal Harbor Development Corporation (ECHDC), and United States Army Corps of Engineers for review and comment. Comments received from the agencies were incorporated into the SAP. Field activities were conducted during the fourth quarter of 2013.

### **Field Investigation**

The purpose of the sampling was to evaluate the environmental conditions at the BHSP investigation area. Environmental sampling for chemical and/or bacteriological parameters of the following media was performed:

- Surface water (see Table 1 and 2 for analytical results) - from beach embayment (including pre- and post-rain event);
- Storm water outfall (see Table 2 for analytical results ) – from two locations following a rain event;
- Sediment (see Table 3 for analytical results) - from beach embayment;
- Surface and subsurface soil (see Tables 4, 5, and 6 for analytical results) - from beach and greenspace (which consists of a former confined disposal facility [CDF]); and
- Groundwater (see Table 7 for analytical results) - from newly installed temporary groundwater monitor wells.

Figure 2 shows the sample locations, and Figures 3 and 4 show geologic cross sections of the area.

The following data was also collected during field activities:

- Groundwater elevation measurements (see Figure 5);

- Submerged aquatic vegetation beds in Lake Erie near the beach (see Figure 6); and
- Bathymetric survey of the beach embayment (see Figure 7).

## Evaluation

The sample results were reviewed with OPRHP, ECHDC, NYSDOH and NYSDEC. NYSDOH and NYSDEC provided an interpretation of the data and guidance for additional sampling and mitigation measures for the proposed future use of the property. The following table contains a summary of the review and discussions held with OPRHP, NYSDOH and NYSDEC:

Bathing Beach	Evaluation	Mitigation/Future Studies
Sediment	Does not represent an exposure concern.	No mitigation required.
Surface Water	<ul style="list-style-type: none"> <li>■ Chemical results do not represent an exposure concern.</li> <li>■ Bacteriological parameters - Sanitary Survey sampling required.</li> </ul>	<p>No mitigation required (chemical).</p> <p>Sanitary Survey.</p>
Surface water discharges/runoff	<ul style="list-style-type: none"> <li>■ Chemical results do not represent an exposure concern.</li> <li>■ Bacteriological parameters - Sanitary Survey sampling required at southern outfall.</li> </ul>	<p>No mitigation required (chemical).</p> <p>Sanitary Survey.</p>
Soil/fill	<ul style="list-style-type: none"> <li>■ Sand/Gravel chemical results do not represent an exposure concern.</li> <li>■ Non-native fill (beneath 0.5 to 4.0 feet of sand/gravel) represents an exposure concern for prolonged exposure.</li> <li>■ Further characterize fill/slag present beneath the surface sand and gravel layer.</li> </ul>	<ul style="list-style-type: none"> <li>■ Recommended cover and demarcation layer for bathing beach and maintain existing cover for non-bathing beach.</li> <li>■ 3-foot cover.</li> <li>■ Demarcation.</li> <li>■ Site Management Plan.</li> </ul> <p>Potential further mitigation pending fill characterization.</p>

<b>Bathing Beach</b>	<b>Evaluation</b>	<b>Mitigation/Future Studies</b>
Groundwater	<ul style="list-style-type: none"> <li>■ Shallow groundwater chemical results do not represent an exposure concern.</li> <li>■ Reduce potential for direct contact with groundwater.</li> </ul>	<ul style="list-style-type: none"> <li>■ 3-foot cover and demarcation layer placement.</li> <li>■ Continue to restrict all uses of groundwater in the Site Management Plan as is currently done.</li> </ul>
<b>Greenspace</b>		
Soil	<ul style="list-style-type: none"> <li>■ Current surface materials provide a barrier to dredge materials.</li> <li>■ Recommend improvement of existing cover material.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2-foot cover/buffer (total).</li> <li>■ Demarcation.</li> <li>■ Pavement where present or proposed serves as the cover.</li> <li>■ Soil Management Plan.</li> <li>■ Site Management Plan.</li> </ul>
Groundwater	<ul style="list-style-type: none"> <li>■ Should not be used.</li> </ul>	<ul style="list-style-type: none"> <li>■ Maintain existing cover.</li> <li>■ Clay dams in utility trenches.</li> <li>■ Continue to restrict all uses of groundwater in the Site Management Plan as is currently done.</li> </ul>

### Upcoming 2014 Activities

After conferring with OPRHP, ECHDC, NYSDOH and NYSDEC it was decided that additional testing was required during the summer months. The following activities are planned for 2014:

- Sanitary Survey – including daily, weekly, and monthly sampling of surface water and storm water in the project area during the spring/summer months for bacteriological parameters;
- Further characterization of fill/slag present beneath the surface sand and gravel layer on the beach; and
- Design of greenspace enhancements incorporating mitigation measures listed above with construction scheduled for fall 2014.

**Table 1 Summary of Analytical Results for Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-04	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-10	SD-11	SD-12	SD-13
Sample Name:	SD-01-WS	SD-02-WS	SD-03-WS	SD-04-WS	SD-04-WS-FD	SD-05-WS	SD-06-WS	SD-07-WS	SD-08-WS	SD-09-WS	SD-10-WS	SD-10-WS-FD	SD-11-WS	SD-12-WS	SD-13-WS
Depth <sup>1</sup> :	0 - 4.8 ft	0 - 4 ft	0 - 4 ft	0 - 3.1 ft	0 - 3.1 ft	0 - 1.9 ft	0 - 7.5 ft	0 - 8.5 ft	0 - 16 ft	0 - 9 ft	0 - 9 ft	0 - 9 ft	0 - 13 ft	1 - 9.6 ft	0 - 14 ft
Analyte	Date:	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13
<b>Bacteriological Parameters by multiple methods (cfu/100ml)</b>															
COLIFORM	690	720	610	650	610	680	920	680	510	770	460	490	600		340
ESCHERICHIA COLI (E. COLI)	20	30	10	30	40	20	90	10	10	20	10	10	50	40	20
FECAL COLIFORM	ND	10	10	10	ND	ND	30	ND	ND	20	20 J	40 J	ND	ND	20
ENTEROCOCCI	12 J	165 J	276 J	1203 J	1986 J	ND	ND	ND	ND	ND	1553 J	2420 J	980 J	4 J	1300 J
<b>General Analytical Chemistry by multiple methods (mg/L)</b>															
HARDNESS (AS CaCO3)	119	122	119	119	121	119	120	120	117	117	117	115	117	119	114
SULFATE (AS SO4)	32.8	32.8	33.7	33.3	33.1	33.6	32.8	32.9	51.9	32.9	33.1	32.7	33.3	50.5	32.4
OIL & GREASE, TOTAL REC	ND	ND	ND	3.6 J	1.6 J	ND	ND	3.4 J	3.6 J	3.8 J	ND	1.5 J	ND	1.5 J	ND
NITROGEN, KJELDAHL, TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND
NITROGEN, NITRATE-NITRITE	0.096	0.1	0.098	0.099	0.1	0.1 J	0.1 J	0.12	0.1	0.12	0.11	0.11	0.11	0.18	0.11
COD - CHEMICAL OXYGEN DEMAND	12.7	10.8	10.5	10.2	14.3	9 J	14.3	14.3	ND	ND	ND	ND	ND	11.2	ND
TOTAL DISSOLVED SOLIDS	154	176	169	165	164	199	171	160	165	162	145	152	164	173	162
PHOSPHORUS	ND	ND	ND	0.0077 J	0.0077 J	0.0058 J	0.011	0.017	0.0077 J	0.0058 J	0.024	ND	ND	ND	ND
BIOCHEMICAL OXYGEN DEMAND (BOD)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Metals by Method SW6010C (µg/L)</b>															
ALUMINUM	ND	ND	ND	ND	ND	ND	ND	590	ND	ND	ND	ND	ND	260	ND
ANTIMONY	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BARIUM	25	26	25	25	25	24	25	28	24	24	25	25	25	26	25
BERYLLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CADMIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CALCIUM	32900	33700	33000	33000	33500	32500	33100	33600	32500	32300	32200	31800	32400	32800	31600
CHROMIUM, TOTAL	ND	1.2 J	ND	ND	ND	ND	1.0 J	2.0 J	ND	ND	ND	ND	1.1 J	ND	ND
COBALT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
COPPER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 J
IRON	90	200	170	120	110	90	180	700	110	130	170	190	150	300	160
LEAD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAGNESIUM	8800	9100	8900	9000	9100	8800	9000	8800	8800	8700	8900	8700	8800	9000	8500
MANGANESE	6.7	11	9.4	7.5	7.2	6	12	32	7.6	8.7	9.5	9.7	8.8	17	11
NICKEL	ND	ND	ND	ND	ND	ND	ND	1.4 J	ND	1.3 J	ND	ND	ND	ND	1.3 J
POTASSIUM	1600	1700	1700	1700	1700	1600	1700	1800	1600	1600	1700	1600	1600	1600	1500
SELENIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SILVER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SODIUM	10100	10600	10100	10100	10400	10100	9900	10000	9900	9800	9800	9800	9800	9900	9600
THALLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VANADIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZINC	5.9 J	7.2 J	3.6 J	8.6 J	7.1 J	6.9 J	2.6 J	7.5 J	19	4.4 J	10	7.7 J	17	ND	12
<b>Mercury by Method SW7470A (µg/L)</b>															
MERCURY	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Cyanide by Method SW9012 (mg/L)</b>															
CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0056 J	ND	ND	ND	ND	ND
<b>Organochlorine Pesticides by Method SW8081B (µg/L)</b>															
ALDRIN	ND	ND	ND	ND	ND	ND	ND	0.0065 J	ND	ND	0.0065 J	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	0.0089 J	0.0085 J	0.0079 J	0.0092 J	ND	0.0074 J	0.0091 J	ND	0.015 J	ND	0.009 J	0.0099 J	0.018 J	0.0092 J	0.0079 J
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	0.081	0.094	0.064	0.057 J	0.18 J	0.064	0.016 J	0.07	0.28	0.012 J	0.072	0.031 J	0.22	ND	0.11
DIELDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN KETONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)	0.0075 J	0.0073 J	0.0068 J	0.0073 J	0.0066 J	0.0075 J	0.0074 J	0.0086 J	0.0068 J	0.0073 J	0.0078 J	0.0077 J	0.0072 J	0.0079 J	0.0087 J
GAMMA CHLORDANE	ND	0.037 J	0.042 J	ND	0.027 J	ND	ND	ND	0.026 J	ND	ND	ND	0.032 J	0.022 J	ND
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR	ND	ND	ND	ND	ND	ND	ND	ND	0.015 J	0.017 J	ND	ND	ND	ND	ND
P,P'-DDD	ND	0.011 J	0.012 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01 J	ND
P,P'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012 J	ND	ND
P,P'-DDT	ND	ND	ND	0.015 J	ND	0.016 J	0.015 J	0.015 J	0.014 J	ND	ND	0.014 J	0.017 J	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Table 1 Summary of Analytical Results for Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-04	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-10	SD-11	SD-12	SD-13
Sample Name:	SD-01-WS	SD-02-WS	SD-03-WS	SD-04-WS	SD-04-WS-FD	SD-05-WS	SD-06-WS	SD-07-WS	SD-08-WS	SD-09-WS	SD-10-WS	SD-10-WS-FD	SD-11-WS	SD-12-WS	SD-13-WS
Depth <sup>1</sup> :	0 - 4.8 ft	0 - 4 ft	0 - 4 ft	0 - 3.1 ft	0 - 3.1 ft	0 - 1.9 ft	0 - 7.5 ft	0 - 8.5 ft	0 - 16 ft	0 - 9 ft	0 - 9 ft	0 - 9 ft	0 - 13 ft	1 - 9.6 ft	0 - 14 ft
Analyte	Date:	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/22/13	10/25/13
<b>Polychlorinated Biphenyls by Method SW8082A (µg/L)</b>															
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (µg/L)</b>															
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Table 1 Summary of Analytical Results for Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-04	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-10	SD-11	SD-12	SD-13
Sample Name:	SD-01-WS	SD-02-WS	SD-03-WS	SD-04-WS	SD-04-WS-FD	SD-05-WS	SD-06-WS	SD-07-WS	SD-08-WS	SD-09-WS	SD-10-WS	SD-10-WS-FD	SD-11-WS	SD-12-WS	SD-13-WS
Depth <sup>1</sup> :	0 - 4.8 ft	0 - 4 ft	0 - 4 ft	0 - 3.1 ft	0 - 3.1 ft	0 - 1.9 ft	0 - 7.5 ft	0 - 8.5 ft	0 - 16 ft	0 - 9 ft	0 - 9 ft	0 - 9 ft	0 - 13 ft	1 - 9.6 ft	0 - 14 ft
Analyte	Date:	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/22/13	10/25/13
XYLENES, TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Semivolatile Organics by Method SW8270D (µg/L)</b>															
2,4,5-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLPHENOL (O-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLORO BENZIDINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETOPHENONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZYL BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
BIPHENYL (DIPHENYL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3 J	ND
CAPROLACTAM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBAZOLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZ(A,H)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZOFURAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ISOPHORONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NITROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Table 1 Summary of Analytical Results for Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

	Location ID:	SD-01	SD-02	SD-03	SD-04	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-10	SD-11	SD-12	SD-13
	Sample Name:	SD-01-WS	SD-02-WS	SD-03-WS	SD-04-WS	SD-04-WS-FD	SD-05-WS	SD-06-WS	SD-07-WS	SD-08-WS	SD-09-WS	SD-10-WS	SD-10-WS-FD	SD-11-WS	SD-12-WS	SD-13-WS
	Depth <sup>1</sup> :	0 - 4.8 ft	0 - 4 ft	0 - 4 ft	0 - 3.1 ft	0 - 3.1 ft	0 - 1.9 ft	0 - 7.5 ft	0 - 8.5 ft	0 - 16 ft	0 - 9 ft	0 - 9 ft	0 - 9 ft	0 - 13 ft	1 - 9.6 ft	0 - 14 ft
Analyte	Date:	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/25/13	10/22/13	10/25/13
PENTACHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Field Measurements</b>																
CONDUCTIVITY (µS/cm)		347.5	294.1	288.3	286.4		286.4	288.5	286.7	287.6	286.9	285.7		285.2	896.2	283.7
PH (standard units)		5.21	5.82	6.62	6.83		7.12	7.77	7.48	7.23	7.81	7.56		7.41	6.63	7.74
TEMPERATURE (°C)		9.5	10.0	9.8	10.0		10.3	9.9	10.3	10.2	10.4	10.6		10.5	11.2	10.6
TURBIDITY (ntu)		3.10	4.38	3.70	2.95		2.87	3.31	3.78	3.27	3.52	5.65		4.11	5.18	4.20

**Notes:**

<sup>1</sup> Sample portions tested for bacteriological parameters were collected as grab samples from a

**Key:**

- "-FD" denotes field duplicate sample
- °C = degrees Celsius
- µg/L = micrograms per liter
- µS/cm = microSiemens per centimeter
- cfu/100ml = colony forming units per 100 milliliters
- J = estimated value
- mg/L = milligrams per liter
- ND = not detected
- ntu = Nephelometric turbidity units
- PCBs = polychlorinated biphenyls

