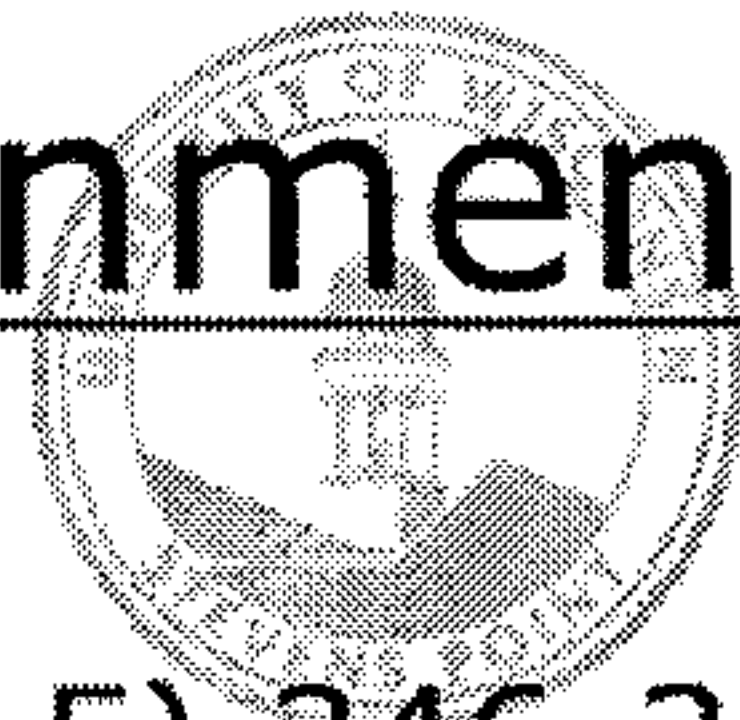



Water & Environmental Analysis Lab



College
of Natural Resources



(715) 346-3209

Center for
Watershed Science
and Education 

Site Information

Project ID: 130
Project: PHANTOM LAKE
Waterbody: Phantom Lake, Upper
County: Waukesha
Site Name: LAKE CENTER-SURFACE

Physical Characteristics of Phantom Lake,

Upper

Surface Area: 110.24 ACRES
Max Depth: 29 FEET
Average Depth: 11 FEET
Shoreline Length: 2.1 MILES

