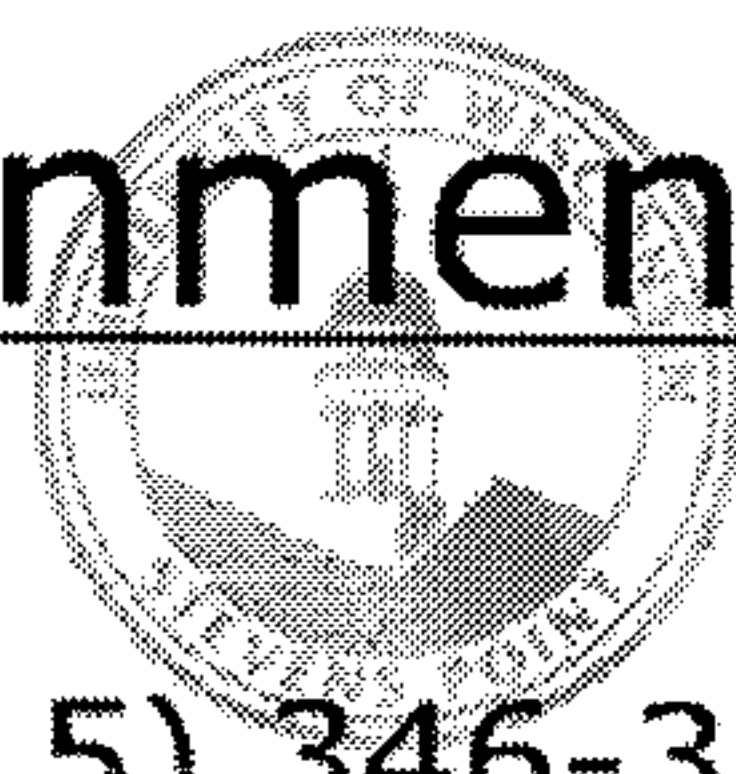


Water & Environmental Analysis Lab



College
of Natural Resources



(715) 346-3209

Center for
Watershed Science
and Education



Site Information

Project ID: 130
Project: PHANTOM LAKE
Waterbody: Phantom Lake, Lower (Howitt)
County: Waukesha
Site Name: LAKE CENTER-SURFACE

Physical Characteristics of Phantom Lake, Lower (Howitt)

Surface Area: 373.02 ACRES
Max Depth: 12 FEET
Average Depth: 4 FEET
Shoreline Length: 3.3 MILES