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	Location ID:	SW-01	SW-01	SW-02	SW-03	WST-01	WST-02
	Sample Name:	SW-01-20131031	SW-01-20131031-FD	SW-02-20131031	SW-03-20131031	WST-01-20131031	WST-02-20131031
	Depth:	1 - 1 ft	1 - 1 ft	1 - 1 ft	1 - 1 ft		
	Date:	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
<b>Bacteriological Parameters by multiple methods (cfu/100ml)</b>							
ESCHERICHIA COLI (E. COLI)		40	50	10	20	40	2100
FECAL COLIFORM		ND	10	ND	10	ND	2000
ENTEROCOCCI		4	4	3	5	3	1732
<b>General Analytical Chemistry by multiple methods (mg/L)</b>							
HARDNESS (AS CaCO3)		117	120	117	119	124	37.9
SULFATE (AS SO4)		33.6	33.6	33.2	32.8	37.2	ND
OIL & GREASE, TOTAL REC		ND	ND	ND	ND	ND	ND
NITROGEN, KJELDAHL, TOTAL		0.38	0.49	0.23 J	0.43	0.46 J	0.62
NITROGEN, NITRATE-NITRITE		0.079	0.078	0.078	0.075	0.081	0.34
COD - CHEMICAL OXYGEN DEMAND		11.5	7.7 J	9 J	6.7 J	13.4	32
TOTAL DISSOLVED SOLIDS		135	136	146	139	183	65
PHOSPHORUS		ND	ND	0.0058 J	ND	ND	0.039
BIOCHEMICAL OXYGEN DEMAND (BOD)		ND	ND	ND	3.1	ND	3.6
<b>Metals by Method SW6010C (µg/L)</b>							
ALUMINUM		76 J	74 J	75 J	66 J	77 J	340
ANTIMONY		ND	ND	ND	ND	ND	ND
ARSENIC		ND	ND	ND	ND	ND	ND
BARIUM		23	23	23	23	33	17
BERYLLIUM		ND	ND	ND	ND	ND	ND
CADMIUM		ND	ND	ND	ND	ND	ND
CALCIUM		32800	33700	32800	33400	35700	14400
CHROMIUM, TOTAL		ND	ND	ND	ND	ND	5.3
COBALT		ND	ND	ND	ND	ND	ND
COPPER		ND	ND	ND	ND	ND	ND
IRON		88	83	82	74	71	500
LEAD		ND	ND	ND	ND	ND	3.4 J
MAGNESIUM		8500	8700	8500	8700	8500	470
MANGANESE		6.5	6.4	6.3	6.6	8.6	21
NICKEL		ND	ND	ND	ND	ND	ND
POTASSIUM		1600	1600	1400	1400	2200	610
SELENIUM		ND	ND	ND	ND	ND	ND
SILVER		ND	ND	ND	ND	ND	ND
SODIUM		11300	11300	10100	10500	15900	5400
THALLIUM		ND	ND	ND	ND	ND	ND
VANADIUM		ND	ND	ND	ND	ND	1.7 J
ZINC		6.8 J	2.7 J	2.2 J	2 J	7.9 J	43
<b>Mercury by Method SW7470A (mg/L)</b>							
MERCURY		ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	Location ID: SW-01	SW-01	SW-02	SW-03	WST-01	WST-02
	Sample Name: SW-01-20131031	SW-01-20131031-FD	SW-02-20131031	SW-03-20131031	WST-01-20131031	WST-02-20131031
	Depth: 1 - 1 ft	1 - 1 ft	1 - 1 ft	1 - 1 ft		
	Date: 10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
<b>Cyanide by Method SW9012 (mg/L)</b>						
CYANIDE	ND	ND	ND	ND	ND	ND
<b>Organochlorine Pesticides by Method SW8081B (µg/L)</b>						
ALDRIN	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	0.0085 J	ND	0.0074 J	ND	0.0076 J	0.01 J
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	0.069
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND	ND
ENDRIN KETONE	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)	ND	ND	ND	ND	0.0067 J	0.011 J
GAMMA CHLORDANE	ND	0.013 J	0.014 J	0.015 J	ND	0.011 J
HEPTACHLOR	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	ND
METHOXYCHLOR	ND	ND	ND	ND	ND	ND
P,P'-DDD	ND	ND	ND	ND	ND	ND
P,P'-DDE	ND	ND	ND	ND	ND	ND
P,P'-DDT	ND	ND	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls by Method SW8082A (µg/L)</b>						
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (µg/L)</b>						
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	SW-01 SW-01-20131031 1 - 1 ft 10/31/13	SW-01 SW-01-20131031-FD 1 - 1 ft 10/31/13	SW-02 SW-02-20131031 1 - 1 ft 10/31/13	SW-03 SW-03-20131031 1 - 1 ft 10/31/13	WST-01 WST-01-20131031 10/31/13	WST-02 WST-02-20131031 10/31/13
1,2,4-TRICHLOROBENZENE		ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE		ND	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE		ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE		ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)		ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)		ND	ND	ND	ND	ND	ND
2-HEXANONE		ND	ND	ND	ND	ND	ND
ACETONE		ND	ND	ND	ND	ND	10
BENZENE		ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND
BROMOFORM		ND	ND	ND	ND	ND	ND
BROMOMETHANE		ND	ND	ND	ND	ND	ND
CARBON DISULFIDE		ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND	ND
CHLOROBENZENE		ND	ND	ND	ND	ND	ND
CHLOROETHANE		ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND
CHLOROMETHANE		ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND
CYCLOHEXANE		ND	ND	ND	ND	ND	ND
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE		ND	ND	ND	ND	ND	ND
ETHYLBENZENE		ND	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)		ND	ND	ND	ND	ND	ND
METHYL ACETATE		ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)		ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE		ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE		ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE		ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE		ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	SW-01 SW-01-20131031 1 - 1 ft 10/31/13	SW-01 SW-01-20131031-FD 1 - 1 ft 10/31/13	SW-02 SW-02-20131031 1 - 1 ft 10/31/13	SW-03 SW-03-20131031 1 - 1 ft 10/31/13	WST-01 WST-01-20131031 10/31/13	WST-02 WST-02-20131031 10/31/13
STYRENE		ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE		ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER		ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)		ND	ND	ND	ND	ND	ND
TOLUENE		ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)		ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND
XYLENES, TOTAL		ND	ND	ND	ND	ND	ND
<b>Semivolatile Organics by Method SW8270D (µg/L)</b>							
2,4,5-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL		ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL		ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL		ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE		ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE		ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE		ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL		ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE		ND	ND	ND	ND	ND	ND
2-METHYLPHENOL (O-CRESOL)		ND	ND	ND	ND	ND	ND
2-NITROANILINE		ND	ND	ND	ND	ND	ND
2-NITROPHENOL		ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE		ND	ND	ND	ND	ND	ND
3-NITROANILINE		ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL		ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL		ND	ND	ND	ND	ND	ND
4-CHLOROANILINE		ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)		ND	ND	ND	ND	ND	ND
4-NITROANILINE		ND	ND	ND	ND	ND	ND
4-NITROPHENOL		ND	ND	ND	ND	ND	ND
ACENAPHTHENE		ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE		ND	ND	ND	ND	ND	ND
ACETOPHENONE		ND	ND	ND	ND	ND	ND
ANTHRACENE		ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

	Location ID:	SW-01	SW-01	SW-02	SW-03	WST-01	WST-02
	Sample Name:	SW-01-20131031	SW-01-20131031-FD	SW-02-20131031	SW-03-20131031	WST-01-20131031	WST-02-20131031
	Depth:	1 - 1 ft	1 - 1 ft	1 - 1 ft	1 - 1 ft		
Analyte	Date:	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
ATRAZINE		ND	ND	ND	ND	ND	ND
BENZALDEHYDE		ND	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE		ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE		ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE		ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE		ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE		ND	ND	ND	ND	ND	ND
BENZYL BUTYL PHTHALATE		ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)		ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE		ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER		ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE		ND	ND	ND	ND	ND	ND
CAPROLACTAM		ND	ND	ND	ND	ND	ND
CARBAZOLE		ND	ND	ND	ND	ND	ND
CHRYSENE		ND	ND	ND	ND	ND	ND
DIBENZ(A,H)ANTHRACENE		ND	ND	ND	ND	ND	ND
DIBENZOFURAN		ND	ND	ND	ND	ND	ND
DIETHYL PHTHALATE		ND	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE		ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE		ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE		ND	ND	ND	ND	ND	ND
FLUORANTHENE		ND	ND	ND	ND	ND	ND
FLUORENE		ND	ND	ND	ND	ND	ND
HEXACHLOROBENZENE		ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE		ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE		ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE		ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE		ND	ND	ND	ND	ND	ND
ISOPHORONE		ND	ND	ND	ND	ND	ND
NAPHTHALENE		ND	ND	ND	ND	ND	ND
NITROBENZENE		ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE		ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE		ND	ND	ND	ND	ND	ND
PENTACHLOROPHENOL		ND	ND	ND	ND	ND	ND
PHENANTHRENE		ND	ND	ND	ND	ND	ND
PHENOL		ND	ND	ND	ND	ND	ND
PYRENE		ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 2 Summary of Analytical Results for Storm Water and Near-Shore Surface Water Samples  
Buffalo Harbor State Park, Buffalo, New York**

	Location ID:	SW-01	SW-01	SW-02	SW-03	WST-01	WST-02
	Sample Name:	SW-01-20131031	SW-01-20131031-FD	SW-02-20131031	SW-03-20131031	WST-01-20131031	WST-02-20131031
	Depth:	1 - 1 ft	1 - 1 ft	1 - 1 ft	1 - 1 ft		
Analyte	Date:	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
<b>Field Measurements</b>							
CONDUCTIVITY (µS/cm)		292.5		294.5	285.2	300.0	104.7
PH (standard units)		8.70		8.73	8.77	8.01	8.76
TEMPERATURE (°C)		13.8		13.9	14.0	12.0	14.7
TURBIDITY (ntu)		2.71		3.13	2.83	4.28	13.9

**Key:**

"-FD" denotes field duplicate sample

°C = degrees Celsius

µg/L = micrograms per liter

µS/cm = microSiemens per centimeter

cfu/100ml = colony forming units per 100 milliliters

J = Estimated value

mg/L = milligrams per liter

ND = Not detected

ntu = Nephelometric turbidity units

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-05	SD-06	SD-06	SD-07	SD-07	SD-08	SD-08	SD-09	
Sample Name:	SD-01-Z0	SD-02-Z0	SD-03-Z0	FD	SD-04-Z0	SD-05-Z0	FD	SD-06-Z0	SD-06-Z2	SD-07-Z0	SD-07-Z2	SD-08-Z0	SD-08-Z3	SD-09-Z0	
Depth:	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	2 - 3 ft	0 - 1 ft	2 - 3 ft	0 - 2 ft	3 - 4 ft	0 - 1 ft	
Analyte	Date:	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/28/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (mg/kg)</b>															
OIL & GREASE, TOTAL REC	440	481	320	190	220	248	ND	389	ND	292	ND	ND	ND	273	
<b>TOC by Lloyd Kahn Method (mg/kg)</b>															
TOTAL ORGANIC CARBON	2430	3070	2710	3090	2220	6180	3260	15400	29200	67500	3490	20900	19500	22900	
<b>Metals by Method SW6010C (mg/kg)</b>															
ALUMINUM	1730 J	2120 J	1960	1970	1910	2050	1630	5070	9820	7080	1800	5080 J	6280	4700	
ANTIMONY	ND	ND	ND	ND	ND	0.47 J	ND								
ARSENIC	2.8	2.3	2.9	3.2	2.9	5.3 J	2.4 J	6.9	4.9	6.1	2.7	4.3	6.8	3.9	
BARIUM	8.3	10.6	8.2	8.2	8.7	19.3 J	8.3 J	37.3	64.1	99.2	9.4	38.3	44.6	33.5	
BERYLLIUM	0.14 J	0.16 J	0.14 J	0.14 J	0.12 J	0.21	0.12 J	0.42	0.53	0.48	0.15 J	0.34	0.41	0.29	
CADMIUM	0.063 J	0.066 J	0.042 J	0.046 J	ND	0.062 J	0.044 J	0.42	0.17 J	0.59	0.065 J	0.35	0.46	0.46	
CALCIUM	12100	14100	13100	14400	11300	16100	12400	36900	34000	29600	12000	24700	28500	45000	
CHROMIUM, TOTAL	4.9	5.6	3.7	5.3	3.1	7.2 J	3 J	19.3	14.8	21.3	4.3	20.9 J	22.4	11.4	
COBALT	2.4	2.4	2.6	2.6	2.5	1.9	2.2	5.4	12.4	5.3	2.8	4.9 J	6.2	4.8	
COPPER	6.6	5.7	5.6	6.8	5.3	6	4.4	19.7	27.4	33.1	4.2	20.2 J	26.3	13	
IRON	7820	6750 J	6500	6620	5600	11200	5380	16900	25000	14400	8240	13400	16200	11500	
LEAD	5.7	5.3	4.4	4.6	3.6	22.8 J	3.3 J	45.9	16.5	15.3	4.6	27.8 J	50.1	13.2	
MAGNESIUM	3190	2990	2720	2850	3050	2750	3310	5490	11900	4260	3190	3870 J	6530	6590	
MANGANESE	134 J	145 J	113	140	114	260	124	388	438	264	107	289	442	216	
NICKEL	6	6.6	7.1	7.1	6.5	5.6	5.5	15.7	33.5	19.6	6.2	15.5 J	19	13.1	
POTASSIUM	331	392	406	410	400	266	344	905	1830	1110	400	776 J	1100	1110	
SELENIUM	ND	ND	ND	ND	ND	ND	ND	0.65 J	0.73 J	2 J	ND	0.78 J	0.5 J	1.1 J	
SILVER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SODIUM	70.2 J	78.9 J	191	207	138 J	106 J	124 J	101 J	139 J	82.4 J	67.5 J	71.4 J	93.9 J	111 J	
THALLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VANADIUM	10.9	8.1	7.5	8.6	5.5	10.1	5.4	13.6	16.4	16.7	11.6	12.8 J	14.4	10	
ZINC	29.8	27.4	25.4	23.9	19.7	63.2 J	21.2 J	147	72	93	23.2	100	173	110	
<b>Mercury by Method SW7471B (mg/kg)</b>															
MERCURY	ND	0.0087 J	ND	ND	ND	ND	ND	0.066	0.011 J	0.065	ND	0.06	0.07	0.029	
<b>Cyanide by Method SW9012 (mg/kg)</b>															
CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>															
ALDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002 J	ND	ND	ND	0.0021 J	
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	0.00047 J	ND	0.0087 J	ND	ND	ND	ND	0.0014 J							
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DIELDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0012 J	ND	ND	0.0033 J	ND	
ENDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ENDRIN KETONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-05	SD-06	SD-06	SD-07	SD-07	SD-08	SD-08	SD-09	
Sample Name:	SD-01-Z0	SD-02-Z0	SD-03-Z0	FD	SD-04-Z0	SD-05-Z0	FD	SD-06-Z0	SD-06-Z2	SD-07-Z0	SD-07-Z2	SD-08-Z0	SD-08-Z3	SD-09-Z0	
Depth:	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	2 - 3 ft	0 - 1 ft	2 - 3 ft	0 - 2 ft	3 - 4 ft	0 - 1 ft	
Analyte	Date:	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/28/13
GAMMA BHC (LINDANE)	ND	0.00089 J	ND	ND	0.00057 J	0.0012 J	0.00058 J	ND	ND	0.0012 J	ND	0.0042 J	0.0029 J	0.00079 J	
GAMMA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
METHOXYCHLOR	ND	0.0017 J	ND	ND	ND	ND	ND	0.015 J	ND	0.0022 J	ND	ND	ND	0.0012 J	
P,P'-DDD	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0016 J	ND	ND	ND	ND	
P,P'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0018 J	ND	ND	ND	0.0012 J	
P,P'-DDT	0.00066 J	0.00068 J	ND	0.0068 J	0.00068 J	0.00063 J	0.00051 J	ND	ND	0.0028 J	ND	0.0027 J	0.004 J	0.0019 J	
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>PCBs by Method SW8082A (mg/kg)</b>															
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>Volatile Organics by Method SW8260C (mg/kg)</b>															
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ACETONE	ND	ND	ND	ND	ND	ND	ND	0.027 J	ND	0.21	ND	0.047 J	0.0086 J	0.041	
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-05	SD-06	SD-06	SD-07	SD-07	SD-08	SD-08	SD-09	
Sample Name:	SD-01-Z0	SD-02-Z0	SD-03-Z0	FD	SD-04-Z0	SD-05-Z0	FD	SD-06-Z0	SD-06-Z2	SD-07-Z0	SD-07-Z2	SD-08-Z0	SD-08-Z3	SD-09-Z0	
Depth:	0 - 1 ft	2 - 3 ft	0 - 1 ft	2 - 3 ft	0 - 2 ft	3 - 4 ft	0 - 1 ft								
Analyte	Date:	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/28/13
CARBON TETRACHLORIDE	ND														
CHLOROBENZENE	ND														
CHLOROETHANE	ND														
CHLOROFORM	ND	ND	ND	ND	ND	0.0023 J	ND								
CHLOROMETHANE	ND														
CIS-1,2-DICHLOROETHYLENE	ND														
CIS-1,3-DICHLOROPROPENE	ND														
CYCLOHEXANE	ND														
DIBROMOCHLOROMETHANE	ND														
DICHLORODIFLUOROMETHANE	ND														
ETHYLBENZENE	ND														
ISOPROPYLBENZENE (CUMENE)	ND														
METHYL ACETATE	ND														
METHYL ETHYL KETONE (2-BUTANONE)	ND	0.058	ND	ND	ND	ND									
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ND														
METHYLCYCLOHEXANE	ND														
METHYLENE CHLORIDE	ND														
N-BUTYLBENZENE	ND														
N-PROPYLBENZENE	ND														
SEC-BUTYLBENZENE	ND														
STYRENE	ND														
T-BUTYLBENZENE	ND														
TERT-BUTYL METHYL ETHER	ND														
TETRACHLOROETHYLENE (PCE)	ND														
TOLUENE	ND														
TRANS-1,2-DICHLOROETHENE	ND														
TRANS-1,3-DICHLOROPROPENE	ND														
TRICHLOROETHYLENE (TCE)	ND														
TRICHLOROFLUOROMETHANE	ND														
VINYL CHLORIDE	ND														
XYLENES, TOTAL	ND														
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>															
2,4,5-TRICHLOROPHENOL	ND														
2,4,6-TRICHLOROPHENOL	ND														
2,4-DICHLOROPHENOL	ND														
2,4-DIMETHYLPHENOL	ND														
2,4-DINITROPHENOL	ND														
2,4-DINITROTOLUENE	ND														
2,6-DINITROTOLUENE	ND														
2-CHLORONAPHTHALENE	ND														
2-CHLOROPHENOL	ND														
2-METHYLNAPHTHALENE	ND	0.019 J	ND	ND	ND	0.017 J	0.018 J	ND							
2-METHYLPHENOL (O-CRESOL)	ND														

