Appendix 1. Construction and location information for monitoring wells and location information for surface water sampling sites. USACE= US Army Corps of Engineers well. Note: ft bls = feet below land surface, CMT=Solinst CMT multi-port well.

DGS Well Identifier	DNREC permit	Top of casing elevation (ft NAVD88)	Land surface elevation (ft NAVD88)	Depth to top of screen (ft bls)	Depth to bottom of screen (ft bls)	Map index number	NOTE
Ni44-16	109284	44.97	42.97	34.6	44.6	1	USACE
Ni45-15	109275	21.87	19.87	13	23	2	USACE
Ni45-16	109276	30.14	27.64	19	29	3	USACE
Ni45-17	109277	23.87	21.87	14.5	24.5	4	USACE
Ni45-33	223154	46.52	44.32	45	60	5	
Ni45-34	223155	30.52	28.92	30	45	6	
Ni45-35	223156	32.13	29.43	30	45	7	
Ni45-36	223157	28.07	25.77	25	40	8	
Ni45-37	223158	17.1	14.9	19.5	34.5	9	
Ni45-38	223159	3.96	1.36	1.4	3.9	10	
Ni45-39	223160	6.78	5.46	2.1	4.6	11	
Ni45-40	223161	3.83	3.05	2.5	5	12	
Ni45-41	223162	7.37	5.67	3.1	5.6	13	
Ni45-42	223163	3.97	1.47	0.5	2.5	14	
Ni45-43	224318	37.18	37.18	30	45	15	
Ni45-44	224319	37.82	35.82	30	45	16	
Ni45-45	224320	30.49	28.49	25	40	17	
Ni45-46	224324	34.5	32.5	30	45	18	
Ni45-47	225308	3.51	1.51	33.4	33.7	15	CMT1
Ni45-48	225309	3.51	1.51	36.9	37.2	15	CMT1
Ni45-49	225310	3.51	1.51	40.4	40.7	15	CMT1
Ni45-50	225311	3.51	1.51	43.9	44.2	15	CMT1
Ni45-51	225312	3.51	1.51	47.4	47.7	15	CMT1
Ni45-52	225313	3.51	1.51	50.9	51.2	15	CMT1
Ni45-53	225314	3.51	1.51	54.4	54.7	15	CMT1
Ni45-54	225335	30.49	30.49	26.4	26.7	17	CMT2
Ni45-55	225336	30.49	30.49	29.9	30.2	17	CMT2
Ni45-56	225337	30.49	30.49	33.4	33.7	17	CMT2
Ni45-57	225338	30.49	30.49	36.9	37.2	17	CMT2
Ni45-58	225339	30.49	30.49	40.4	40.7	17	CMT2
Ni45-59	225340	30.49	30.49	43.9	44.2	17	CMT2
Ni45-60	225341	30.49	30.49	47.4	47.7	17	CMT2
Ni45-61	225315	5.97	3.97	28.8	29.1	7	CMT3
Ni45-62	225316	5.97	3.97	31.8	32.1	7	CMT3

Appendix 1 (continued). Construction and location information for monitoring wells and location information for surface water sampling sites. Background indicates surface water sampling site located in area not influenced by RIBS. USACE= US Army Corps of Engineers well. Note: ft bls = feet below land surface, CMT=Solinst CMT multi-port well.