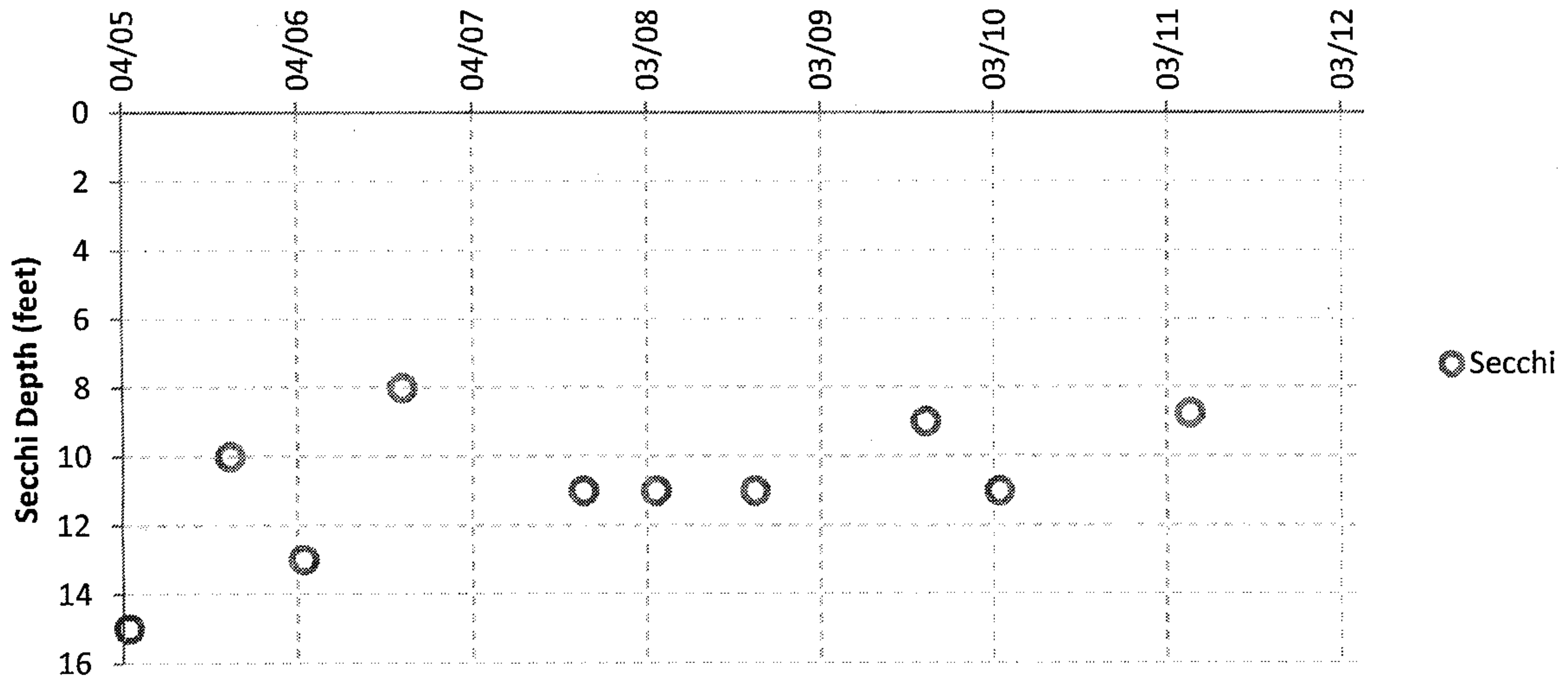
Monitoring Data for Site Visit – 5/19/2011

Parameter	Units	Result
pH	SU	-
Conductivity	µS/cm at 25°C	599
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	6
Total Phosphorus	µg/L	21
Ammonium	mg/L N	0.04
Nitrate - Nitrite	mg/L N	0.12
Inorganic Nitrogen	mg/L N	0.16
Total Kjeldahl Nitrogen	mg/L N	0.59
Total Nitrogen	mg/L N	0.71
*Nitrogen/Phosphorus Ratio	ratio	33.8
Chloride	mg/L	41
Sulfate	mg/L	-
Sodium	mg/L	-
Potassium	mg/L	-
Temperature	Degrees F	-
Secchi Depth	Feet	8.8
Chlorophyll a	mg/L	-
Dissolved Oxygen	mg/L	75
E. coli	MPN/100ml	-