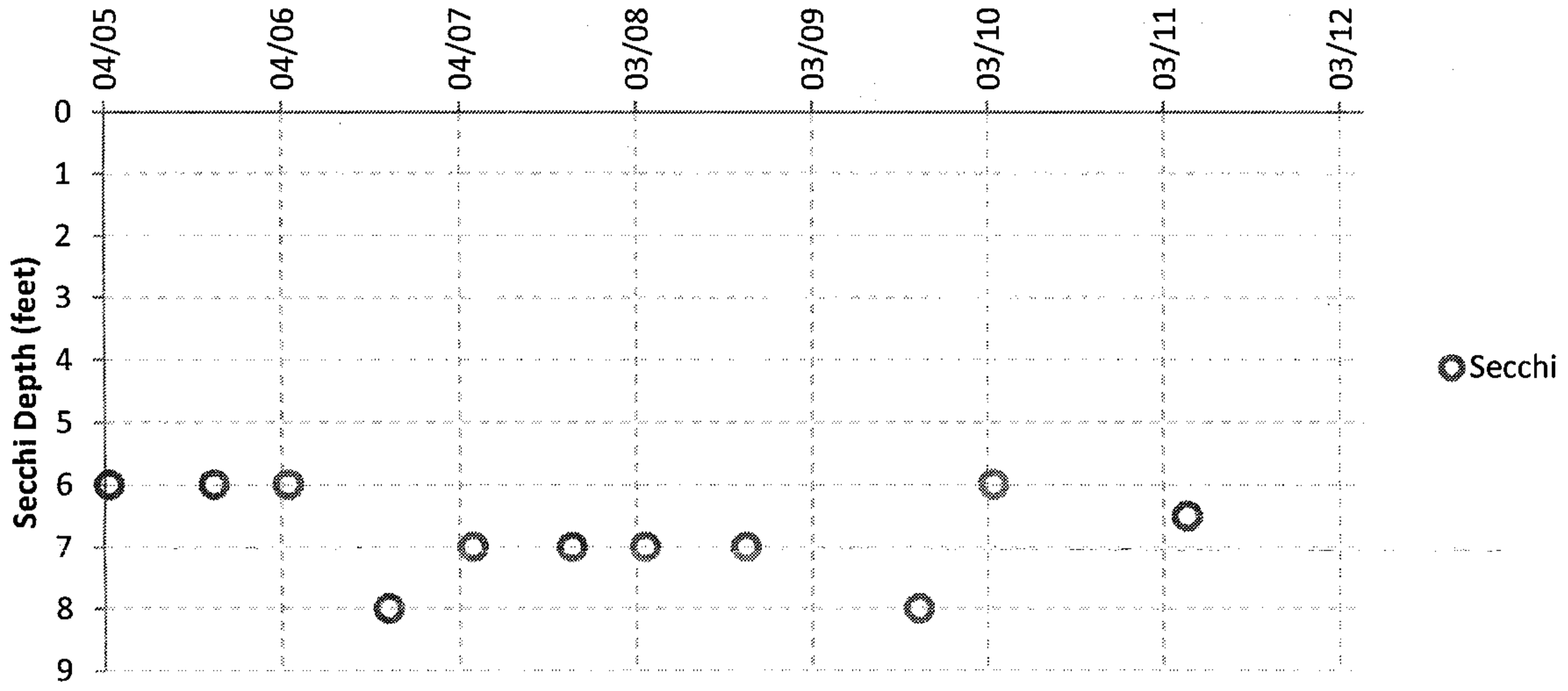
Monitoring Data for Site Visit – 5/19/2011

Parameter	Units	Result
pH	SU	-
Conductivity	µS/cm at 25°C	597
Alkalinity	mg/L CaCO ₃	-
Magnesium Hardness	mg/L CaCO ₃	-
Calcium Hardness	mg/L CaCO ₃	-
Total Hardness	mg/L CaCO ₃	-
Turbidity	NTU	-
Color	SU	-
Reactive Phosphorus	µg/L	7
Total Phosphorus	µg/L	29
Ammonium	mg/L N	0.10
Nitrate - Nitrite	mg/L N	0.45
Inorganic Nitrogen	mg/L N	0.55
Total Kjeldahl Nitrogen	mg/L N	0.87
Total Nitrogen	mg/L N	1.32
*Nitrogen/Phosphorus Ratio	ratio	45.5
Chloride	mg/L	31.8
Sulfate	mg/L	-
Sodium	mg/L	-
Potassium	mg/L	-
Temperature	Degrees F	-
Secchi Depth	Feet	6.5
Chlorophyll a	mg/L	-
Dissolved Oxygen	mg/L	76
E. coli	MPN/100ml	-