DGS Well Identifier	DNREC permit	Top of casing elevation (ft NAVD88)	Land surface elevation (ft NAVD88)	Depth to top of screen (ft bls)	Depth to bottom of screen (ft bls)	Map index number	NOTE
Ni45-63	225317	5.97	3.97	35.8	36.1	7	CMT3
Ni45-64	225318	5.97	3.97	40.3	40.6	7	CMT3
Ni45-65	225319	5.97	3.97	44.8	45.1	7	CMT3
Ni45-66	225320	5.97	3.97	49.3	49.6	7	CMT3
Ni45-67	225321	5.97	3.97	51.8	52.1	7	CMT3
Ni45-78	224321	1.9	-0.1	1	1.3	14	CMT4
Ni45-79	Ni4579	33	31	2.5	2.8	14	CMT4
Ni45-80	Ni4580	33	31	4	4.3	14	CMT4
Ni45-81	Ni4581	33	31	5.5	5.8	14	CMT4
Ni45-82	Ni4582	33	31	7	7.3	14	CMT4
Ni45-83	Ni4583	33	31	8.5	8.8	14	CMT4
Ni45-84	Ni4584	33	31	10	10.3	14	CMT4

Surface-water sampling sites.

DGS Site Identifier	Map index number	NOTE
Ni44-b	19	background
Ni44-c	20	background
Ni45-r	21	
Ni45-s	22	
Ni45-t	23	
Ni45-v	25	
Ni45-w	26	
Ni45-x	27	
Ni45-y	28	
Ni45-aa	34	background
Ni45-ab	30	
Ni45-ac	31	
Ni45-ae	32	
Ni45-**EFF**	33	effluent

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Al (mg/L)	Al Flag	As (mg/L)	As Flag	B (mg/L)	B Flag	Ca (mg/L)	Ca Flag	Cr (mg/L)	Cr Flag	Cu (mg/L)	Cu Flag	Fe (mg/L)	Fe Flag	K (mg/L)	K Flag	Mg (mg/L)	Mg Flag	Mn (mg/L)	Mn Flag	Na (mg/L)	Na Flag	Pb (mg/L)	Pb Flag	Si (mg/L)	Si Flag	Zn (mg/L)	Zn Flag
Ni44-16	6/17/2008	06/17/2008Ni44-16																												
	8/13/2008	08/13/2008Ni44-16	0.091	M	0.001	LM			11	M	0.001	M			0.184	M	0.7	M	2.2	M	0.006	M	7.4	M	0.004	LM	8.6	M	0.002	M
	10/17/2008	10/17/2008Ni44-16	0.046	M	0.003	M			14.4	M	0.001	LM			0.026	M	0.7	M	2.7	M	0.001	LM	6.2	M	0.004	LM	8	M	0.001	LM
	12/18/2008	12/18/2008Ni44-16	0.037	M	0.02	M			8.1	M	0.001	LM			0.001	LM	4.3	M	1.8	M	0.001	LM	7.5	M	0.003	JM	13.5	M	0.001	LM
	2/11/2009	02/11/2009Ni44-16																												
	7/28/2009	07/28/2009Ni44-16	0.09	M	0.004	LM	0.023	M	9.66	M	0.001	LM	0.005	M	0.001	LM	0.969	M	2.04	M	0	M	9.83	M	0.004	LM	8.01	M	0.011	M
	11/4/2009	11/04/2009Ni44-16	0.053	M	0.009	M	0.017	M	8.95	M	0.001	LM	0.002	LM	0.001	LM	4.424	M	1.91	M	0	M	10.21	M	0.004	LM	9.07	M	0.006	M
Ni45-15	6/18/2008	06/18/2008Ni45-15																												
	8/13/2008	08/13/2008Ni45-15	0.635	M	0.003	M			0.5	M	0.002	M			0.218	M	0.5	M	0.9	M	0.012	M	9.5	M	0.004	LM	9.8	M	0.012	M