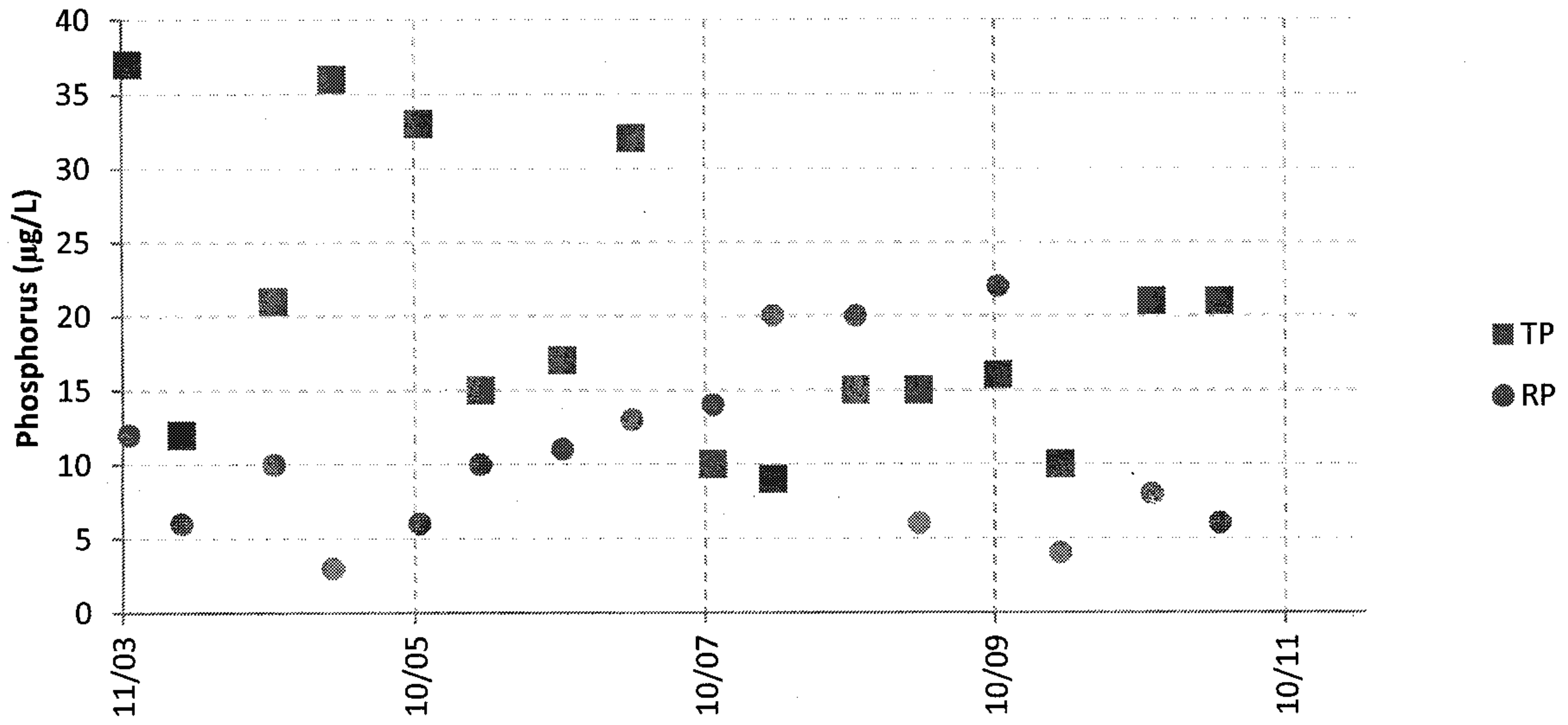
* Nitrogen/Phosphorus Ratio less than 10 generally indicates N limiting
Nitrogen/Phosphorus Ratio greater than 15 generally indicates P limiting

Comments:

