

## Library Reference 7.13

**Concentration summary of other parameters, Onondaga Lake South Deep, 2010.**

Parameter (Units)	Sample Date Range 2010	Sample Depth Range (m)	N Samples	Concentration Results		
				Range	Average	Std Error
BOD5 (mg/L)	03/23 - 11/16	UML/LWL	38	2 - 5	2.4	0.14
Alkalinity (mg/L)	03/23 - 11/16	UML/LWL	38	130 - 210	179	3.38
Hardness (mg/L)	03/23 - 11/16	UML/LWL	38	381 - 474	436	3.72
pH (Std Units)	03/23 - 11/16	0 - 18	133	7.05 - 8.36	7.7	0.02
Temperature (°C)	03/23 - 11/16	0 - 18	153	2.93 - 26.28	15	0.46
Total organic carbon (mg/L)	03/23 - 11/16	0 - 18	76	2.68 - 5.04	3.3	0.05
Total organic carbon, filtered (mg/L)	03/23 - 11/16	0 - 18	76	2.62 - 4.15	3.1	0.04
Total inorganic carbon (mg/L)	03/23 - 11/16	0 - 18	76	29.9 - 54.6	43	0.68
Total Kjeldahl nitrogen (mg/L)	03/23 - 11/16	0 - 18	133	0.378 - 1.81	0.74	0.024
Organic nitrogen (mg/L)	03/23 - 11/16	0 - 18	133	0.09 - 1.11	0.50	0.018
Ammonia as N (mg/L)	03/23 - 11/16	0 - 18	133	0.029 - 1.337	0.24	0.022
Nitrite as N (mg/L)	03/23 - 11/16	UML/LWL	38	0.0128 - 0.198	0.047	0.0059
Nitrate as N (mg/L)	03/23 - 11/16	UML/LWL	38	0.754 - 2.69	2.0	0.08
Total phosphorus (mg/L)	03/23 - 11/16	0 - 18	142	0.008 - 0.188	0.027	0.0017
Soluble reactive phosphorus (mg/L)	03/23 - 11/16	0 - 18	133	0.001 - 0.089	0.007	0.0011
Total dissolved phosphorus (mg/L)	03/23 - 11/16	0 - 18	132	0.003 - 0.114	0.013	0.0014
Silica (mg/L)	03/23 - 11/16	0 - 18	76	0.5 - 7.89	3.2	0.17
Calcium (mg/L)	03/23 - 11/16	UML/LWL	38	118 - 149	136	1.29
Sodium (mg/L)	03/23 - 11/16	UML/LWL	38	185 - 251	222	2.32
Sulfate (mg/L)	03/23 - 11/16	UML/LWL	38	132 - 165	148	1.31
Chloride (mg/L)	03/23 - 11/16	UML/LWL	38	366 - 444	398	2.95
Salinity (ppt)	03/23 - 11/16	0 - 18	133	0.75 - 1.12	0.93	0.007
Conductivity (umHos/cm)	03/23 - 11/16	0 - 18	133	1478 - 2213	1817	12.63
Total solids (mg/L)	03/23 - 11/16	0 - 18	76	1052 - 1332	1191	7.36
Total suspended solids (mg/L)	03/23 - 11/16	0 - 18	76	2 - 4	2.7	0.11
Total dissolved solids (mg/L)	03/23 - 11/16	0 - 18	76	993 - 1248	1090	6.05
Turbidity (NTU)	03/23 - 11/16	UML	58	1.18 - 12.5	3.0	0.23
Phaeophytin-a (mg/m3)	03/23 - 11/16	0 - 3 (TC)	35	0.2 - 2.4	0.73	0.107
Arsenic (mg/L)	04/07 - 11/16	UML/LWL	8	0.002 - 0.002	0.0020	0
Cadmium (mg/L)	04/07 - 11/16	UML/LWL	8	0.0008 - 0.0008	0.0008	6.74E-12
Chromium (mg/L)	04/07 - 11/16	UML/LWL	8	0.002 - 0.002	0.0020	0
Copper (mg/L)	04/07 - 11/16	UML/LWL	8	0.0025 - 0.0025	0.0025	0.000000
Iron (mg/L)	03/23 - 11/16	UML/LWL	38	0.04 - 0.204	0.09	0.007
Lead (mg/L)	04/07 - 11/16	UML/LWL	8	0.002 - 0.002	0.0020	0
Magnesium (mg/L)	03/23 - 11/16	UML/LWL	38	21 - 25.2	23	0.16
Manganese (mg/L)	03/23 - 11/16	UML/LWL	38	0.02 - 0.871	0.14	0.039
Mercury, methyl (ng/l)	04/20 - 10/26	3 - 18	6	0.05 - 0.207	0.13	0.029
Mercury, total (ng/l)	04/20 - 10/26	3 - 18	6	1.12 - 2.93	2.1	0.24
Nickel (mg/L)	04/07 - 11/16	UML/LWL	8	0.0038 - 0.0038	0.0038	1.56E-11
Potassium (mg/L)	04/07 - 11/16	UML/LWL	8	4.08 - 4.72	4.4	0.07
Selenium (mg/L)	04/07 - 11/16	UML/LWL	8	0.002 - 0.002	0.0020	0
Zinc (mg/L)	04/07 - 11/16	UML/LWL	8	0.005 - 0.0101	0.0066	0.00074

**Notes:**

UML = Upper mixed layer composite; LWL = Lower water layer composite; TC = Tube composite standardized to 0-3m.

(a) Late fall, winter, and early spring (Oct. 1 – May 31) when the lake waters are not strongly stratified: the default UML is 0, 3, 6m; the default LWL is defined as 9, 12, 15 and 18m.

(b) Summer stratification period (June 1 – Sept. 30): UML composite shall always include samples collected at 0 and 3 m depths, and inclusion of water collected at 6 m in the composite shall be evaluated based on the temperature profiles measured during the sampling event; LWL composite will typically include water collected at depths of 12, 15 and 18 m, and inclusion of the 12 m depth should be reviewed during each sampling event; the 9m depth is not included in either composite, as it is consistently in the metalimnion during this period.