	10/8/2008	10/08/2008Ni45-15	0.399	M	0.003	M			0.5	M	0.001	LM			0.229	M	0.7	M	1	M	0.014	M	8.7	M	0.005	M	9.2	M	0.011	M
	12/2/2008	12/02/2008Ni45-15	0.231	M	0.041	M			0.7	M	0.001	LM			0.223	M	0.6	M	0.9	M	0.008	M	8.4	M	0.004	LM	8.6	M	0.006	M
	2/12/2009	02/12/2009Ni45-15																												
Ni45-17	8/13/2008	08/13/2008Ni45-17	0.27	M	0.001	LM			1.9	M	0.001	M			0.18	M	1.1	M	2.3	M	0.029	M	14.8	M	0.004	LM	6.9	M	0.012	M
	7/28/2009	07/28/2009Ni45-17	0.33	M	0.004	LM	0.019	M	2.14	M	0.001	LM	0.008	M	0.005	M	1.249	M	1.98	M	0.039	M	12.53	M	0.003	JM	3.95	M	0.021	M
	11/4/2009	11/04/2009Ni45-17	0.295	M	0.006	M	0.016	M	2.08	M	0.001	LM	0.002	LM	0.01	M	1.538	M	1.81	M	0.023	M	11.59	M	0.004	LM	6.91	M	0.009	M
Ni45-33	4/17/2008	04/17/2008Ni45-33a	0.404	M	0.002	JM			13.1	M	0.001	LM			0.069	M	5.93	M	8.95	M	0.205	M	71.99	M	0.015	M	10.97	M	0.055	M
		04/17/2008Ni45-33b	1.267	M	0.004	LM			21.2	M	0.001	LM			0.001	LM	10.09	M	15.13	M	0.191	M	123.2	M	0.004	LM	11.8	M	0.048	M
	6/20/2008	06/20/2008Ni45-33																												
	8/13/2008	08/13/2008Ni45-33	0.389	M	0.001	LM			9.7	M	0.003	M			0.533	M	5.8	M	7.4	M	0.032	M	53.8	M	0.004	LM	12.9	M	0.016	M
	10/7/2008	10/07/2008Ni45-33	0.149	M	0.001	M			6.3	M	0.001	LM			0.571	M	3.1	M	4.5	M	0.039	M	33.3	M	0.008	M	12.9	M	0.018	M
	12/18/2008	12/18/2008Ni45-33	0.126	M	0.001	LM			7.1	M	0.001	LM			0.376	M	3.4	M	5.2	M	0.034	M	42.4	M	0.006	M	18.8	M	0.025	M
	2/11/2009	02/11/2009Ni45-33																												
	8/7/2009	08/07/2009Ni45-33	0.543	M	0.007	M	0.045	M	8.24	M	0.001	LM	0.039	M	0.095	M	3.878	M	4.48	M	0.027	M	29.39	M	0.007	M	11.3	M	0.061	M
	11/4/2009	11/04/2009Ni45-33	0.077	M	0.004	M	0.049	M	11.24	M	0.001	LM	0.002	M	0.024	M	5.21	M	7.31	M	0.046	M	61.6	M	0.004	LM	11.67	M	0.026	M
Ni45-34	4/16/2008	04/16/2008Ni45-34a	0.18	M	0.005	M			14.8	M	0.002	M			0.12	M	9.41	M	11.98	M	0.192	M	82.8	M	0.004	LM	12.36	M	0.037	M
		04/16/2008Ni45-34b	0.576	M	0.007	M			20.1	M	0.001	M			0.202	M	12.04	M	19.3	M	0.336	M	125.5	M	0.002	JM	13.43	M	0.052	M
	6/18/2008	06/18/2008Ni45-34																												
	8/11/2008	08/11/2008Ni45-34	0.19	M	0.008	M			10	M	0.001	LM			0.222	M	6.3	M	7.1	M	0.038	M	70.8	M	0.008	M	8.4	M	0.017	M
	10/7/2008	10/07/2008Ni45-34	0.184	M	0.007	M			11.1	M	0.001	LM			0.348	M	6.6	M	7.8	M	0.061	M	71.4	M	0.006	M	12.3	M	0.03	M