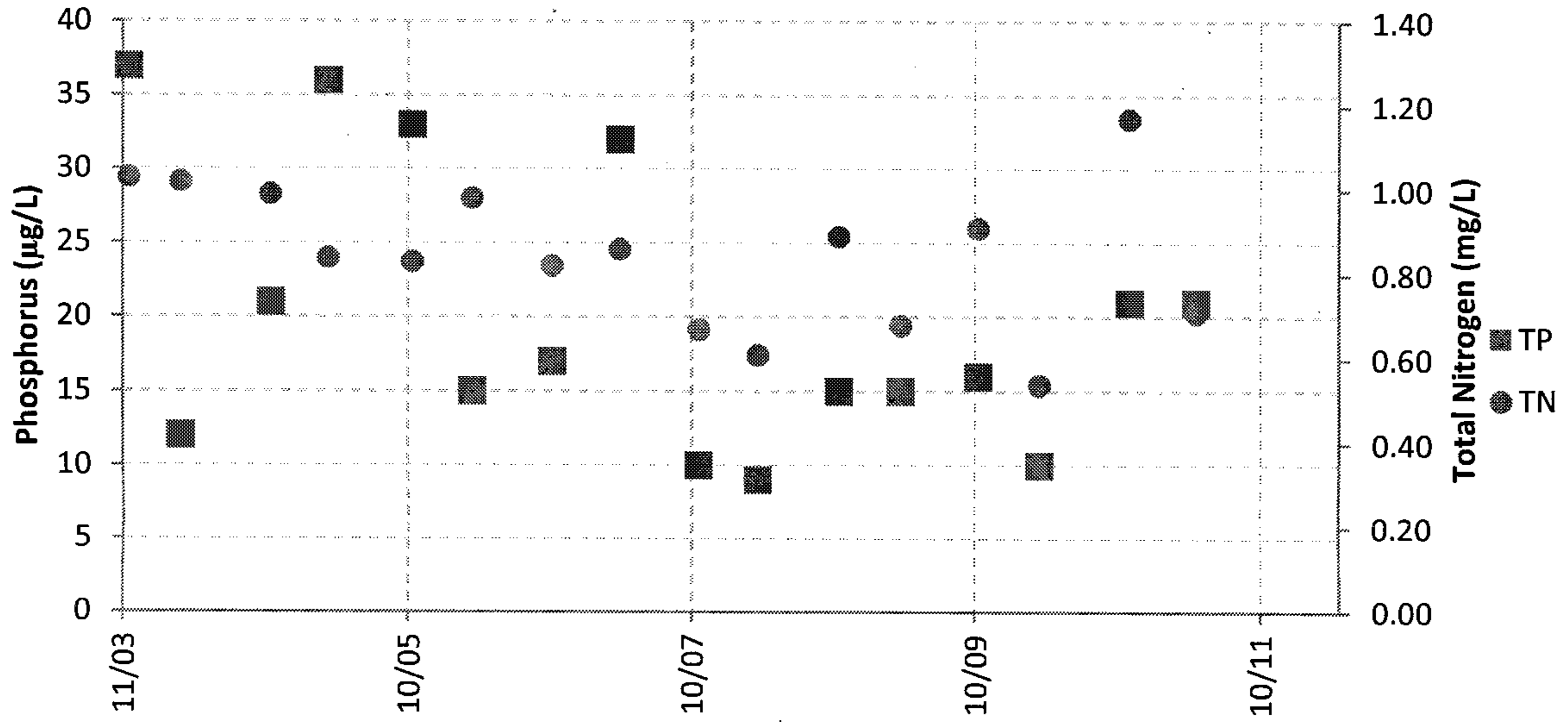
Secchi Disc Depths Over Time



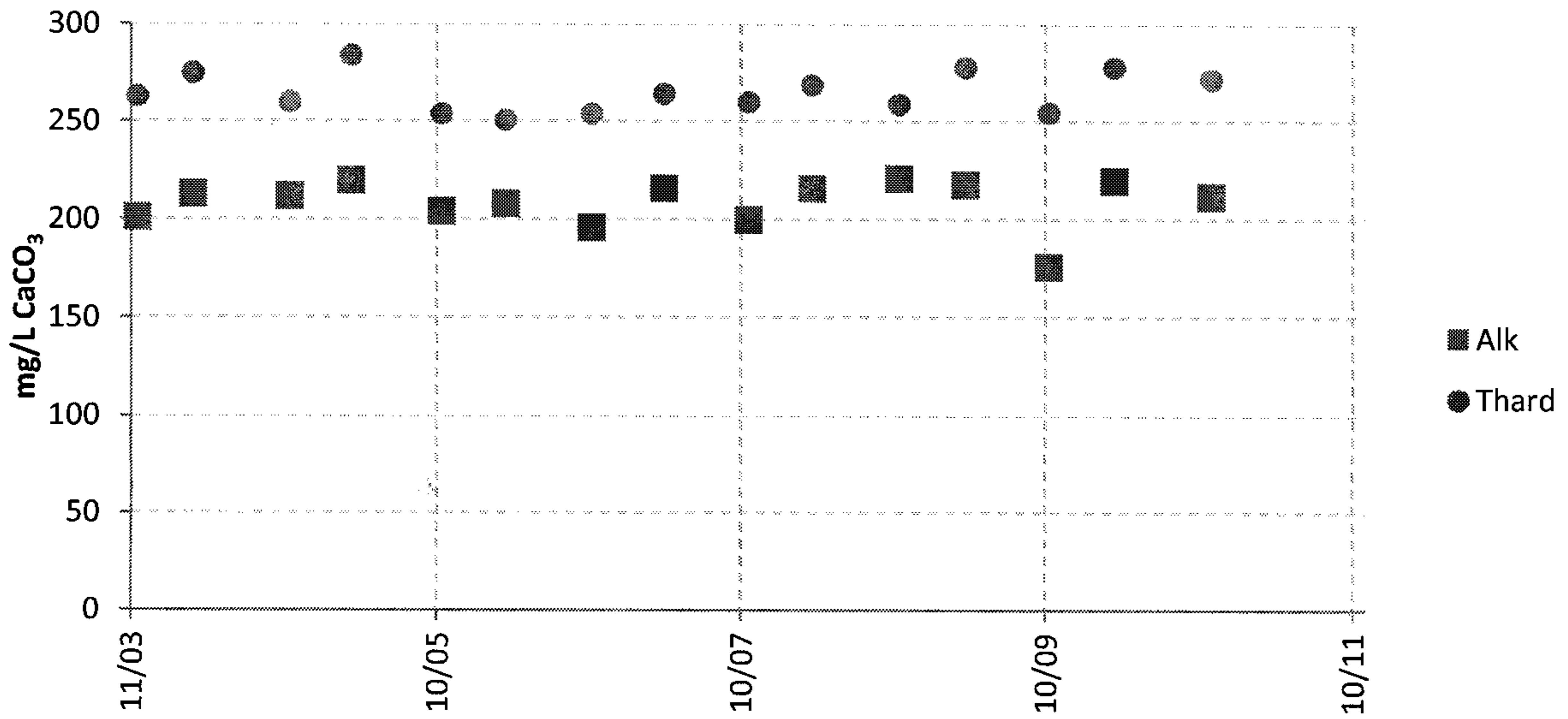
Total and Reactive Phosphorus Concentrations Over Time