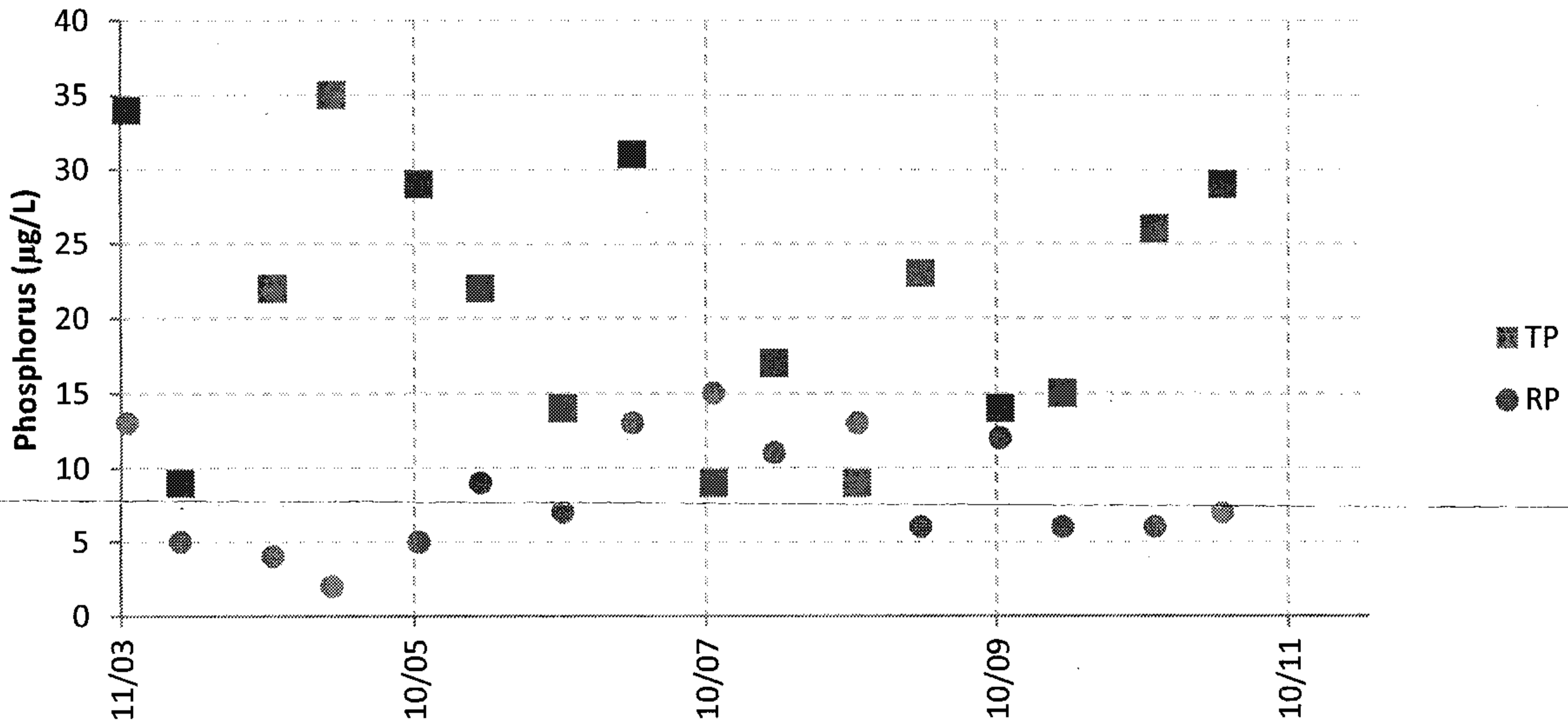
* Nitrogen/Phosphorus Ratio less than 10 generally indicates N limiting
Nitrogen/Phosphorus Ratio greater than 15 generally indicates P limiting

Comments:

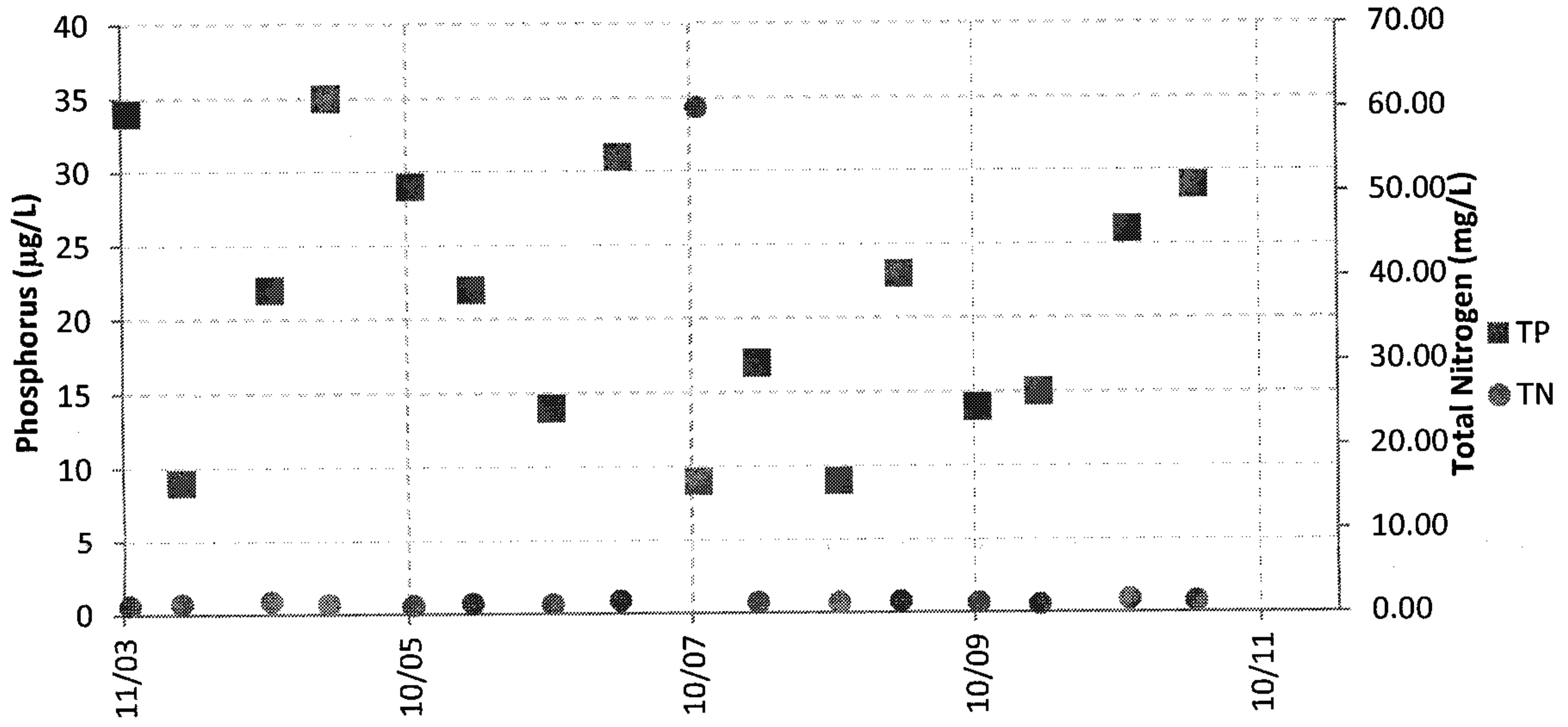
Secchi Disc Depths Over Time



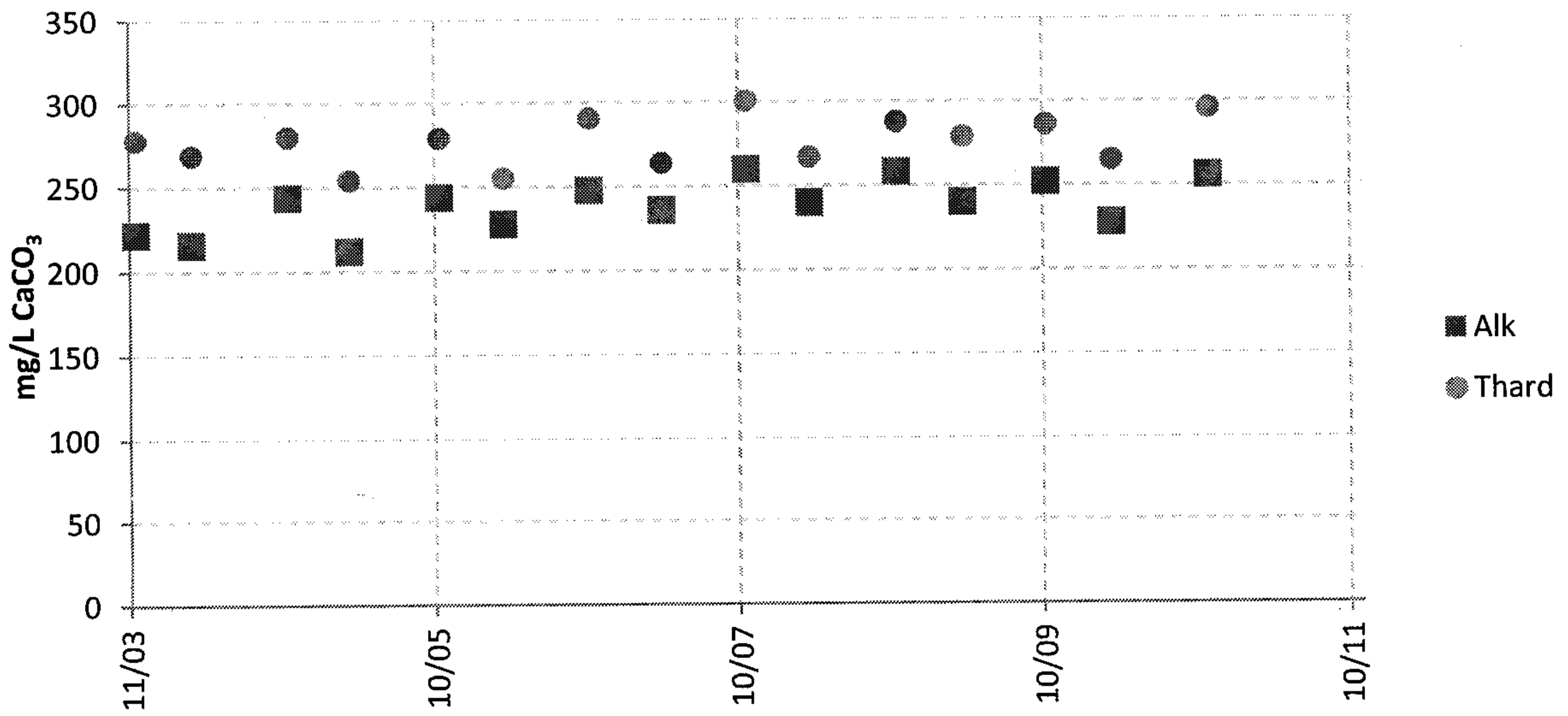
Total and Reactive Phosphorus Concentrations Over Time