	12/2/2008	12/02/2008Ni45-34	0.597	M	0.032	M			18	M	0.001	LM			0.152	M	8.7	M	13.4	M	0.032	M	94.7	M	0.009	M	13.5	M	0.033	M
	2/12/2009	02/12/2009Ni45-34																												
	7/28/2009	07/28/2009Ni45-34	0.579	M	0.008	M	0.046	M	9.32	M	0.001	LM	0.021	M	0.066	M	5.834	M	7.56	M	0.026	M	53.2	M	0.004	LM	8.73	M	0.049	M
	10/29/2009	10/29/2009Ni45-34	0.473	M	0.002	LM	0.044	M	12.86	M	0.001	LM	0.012	M	0.046	M	6.668	M	7.85	M	0.027	M	48.29	M	0.004	LM	13.84	M	0.032	M
Ni45-35	4/16/2008	04/16/2008Ni45-35a	0.469	M	0.004	JM			11.7	M	0.002	M			0.001	LM	4.63	M	9.1	M	0.245	M	61.37	M	0.006	M	10.09	M	0.035	M
		04/16/2008Ni45-35b	0.239	M	0.013	M			10.2	M	0.001	JM			0.067	M	4.13	M	8.91	M	0.249	M	62.11	M	0.006	M	8.809	M	0.026	M
	6/17/2008	06/17/2008Ni45-35																												
	8/12/2008	08/12/2008Ni45-35	0.475	M	0.001	LM			19.8	M	0.001	LM			0.161	M	8.2	M	13.8	M	0.014	M	81.4	M	0.008	M	11.5	M	0.024	M
	10/7/2008	10/07/2008Ni45-35a	1.665	M	0.002	M			23.5	M	0.001	LM			0.046	M	11.5	M	14.7	M	0.047	M	79.7	M	0.005	M	17.5	M	0.058	M
		10/07/2008Ni45-35b	0.94	M	0.004	M			23.6	M	0.001	LM			0.06	M	12.6	M	14.6	M	0.041	M	86.3	M	0.011	M	16.7	M	0.04	M
	12/1/2008	12/01/2008Ni45-35	2.035	M	0.037	M			15.2	M	0.001	LM			0.025	M	7.2	M	10.1	M	0.03	M	56.4	M	0.003	JM	17.9	M	0.052	M
	2/11/2009	02/11/2009Ni45-35a																												
		02/11/2009Ni45-35b																												
	4/16/2009	04/16/2009Ni45-35a																												
		04/16/2009Ni45-35b																												
	7/22/2009	07/22/2009Ni45-35	0.507	M	0.004	LM	0.045	M	11.15	M	0.001	LM	0.02	M	0.023	M	5.282	M	11.43	M	0.004	M	56.96	M	0.002	JM	8.03	M	0.014	M
	10/29/2009	10/29/2009Ni45-35	0.701	M	0.001	JM	0.038	M	14.08	M	0.001	LM	0.015	M	0.01	M	7.756	M	6.93	M	0.041	M	38.3	M	0.002	JM	15.53	M	0.045	M
Ni45-36	4/16/2008	04/16/2008Ni45-36a	0.104	M	0.005	M			10.1	M	0.002	M			0.001	LM	3.28	M	6.76	M	0.228	M	35.16	M	0.004	LM	9.252	M	0.03	M
		04/16/2008Ni45-36b	0.15	M	0.011	M			14.3	M	0.001	LM			0.002	M	7.59	M	12.8	M	0.238	M	82.83	M	0.004	LM	11.07	M	0.044	M
	6/17/2008	06/17/2008Ni45-36																												
	8/11/2008	08/11/2008Ni45-36	0.203	M	0.001	LM			14.8	M	0.001	LM			0.123	M	5.2	M	10.1	M	0.02	M	84.8	M	0.015	M	8.4	M	0.024	M
	10/7/2008	10/07/2008Ni45-36	0.256	M	0.001	M			17.3	M	0.001	LM			0.049	M	6.9	M	13.8	M	0.022	M	81.3	M	0.003	JM	12.6	M	0.045	M
