

**Lake Pleasant sampling results, 1m above bottom, center of lake, 8/28/91, 1:15pm
(Wellington 1991)**

Test no.	Parameter	Result	Units
403	pH	7.8000	
410	Total Alkalinity	126.0000	mg/L as CaCO ₃
610A	Total NH ₃ -N	1.4400	mg/L
615	Nitrate-NO ₂	<0.0400	mg/L
620	Nitrate-NO ₃	<0.0400	mg/L
625A	Total Kjeld-N	1.6600	mg/L
665A	Total P	0.5500	mg/L
680	Total Organic Carbon (TOC)	4.3000	mg/L
900A	Total Hardness	119.0000	mg/L as CaCO ₃
916A	Ca, Total	39.8000	mg/L
927A	Mg, Total	6.2000	mg/L
945	SO ₄ , Total	4.1000	mg/L
1040J	Cu, Dissolved	1.9400	µg/L
1042J	Cu, Total	0.8960	µg/L
1045A	Fe, Total	2040.0000	µg/L
1046A	Fe, Dissolved	1890.0000	µg/L
1049J	Pb, Dissolved	0.2080	µg/L
1051J	Pb, Total	0.0800	µg/L
1055J	Mn, Total	2640.0000	µg/L
1056J	Mn, Dissolved	2590.0000	µg/L
1090J	Zn, Dissolved	4.7900	µg/L
1092J	Zn, Total	2.0700	µg/L
1105J	Al, Total	4.7100	µg/L
1106J	Al, Dissolved	3.2200	µg/L
70507A	Phos/T Ortho	0.2550	mg/L

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Test no.	Parameter	Result	Units
1002Y	As, Total	4.6000	µg/L
1027Y	Cd, Total	<0.2000	µg/L
1034Y	Cr, Total	<4.0000	µg/L
1042X	Copper	<50.0000	µg/L
1045X	Fe, Total	2660.0000	µg/L
1051Y	Pb, Total	<4.0000	µg/L
1055X	Manganese	3240.0000	µg/L
1067X	Nickel	<50.0000	µg/L
1092X	Zinc	<10.0000	µg/L
1105X	Al, Total	<150.0000	µg/L
1147Y	Se, Total	<6.0000	µg/L
71900X	Mercury	<1.0000	µg/L

Lake Pleasant field data, center of lake, 6/28/01, 9:00am (Wellington 2001)

Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	pH	Specific Conductance (umhos/c)
1.00	24.7	9.1	8.6	264
2.00	23.8	9.7	8.7	265
3.00	22.5	10.	8.7	267
4.00	18.4	11.5	8.8	267
5.00	15.6	6.4	8.0	280
6.00	13.3	1.8	7.4	291
7.00	11.3	1.0	7.2	288
8.00	8.8	0.1	7.0	306
9.00	8.1	0.04	6.9	313
10.00	8.0	0.03	6.9	312
11.00	7.8	0.02	6.9	313
12.00	7.7	0.02	6.8	317
12.50	7.6	0.01	6.8	318

Lake Pleasant sediment data, 6/28/01, center, 1:24pm (Wellington 2001)

Test no.	Parameter	Result	Units
40610	Ammonia	1.05	mg/L
46745	Reactive S	113	mg/kg
40680	Carbon	10.6	mg/L
40005K	Moisture	90.2	
40006K	Solids	9.84	
46251K	Magnesium	4380	mg/kg
46254K	Iron	44516	mg/kg
46255K	Manganese	1128	mg/kg
46256K	Calcium	9554	mg/kg
46257K	Copper	43.7	mg/kg
46307K	Nickel	26.4	mg/kg
46308K	Chromium	21.9	mg/kg
46309K	Cadmium	<5.1	mg/kg
46900K	Aluminum	14889	mg/kg
46902K	Silver	<5.1	mg/kg
46903K	Arsenic	25.1	mg/kg
46904K	Selenium	<35.6	mg/kg
46905K	Zinc	191	mg/kg
46909K	Antimony	<30.5	mg/kg
46910K	Beryllium	<5.1	mg/kg
46912K	Tin	<203	mg/kg
46913K	Vanadium	58.9	mg/kg
80002K	Acid Digest	0 Each	
46022K	Boron	<203	mg/kg
46259K	Mercury	1.25	mg/kg
40665	Phosphorus	0.07	mg/kg
46720	Reactive Cn	<0.05	mg/kg

APPENDIX D

Nomenclature

A standard system for naming location points and samples has been developed. Each sample taken (at each location, depth, and time) will be assigned a unique location ID and sample ID.