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

	Location ID:	SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-05	SD-06	SD-06	SD-07	SD-07	SD-08	SD-08	SD-09
	Sample Name:	SD-01-Z0	SD-02-Z0	SD-03-Z0	FD	SD-04-Z0	SD-05-Z0	FD	SD-06-Z0	SD-06-Z2	SD-07-Z0	SD-07-Z2	SD-08-Z0	SD-08-Z3	SD-09-Z0
	Depth:	0 - 1 ft	2 - 3 ft	0 - 1 ft	2 - 3 ft	0 - 2 ft	3 - 4 ft	0 - 1 ft							
Analyte	Date:	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/28/13
2-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	0.092 J	ND	ND	ND	0.048 J	0.043 J	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	ND	ND	ND	0.055 J	0.06 J	ND
ACETOPHENONE	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	0.39 J	ND	0.12 J	ND	0.14 J	0.15 J	0.046 J
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	0.11 J	ND	0.07 J	ND	ND	ND	0.048 J
BENZO(A)ANTHRACENE	0.026 J	0.074 J	ND	ND	ND	0.044 J	ND	ND	1.2 J	ND	0.31 J	0.037 J	0.44 J	0.45 J	0.18 J
BENZO(A)PYRENE	0.024 J	0.053 J	ND	ND	ND	0.032 J	ND	ND	1.2 J	ND	0.27 J	0.059 J	0.43 J	0.42 J	0.17 J
BENZO(B)FLUORANTHENE	0.032 J	0.095 J	ND	ND	ND	0.063 J	ND	ND	1.6 J	ND	0.34 J	ND	0.52 J	0.54 J	0.26 J
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND	0.021 J	ND	ND	0.82 J	ND	0.16 J	0.013 J	0.22 J	0.16 J	0.13 J
BENZO(K)FLUORANTHENE	0.019 J	0.09 J	ND	ND	ND	0.02 J	ND	ND	0.71 J	ND	0.18 J	ND	0.25 J	0.28 J	0.094 J
BENZYL BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CAPROLACTAM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBAZOLE	ND	ND	ND	ND	ND	ND	ND	ND	0.073 J	ND	ND	ND	0.056 J	0.035 J	0.012 J
CHRYSENE	0.044 J	0.084 J	ND	ND	ND	0.053 J	ND	ND	1.4 J	ND	0.33 J	0.039 J	0.47 J	0.49 J	0.2 J
DIBENZ(A,H)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.065 J	ND	0.061 J	0.058 J	0.044 J
DIBENZOFURAN	ND	ND	ND	ND	ND	ND	ND	ND	0.058 J	ND	ND	ND	0.037 J	0.033 J	ND
DIETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.084 J	0.21 J	ND	ND	0.018 J	0.093 J	0.018 J	0.018 J	2.7 J	ND	0.56 J	0.059 J	0.91 J	0.89 J	0.35 J
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	ND	ND	0.065 J	0.062 J	ND
HEXACHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-05	SD-06	SD-06	SD-07	SD-07	SD-08	SD-08	SD-09
Sample Name:	SD-01-Z0	SD-02-Z0	SD-03-Z0	FD	SD-04-Z0	SD-05-Z0	FD	SD-06-Z0	SD-06-Z2	SD-07-Z0	SD-07-Z2	SD-08-Z0	SD-08-Z3	SD-09-Z0
Depth:	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	2 - 3 ft	0 - 1 ft	2 - 3 ft	0 - 2 ft	3 - 4 ft	0 - 1 ft
Date:	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/28/13	10/28/13	10/28/13	10/28/13	10/29/13	10/29/13	10/28/13
HEXACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	0.015 J	0.03 J	ND	ND	ND	0.024 J	ND	0.76 J	ND	0.15 J	0.016 J	0.24 J	0.18 J	0.11 J
ISOPHORONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	0.11 J	ND	ND	ND	0.062 J	0.078 J	ND
NITROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	0.032 J	0.056 J	ND	ND	ND	0.057 J	ND	1.1 J	ND	0.24 J	0.051 J	0.5 J	0.48 J	0.15 J
PHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	0.062 J	0.14 J	ND	ND	ND	0.07 J	0.016 J	2 J	ND	0.43 J	0.048 J	0.66 J	0.63 J	0.27 J

**Key:**  
 J = estimated value  
 mg/kg = milligrams per kilogram  
 ND = not detected  
 PCBs = polychlorinated biphenyl

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-09	SD-09	SD-10	SD-10	SD-10	SD-11	SD-11	SD-12	SD-12	SD-12	SD-13	SD-13
Sample Name:	FD	SD-09-Z3	SD-10-Z0	SD-10-Z2	SD-10-Z4	SD-11-Z0	SD-11-Z1	SD-12-Z0	SD-12-Z3	SD-12-Z6	SD-13-Z0	SD-13-Z1
Depth:	0 - 1 ft	3 - 3.5 ft	0 - 1 ft	2 - 3 ft	4 - 5 ft	0 - 1 ft	1 - 2.5 ft	0 - 1 ft	3 - 4 ft	6 - 7.3 ft	0 - 1 ft	1 - 2 ft
Analyte	Date:	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (m</b>												
OIL & GREASE, TOTAL REC	216	ND	330	229	212	ND	268	280	208	ND	236	ND
<b>TOC by Lloyd Kahn Method (mg/kg)</b>												
TOTAL ORGANIC CARBON	21000	40000	20800	14300	12000	12000	17100	23900	15900	25900	22600	13200
<b>Metals by Method SW6010C (mg/kg)</b>												
ALUMINUM	4940	5880	7300	7380	3600	10200	8350	7870	8410	5480	6080	8940
ANTIMONY	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	4.1	7	8.9	5.3	3.6	8.7	7.9	8	8.1	5.2	5.1	4.4
BARIUM	35.5	52.7	58.6	53	24.9	68.5	57.9	56.4	76.2	41.3	38.4	51.8
BERYLLIUM	0.32	0.37	0.61	0.61	0.21 J	0.53	0.43	0.66	0.82	0.41	0.37	0.46
CADMIUM	0.22	0.19 J	0.43	0.17 J	0.12 J	0.12 J	0.079 J	0.67	0.33	0.17 J	0.23	0.12 J
CALCIUM	52700	28000	30500	23000	20700	29400	22400	25800	27400	19800	18800	35800
CHROMIUM, TOTAL	13.3	9	22.6	8.7	5.5	16.1	12.7	41.6	16	7.5	15.5	13.4
COBALT	5.5	6.8	6	5.2	3.9	10.7	8.5	7.1	5.8	4.9	6.5	9.5
COPPER	14.4	18.5	24	17.4	10	26	21	26.3	23	16.3	20	25.7
IRON	12900	14300	23600	13700	8630	20700	16700	25800	19900	11100	14800	19200
LEAD	15.1	8.8	57.2	23.8	7.3	13.6	10.5	72.3	46.4	16.3	17.7	11.3
MAGNESIUM	9500	8900	5000	5350	6140	11100	8210	5460	6330	4900	6410	13200
MANGANESE	270	251	629	454	149	356	285	799	635	296	327	376
NICKEL	14.4	18.1	17	14	10.3	28	22.8	20.4	15.7	13.8	18	25.2
POTASSIUM	1210	1240	1020	1060	635	2000	2490	1150	1070	746	970	1640
SELENIUM	1 J	0.94 J	ND	0.56 J	ND	0.71 J	ND	1 J	0.53 J	ND	0.53 J	ND
SILVER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SODIUM	120 J	130 J	90.1 J	121 J	68.8 J	137 J	116 J	89.8 J	130 J	90 J	73.3 J	130 J
THALLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VANADIUM	11.5	11.9	14.7	9.8	8	18	14.6	18.1	13.9	8.5	13.2	16
ZINC	62	39.5	239	57.2	35.8	63.2	50.2	315	186	44	70.6	55.8
<b>Mercury by Method SW7471B (mg/kg)</b>												
MERCURY	0.032	0.016 J	0.15	0.03	ND	0.011 J	0.012 J	0.16	0.096	0.032	0.04	ND
<b>Cyanide by Method SW9012 (mg/kg)</b>												
CYANIDE	ND	0.75 J	0.65 J	0.52 J	ND	ND	ND	ND	ND	ND	ND	ND
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>												
ALDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	0.0017 J	0.00098 J	ND	ND	ND	ND	ND	0.013 J	ND	ND	ND	ND
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	0.0019 J	0.0012 J	ND	ND	ND	ND	ND	ND	0.0079 J	ND	ND	ND
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN KETONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0012 J

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-09	SD-09	SD-10	SD-10	SD-10	SD-11	SD-11	SD-12	SD-12	SD-12	SD-13	SD-13
Sample Name:	FD	SD-09-Z3	SD-10-Z0	SD-10-Z2	SD-10-Z4	SD-11-Z0	SD-11-Z1	SD-12-Z0	SD-12-Z3	SD-12-Z6	SD-13-Z0	SD-13-Z1
Depth:	0 - 1 ft	3 - 3.5 ft	0 - 1 ft	2 - 3 ft	4 - 5 ft	0 - 1 ft	1 - 2.5 ft	0 - 1 ft	3 - 4 ft	6 - 7.3 ft	0 - 1 ft	1 - 2 ft
Analyte	Date:	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13
GAMMA BHC (LINDANE)	ND	ND	ND	0.012 J	ND	0.00058 J	ND	ND	ND	0.0013 J	ND	ND
GAMMA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR	0.0012 J	ND	0.0078 J	0.0063 J	0.00055 J	ND	ND	0.009 J	0.0068 J	0.00061 J	ND	ND
P,P'-DDD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P,P'-DDE	0.0012 J	ND	ND	ND	ND	ND	ND	0.0075 J	ND	0.00072 J	0.0041 J	ND
P,P'-DDT	0.0019 J	ND	0.0093 J	0.0095 J	ND	ND	0.00056 J	0.0097 J	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>PCBs by Method SW8082A (mg/kg)</b>												
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (mg/kg)</b>												
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	0.032	0.19	0.021 J	0.0071 J	0.013 J	0.0088 J	ND	0.029	ND	0.22	0.066	ND
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	0.0037 J	ND	ND	ND

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SD-09	SD-09	SD-10	SD-10	SD-10	SD-11	SD-11	SD-12	SD-12	SD-12	SD-13	SD-13
Sample Name:	FD	SD-09-Z3	SD-10-Z0	SD-10-Z2	SD-10-Z4	SD-11-Z0	SD-11-Z1	SD-12-Z0	SD-12-Z3	SD-12-Z6	SD-13-Z0	SD-13-Z1
Depth:	0 - 1 ft	3 - 3.5 ft	0 - 1 ft	2 - 3 ft	4 - 5 ft	0 - 1 ft	1 - 2.5 ft	0 - 1 ft	3 - 4 ft	6 - 7.3 ft	0 - 1 ft	1 - 2 ft
Analyte	Date:	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)	ND	0.051	ND	ND	ND	ND	ND	ND	ND	0.06	0.021 J	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>												
2,4,5-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE	ND	ND	0.024 J	ND	ND	ND	ND	0.036 J	0.037 J	ND	ND	ND
2-METHYLPHENOL (O-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

	Location ID:	SD-09	SD-09	SD-10	SD-10	SD-10	SD-11	SD-11	SD-12	SD-12	SD-12	SD-13	SD-13
	Sample Name:	FD	SD-09-Z3	SD-10-Z0	SD-10-Z2	SD-10-Z4	SD-11-Z0	SD-11-Z1	SD-12-Z0	SD-12-Z3	SD-12-Z6	SD-13-Z0	SD-13-Z1
	Depth:	0 - 1 ft	3 - 3.5 ft	0 - 1 ft	2 - 3 ft	4 - 5 ft	0 - 1 ft	1 - 2.5 ft	0 - 1 ft	3 - 4 ft	6 - 7.3 ft	0 - 1 ft	1 - 2 ft
Analyte	Date:	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13
2-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	ND	ND	0.078 J	0.012 J	0.011 J	ND	ND	0.076 J	0.034 J	0.0094 J	0.03 J	ND	ND
ACENAPHTHYLENE	ND	ND	0.12 J	ND	ND	ND	ND	0.21 J	0.084 J	ND	0.04 J	ND	ND
ACETOPHENONE	ND	ND	0.21 J	0.1 J	0.061 J	ND	ND	0.3 J	0.27 J	0.11 J	0.1 J	0.029 J	ND
ANTHRACENE	0.038 J	ND	0.3 J	0.066 J	ND	ND	ND	0.38 J	0.24 J	0.045 J	0.095 J	ND	ND
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE	ND	ND	0.059 J	ND	ND	ND	ND	0.072 J	0.042 J	0.041 J	0.065 J	ND	ND
BENZO(A)ANTHRACENE	0.13 J	ND	1.1 J	0.3 J	0.022 J	ND	ND	1.3 J	0.9 J	0.17 J	0.36 J	ND	ND
BENZO(A)PYRENE	0.12 J	ND	1.2 J	0.26 J	0.16 J	ND	ND	1.3 J	0.94 J	0.17 J	0.31 J	ND	ND
BENZO(B)FLUORANTHENE	0.19 J	ND	1.6 J	0.35 J	ND	ND	ND	1.7 J	1.2 J	0.22 J	0.44 J	ND	ND
BENZO(G,H,I)PERYLENE	0.081 J	ND	0.43 J	0.15 J	0.012 J	ND	ND	0.44 J	0.37 J	0.1 J	0.16 J	ND	ND
BENZO(K)FLUORANTHENE	0.066 J	ND	0.79 J	0.15 J	ND	ND	ND	1.2 J	0.54 J	0.092 J	0.17 J	ND	ND
BENZYL BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)	ND	ND	ND	ND	ND	ND	ND	ND	0.023 J	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CAPROLACTAM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBAZOLE	ND	ND	0.069 J	ND	ND	ND	ND	0.042 J	0.06 J	ND	ND	ND	ND
CHRYSENE	0.14 J	ND	1.2 J	0.32 J	0.032 J	ND	ND	1.4 J	1 J	0.22 J	0.37 J	ND	ND
DIBENZ(A,H)ANTHRACENE	0.027 J	ND	0.14 J	0.052 J	ND	ND	ND	0.15 J	0.11 J	0.026 J	0.049 J	ND	ND
DIBENZOFURAN	ND	ND	0.064 J	ND	0.01 J	ND	ND	0.081 J	0.058 J	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.26 J	ND	1.9 J	0.5 J	0.037 J	ND	ND	2.2 J	1.5 J	0.28 J	0.56 J	ND	ND
FLUORENE	ND	ND	0.11 J	ND	ND	ND	ND	0.22 J	0.12 J	ND	0.043 J	ND	ND
HEXACHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 3 Summary of Analytical Results for Sediment Samples  
Buffalo Harbor State Park, Buffalo, NY**

	Location ID:	SD-09	SD-09	SD-10	SD-10	SD-10	SD-11	SD-11	SD-12	SD-12	SD-12	SD-13	SD-13
	Sample Name:	FD	SD-09-Z3	SD-10-Z0	SD-10-Z2	SD-10-Z4	SD-11-Z0	SD-11-Z1	SD-12-Z0	SD-12-Z3	SD-12-Z6	SD-13-Z0	SD-13-Z1
	Depth:	0 - 1 ft	3 - 3.5 ft	0 - 1 ft	2 - 3 ft	4 - 5 ft	0 - 1 ft	1 - 2.5 ft	0 - 1 ft	3 - 4 ft	6 - 7.3 ft	0 - 1 ft	1 - 2 ft
Analyte	Date:	10/28/13	10/28/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13	10/29/13
HEXACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE		0.081 J	ND	0.45 J	0.14 J	ND	ND	ND	0.52 J	0.36 J	0.1 J	0.14 J	ND
ISOPHORONE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE		ND	ND	0.19 J	0.037 J	ND	ND	ND	0.35 J	0.2 J	ND	0.071 J	ND
NITROBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENTACHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE		0.12 J	ND	0.78 J	0.21 J	0.026 J	ND	ND	1.2 J	0.71 J	0.14 J	0.23 J	ND
PHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE		0.2 J	ND	1.3 J	0.41 J	0.039 J	ND	ND	1.5 J	1.1 J	0.25 J	0.46 J	ND

**Key:**  
 J = estimated value  
 mg/kg = milligrams per kilogram  
 ND = not detected  
 PCBs = polychlorinated biphenyl

Key at end of table.