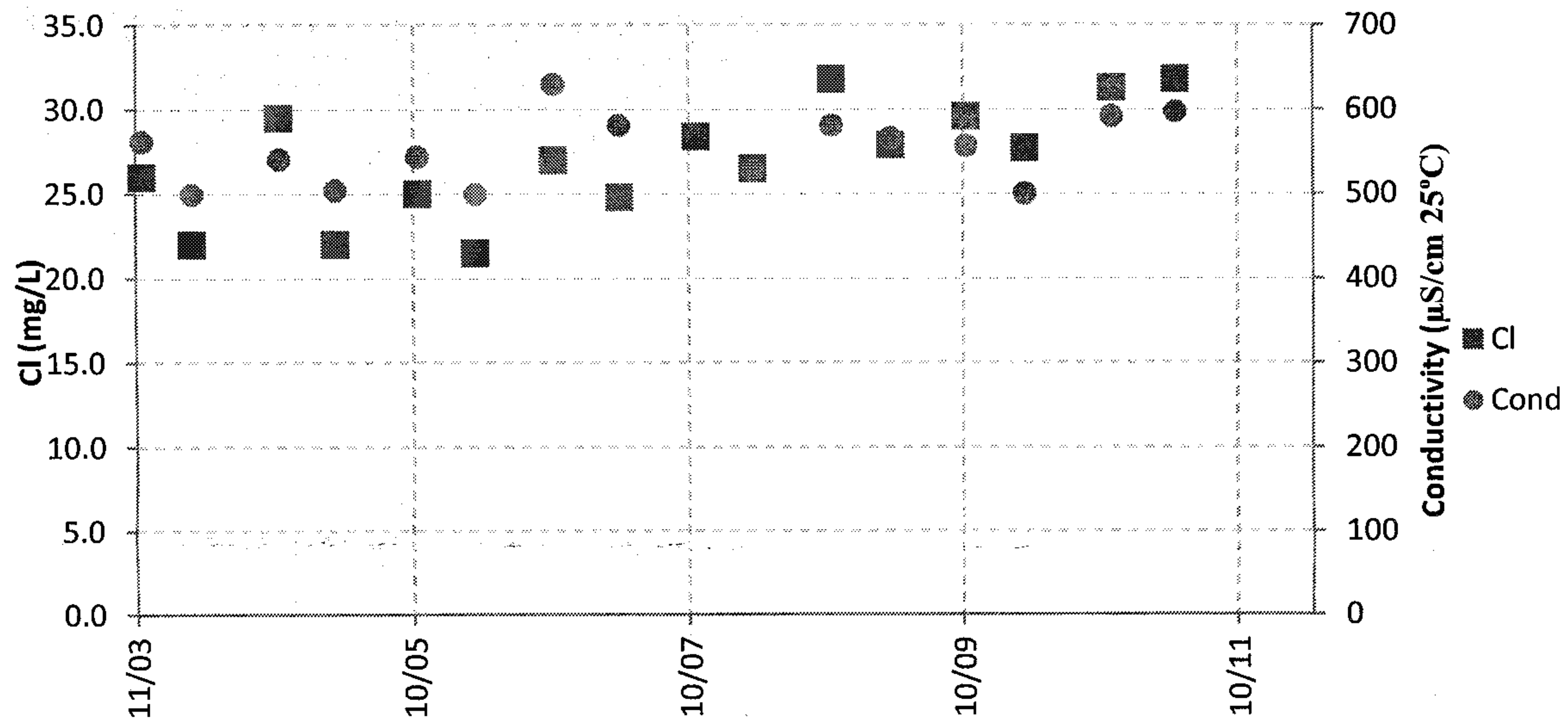
Total Phosphorus and Total Nitrogen Concentrations Over Time