Location ID

Samples collected at the points center, north, outlet, w_stream_s, w_stream_n, and bridge will have location ID's of the same name. Samples will be collected from approximately the same latitude and longitude each time. However, due to the difficulty in reproducing the exact same latitude and longitude point every time while carrying a GPS unit, especially out on the water, a unique latitude and longitude will be recorded whenever possible. Those points with approximated latitude/longitude coordinates will be assigned a standard position corresponding to its general location.

The location ID's for the drinking water wells are: Lyons, LYONSW1 (also well1); Diane Johnson's well has the loc_id JOHNSONW2 (also well2); Johnson artesian, JOHNSONW1, (also well3), and OPRENDEKW1, OprendeK (also well 4).

The monitoring wells have been given the sample ID's: LyonsM1S, Lyons M1D, Lyons M2S, Lyons M2D, and Gravel M1D.

Ponds that were sampled have been named pond a, pond b, pond c, pond d, pond e, pond f, pond g, and pond h.

The culverts (previously named UNT1, UNT3 pipe1, UNT3 pipe2, UNT3 pipe3) have been given the location ID's unt1, unt3p1, unt3p2, and unt3p3.

In cases where a specific location ID hasn't been established, the first eight digits of the sample ID will be used (see following section).

Sample ID

The twelve-digit sample ID indicates the date the sample is collected, the sample type, the sample order and location, and the depth at which the sample was collected. The sample ID begins with a two digit month index, two digit day index, and two digit year index that corresponds with the specific day that data were collected at that point. For example, if a sample was taken at a certain point on November 12, 2001, the first six digits of the location ID would be 111201.

Month Index Codes	Month
01	January
02	February
03	March
04	April
05	May
06	June

07	July
08	August
09	September
10	October
11	November
12	December

Sample Year Index Codes	Year
98	1998
99	1999
00	2000
01	2001

The seventh digit, the type index, corresponds with the type of sample collected. The categories for the type index are listed below.

Type Index Codes	Description
H	Hydrolab
P	Precipitation
I	Ice
G	Groundwater
L	Lake water
S	Surface water

Hydrolab

Field parameters measured with the YSI sonde are considered as Hydrolab data and will have a type code of H.

Precipitation

Meteorological data relating to precipitation will have a type code of P.

Ice

Any ice samples collected from the lake will have a type code of I.

Groundwater

Groundwater samples will have a type code of G.

Lake water

Samples collected from the water column of the lake, including water quality parameters, but excluding field parameters (hydrolab data) will have a type code of L.

The eighth digit corresponds with the order and location in which the sample was taken on a particular day, by type. The eighth digit will correspond with a particular latitude and longitude, but not with a particular elevation. The latitude and longitude of the sampling point should be recorded with a GPS unit and reported. For example, if three lake water samples are taken from three different points on the lake on a particular day, the first sample or groups of samples will have seventh and eighth digits of LA, the second, LB, and the third, LC. If three samples are taken from three different points on the lake on a particular day, but two of those were hydrolab data, and the other was lake water, the seventh and eighth digits would be HA, HB, and LA.

The last four digits correspond to the depth of the sample. For example, the last four digits of a surface sample would be 00.0 – including the decimal point. The last four digits of a sample taken at 12.5 meters would be 12.5. At 2.0 meters, the last four digits would be 02.0.

Please note that if a sample is collected from one point but many depths, it is considered to be the same sampling effort. In other words, hydrolab samples taken at the center of the lake on one day, but with varying depths are all HA samples with different depth numbers... HA00.5, HA01.5, HA02.5, etc.

Sample ID

Example 1:

123001HD00.0 123001HD01.0 123001HD02.0

These Sample ID's were given to samples taken on December 30, 2001. They were taken at the fourth latitude/longitude location (D) of hydrolab (H) samples that day. In other words, 123001HA, 120301HB, and 123001HC would also have to exist. The first sample was taken at the surface, the next at one meter, and the next at two meters. The location ID of these three samples is 123001HD.

Example 2:

100501SA 100501SB 100501SC

These sample ID's indicate that surface water samples were collected on October 5, 2001, in three different latitude/longitude locations. Each sample ID would correspond with one of the location ID's: stream, outlet, or bridge.

Sample ID and Location ID Example:

Center 110601HA00.5, Stream 110601SB, Center 110601LA07.5

According to these ID's, a hydrolab sample was taken at the center of the lake, at a depth of 0.5m below lake elevation. A surface water sample was taken at the point named Stream and was the second surface water sample taken that day. A lake water sample was taken at the center of the lake at a depth of 7.5m below lake elevation. All of the samples were taken on November 6, 2001.