**Table 4 Summary of Analytical Results for Surface Soil Samples  
Buffalo Harbor State Park, Buffalo, NY**

	Location ID:	SS-01	SS-02	SS-03	SS-04	SS-05	SS-05	SS-06
	Sample Name:	SS-01-Z0	SS-02-Z0	SS-03-Z0	SS-04-Z0	SS-05-Z0	SS-05-Z0-FD	SS-06-Z0
	Depth:	0 - 0.5 ft	0 - 0.5 ft					
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (mg/kg)</b>								
OIL & GREASE, TOTAL REC		1290	604	580	459	482	759	951
<b>Metals by Method SW6010C (mg/kg)</b>								
ALUMINUM		2350 J	3030	4120 J	6550	3170	4440	4010
ANTIMONY		ND	ND	ND	ND	ND	ND	ND
ARSENIC		2.5	2.7	4.6	6.8	4.7	3.5	4.8
BARIUM		20.8 J	17.2	33 J-	69.6	29.9	19.4	31.5
BERYLLIUM		0.15 J	0.18 J	0.19 J	0.61	0.2 J	0.2 J	0.37
CADMIUM		0.036 J	ND	0.25	ND	0.053 J	ND	0.087 J
CALCIUM		72900 J	37900	142000 J	41900	103000 J	46700 J	75200
CHROMIUM, TOTAL		6.4 J	20.8	36.4 J	58.9	5.6	6.5	9.8
COBALT		1.4	2.1	3.5	2.6	2.8	3.3	3
COPPER		6.2 J	8.6	12.5 J	20.5	9.4 J	21.8 J	11.5
IRON		9190 J	8900	15500	32300	8710	12400	10800
LEAD		10.9	5.4	12.4	35.5	10.6	8.9	17.2
MAGNESIUM		23300 J	4320	4810 J	5690	14100 J	3330 J	10400
MANGANESE		483 J	880	1990	3320	433	470	593
NICKEL		4.5 J	6.2	9.9	10.4	8.8	10.5	8.9
POTASSIUM		324	385	489	685	454	426	525
SELENIUM		ND	ND	ND	2.2 J	ND	ND	ND
SILVER		ND	ND	ND	ND	ND	ND	ND
SODIUM		ND	123 J	178	277	115 J	86 J	138
THALLIUM		ND	ND	ND	ND	ND	ND	ND
VANADIUM		7.1 J	9.6	27.1	43	7	8.5	9.4
ZINC		39.1 J	28.9	69.9 J	71.3	41	51.8	48.5
<b>Mercury by Method SW7471B (mg/kg)</b>								
MERCURY		0.039	ND	0.029	0.0096 J	ND	ND	ND
<b>Cyanide by Method SW9012 (mg/kg)</b>								
CYANIDE		0.54 J	ND	ND	ND	ND	0.52 J	ND
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>								
ALDRIN		ND	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)		ND	ND	ND	ND	ND	ND	ND
ALPHA CHLORDANE		ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN		ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)		ND	ND	ND	ND	ND	ND	ND
BETA ENDOSULFAN		ND	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)		ND	0.0041 J	ND	0.0042 J	ND	ND	ND
DIELDRIN		ND	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE		ND	ND	ND	ND	ND	ND	ND
ENDRIN		ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 4 Summary of Analytical Results for Surface Soil Samples  
Buffalo Harbor State Park, Buffalo, NY**

	Location ID:	SS-01	SS-02	SS-03	SS-04	SS-05	SS-05	SS-06
	Sample Name:	SS-01-Z0	SS-02-Z0	SS-03-Z0	SS-04-Z0	SS-05-Z0	SS-05-Z0-FD	SS-06-Z0
	Depth:	0 - 0.5 ft	0 - 0.5 ft					
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
ENDRIN ALDEHYDE		ND	ND	ND	ND	ND	ND	ND
ENDRIN KETONE		ND	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)		ND	ND	ND	ND	ND	ND	ND
GAMMA CHLORDANE		ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR		ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE		ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR		ND	ND	ND	ND	ND	ND	ND
P,P'-DDD		ND	ND	ND	ND	ND	ND	ND
P,P'-DDE		ND	ND	ND	ND	ND	ND	ND
P,P'-DDT		ND	ND	0.0029 J	0.0034 J	0.0028 J	0.0042 J	0.0027 J
TOXAPHENE		ND	ND	ND	ND	ND	ND	ND
<b>PCBs by Method SW8082A (mg/kg)</b>								
PCB-1016 (AROCLOR 1016)		ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)		ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)		ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)		ND	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)		ND	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)		ND	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)		ND	ND	ND	ND	ND	ND	ND
Total PCBs		ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (mg/kg)</b>								
1,1,1-TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE		ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)		ND	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)		ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 4 Summary of Analytical Results for Surface Soil Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID:	SS-01	SS-02	SS-03	SS-04	SS-05	SS-05	SS-06
	Sample Name:	SS-01-Z0	SS-02-Z0	SS-03-Z0	SS-04-Z0	SS-05-Z0	SS-05-Z0-FD	SS-06-Z0
	Depth:	0 - 0.5 ft	0 - 0.5 ft					
	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
2-HEXANONE		ND	ND	ND	ND	ND	ND	ND
ACETONE		ND	ND	ND	ND	ND	ND	ND
BENZENE		ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
BROMOFORM		ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE		ND	ND	ND	ND	ND	ND	ND
CARBON DISULFIDE		ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE		ND	ND	ND	ND	0.0037 J	0.0042 J	0.0024 J
CHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE		ND	ND	ND	ND	ND	ND	ND
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE		ND	ND	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)		ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE		ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)		ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE		ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE		ND	ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND
STYRENE		ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER		ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)		ND	ND	ND	ND	ND	ND	ND
TOLUENE		ND	ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)		ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL		ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 4 Summary of Analytical Results for Surface Soil Samples  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

	Location ID:	SS-01	SS-02	SS-03	SS-04	SS-05	SS-05	SS-06
	Sample Name:	SS-01-Z0	SS-02-Z0	SS-03-Z0	SS-04-Z0	SS-05-Z0	SS-05-Z0-FD	SS-06-Z0
	Depth:	0 - 0.5 ft	0 - 0.5 ft					
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>								
2,4,5-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL		ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL		ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE		ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE		ND	ND	ND	ND	ND	ND	ND
2-METHYLPHENOL (O-CRESOL)		ND	ND	ND	ND	ND	ND	ND
2-NITROANILINE		ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL		ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE		ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE		ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL		ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL		ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE		ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)		ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE		ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL		ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE		ND	ND	ND	ND	ND	0.061 J+	0.02 J
ACENAPHTHYLENE		ND	ND	ND	ND	ND	ND	ND
ACETOPHENONE		0.22 J	0.15 J	ND	ND	ND	ND	ND
ANTHRACENE		0.014 J	ND	ND	ND	0.061 J	0.13 J+	0.074 J
ATRAZINE		ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE		ND	ND	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE		0.058 J	0.048 J	0.1 J+	0.24 J+	0.22 J	0.29 J+	0.33 J
BENZO(A)PYRENE		0.05 J	0.04 J	0.074 J+	0.23 J+	0.15 J	0.21 J+	0.28 J
BENZO(B)FLUORANTHENE		0.08 J	0.063 J	0.099 J+	0.35 J+	0.23 J	0.32 J+	0.42
BENZO(G,H,I)PERYLENE		0.032 J	0.036 J	0.06 J+	0.15 J+	0.079 J	0.1 J+	0.098 J
BENZO(K)FLUORANTHENE		0.044 J	0.03 J	0.064 J+	0.18 J+	0.1 J	0.14 J+	0.19 J
BENZYL BUTYL PHTHALATE		ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)		ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE		ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 4 Summary of Analytical Results for Surface Soil Samples  
Buffalo Harbor State Park, Buffalo, NY**

	Location ID:	SS-01	SS-02	SS-03	SS-04	SS-05	SS-05	SS-06
	Sample Name:	SS-01-Z0	SS-02-Z0	SS-03-Z0	SS-04-Z0	SS-05-Z0	SS-05-Z0-FD	SS-06-Z0
	Depth:	0 - 0.5 ft	0 - 0.5 ft					
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER		ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE		ND	1.2	ND	ND	ND	ND	ND
CAPROLACTAM		ND	ND	ND	ND	ND	ND	ND
CARBAZOLE		ND	ND	ND	ND	ND	0.08 J+	0.035 J
CHRYSENE		0.063 J	0.055 J	0.11 J+	0.3 J+	0.22 J	0.33 J+	0.35
DIBENZ(A,H)ANTHRACENE		ND	0.013 J	0.027 J+	0.059 J+	0.036 J	0.045 J+	0.049 J
DIBENZOFURAN		ND	ND	ND	ND	ND	0.05 J+	ND
DIETHYL PHTHALATE		ND	ND	ND	ND	ND	ND	0.046 J
DIMETHYL PHTHALATE		ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE		ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE		ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE		0.13 J	0.083 J	0.18 J+	0.38 J+	0.43	0.69 J+	0.66
FLUORENE		ND	ND	ND	ND	ND	0.068 J+	ND
HEXACHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE		ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE		ND	ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE		0.028 J	0.029 J	0.056 J+	0.18 J+	0.084 J	0.12 J+	0.11 J
ISOPHORONE		ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE		ND	ND	ND	ND	ND	ND	ND
NITROBENZENE		ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE		ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE		ND	ND	ND	ND	ND	ND	ND
PENTACHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE		0.076 J	0.046 J	0.089 J+	0.13 J+	0.34 J	0.59 J+	0.35
PHENOL		ND	ND	ND	ND	ND	ND	ND
PYRENE		0.082 J	0.062 J	0.13 J+	0.33 J+	0.33 J	0.5 J+	0.46

**Key:**

- "-FD" denotes field duplicate sample
- J = estimated value
- J- = estimated value with low bias
- J+ = estimated value with high bias
- mg/kg = milligrams per kilogram
- ND = not detected

Key at end of table.

**Table 5 Summary of Analytical Results for Subsurface Soil Samples from Soil Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID:	SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-06	SB-06	SB-07
	Sample Name:	SB-01-Z0	SB-01-Z2	SB-02-Z0	SB-02-Z2	FD	SB-03-Z0	SB-03-Z2	SB-04-Z0	SB-04-Z2	FD	SB-05-Z0	SB-05-Z2	SB-06-Z0	SB-06-Z2	SB-07-Z18
	Depth:	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	18 - 19 ft
	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (mg/kg)</b>																
OIL & GREASE, TOTAL REC		1410	ND	747	296	588	ND	304	1020	494	403	480	289	1290	402	1400
<b>Metals by Method SW6010C (mg/kg)</b>																
ALUMINUM		4080	8700	3440	5790	6790	7320	5950	4440	6310	4000	5400	6570 J	6320	10800	10700
ANTIMONY		ND	ND	ND	ND	ND	1 J	0.57 J	ND	ND	ND	ND	ND	1 J	1.3 J	3.4 J
ARSENIC		3.4	7.2	3.3	7.2	6.6	17.6	6.3	5.9	3.9 J	41.2 J	6.1	7.4	14.5	12	131
BARIUM		33.2	97.5	37.6	82.4	51.9	60.1	51.7	32.7	38.5	30.4	38.3	51.8 J	75	94.3	105
BERYLLIUM		0.29	0.29	0.43	0.3	0.37	0.46	0.26	0.26	0.22 J	0.15 J	0.3	0.29	0.41	0.47	0.66
CADMIUM		0.036 J	ND	ND	0.14 J	0.2 J	1.6	ND	0.035 J	ND	ND	0.04 J	ND	ND	ND	19.2
CALCIUM		47500	88300	79700	71200	52700	32900	40700	34800	41000	31900	43000	30800	47900	44800	15000
CHROMIUM, TOTAL		8.7	399	49.9	214 J	74.1 J	72.8	31.7	8.8	9	6.8	18.9	20.3	97.3	38.5	658
COBALT		2.2	2.8	1.8	2.3	2.2	2.9	2.5	3.8	2.2	2	4.8	3.1	7.4	6.7	15.6
COPPER		10.3	17.9	22.3	235 J	46.5 J	43.4	28.6	29	10	9.1	20.6	34.6 J	53.6	76.6	579
IRON		12900	51800	12800	32800	21000	21500	25200	13100	16800	26000	17500	28500	108000	70700	81900
LEAD		11.8	24	57.7	71	61.9	347	55	19	24.2 J	1920 J	17	28.3 J	62.6	60.1	2260
MAGNESIUM		3290	13200	7990	7260	5690	5580	3840	4270	3670	3000	6540	2800 J	5990	2910	6040
MANGANESE		1060	13100	1560	6160 J	2590 J	2660	2170	581	957	556	1040	1390	4960	2690	965
NICKEL		6.6	48.5	11.1	9.8	17.7	25.5	7.7	12.5	5.6 J	4.9 J	13.8	9	33.2	20.8	81.9
POTASSIUM		399	542	351	415	681	921	668	515	714	468	693	779	607	1180	1050
SELENIUM		0.74 J	7.3	0.47 J	3.5 J	1.7 J	1.7 J	1.3 J	ND	0.97 J	ND	ND	1 J	3.3 J	1.4 J	3.6 J
SILVER		ND	ND	ND	0.26 J	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND	0.42 J	5.4
SODIUM		109 J	474	171	385	478	562	525	128 J	286	181	143 J	228	267	589	139 J
THALLIUM		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.57 J
VANADIUM		10	150	21	112 J	30.7 J	28.9	22.1	9.5	14	11.3	18.6	26.3 J	118	42.9	28.3
ZINC		43.7	39.6	144	123	90.7	276	59.2	57.4	24.5	22.8	54.2	100 J	106	77.3	3450
<b>Mercury by Method SW7471B (mg/kg)</b>																
MERCURY		ND	0.033	0.0095 J	0.029	0.026	0.024	0.028	ND	ND	ND	ND	0.016 J	0.023	0.01 J	11.9
<b>Cyanide by Method SW9012 (mg/kg)</b>																
CYANIDE		ND	ND	0.61 J	ND	ND	0.64 J	ND	ND	ND	ND	ND	0.51 J	1.5	0.79 J	3.8
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>																
ALDRIN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA CHLORDANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.00093 J	ND	ND	ND	0.018 J
BETA ENDOSULFAN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025 J
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)		ND	0.0051 J	ND	0.0009 J	0.00093 J	ND	0.00095 J	ND	ND	ND	0.00091 J	0.00088 J	ND	0.00098 J	0.095 J
DIELDRIN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.072 J
ENDOSULFAN SULFATE		ND	ND	ND	0.00092 J	ND	ND	0.0015 J	ND	ND	ND	ND	ND	ND	0.0019 J	0.02 J
ENDRIN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN KETONE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)		ND	0.0032 J	ND	ND	ND	ND	0.00078 J	ND	0.00066 J	0.00067 J	0.00056 J	0.00067 J	ND	0.00062 J	ND
GAMMA CHLORDANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.022 J
HEPTACHLOR EPOXIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 5 Summary of Analytical Results for Subsurface Soil Samples from Soil Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-06	SB-06	SB-07
Sample Name:	SB-01-Z0	SB-01-Z2	SB-02-Z0	SB-02-Z2	FD	SB-03-Z0	SB-03-Z2	SB-04-Z0	SB-04-Z2	FD	SB-05-Z0	SB-05-Z2	SB-06-Z0	SB-06-Z2	SB-07-Z18
Depth:	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	18 - 19 ft
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
METHOXYCHLOR	ND	ND	ND	0.002 J	0.0018 J	ND	ND	ND	ND	ND	ND	ND	0.021 J	0.0012 J	ND
P,P'-DDD	ND	0.00097 J	ND	ND	ND	ND	ND	0.11							
P,P'-DDE	ND	ND	ND	ND	ND	0.0044 J	ND	ND	0.001 J	0.0011 J	ND	ND	ND	ND	ND
P,P'-DDT	ND	0.005 J	ND	0.0018 J	ND	0.0068 J	ND	ND	ND	ND	ND	ND	ND	ND	0.089 J
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND								
<b>PCBs by Method SW8082A (mg/kg)</b>															
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND								
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND								
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND								
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	ND								
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND	5.7 J								
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND	3.6 J								
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND	0.82 J								
Total PCBs	ND	ND	ND	ND	ND	ND	ND								
<b>Volatile Organics by Method SW8260C (mg/kg)</b>															
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND								
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	1.3 J								
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	5.6								
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND								
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND								
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	0.39								
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND								
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	ND	ND	ND	1.6								
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	1.4								
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	5.7								
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND								
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND								
ACETONE	ND	ND	ND	ND	ND	ND	ND								
BENZENE	ND	ND	ND	ND	ND	ND	4.9								
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND								
BROMOFORM	ND	ND	ND	ND	ND	ND	ND								
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND								
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND								
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND								
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	280								
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND								
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND								
CHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND								

Key at end of table.