	12/2/2008	12/02/2008Ni45-36	0.125	M	0.01	M			21.3	M	0.001	LM			0.071	M	8.2	M	15	M	0.016	M	81.3	M	0.004	LM	14	M	0.036	M
	2/12/2009	02/12/2009Ni45-36																												
	7/28/2009	07/28/2009Ni45-36	0.528	M	0.004	LM	0.032	M	7.9	M	0.001	LM	0.014	M	0.008	M	3.555	M	4.83	M	0.008	M	40.85	M	0.004	LM	7.22	M	0.031	M
	10/29/2009	10/29/2009Ni45-36	0.465	M	0.002	LM	0.044	M	15.45	M	0.001	LM	0.007	M	0.03	M	8.433	M	10.85	M	0.017	M	54.81	M	0.004	LM	13.51	M	0.037	M
Ni45-37	4/17/2008	04/17/2008Ni45-37a	0.075	M	0.004	LM			22.2	M	0.001	JM			0.182	M	8.2	M	12.69	M	0.338	M	103.5	M	0.013	M	11.65	M	0.019	M
		04/17/2008Ni45-37b	0.066	M	0.005	M			26	M	0.001	JM			0.115	M	9.01	M	14.39	M	0.259	M	126.9	M	0.003	JM	11.33	M	0.02	M
	6/18/2008	06/18/2008Ni45-37																												
	8/11/2008	08/11/2008Ni45-37	0.055	M	0.005	M			11.6	M	0.001	LM			0.767	M	5.9	M	6.1	M	0.037	M	44.1	M	0.017	M	9.6	M	0.006	M
	10/7/2008	10/07/2008Ni45-37	0.103	M	0.001	M			14.5	M	0.001	LM			0.49	M	5.1	M	8	M	0.052	M	67.6	M	0.006	M	13.1	M	0.01	M
	12/2/2008	12/02/2008Ni45-37	0.048	M	0.014	M			9.1	M	0.001	LM			0.095	M	3.3	M	5.3	M	0.035	M	46.1	M	0.006	M	12.6	M	0.017	M
	2/12/2009	02/12/2009Ni45-37																												
	7/28/2009	07/28/2009Ni45-37	0.184	M	0.004	LM	0.014	M	3.16	M	0.001	LM	0.007	M	0.118	M	0.886	M	1.45	M	0.014	M	10.44	M	0.004	LM	3.47	M	0.063	M
	10/29/2009	10/29/2009Ni45-37	0.142	M	0.002	LM	0.042	M	11.84	M	0.001	LM	0.004	M	0.154	M	5.345	M	7.58	M	0.033	M	56.83	M	0.004	LM	13.11	M	0.015	M
Ni45-38	4/17/2008	04/17/2008Ni45-38	1.592	M	0.005	M			20.8	M	0.001	JM			0.055	M	12.08	M	24.53	M	0.292	M	146.7	M	0.007	M	12.2	M	0.055	M
	6/18/2008	06/18/2008Ni45-38																												
	8/12/2008	08/12/2008Ni45-38	0.984	M	0.002	M			12.5	M	0.001	LM			0.166	M	7.6	M	12.8	M	0.015	M	112.3	M	0.012	M	9.8	M	0.032	M
	10/8/2008	10/08/2008Ni45-38	0.582	M	0.005	M			8.9	M	0.001	LM			0.155	M	2.6	M	6.5	M	0.047	M	56.4	M	0.003	JM	20.9	M	0.033	M
	12/2/2008	12/02/2008Ni45-38	0.837	M	0.01	M			14.2	M	0.001	LM			0.043	M	5	M	10.5	M	0.016	M	93.3	M	0.004	LM	12.5	M	0.029	M
	2/13/2009	02/13/2009Ni45-38																												
	8/7/2009	08/07/2009Ni45-38	0.58	M	0.004	LM	0.009	M	2.64	M	0.001	LM	0.011	M	0.003	M	1.347	M	1.72	M	0.006	M	9.03	M	0.004	LM	8.63	M	0.025	M