Alkalinity and Total Hardness Concentrations Over Time



Chloride Concentration and Conductivity Over Time



Lab Results From The University of Wisconsin Stevens Point Water and Environmental Lab (715) 346-3209

Project: PHANTOM LAKE, Waterbody: Phantom Lake, Lower (Howitt), Site: LAKE CENTER-SURFACE

Date	pH_I	Cond_I	Alk	CaHard	THard	Turb	Color	DRP	TP	NH4	NO3NO2	Inorg_N	TKN	TN	TN_TP	CI	SO4	Na	K
11/17/2003	8.24	562	222	134	278	1.6	22	13	34	0.12	0.36	0.48	0.72	1.08	32	26	30.6	11.7	2.5
3/29/2004	8.11	499	216	137	269	0.8	12	5	9	0.05	0.56	0.61	0.67	1.23	137	22	24.1	9.4	1.7
11/14/2004	8.47	541	244	142	280	1.9	14	4	22	0.07	0.46	0.53	1.05	1.51	69	29.5	25.3	11.5	2.2
4/10/2005	8.1	504	212	132	254	1.7	25.4	<4	35	0.06	0.44	0.5	0.72	1.16	33	22	21.1	9.3	1.9
11/12/2005	8.14	544	244	141	279	1.6	20	5	29	0.06	0.49	0.55	0.53	1.02	35	25	24.4	10.3	2.3
4/14/2006	8.05	499	228	131	255	2.8	12	9	22	0.03	0.56	0.59	0.66	1.22	55	21.5	22.5	9.9	1.8
11/6/2006	8.31	630	248	149	291	1.7	17.6	7	14	0.03	0.68	0.71	0.45	1.13	81	27	22.7	11.3	2.1
4/29/2007	8.15	581	236	138	264.1	0.7	34	13	31	0.06	0.71	0.77	0.79	1.5	48	24.8	18.9	11.5	1.8
11/19/2007	8.31	570	260	151	301	2.5	12	15	9	0.01	1.1	1.11	59	60.1	6678	28.4	21.8	13.6	1.9
4/19/2008	8.13	527	240	142	267	8	17	11	17	0.01	0.74	0.75	0.46	1.2	71	26.5	18.5	12.7	1.8
11/14/2008	8.37	581	258	146	288	1.8	11	13	9	0.005	0.8	0.81	0.39	1.19	132	31.8	21.1	13.8	2.3
4/22/2009	8.26	566	240	137	279	2.6	11	6	23	0.1	0.64	0.74	0.66	1.3	57	27.9	20.9	13.6	1.8
11/8/2009	8.22	557	252	146	286	2.1	16	12	14	0.02	0.69	0.71	0.43	1.12	80	29.6	19.89	12.3	2.1
4/13/2010	8.17	500	228	135	265	3.0	7	6	15	0.04	0.47	0.51	0.45	0.92	61	27.7	19.49	11.7	1.8
11/30/2010	8.23	592	256	151	296	3.1	15.9	6	26	0.10	0.96	1.06	0.57	1.53	59	31.3	21.4	13.7	2.1
5/19/2011		597						7	29	0.10	0.45	0.55	0.87	1.32	46	31.8			