**Table 5 Summary of Analytical Results for Subsurface Soil Samples from Soil Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID:	SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-06	SB-06	SB-07
Sample Name:	SB-01-Z0	SB-01-Z2	SB-02-Z0	SB-02-Z2	FD	SB-03-Z0	SB-03-Z2	SB-04-Z0	SB-04-Z2	FD	SB-05-Z0	SB-05-Z2	SB-06-Z0	SB-06-Z2	SB-07-Z18	
Depth:	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	18 - 19 ft	
Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	
CIS-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CYCLOHEXANE	ND	0.0014 J	ND	2.2												
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.9	
ISOPROPYLBENZENE (CUMENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	
METHYL ACETATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
METHYL ETHYL KETONE (2-BUTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
METHYLCYCLOHEXANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 J	
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	
N-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.78	
SEC-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
T-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TERT-BUTYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TETRACHLOROETHYLENE (PCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
TRANS-1,2-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROFUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
XYLENES, TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>																
2,4,5-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE	ND	2.3 J+	ND	0.076 J	0.089 J+	0.034 J	0.39 J	ND	ND	0.051 J	ND	0.15 J+	0.11 J	ND	14 J+	
2-METHYLPHENOL (O-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	0.55 J+	ND	3.7 J+												
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 5 Summary of Analytical Results for Subsurface Soil Samples from Soil Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID:	SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-06	SB-06	SB-07
Sample Name:	SB-01-Z0	SB-01-Z2	SB-02-Z0	SB-02-Z2	FD	SB-03-Z0	SB-03-Z2	SB-04-Z0	SB-04-Z2	FD	SB-05-Z0	SB-05-Z2	SB-06-Z0	SB-06-Z2	SB-07-Z18	
Depth:	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	18 - 19 ft	
Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-CHLOROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-METHYLPHENOL (P-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ACENAPHTHENE	ND	2.5 J+	0.02 J	0.096 J	0.22 J+	0.23 J	1.1 J	0.073 J	0.038 J	0.022 J	ND	0.12 J+	0.45	ND	15 J+	
ACENAPHTHYLENE	ND	0.27 J+	ND	0.067 J	0.076 J+	ND	ND	0.037 J	ND	ND	ND	ND	0.1 J	0.082 J	1.6 J+	
ACETOPHENONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ANTHRACENE	ND	5.5 J+	0.12 J	0.23 J	0.5 J+	0.2 J	2.5	0.19 J	0.072 J	0.048 J	ND	0.39 J+	1	0.24 J	34 J+	
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BENZALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BENZO(A)ANTHRACENE	0.07 J	1.8 J+	0.32 J	0.64	0.98 J+	0.99	4.6	0.42	ND	0.08 J	0.15 J	0.56 J+	2.6	0.78	11 J+	
BENZO(A)PYRENE	0.046 J	1.2 J+	0.21 J	0.43	0.62 J+	0.7	3	0.31 J	0.077 J	ND	0.11 J	0.39 J+	1.7	0.51	7.1 J+	
BENZO(B)FLUORANTHENE	0.09 J	1.8 J+	0.36	0.75	1.1 J+	1.3	4.6	0.45	0.12 J	ND	0.22 J	0.62 J+	3.1	0.94	11 J+	
BENZO(G,H,I)PERYLENE	ND	0.16 J+	0.071 J	0.16 J	0.2 J+	0.27 J	1.6 J	0.091 J	ND	ND	0.043 J	0.11 J+	0.51	0.21 J	0.92 J+	
BENZO(K)FLUORANTHENE	0.029 J	1.2 J+	0.16 J	0.36 J	0.38 J+	0.57	2.3	0.2 J	0.059 J	ND	0.087 J	0.26 J+	1.1	0.42	4.5 J+	
BENZYL BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J+	ND	ND	ND	
BIPHENYL (DIPHENYL)	ND	0.21 J+	ND	0.026 J	0.037 J+	ND	0.14 J	ND	0.025 J	ND	ND	ND	0.033 J	ND	1.2 J+	
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BIS(2-ETHYLHEXYL) PHTHALATE	ND	0.82 J+	ND	0.11 J	ND	4.6 J+										
CAPROLACTAM	ND	7.1 J+	ND	41 J+												
CARBAZOLE	ND	0.4 J+	ND	0.11 J	0.24 J+	0.19 J	1.6 J	0.086 J	0.027 J	ND	ND	0.15 J+	0.49	ND	2.4 J+	
CHRYSENE	0.056 J	1.8 J+	0.35 J	0.74	0.93 J+	1.1	5	0.44	0.12 J	0.078 J	0.18 J	0.57 J+	2.7	0.82	12 J+	
DIBENZ(A,H)ANTHRACENE	ND	ND	ND	ND	ND	ND	0.57 J	0.043 J	ND	ND	ND	0.058 J+	ND	ND	ND	
DIBENZOFURAN	ND	1.5 J+	ND	0.11 J	0.23 J+	0.11 J	1.4 J	0.039 J	0.049 J	0.033 J	ND	0.15 J+	0.34 J	ND	8.9 J+	
DIETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
FLUORANTHENE	0.098 J	6 J+	0.69	1.3	2 J+	2.1	11	0.97	0.24 J	0.13 J	0.22 J	1.3 J+	5.9	1.6	35 J+	
FLUORENE	ND	5 J+	0.056 J	0.14 J	0.28 J+	0.12 J	1.8 J	0.087 J	0.086 J	ND	ND	0.17 J+	0.6	ND	22 J+	
HEXACHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
HEXACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
INDENO(1,2,3-C,D)PYRENE	0.024 J	0.18 J+	0.092 J	0.2 J	0.24 J+	0.33 J	1.7 J	0.12 J	0.025 J	ND	0.055 J	0.15 J+	0.66	0.29 J	1.2 J+	
ISOPHORONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NAPHTHALENE	ND	1.9 J+	ND	0.13 J	0.2 J+	0.11 J	1.1 J	ND	0.17 J	ND	ND	0.14 J+	0.25 J	0.058 J	11 J+	
NITROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-NITROSODIPHENYLAMINE	ND	6 J+	ND	33 J+												

Key at end of table.

**Table 5 Summary of Analytical Results for Subsurface Soil Samples from Soil Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

	Location ID:	SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-06	SB-06	SB-07
	Sample Name:	SB-01-Z0	SB-01-Z2	SB-02-Z0	SB-02-Z2	FD	SB-03-Z0	SB-03-Z2	SB-04-Z0	SB-04-Z2	FD	SB-05-Z0	SB-05-Z2	SB-06-Z0	SB-06-Z2	SB-07-Z18
	Depth:	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	18 - 19 ft
Analyte	Date:	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13	10/23/13
PENTACHLOROPHENOL		ND														
PHENANTHRENE		ND	8.7 J+	0.51	0.92	1.8 J+	1.6	13	0.77	0.31 J	0.23 J	0.098 J	1.4 J+	4.6	0.75	53 J+
PHENOL		ND														
PYRENE		0.067 J	3.3 J+	0.46	0.92	1.5 J+	1.5	8.6	0.65	0.17 J	0.1 J	0.17 J	0.92 J+	4	1.1	20 J+

**Key:**

- J = estimated value
- J- = estimated value with low bias
- N = tentative identification
- mg/kg = milligrams per kilogram
- ND = not detected
- PCBs = polychlorinated biphenyl

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03
Sample Name:	MW-01-Z0	MW-01-Z3	MW-01-Z9	MW-01-Z17	MW-02-Z0	MW-02-Z7	MW-02-Z11	MW-02-Z13	MW-03-Z0	MW-03-Z7	MW-03-Z9	MW-03-Z12
Depth:	0 - 2 ft	3 - 4 ft	9 - 10 ft	17 - 19 ft	0 - 2 ft	7 - 8 ft	11 - 12 ft	13 - 14 ft	0 - 2 ft	7 - 8 ft	9 - 10 ft	12 - 14 ft
Date:	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/22/13	10/21/13	10/21/13	10/21/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (mg/kg)</b>												
OIL & GREASE, TOTAL REC	ND	ND	ND	734	550	8410	486	481	ND	476	564	1650 J
<b>Metals by Method SW6010C (mg/kg)</b>												
ALUMINUM	19400	8070	12000	12800 J	13700	7710	3190	4280	6560	11000	14100	14400
ANTIMONY	ND	ND	ND	ND	ND	ND	ND	2.9 J	ND	ND	ND	ND
ARSENIC	5.9	2.9	18.9	34.9 J	8.7	6.7	6.1	15.8	3.1	27.9	48.8	38.2
BARIUM	170	68.7	108	173 J	123	95.5	29.5	58.7	57.7	108	135	154
BERYLLIUM	3.1	0.44	0.95	0.81	1.8	0.64	0.24	0.29	0.44	0.79	0.81	0.84
CADMIUM	0.31	0.14 J	2.8	10.1	0.53	0.43	0.35	1.1	0.16 J	3	5.4	7.9
CALCIUM	83900	127000	29800	35200	97000	83700	11300	16400	65400	36600	27200	26300
CHROMIUM, TOTAL	12.3	9.9	118	207 J	21.3	9.7	20.7	65.2	10.2	150	209	232
COBALT	5	5.9	10.4	12.2	6.3	4.3	3.9	6	5.5	11.1	14.5	13.8
COPPER	19.9	12.4	118	197 J	30.2	22	21.8	66.1	13.1	119	191	220
IRON	17300	12500	28300	35800	19300	16000	13300	22000	11600	36800	35900	37500
LEAD	31.8	16.3	198	428	87.6	199	42	132	9.7	188	266	413
MAGNESIUM	17500	15300	9640	11800 J	14800	11400	3270	4330	21000	8910	9700	10000
MANGANESE	1080	425	590	687	888	404	189	405	321	1470	537	575
NICKEL	13.5	13.4	34.3	45.3 J	25.8	10.6	12.7	21.2	12.4	36.9	45.4	48.4
POTASSIUM	1820	1530	1350	1490 J	1460	1080	542	653	1720	1180	1580	1540
SELENIUM	2.3 J	ND	0.98 J	1.2 J	2.5 J	1.1 J	ND	0.58 J	ND	1.8 J	1.9 J	1.7 J
SILVER	ND	ND	0.48 J	2.8	ND	ND	ND	ND	ND	0.51 J	0.66 J	2.4
SODIUM	544	183	185 J	165 J	341	311	76.6 J	83.3 J	246	227	220 J	216 J
THALLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VANADIUM	12.6	14	19.9	26.9	15.3	13.2	7.5	10	15	29.9	26.5	26.4
ZINC	55.1	48.1	321	771	89.5	107	83	220	48	381	717	738
<b>Mercury by Method SW7471B (mg/kg)</b>												
MERCURY	0.15	0.028	1.7	4.3	0.18	0.17	0.2	0.55	0.049	2	4.1	3.7 J
<b>Cyanide by Method SW9012 (mg/kg)</b>												
CYANIDE	ND	ND	0.72 J	ND	3.1	0.55 J	ND	0.99 J	ND	ND	1 J	1.8
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>												
ALDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0053 J+	0.015 J+	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	ND	ND	0.00089 J	ND	ND	ND	0.004 J	ND	ND	0.0019 J+	0.0019 J+	0.011 J
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.041 J
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0026 J+	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	ND	ND	0.0028 J	0.0083 J	ND	ND	ND	0.0049 J	ND	0.005 J+	0.0031 J+	0.029 J
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0038 J+	0.022 J
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	0.00084 J	0.019 J	ND	ND	ND	ND	ND	ND	ND	0.0038 J+	0.012 J+	0.11
DIELDRIN	ND	ND	0.005	0.084	ND	ND	ND	0.015 J	ND	0.0044 J+	0.0082 J+	0.15
ENDOSULFAN SULFATE	0.0025 J	0.043 J	0.0017 J	0.01 J	ND	ND	ND	ND	ND	0.0027 J+	0.0022 J+	0.062
ENDRIN	ND	ND	0.0051	ND	0.0027 J	ND	ND	0.0052 J	ND	0.004 J+	0.0034 J+	0.027 J
ENDRIN ALDEHYDE	ND	ND	0.0018 J	0.04 J	0.0013 J	ND	ND	ND	ND	0.0031 J+	0.0028 J+	0.1
ENDRIN KETONE	ND	ND	0.0022 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)	ND	ND	ND	0.012 J	ND	ND	0.0041 J	0.004 J	ND	0.0022 J+	0.0037 J+	0.026 J
GAMMA CHLORDANE	ND	ND	0.0041 J	ND	ND	ND	ND	ND	ND	0.0049 J+	0.0086 J+	0.038 J

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Location ID:	MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03
Sample Name:	MW-01-Z0	MW-01-Z3	MW-01-Z9	MW-01-Z17	MW-02-Z0	MW-02-Z7	MW-02-Z11	MW-02-Z13	MW-03-Z0	MW-03-Z7	MW-03-Z9	MW-03-Z12
Depth:	0 - 2 ft	3 - 4 ft	9 - 10 ft	17 - 19 ft	0 - 2 ft	7 - 8 ft	11 - 12 ft	13 - 14 ft	0 - 2 ft	7 - 8 ft	9 - 10 ft	12 - 14 ft
Analyte	Date:	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/22/13	10/21/13	10/21/13
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0017 J+	0.02 J
HEPTACHLOR EPOXIDE	ND	ND	0.0012 J	ND	ND	ND	0.0059 J	ND	ND	ND	ND	0.072
METHOXYCHLOR	0.0016 J	0.031 J	0.0019 J	ND	0.0021 J	ND	ND	ND	ND	ND	ND	ND
P,P'-DDD	0.0011 J	ND	0.0048	0.016 J	ND	ND	0.0052 J	0.032	ND	0.0069 J+	0.011 J+	0.28 J
P,P'-DDE	0.0013 J	ND	0.0022 J	0.013 J	0.0012 J	0.0085 J	0.0053 J	0.0061 J	0.00093 J	0.0041 J+	0.011 J+	0.029 J
P,P'-DDT	0.0024 J	ND	ND	0.029 J	ND	0.018 J	ND	0.013 J	0.0015 J	0.01 J+	0.014 J+	0.17 J
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>PCBs by Method SW8082A (mg/kg)</b>												
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	0.11 J	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)	ND	ND	ND	4.1	ND	ND	ND	0.64	ND	ND	1.9	13 J
PCB-1254 (AROCLOR 1254)	ND	ND	0.24 J	3.1 J	ND	ND	ND	ND	ND	0.21 J	ND	ND
PCB-1260 (AROCLOR 1260)	ND	ND	ND	0.72 J	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (mg/kg)</b>												
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	0.21	ND	ND	ND	0.23	ND	ND	ND	0.034 J
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	0.35 J	ND	0.0091	ND	0.024 J	ND	ND	ND	0.036 J
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	0.0028 J	0.12 J	ND	ND	0.00078 J	0.074	ND	0.0014 J	0.0011 J	0.0049 J
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	0.095 J	ND	0.0016 J	ND	ND	ND	ND	ND	0.012
1,3-DICHLOROBENZENE	ND	ND	0.0023 J	0.3	ND	ND	0.0023 J	0.0043 J	ND	0.0022 J	0.0012 J	0.2 J
1,4-DICHLOROBENZENE	ND	0.0016 J	0.013	1.8	ND	ND	0.012	0.017	ND	0.0095	0.0056 J	0.680 J-
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND
ACETONE	ND	0.0057 J	0.12	ND	ND	0.014 J	0.038	0.019 J	ND	0.062	0.042	0.087
BENZENE	ND	ND	0.0053 J	0.12 J	ND	0.0082	ND	0.014	ND	0.0022 J	0.00071 J	0.11
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	0.004 J	0.12	9.8	ND	ND	0.22	2.6	ND	0.083	0.088	1.5 J-

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	MW-01 MW-01-Z0 0 - 2 ft 10/21/13	MW-01 MW-01-Z3 3 - 4 ft 10/21/13	MW-01 MW-01-Z9 9 - 10 ft 10/21/13	MW-01 MW-01-Z17 17 - 19 ft 10/21/13	MW-02 MW-02-Z0 0 - 2 ft 10/21/13	MW-02 MW-02-Z7 7 - 8 ft 10/21/13	MW-02 MW-02-Z11 11 - 12 ft 10/21/13	MW-02 MW-02-Z13 13 - 14 ft 10/21/13	MW-03 MW-03-Z0 0 - 2 ft 10/22/13	MW-03 MW-03-Z7 7 - 8 ft 10/21/13	MW-03 MW-03-Z9 9 - 10 ft 10/21/13	MW-03 MW-03-Z12 12 - 14 ft 10/21/13
CHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE		ND	ND	ND	0.35	ND	ND	0.02	0.024	ND	ND	ND	0.054
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE		ND	ND	ND	0.82 J	ND	0.0057	ND	ND	ND	ND	ND	0.27 J
ISOPROPYLBENZENE (CUMENE)		ND	ND	ND	0.026 J	ND	0.0023 J	0.0013 J	0.0019 J	ND	ND	ND	0.0026 J
METHYL ACETATE		ND	ND	ND	0.68	ND	ND	ND	0.082	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)		ND	ND	0.039	ND	ND	0.0047 J	0.012 J	0.0073 J	ND	0.02 J	0.016 J	0.023 J
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE		ND	ND	0.0023 J	0.79	ND	ND	0.016	0.048	ND	ND	ND	0.1 J
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	ND	ND	0.0023 J	ND	ND	ND	ND
N-BUTYLBENZENE		ND	ND	ND	0.16	ND	ND	0.0006 J	0.0029 J	ND	ND	ND	ND
N-PROPYLBENZENE		ND	ND	ND	0.071 J	ND	0.004 J	ND	0.0026 J	ND	ND	ND	0.0053 J
SEC-BUTYLBENZENE		ND	ND	ND	ND	ND	0.00089 J	0.0018 J	0.0021 J	ND	ND	ND	0.0026 J
STYRENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER		ND	ND	ND	ND	ND	ND	ND	0.0013 J	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE		ND	ND	0.00066 J	0.094 J	ND	0.00077 J	ND	0.00077 J	ND	0.0007 J	0.00057 J	ND
TRANS-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL		ND	ND	0.0014 J	0.41	ND	0.0022 J	0.0042 J	0.0085 J	ND	0.0016 J	0.0012 J	0.047
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>													
2,4,5-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE		0.014 J	0.037 J	0.036 J	0.60 J	0.052 J	0.11 J	0.03 J	0.58	ND	0.033 J	0.014 J	0.20 J
2-METHYLPHENOL (O-CRESOL)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROANILINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