	11/4/2009	11/04/2009Ni45-38	0.913	M	0.002	JM	0.055	M	17.02	M	0.001	LM	0.002	M	0.006	M	6.364	M	11.07	M	0.026	M	95.26	M	0.004	LM	10.22	M	0.035	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Al (mg/L)	Al Flag	As (mg/L)	As Flag	B (mg/L)	B Flag	Ca (mg/L)	Ca Flag	Cr (mg/L)	Cr Flag	Cu (mg/L)	Cu Flag	Fe (mg/L)	Fe Flag	K (mg/L)	K Flag	Mg (mg/L)	Mg Flag	Mn (mg/L)	Mn Flag	Na (mg/L)	Na Flag	Pb (mg/L)	Pb Flag	Si (mg/L)	Si Flag	Zn (mg/L)	Zn Flag
Ni45-39	4/17/2008	04/17/2008Ni45-39	0.238	M	0.007	M			10.5	M	0.002	M			0.187	M	1.51	M	7.41	M	0.216	M	36.35	M	0.004	LM	15.55	M	0.011	M
	6/18/2008	06/18/2008Ni45-39																												
	8/12/2008	08/12/2008Ni45-39	0.343	M	0.015	M			15.8	M	0.001	LM			0.365	M	2.9	M	8.7	M	0.021	M	62.2	M	0.002	JM	22.6	M	0.001	M
	10/8/2008	10/08/2008Ni45-39	0.196	M	0.002	M			26.7	M	0.001	LM			0.506	M	4	M	15.8	M	0.057	M	94.6	M	0.01	M	29.1	M	0.003	M
	12/2/2008	12/02/2008Ni45-39	0.336	M	0.033	M			17.2	M	0.001	LM			0.461	M	4.8	M	9.7	M	0.051	M	76.9	M	0.004	LM	22.4	M	0.009	M
	2/13/2009	02/13/2009Ni45-39																												
	8/7/2009	08/07/2009Ni45-39	0.17	M	0.004	LM	0.017	M	4.84	M	0.001	LM	0.003	M	0.08	M	1.233	M	2.46	M	0.012	M	12.75	M	0.009	M	12.4	M	0.007	M
	11/4/2009	11/04/2009Ni45-39	0.302	M	0.007	M	0.039	M	13.07	M	0.001	LM	0.002	M	0.153	M	2.899	M	8.11	M	0.058	M	49.98	M	0.004	LM	19.13	M	0.014	M
Ni45-40	4/17/2008	04/17/2008Ni45-40	0.269	M	0.004	LM			25.3	M	0.002	M			0.064	M	12.37	M	18.89	M	0.02	M	123.8	M	0.004	M	15.59	M	0.044	M
	6/20/2008	06/20/2008Ni45-40																												
	8/12/2008	08/12/2008Ni45-40	0.229	M	0.019	M			20	M	0.001	LM			0.037	M	7.7	M	12.9	M	0.021	M	123.1	M	0.012	M	10.4	M	0.02	M
	10/8/2008	10/08/2008Ni45-40	0.118	M	0.001	LM			22.3	M	0.001	LM			0.034	M	7.9	M	15.7	M	0.06	M	105.1	M	0.012	M	15.6	M	0.022	M
	12/2/2008	12/02/2008Ni45-40	0.127	M	0.019	M			19.2	M	0.001	LM			0	M	8.8	M	13.6	M	0.046	M	107.2	M	0.004	LM	14.6	M	0.015	M
	2/13/2009	02/13/2009Ni45-40																												
	8/7/2009	08/07/2009Ni45-40	0.47	M	0.004	LM	0.014	M	4.53	M	0.001	LM	0.009	M	0.016	M	1.789	M	3.28	M	0.008	M	16.96	M	0.006	M	2.84	M	0.028	M
	11/4/2009	11/04/2009Ni45-40	0.374	M	0.01	M	0.052	M	17.54	M	0.001	LM	0.002	M	0.011	M	7.297	M	17.18	M	0.025	M	72.35	M	0.004	LM	13	M	0.017	M