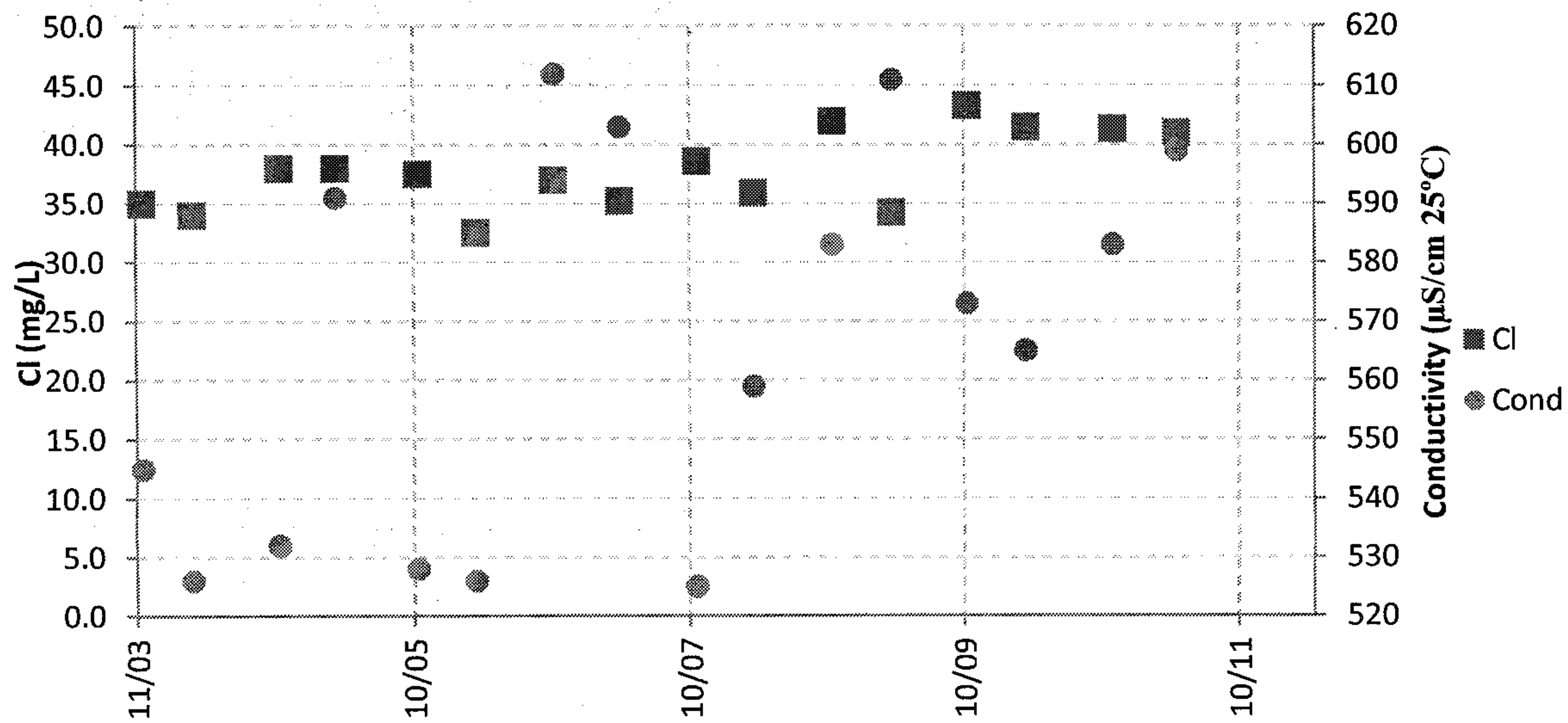
Total Phosphorus and Total Nitrogen Concentrations Over Time