	Location ID:	MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03
	Sample Name:	MW-01-Z0	MW-01-Z3	MW-01-Z9	MW-01-Z17	MW-02-Z0	MW-02-Z7	MW-02-Z11	MW-02-Z13	MW-03-Z0	MW-03-Z7	MW-03-Z9	MW-03-Z12
	Depth:	0 - 2 ft	3 - 4 ft	9 - 10 ft	17 - 19 ft	0 - 2 ft	7 - 8 ft	11 - 12 ft	13 - 14 ft	0 - 2 ft	7 - 8 ft	9 - 10 ft	12 - 14 ft
Analyte	Date:	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/22/13	10/21/13	10/21/13	10/21/13
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND	ND	ND	ND	0.51	ND	ND	ND	ND
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	0.065 J	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	0.019 J	0.14 J	0.044 J	0.39 J	0.21 J	0.15 J	0.087 J	0.84	ND	ND	0.035 J	1.3	
ACENAPHTHYLENE	ND	0.11 J	0.071 J	0.12 J	0.042 J	0.034 J	0.048 J	0.15 J	ND	0.13 J	0.05 J	0.18 J	
ACETOPHENONE	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.028 J	ND	ND	ND
ANTHRACENE	0.061 J	0.52	0.17 J	1.2 J	0.49	0.3 J	0.17 J	1.7	ND	0.18 J	0.14 J	0.5 J	
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE	ND	ND	0.056 J	ND	ND	ND	0.073 J	0.069 J	ND	ND	0.086 J	0.26 J	
BENZO(A)ANTHRACENE	0.25 J	1.6	0.4 J	0.57	1.1	0.71	0.35 J	1	0.023 J	0.65	0.16 J	0.66	
BENZO(A)PYRENE	0.22 J	1.3	0.48	0.5 J	1	0.65	0.36 J	0.92	ND	0.75	0.22 J	0.87	
BENZO(B)FLUORANTHENE	0.29 J	2.1	0.73	0.81 J	1.6	1.1	0.66	1.3	0.032 J	0.95	0.23 J	1.2	
BENZO(G,H,I)PERYLENE	0.064 J	0.19 J	0.11 J	0.075 J	0.19 J	0.19 J	0.1 J	0.15 J	ND	0.23 J	0.092 J	0.19 J	
BENZO(K)FLUORANTHENE	0.12 J	0.91	0.33 J	0.28 J	0.63	0.57	0.34 J	0.7	0.023 J	0.42 J	0.15 J	0.46 J	
BENZYL BUTYL PHTHALATE	ND	ND	ND	ND	ND	0.11 J	ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)	ND	ND	ND	0.088 J	ND	0.024 J	ND	0.078 J	ND	ND	ND	ND	0.21 J
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	0.18 J	0.71	ND	0.18 J	0.46	0.28 J	ND	0.19 J	0.18 J	1.7	
CAPROLACTAM	ND	ND	0.23 J	3.7 J	ND	0.19 J	ND	1.1	ND	0.35 J	ND	1.3	
CARBAZOLE	0.021 J	0.26 J	0.058 J	0.075 J	0.27 J	0.16 J	0.047 J	0.16 J	ND	0.04 J	ND	0.049 J	
CHRYSENE	0.27 J	1.6	0.47	0.62	1.2	0.81	0.39 J	1	0.023 J	0.72	0.21 J	0.89	
DIBENZ(A,H)ANTHRACENE	0.032 J	0.11 J	0.062 J	ND	0.097 J	0.054 J	ND	0.075 J	ND	0.1 J	ND	0.067 J	
DIBENZOFURAN	ND	0.099 J	0.039 J	0.22 J	0.15 J	0.11 J	ND	0.24 J	ND	0.044 J	0.016 J	0.18 J	
DIETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.5	3.4	0.7	1.4 J	2.7	2	0.81	2.8	0.034 J	0.95	0.26 J	1	
FLUORENE	0.023 J	0.18 J	ND	0.82 J	0.26 J	0.19 J	ND	0.8	ND	0.084 J	ND	0.12 J	
HEXACHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	0.45	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	0.081 J	0.28 J	0.14 J	0.098 J	0.28 J	0.21 J	0.093 J	0.17 J	ND	0.28 J	0.084 J	0.19 J	

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03
Sample Name:	MW-01-Z0	MW-01-Z3	MW-01-Z9	MW-01-Z17	MW-02-Z0	MW-02-Z7	MW-02-Z11	MW-02-Z13	MW-03-Z0	MW-03-Z7	MW-03-Z9	MW-03-Z12
Depth:	0 - 2 ft	3 - 4 ft	9 - 10 ft	17 - 19 ft	0 - 2 ft	7 - 8 ft	11 - 12 ft	13 - 14 ft	0 - 2 ft	7 - 8 ft	9 - 10 ft	12 - 14 ft
Date:	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/21/13	10/22/13	10/21/13	10/21/13	10/21/13
ISOPHORONE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	0.054 J	0.13 J	0.88 J	0.12 J	0.16 J	0.069 J	0.69	ND	0.18 J	0.045 J	0.34 J
NITROBENZENE	ND	ND	ND	ND	ND	ND	ND	0.066 J	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	0.28 J	2.2 J	ND	ND	0.097 J	3.3	ND	0.21 J	0.24 J	0.52 J
PENTACHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	0.26 J	2.2	0.42 J	1.6 J	2	1.3	0.34 J	2.4	ND	0.42 J	0.083 J	0.56
PHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	0.37 J	2.1	0.46 J	1	1.6	1.3	0.46	1.7	0.019 J	0.69	0.26 J	1.2

**Key:**

- J = estimated value
- J- = estimated value with low bias
- J+ = estimated value with high bias
- mg/kg = milligrams per kilogram
- ND = not detected
- PCBs = polychlorinated biphenyl

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID:	MW-03	MW-04	MW-04	MW-04	MW-05	MW-05	MW-05	MW-06	MW-06	MW-06	MW-06
	Sample Name:	FD	MW-04-Z0	MW-04-Z2	MW-04-Z11	MW-05-Z0	MW-05-Z7	MW-05-Z10	MW-06-Z0	MW-06-Z5	MW-06-Z11	FD
	Depth:	12 - 14 ft	0 - 2 ft	2 - 4 ft	11 - 12 ft	0 - 2 ft	7 - 8 ft	10 - 11 ft	0 - 2 ft	5 - 6 ft	11 - 13 ft	11 - 13 ft
	Date:	10/21/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13	10/22/13
<b>Oil &amp; Grease (n-Hexane Extractable Material) by Method E1664A (mg/kg)</b>												
OIL & GREASE, TOTAL REC		621 J	643	1040	ND	585	ND	305	682	4180	396	434
<b>Metals by Method SW6010C (mg/kg)</b>												
ALUMINUM		11300	10800	11100	5110	13000	9740	3610	12600	13800	9000	6580
ANTIMONY		ND	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND
ARSENIC		34.3	7	8.2 J	4.2	6.2	7.9	3.1	30.3 J	8.1	17.9	ND
BARIUM		166	133	89.1	27.5	105	63.1	17.3	128 J	118	118	96.5
BERYLLIUM		0.73	1.1	0.53 J	0.18 J	1	0.35	0.13 J	1.6	1.1	0.96	0.73
CADMIUM		9.7	0.64	ND	ND	0.27	0.13 J	ND	0.81 J	0.17 J	0.74	1
CALCIUM		29000	47000	201000	30000	31300	28900	34700	68600	24000	64800	105000
CHROMIUM, TOTAL		205	23.6	916	9.7	15.7	16.7	5.4	49.9 J	17.3	96.1 J	450 J
COBALT		10.9	5.9	1.3 J	2.1	7.3	3.6	2	3.2 J	9.1	2.8	3.6
COPPER		193	46.4	27.9	32.3	18.7	35.9	6	27.5	18.6	34.4	33.8
IRON		27800	15300	112000	21200	18700	30000	9280	18100	25000	37600	59300
LEAD		402	119	80.6	14.6	39.3	97.3	6.6	71.1	35.4	121	91.6
MAGNESIUM		9660	12700	20700	3390	10700	3190	3920	15000	9280	6370 J	21500 J
MANGANESE		533	770	41800	617	656	2390	136	2590 J	354	4590 J	21400 J
NICKEL		41	16.7	8.7 J	4.9 J	16.9	9.5	4.8 J	10.8	26	10.2	13.1
POTASSIUM		1080	1360	938	588	1380	1200	492	1240 J	1860	1090	774
SELENIUM		1.5 J	0.87 J	21.7	ND	1.1 J	1.6 J	ND	14.9 J	ND	3.1 J	7.2 J
SILVER		3.5	ND	1.7 J	ND	ND	ND	ND	ND	ND	0.25 J	1.8 J
SODIUM		196	266	315	384	164 J	370	244	305	187	752	665
THALLIUM		ND	ND	43.6	ND	ND	1.4 J	ND	7.6	ND	ND	3.5 J
VANADIUM		23	16.5	426	13.1	23	32	11.8	18.4 J	22	54.8 J	172 J
ZINC		628	132	59.9	22.6	80.7	81.7	19.9	86.3 J	67	149	169
<b>Mercury by Method SW7471B (mg/kg)</b>												
MERCURY		1.2 J	0.1	0.073	ND	0.3	0.025	ND	0.055	0.04	0.12	0.14
<b>Cyanide by Method SW9012 (mg/kg)</b>												
CYANIDE		1 J	0.64 J	1.2	0.62 J	0.86 J	ND	ND	0.55 J	0.66 J	ND	0.8 J
<b>Organochlorine Pesticides by Method SW8081B (mg/kg)</b>												
ALDRIN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)		0.01 J	ND	ND	0.00076 J	ND	0.00095 J+	0.00079 J	ND	ND	ND	ND
ALPHA CHLORDANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)		0.019 J	ND	ND	ND	ND	0.0048 J+	0.0035 J	ND	ND	ND	ND
BETA ENDOSULFAN		0.01 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)		0.13	0.0018 J	0.0072 J	ND	0.0016 J	0.00074 J+	0.0013 J	ND	ND	ND	0.014 J
DIELDRIN		0.1	0.0045 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE		0.04 J	0.0064 J	ND	ND	0.0057 J	0.0044 J+	ND	ND	ND	ND	ND
ENDRIN		0.022 J	0.0031 J	ND	ND	ND	ND	0.0025 J	ND	ND	ND	ND
ENDRIN ALDEHYDE		ND	0.0025 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN KETONE		ND	ND	0.01 J	ND	0.0034 J	0.0025 J+	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)		0.029 J	0.0014 J	ND	ND	ND	0.00075 J+	0.00087 J	ND	0.014 J	ND	ND
GAMMA CHLORDANE		0.042 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	MW-03 FD 12 - 14 ft 10/21/13	MW-04 MW-04-Z0 0 - 2 ft 10/22/13	MW-04 MW-04-Z2 2 - 4 ft 10/22/13	MW-04 MW-04-Z11 11 - 12 ft 10/22/13	MW-05 MW-05-Z0 0 - 2 ft 10/22/13	MW-05 MW-05-Z7 7 - 8 ft 10/22/13	MW-05 MW-05-Z10 10 - 11 ft 10/22/13	MW-06 MW-06-Z0 0 - 2 ft 10/22/13	MW-06 MW-06-Z5 5 - 6 ft 10/22/13	MW-06 MW-06-Z11 11 - 13 ft 10/22/13	MW-06 FD 11 - 13 ft 10/22/13
HEPTACHLOR		0.022 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE		0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR		ND	0.0035 J	ND	ND	0.0032 J	0.0047 J+	0.0015 J	ND	ND	0.0055 J	0.0055 J
P,P'-DDD		0.12 J	ND	0.01 J	0.00096 J	ND	ND	ND	ND	ND	ND	ND
P,P'-DDE		0.032 J	0.0026 J	0.0094 J	0.0011 J	0.0044 J	0.0012 J+	0.0013 J	ND	0.01 J	ND	ND
P,P'-DDT		0.076 J	ND	0.017 J	ND	0.0067 J	0.0014 J+	ND	0.014 J	0.018 J	0.014 J	0.014 J
TOXAPHENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>PCBs by Method SW8082A (mg/kg)</b>												
PCB-1016 (AROCLOR 1016)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)		6.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)		ND	0.14 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (mg/kg)</b>												
1,1,1-TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE		3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE		1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE		6.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE		31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-HEXANONE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOFORM		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON DISULFIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE		68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	MW-03 FD 12 - 14 ft 10/21/13	MW-04 MW-04-Z0 0 - 2 ft 10/22/13	MW-04 MW-04-Z2 2 - 4 ft 10/22/13	MW-04 MW-04-Z11 11 - 12 ft 10/22/13	MW-05 MW-05-Z0 0 - 2 ft 10/22/13	MW-05 MW-05-Z7 7 - 8 ft 10/22/13	MW-05 MW-05-Z10 10 - 11 ft 10/22/13	MW-06 MW-06-Z0 0 - 2 ft 10/22/13	MW-06 MW-06-Z5 5 - 6 ft 10/22/13	MW-06 MW-06-Z11 11 - 13 ft 10/22/13	MW-06 FD 11 - 13 ft 10/22/13
CHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE		ND	ND	0.0013 J	ND	ND	ND	ND	ND	ND	0.0011 J	ND
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE		4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE		1.2 J	ND	0.0018 J	ND	ND	ND	ND	ND	ND	0.00097 J	0.0011 J
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE (PCE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Semivolatile Organics by Method SW8270D (mg/kg)</b>												
2,4,5-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE		0.29 J	0.022 J	0.089 J	0.029 J	0.063 J	0.11 J	0.031 J	ND	ND	0.076 J	0.052 J
2-METHYLPHENOL (O-CRESOL)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROANILINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	MW-03 FD 12 - 14 ft 10/21/13	MW-04 MW-04-Z0 0 - 2 ft 10/22/13	MW-04 MW-04-Z2 2 - 4 ft 10/22/13	MW-04 MW-04-Z11 11 - 12 ft 10/22/13	MW-05 MW-05-Z0 0 - 2 ft 10/22/13	MW-05 MW-05-Z7 7 - 8 ft 10/22/13	MW-05 MW-05-Z10 10 - 11 ft 10/22/13	MW-06 MW-06-Z0 0 - 2 ft 10/22/13	MW-06 MW-06-Z5 5 - 6 ft 10/22/13	MW-06 MW-06-Z11 11 - 13 ft 10/22/13	MW-06 FD 11 - 13 ft 10/22/13
3,3'-DICHLOROBENZIDINE		0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROANILINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE		1.8	0.037 J	0.021 J	0.01 J	0.19 J	0.056 J	ND	0.2 J	0.022 J	0.25 J	0.11 J
ACENAPHTHYLENE		0.088 J	0.062 J	0.2 J	ND	0.053 J	ND	ND	0.16 J	ND	0.17 J	0.26 J
ACETOPHENONE		ND	ND	0.034 J	ND	ND	ND	ND	ND	ND	ND	ND
ANTHRACENE		0.8	0.13 J	0.11 J	0.027 J	0.41	0.13 J	ND	0.42	0.035 J	0.83	0.82
ATRAZINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE		0.26 J	ND	ND	ND	ND	0.097 J	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE		0.32 J	0.52	0.81	0.054 J	0.94	0.27 J	0.025 J	1.5	0.13 J	1.9	2.1
BENZO(A)PYRENE		0.39 J	0.48	0.86	0.041 J	0.73	0.25 J	0.045 J	1.6	0.13 J	1.5	1.8
BENZO(B)FLUORANTHENE		0.55 J	1.1	2.1	0.084 J	1.5	0.52	0.054 J	2.7	0.19 J	2.7	2.7
BENZO(G,H,I)PERYLENE		0.074 J	0.12 J	0.2 J	ND	0.13 J	0.057 J	ND	0.49	0.051 J	0.4	0.51
BENZO(K)FLUORANTHENE		0.24 J	0.41	0.91	0.027 J	0.59	0.19 J	0.051 J	1.4	0.077 J	0.93	1.2
BENZYL BUTYL PHTHALATE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)		0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE		1	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	0.25 J
CAPROLACTAM		1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBAZOLE		ND	0.057 J	0.052 J	ND	0.25 J	0.076 J	ND	0.19 J	ND	0.32 J	0.18 J
CHRYSENE		0.41 J	0.58	0.91	0.072 J	0.87	0.31 J	0.05 J	1.6	0.13 J	1.8	2.2
DIBENZ(A,H)ANTHRACENE		ND	0.054 J	0.092 J	ND	0.062 J	ND	ND	0.18 J	ND	0.19 J	0.24 J
DIBENZOFURAN		0.24 J	ND	0.043 J	0.023 J	0.14 J	0.09 J	0.024 J	0.16 J	ND	0.19 J	0.11 J
DIETHYL PHTHALATE		ND	0.14 J	0.18 J	0.12 J	0.062 J	0.061 J	0.048 J	ND	0.045 J	0.056 J	0.047 J
DIMETHYL PHTHALATE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE		ND	ND	0.25 J	0.18 J	ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE		0.53	1.2	1.4	0.13 J	2.2	0.73	0.051 J	2.5	0.27 J	4.2	4.6
FLUORENE		0.11 J	0.05 J	0.029 J	ND	0.26 J	0.064 J	ND	0.21 J	ND	0.33 J	0.21 J
HEXACHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE		0.081 J	0.14 J	0.24 J	ND	0.17 J	0.066 J	ND	0.58	0.055 J	0.54	0.68

Key at end of table.