Ni45-41	4/17/2008	04/17/2008Ni45-41	0.043	M	0.004	M			12.4	M	0.001	M			0.175	M	0.32	M	3.27	M	0.001	LM	9.3	M	0.008	M	7.179	M	0.013	M
	6/20/2008	06/20/2008Ni45-41																												
	8/12/2008	08/12/2008Ni45-41	0.08	M	0.001	LM			17	M	0.001	LM			0.763	M	0.6	M	3.8	M	0.009	M	14.9	M	0.004	M	8.7	M	0.001	LM
	10/8/2008	10/08/2008Ni45-41	0.076	M	0.001	LM			17.6	M	0.001	LM			0.559	M	1.1	M	4.4	M	0.029	M	17.1	M	0.01	M	11.8	M	0.001	M
	12/2/2008	12/02/2008Ni45-41	0.031	M	0.015	M			22.8	M	0.001	LM			0.373	M	1	M	5.7	M	0.006	M	18.8	M	0.002	JM	12.4	M	0.013	M
	2/13/2009	02/13/2009Ni45-41																												
	8/7/2009	08/07/2009Ni45-41	0.24	M	0.005	M	0.019	M	21.15	M	0.001	LM	0.003	M	0.282	M	1.203	M	5.47	M	0.017	M	22.51	M	0.003	JM	11.77	M	0.011	M
	11/4/2009	11/04/2009Ni45-41	0.383	M	0.006	M	0.017	M	20.82	M	0.001	LM	0.002	LM	0.254	M	1.008	M	6.25	M	0.03	M	14.42	M	0.004	LM	9.9	M	0.005	M
Ni45-42	4/17/2008	04/17/2008Ni45-42	0.025	M	0.004	LM			22.3	M	0.002	M			0.069	M	7.55	M	15.53	M	0.104	M	102.1	M	0.008	M	9.715	M	0.03	M
	6/20/2008	06/20/2008Ni45-42																												
	8/12/2008	08/12/2008Ni45-42	0.141	M	0.001	LM			9.2	M	0.002	M			0.308	M	2	M	4.6	M	0.011	M	25.7	M	0.004	LM	11.6	M	0.006	M
	10/8/2008	10/08/2008Ni45-42	0.108	M	0.009	M			9.5	M	0.001	LM			0.209	M	1.5	M	4.9	M	0.013	M	19.4	M	0.006	M	11.5	M	0.005	M
	12/2/2008	12/02/2008Ni45-42	0.232	M	0.046	M			7.4	M	0.001	LM			0.218	M	1.4	M	3.9	M	0.016	M	26.1	M	0.006	M	13.1	M	0.004	M
	2/13/2009	02/13/2009Ni45-42																												
	4/16/2009	04/16/2009Ni45-42																												
	8/7/2009	08/07/2009Ni45-42	0.443	M	0.004	LM	0.01	M	2.09	M	0.001	LM	0.004	M	0.14	M	0.923	M	1.47	M	0.006	M	5.82	M	0.007	M	9.08	M	0.035	M
	11/4/2009	11/04/2009Ni45-42	0.203	M	0.005	M	0.035	M	11.62	M	0.001	LM	0.001	JM	0.065	M	5.142	M	8.13	M	0.022	M	44.44	M	0.004	LM	13.93	M	0.016	M
Ni45-43	6/17/2008	06/17/2008Ni45-43																												
	8/11/2008	08/11/2008Ni45-43	0.393	M	0.001	LM			22	M	0.001	LM			0.161	M	10.4	M	13.3	M	0.004	M	66.9	M	0.004	LM	12.6	M	0.017	M
	10/8/2008	10/08/2008Ni45-43																												
	10/17/2008	10/17/2008Ni45-43a	0.653	M	0.001	LM			20.3	M	0.001	LM			0.028	M	10.7	M	14.1	M	0.025	M	69.7	M	0.004	LM	18.1	M	0.039	M