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, Upper, 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	8.26	545	201	103	263	1.9	9	12	37	0.26	0.08	0.34	0.95	1.03	28	35	34.4	16.2	2.3
3/29/2004	8.16	526	213	120	275	0.5	6	6	12	0.3	0.21	0.51	0.81	1.02	85	34	33.7	15.1	2.1
11/14/2004	8.35	532	212	113	260	3	12	10	21	0.26	0.03	0.29	0.96	0.99	47	38	35.1	15.6	2
4/10/2005	8.07	591	220	131	284	1.4	9.5	3	36	0.17	0.21	0.38	0.63	0.84	23	38		16	2
11/12/2005	8.1	528	204	100	254	1.4	12	6	33	0.18	0.11	0.29	0.72	0.83	25	37.5	36.5	16.1	1.9
4/14/2006	8.1	526	208	111	251	2	2.5	10	15	0.07	0.26	0.33	0.72	0.98	65	32.5	34.6	15.3	2.2
11/6/2006	8.13	612	196	108	254	2.2	12.4	11	17	0.17	0.13	0.3	0.69	0.82	48	37	35.9	16.2	2.1
4/29/2007	8.2	603	216	123	264.3	0.8	17	13	32	0.04	0.26	0.3	0.6	0.86	27	35.2	36.4	16	2
11/19/2007	8.2	525	200	106	260	1.9	12	14	10	0.11	0.05	0.16	0.62	0.67	67	38.6	34	17.2	1.9
4/19/2008	8.19	559	216	129	269	7.8	9	20	9	0.06	0.28	0.34	0.33	0.61	68	35.9	33.8	16.8	1.9
11/14/2008	8.34	583	221	111	259	2.4	7	20	15	0.08	0.11	0.19	0.78	0.89	59	42	36.5	18.6	2.4
4/22/2009	8.27	611	218	125	278	2.5	6	6	15	0.005	0.18	0.19	0.5	0.68	45	34.2	36.6	18.1	1.9
11/8/2009	7.30	573	176	106	255	3.0	9	22	16	0.08	0.11	0.19	0.80	0.91	57	43.3	60.12	17.6	2.4
4/13/2010	8.26	565	220	127	278	2.6	6	4	10	0.03	0.14	0.17	0.40	0.54	54	41.5	35.73	17.6	2.0
11/30/2010	8.10	583	212	109	272	3.1	9.5	8	21	0.23	0.17	0.4	1.00	1.17	56	41.3	30.3	16.3	2.0
5/19/2011		599						6	21	0.04	0.12	0.16	0.59	0.71	34	41.0			