**Table 6 Summary of Analytical Results for Subsurface Soil Samples from Monitoring Well Borings  
Buffalo Harbor State Park, Buffalo, NY**

**PRELIMINARY REPORT**

Analyte	Location ID: Sample Name: Depth: Date:	MW-03 FD 12 - 14 ft 10/21/13	MW-04 MW-04-Z0 0 - 2 ft 10/22/13	MW-04 MW-04-Z2 2 - 4 ft 10/22/13	MW-04 MW-04-Z11 11 - 12 ft 10/22/13	MW-05 MW-05-Z0 0 - 2 ft 10/22/13	MW-05 MW-05-Z7 7 - 8 ft 10/22/13	MW-05 MW-05-Z10 10 - 11 ft 10/22/13	MW-06 MW-06-Z0 0 - 2 ft 10/22/13	MW-06 MW-06-Z5 5 - 6 ft 10/22/13	MW-06 MW-06-Z11 11 - 13 ft 10/22/13	MW-06 FD 11 - 13 ft 10/22/13
ISOPHORONE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE		0.4 J	0.036 J	0.073 J	0.053 J	0.17 J	0.11 J	0.046 J	0.22 J	ND	0.15 J	0.13 J
NITROBENZENE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE		0.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENTACHLOROPHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE		0.45 J	0.55	0.4	0.11 J	1.8	0.72	0.096 J	1.6	0.19 J	3	2.2
PHENOL		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE		0.58	0.69	0.91	0.09 J	1.2	0.43	0.031 J	1.8	0.2 J	2.5	3

**Key:**

- J = estimated value
- J- = estimated value with low bias
- J+ = estimated value with high bias
- mg/kg = milligrams per kilogram
- ND = not detected
- PCBs = polychlorinated biphenyl

**Table 7 Summary of Analytical Results for Groundwater Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	MW-01	MW-02	MW-02	MW-03	MW-04	MW-05	MW-06	SB-02	SB-04
	MW-01-WG	MW-02-WG	MW-02-WG-FD	MW-03-WG	MW-04-WG	MW-05-WG	MW-06-WG	SB-02-WG	SB-04-WG
	6 - 16 ft	6 - 16 ft	6 - 16 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	1 - 4 ft	2 - 4 ft
	10/29/13	10/28/13	10/28/13	10/29/13	10/28/13	10/28/13	10/28/13	10/23/13	10/23/13
<b>Metals by Method SW6010C (µg/L)</b>									
ALUMINUM	880	110 J	83 J	150 J	ND	170 J	120 J	270	190 J
ANTIMONY	ND	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	10	110	110	19	ND	7.2 J	ND	ND	ND
BARIUM	130	160	150	190	44	32	59	20	9
BERYLLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND
CADMIUM	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND
CALCIUM	272000	274000	267000	371000	117000	83000	104000	74700	29300
CHROMIUM, TOTAL	15	6.2	5.5	11	5.6	ND	1.3 J	5.2	ND
COBALT	2.1 J	1.6 J	1.4 J	6	ND	ND	ND	ND	ND
COPPER	11	2.2 J	2.3 J	3.5 J	3.6 J	1.7 J	2.3 J	9.1 J	2.6 J
IRON	4000	43500	42500	20200	1100	180	ND	1400	380
LEAD	13	ND	ND	5	ND	ND	ND	10	ND
MAGNESIUM	76100	69000	67400	87600	13000	7100	130 J	8900	5700
MANGANESE	900	1200	1200	580	110	190	4.6	240	63
NICKEL	8.2 J	1.8 J	2.7 J	11	1.8 J	1.4 J	ND	ND	ND
POTASSIUM	16900	17700	17500	19300	10400	18400 J+	34100	6300	4900
SELENIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND
SILVER	ND	ND	ND	ND	ND	ND	ND	ND	ND
SODIUM	42400	57600	56600	76800	567000	610000	923000	287000	100000
THALLIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND
VANADIUM	2 J	ND	ND	ND	5.5	10	61	8.2	ND
ZINC	64	4.9 J	4.7 J	83	2.2 J	3.2 J	ND	6.2 J	7.9 J
<b>Mercury by Method SW7470A (µg/L)</b>									
MERCURY	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Cyanide by Method SW9012 (µg/L)</b>									
CYANIDE	6.2 J	7.3 J	6.8 J	7.7 J	5 J	5.3 J	11	ND	ND
<b>Organochlorine Pesticides by Method SW8081B (µg/L)</b>									
ALDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	ND	0.015 J	0.23 J	ND	0.021 J	ND	0.013 J	ND	0.0079 J
ALPHA CHLORDANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
BETA ENDOSULFAN	ND	ND	ND	ND	ND	ND	ND	ND	ND
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN	ND	0.036 J	ND	ND	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	0.02 J	ND	ND	ND	ND
ENDRIN KETONE	ND	ND	ND	ND	ND	ND	ND	ND	ND
GAMMA BHC (LINDANE)	ND	0.01 J	ND	ND	0.0096 J	0.0094 J	0.0092 J	ND	ND

Key at end of table.

**Table 7 Summary of Analytical Results for Groundwater Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	MW-01	MW-02	MW-02	MW-03	MW-04	MW-05	MW-06	SB-02	SB-04
	MW-01-WG	MW-02-WG	MW-02-WG-FD	MW-03-WG	MW-04-WG	MW-05-WG	MW-06-WG	SB-02-WG	SB-04-WG
	6 - 16 ft	6 - 16 ft	6 - 16 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	1 - 4 ft	2 - 4 ft
	10/29/13	10/28/13	10/28/13	10/29/13	10/28/13	10/28/13	10/28/13	10/23/13	10/23/13
GAMMA CHLORDANE	ND	0.022 J	ND	ND	0.019 J	0.022 J	0.027 J	ND	0.027 J
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND
P,P'-DDD	ND	ND	ND	ND	ND	ND	ND	0.052 J	ND
P,P'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
P,P'-DDT	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls by Method SW8082A (µg)</b>									
PCB-1016 (AROCLOR 1016)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221 (AROCLOR 1221)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232 (AROCLOR 1232)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242 (AROCLOR 1242)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248 (AROCLOR 1248)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254 (AROCLOR 1254)	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260 (AROCLOR 1260)	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Volatile Organics by Method SW8260C (µg/L)</b>									
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	11	ND	ND	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	30	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	6.5	ND	ND	160	ND	ND	ND	ND	ND
1,4-DIOXANE (P-DIOXANE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	ND	ND	ND	21 J	ND	ND	ND	ND	ND
BENZENE	13	7 J	7.7 J	580	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 7 Summary of Analytical Results for Groundwater Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	MW-01	MW-02	MW-02	MW-03	MW-04	MW-05	MW-06	SB-02	SB-04
	MW-01-WG	MW-02-WG	MW-02-WG-FD	MW-03-WG	MW-04-WG	MW-05-WG	MW-06-WG	SB-02-WG	SB-04-WG
	6 - 16 ft	6 - 16 ft	6 - 16 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	1 - 4 ft	2 - 4 ft
	10/29/13	10/28/13	10/28/13	10/29/13	10/28/13	10/28/13	10/28/13	10/23/13	10/23/13
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	120	130	130	7600	5.9	5.3	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE	ND	ND	ND	3.3 J	ND	ND	ND	ND	ND
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	81	ND	ND	ND	ND	ND
ISOPROPYLBENZENE (CUMENE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE (4-METHYL-2-PEN	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE	2.1 J	4 J	4.3 J	4.2 J	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-BUTYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
TERT-BUTYL METHYL ETHER	ND	3.2 J	3.1 J	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE(PCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	6.1	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	ND	ND	ND	27	ND	ND	ND	ND	ND
<b>Semivolatile Organics by Method SW8270D (µg/L)</b>									
2,4,5-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	1.3 J	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	1 J	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 7 Summary of Analytical Results for Groundwater Samples  
Buffalo Harbor State Park, Buffalo, New York**

**PRELIMINARY REPORT**

Analyte	MW-01	MW-02	MW-02	MW-03	MW-04	MW-05	MW-06	SB-02	SB-04
	MW-01-WG	MW-02-WG	MW-02-WG-FD	MW-03-WG	MW-04-WG	MW-05-WG	MW-06-WG	SB-02-WG	SB-04-WG
	6 - 16 ft	6 - 16 ft	6 - 16 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	1 - 4 ft	2 - 4 ft
	10/29/13	10/28/13	10/28/13	10/29/13	10/28/13	10/28/13	10/28/13	10/23/13	10/23/13
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-CHLOROPHENOL	0.94 J	1.6 J	1.7 J	42	ND	ND	ND	ND	ND
2-METHYLNAPHTHALENE	0.67 J	ND	ND	3.6 J	ND	ND	ND	ND	ND
2-METHYLPHENOL (O-CRESOL)	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
2-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-DINITRO-2-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLORO-3-METHYLPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-CHLOROANILINE	0.96 J	ND	ND	39	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-METHYLPHENOL (P-CRESOL)	ND	0.69 J	0.89 J	ND	ND	ND	1.3 J	ND	ND
4-NITROANILINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	0.76 J	0.8 J	0.69 J	2.4 J	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETOPHENONE	ND	ND	ND	0.87 J	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND
ATRAZINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZALDEHYDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZYL BUTYL PHTHALATE	0.59 J	ND	ND	ND	ND	ND	ND	ND	ND
BIPHENYL (DIPHENYL)	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY) METHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHY	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND
CAPROLACTAM	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBAZOLE	0.36 J	ND	0.51 J	1 J	ND	ND	0.42 J	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND
DIBENZ(A,H)ANTHRACENE	ND	ND	ND	ND	0.55 J	0.55 J	ND	ND	ND
DIBENZOFURAN	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIETHYL PHTHALATE	0.35 J	ND	ND	ND	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key at end of table.

**Table 7 Summary of Analytical Results for Groundwater Samples  
Buffalo Harbor State Park, Buffalo, New York**

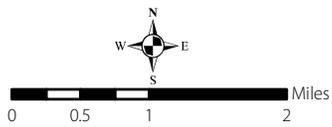
**PRELIMINARY REPORT**

Analyte	MW-01	MW-02	MW-02	MW-03	MW-04	MW-05	MW-06	SB-02	SB-04
	MW-01-WG	MW-02-WG	MW-02-WG-FD	MW-03-WG	MW-04-WG	MW-05-WG	MW-06-WG	SB-02-WG	SB-04-WG
	6 - 16 ft	6 - 16 ft	6 - 16 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	8 - 18 ft	1 - 4 ft	2 - 4 ft
	10/29/13	10/28/13	10/28/13	10/29/13	10/28/13	10/28/13	10/28/13	10/23/13	10/23/13
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI-N-OCTYLPHTHALATE	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND
FLUORENE	0.47 J	ND	ND	0.71 J	ND	ND	ND	ND	ND
HEXACHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND	ND	1.8 J	ND	1.8 J	ND	ND
ISOPHORONE	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	1.1 J	ND	ND	22	ND	ND	1.4 J	ND	ND
NITROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	3.5 J	1.2 J	1.2 J	24	ND	ND	ND	ND	ND
PENTACHLOROPHENOL	3.7 J	ND	ND	7.8 J	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	0.6 J	ND	ND	ND	0.64 J	ND
PHENOL	ND	ND	0.42 J	6.0	ND	0.43 J-	1.6 J	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND

**Key:**

- "-FD" denotes field duplicate sample
- µg/L = Micrograms per liter
- J = Estimated value
- J- = Estimated value with low bias
- J+ = Estimated value with high bias
- mg/L = Milligrams per liter
- ND = Not detected

Key at end of table.



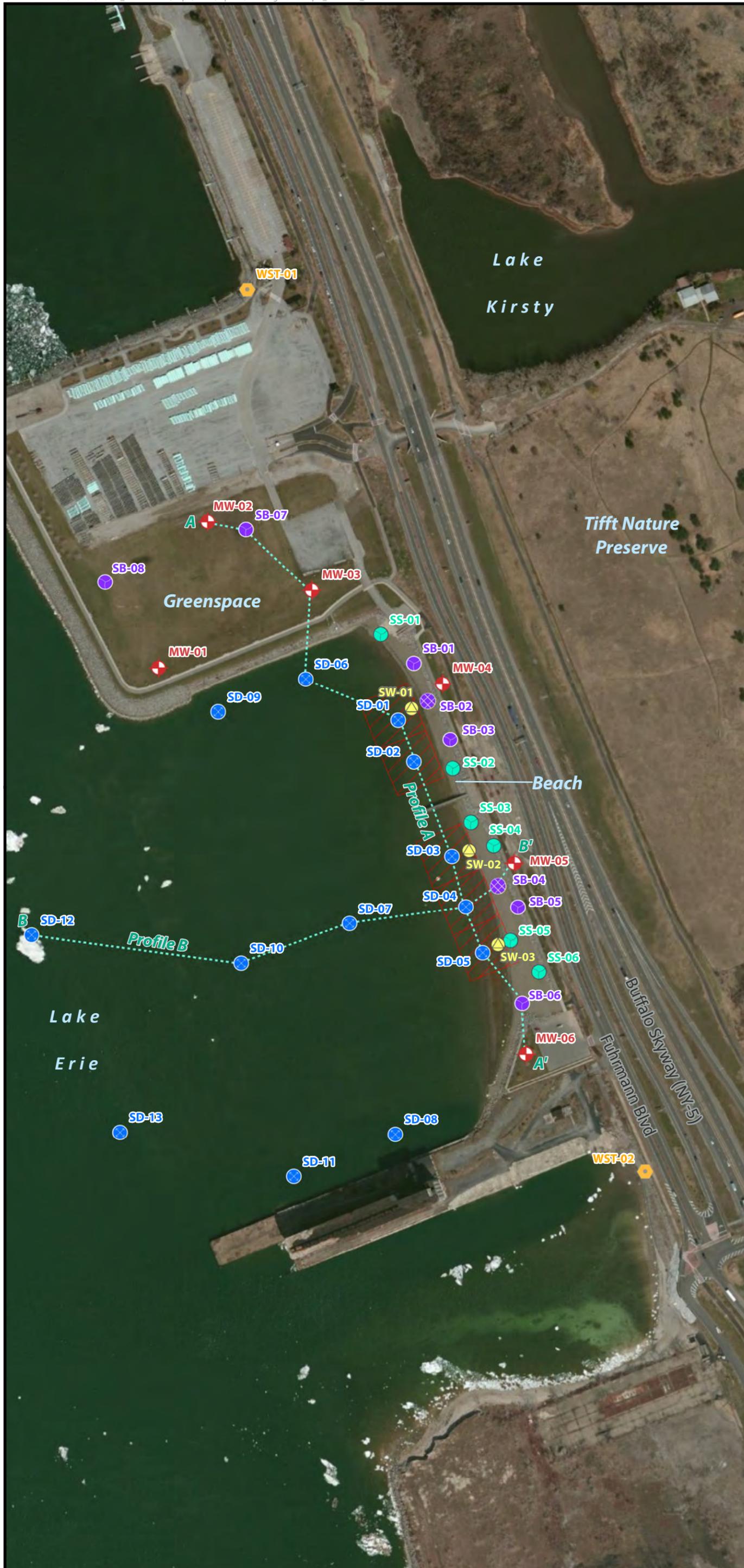
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### Legend

-  Buffalo Harbor State Park
-  Project Site Boundary

**Figure 1**  
**Site Location Map**  
**Buffalo Harbor State Park**  
Buffalo, New York



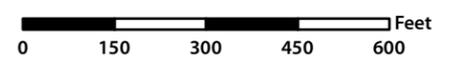
**Figure 2**  
**Sample Location and Profile Map**  
 Buffalo Harbor State Park  
 Buffalo, New York

**Legend**

- - - - - Cross-Section Profile
- Near-Shore Surface Water Sample Location
- Stormwater Outfall Sample Location
- Surface and Subsurface Soil Sample Location
- Surface and Subsurface Soil and Near-Shore Groundwater Sample Location
- Surface Soil Sample Location
- Monitoring Well Location
- Sediment Core
- Potential Swimming Area

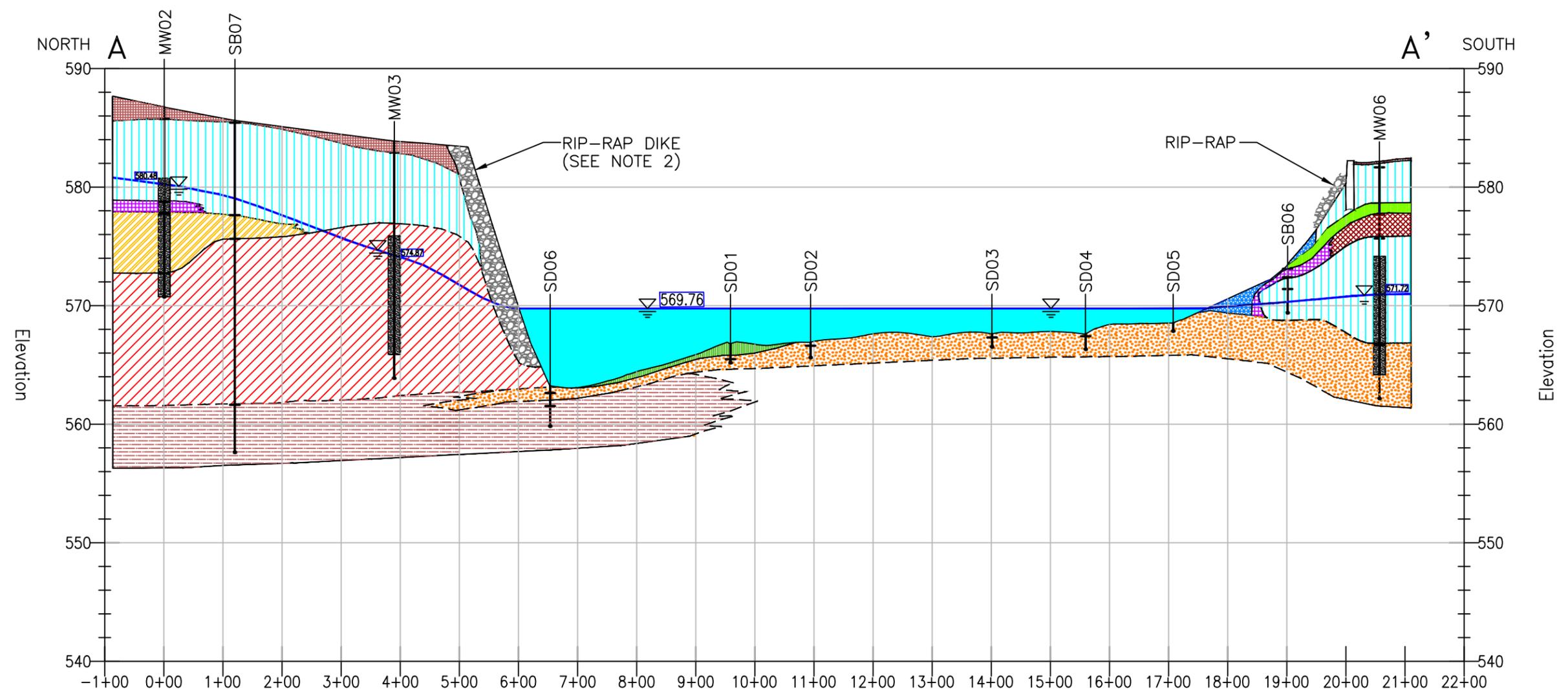


**SCALE**



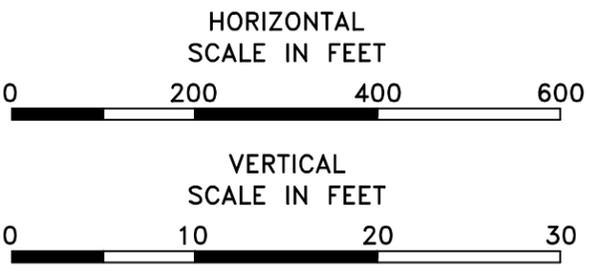
1" = 300'

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, Ecology and Environment Engineering, P.C., 2013.



LEGEND

	FILL (DREDGE SPOILS)		CLAY
	FILL (SAND, SILT)		SAND
	FILL (MIX)		RECENT SOFT SEDIMENT
	FILL (GRAVEL)		SILTY CLAY
	FILL (CLAY)		FILL (GRAVELLY SAND)
	FILL (SILT)		BOTTOM OF BORING
	RIP-RAP		SCREEN INTERVAL
	WATER		569.76 WATER LEVEL (FEET ABOVE SEA LEVEL)

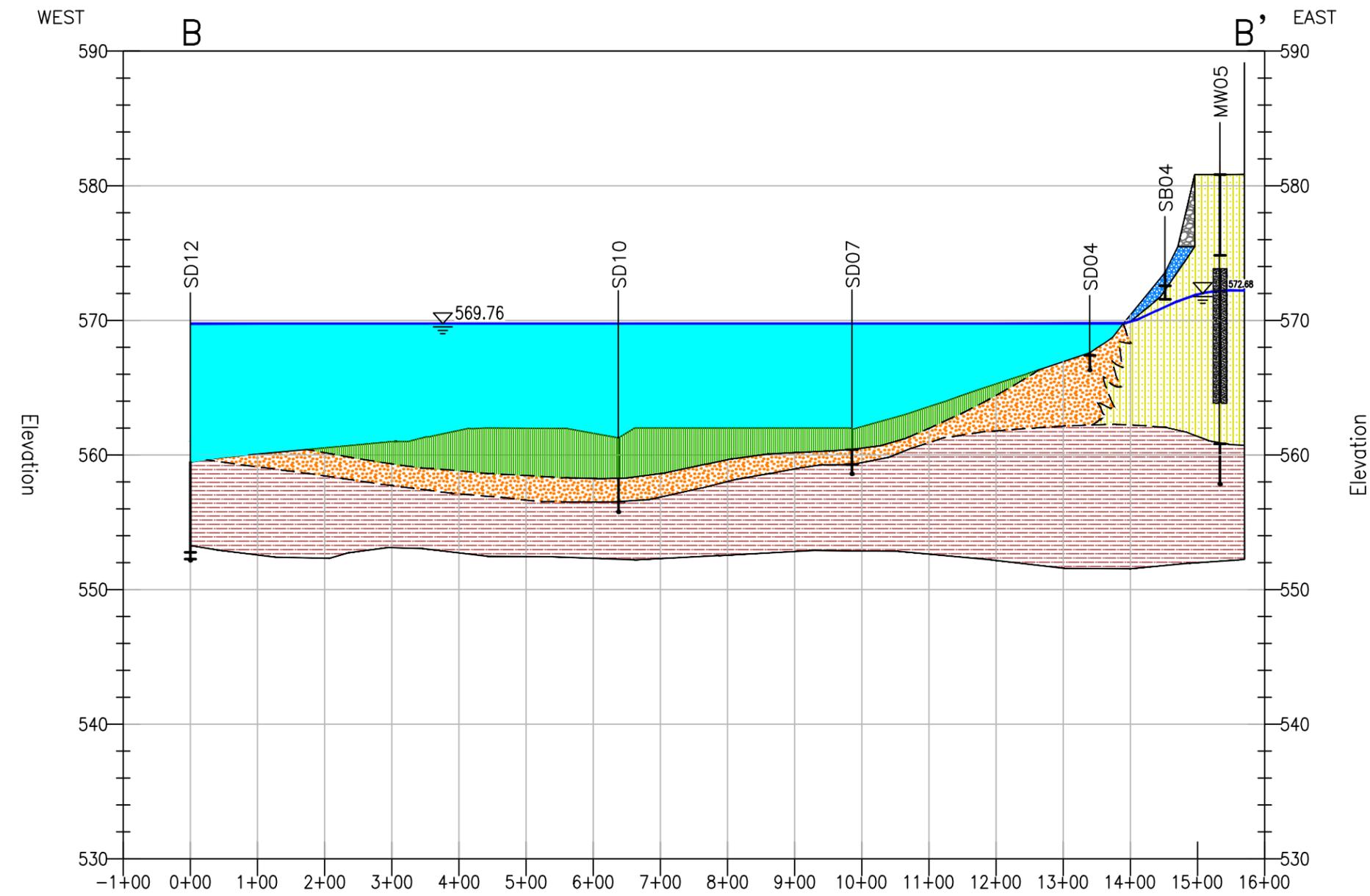


NOTES

1. DASHED LINES REPRESENT INFERRED DATA.
2. DIKE DESIGN IS DESCRIBED AS 'PREPARED LIMESTONE RIP-RAP ON EARTHEN AND SLAG CORE' PER USACE GREAT LAKES CONFINED DISPOSAL FACILITIES BUFFALO HARBOR - SMALL BOAT HARBOR CDF FACT SHEET.

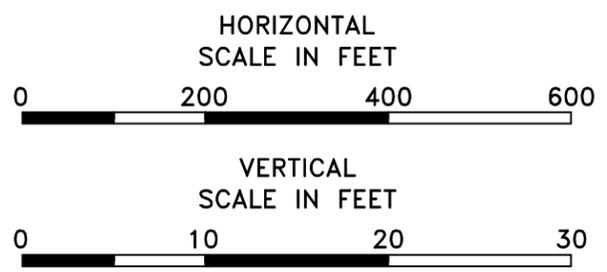
FIGURE 3

GEOLOGIC CROSS SECTION, PROFILE LINE A-A'  
BUFFALO HARBOR STATE PARK  
BUFFALO, NEW YORK



LEGEND

-  SAND
-  RECENT SOFT SEDIMENT
-  SILTY CLAY
-  FILL
-  FILL (GRAVELLY SAND)
-  RIP-RAP
-  WATER
-  BOTTOM OF BORING
-  SCREEN INTERVAL
-  WATER LEVEL (FEET ABOVE SEA LEVEL)



NOTES

1. DASHED LINES REPRESENT INFERRED DATA.



**Figure 5**  
**Groundwater Contour Map**  
**October 29, 2013**  
 Buffalo Harbor State Park  
 Buffalo, New York

**Legend**

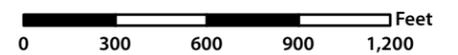
- Monitoring Well Location
- Tift Farm Monitoring Well Location *N/A = Not Available*
- Surface Water Elevation Measurement Point
- Staff Gauge
- Groundwater Contour Line (elevation in feet above mean sea level)
- Inferred Groundwater Contour Line (elevation in feet above mean sea level)
- Groundwater Flow Direction



**Vertical Datum:**  
 North American Vertical Datum of 1988 (NAVD88)



**SCALE**



1" = 600'



**Figure 6**  
**Approximate Locations and Densities**  
**of the Different Submerged Aquatic**  
**Vegetation Species Observed**  
**at Gallagher Beach**  
 Buffalo Harbor State Park  
 Buffalo, New York

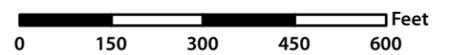
**Legend**

Submerged Aquatic Vegetation Sections

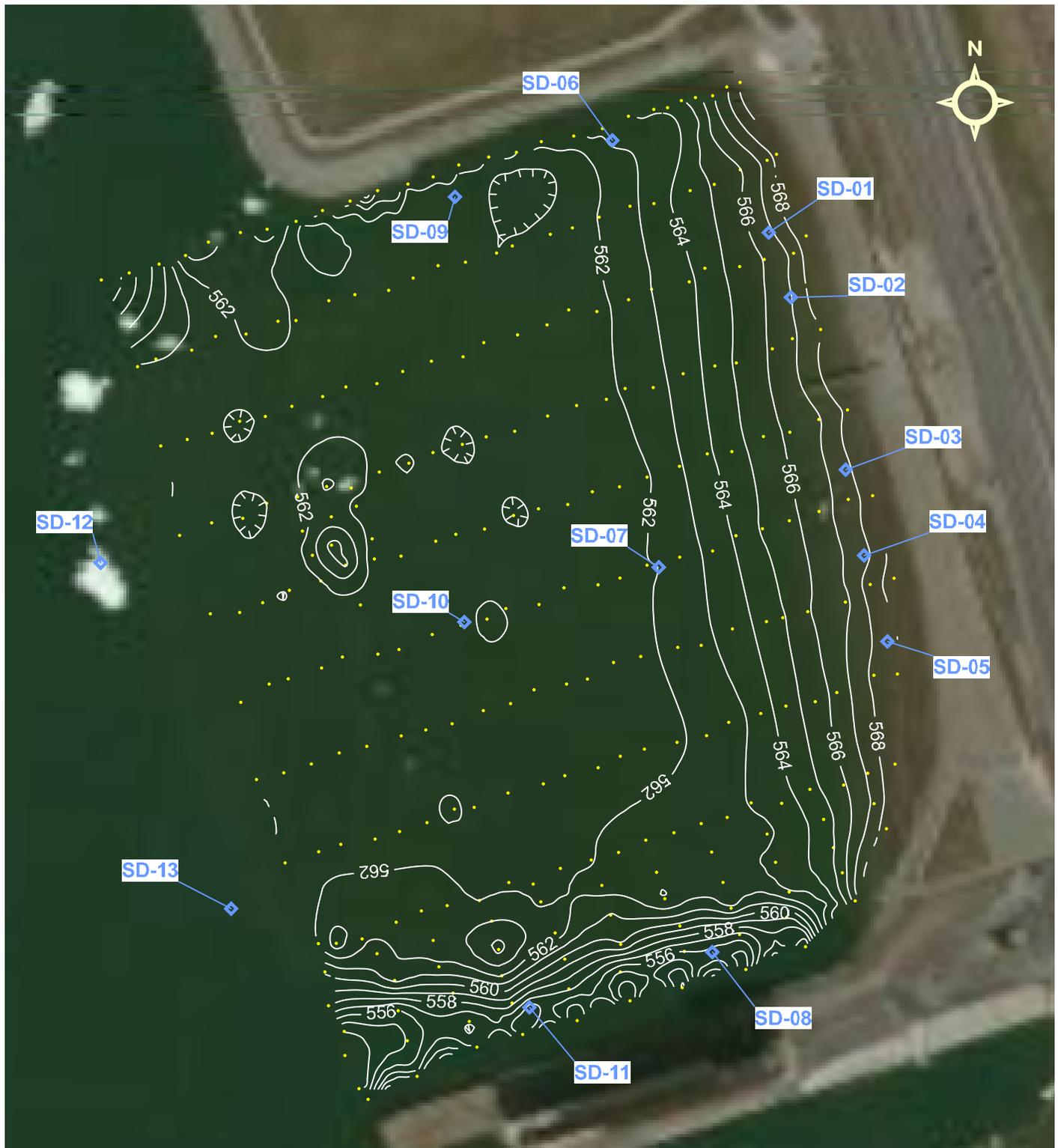
- Section 1:** 100% Eurasian Watermilfoil
- Section 2:** 60%-80% Wild Celery  
10%-30% Eurasian Watermilfoil  
10%-20% American Waterweed
- Section 3:** 30%-60% Wild Celery  
30%-60% American Waterweed  
30%-60% Grassleaf Mudplantain  
0%-10% Eurasian Watermilfoil
- Section 4:** 80% Wild Celery  
10% Eurasian Watermilfoil  
10% Grassleaf Mudplantain
- Section 5:** 75%-90% Wild Celery  
5%-20% Richardson's Pondweed  
5% Grassleaf Mudplantain
- Section 6:** 80% Wild Celery  
20% Richardson's Pondweed
- Section 7:** 25%-50% Wild Celery  
50%-75% Bare



**SCALE**



1" = 300'



Service Layer Credits: Image Courtesy of USGS State of Michigan  
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0 50 100 150 Feet

- Key:
- LimnoTech Water Depth Measurement Location
  - ◆ Sediment Core / Surface Water Sample Location
  - Top of Sediment Elevation (feet)

Note:  
Elevation datum is North American Vertical Datum 1988, feet.

Figure 7  
Bathymetric Elevation  
Buffalo Harbor State Park