		10/17/2008Ni45-43b	0.282	M	0.001	LM			27.1	M	0.001	LM			0.044	M	11.7	M	17.6	M	0.014	M	77.9	M	0.004	LM	17.2	M	0.03	M
	12/1/2008	12/01/2008Ni45-43a	0.647	M	0.014	M			21.1	M	0.001	LM			0.059	M	8.6	M	12.9	M	0.022	M	77.7	M	0.004	LM	15.9	M	0.043	M
		12/01/2008Ni45-43b	0.263	M	0.037	M			26.2	M	0.001	LM			0.023	M	10.4	M	15.3	M	0.025	M	80.7	M	0.004	LM	16.4	M	0.031	M
	2/11/2009	02/11/2009Ni45-43a																												
		02/11/2009Ni45-43b																												
	4/16/2009	04/16/2009Ni45-43a																												
		04/16/2009Ni45-43b																												
	7/22/2009	07/22/2009Ni45-43	0.559	M	0.004	LM	0.052	M	14.19	M	0.001	LM	0.013	M	0.018	M	5.971	M	11.35	M	0.017	M	65.37	M	0.003	JM	10.45	M	0.038	M
	10/29/2009	10/29/2009Ni45-43	0.632	M	0.002	LM	0.048	M	22.89	M	0.001	LM	0.005	M	0.019	M	9.829	M	12.4	M	0.04	M	40.39	M	0.003	JM	18.09	M	0.041	M
Ni45-44	6/17/2008	06/17/2008Ni45-44																												
	8/12/2008	08/12/2008Ni45-44	0.438	M	0.001	LM			20.3	M	0.001	LM			0.157	M	7.2	M	14.6	M	0.021	M	84.6	M	0.003	JM	10.8	M	0.028	M
	10/7/2008	10/07/2008Ni45-44	1.385	M	0.006	M			25.6	M	0.001	LM			0.012	M	15.1	M	24.1	M	0.06	M	127.3	M	0.012	M	19.6	M	0.035	M
	12/1/2008	12/01/2008Ni45-44	1.705	M	0.032	M			17.5	M	0.001	LM			0.041	M	9	M	12	M	0.045	M	77.1	M	0.004	LM	17.1	M	0.048	M
	2/12/2009	02/12/2009Ni45-44																												
	7/22/2009	07/22/2009Ni45-44	0.258	M	0.004	LM	0.009	M	2.41	M	0.001	LM	0.013	M	0.01	M	1.049	M	1.47	M	0	M	4.48	M	0.005	M	2.44	M	0.019	M
	10/29/2009	10/29/2009Ni45-44	1.43	M	0.002	LM	0.033	M	17.67	M	0.001	LM	0.006	M	0.016	M	6.492	M	7.25	M	0.046	M	37.26	M	0.004	LM	14.84	M	0.053	M
Ni45-45	6/20/2008	06/20/2008Ni45-45																												
	8/12/2008	08/12/2008Ni45-45	1.133	M	0.001	LM			12.1	M	0.001	LM			0.152	M	4.9	M	10.8	M	0.016	M	78.6	M	0.004	LM	8.9	M	0.022	M
	10/7/2008	10/07/2008Ni45-45a	1.155	M	0.004	M			13.3	M	0.001	LM			0.041	M	6.6	M	12.7	M	0.021	M	84.3	M	0.005	M	14.2	M	0.035	M
		10/07/2008Ni45-45b	1.291	M	0.001	LM									0.029	M	8.5	M			0.016	M	85.4	M	0.006	M	13.7	M	0.03	M
	12/2/2008	12/02/2008Ni45-45a	1.653	M	0.001	M			15.3	M	0.001	LM			0.063	M	7.2	M	12.6	M	0.02	M	75.6	M	0.004	LM	21.2	M	0.033	M
		12/02/2008Ni45-45b	1.76	M	0.019	M			20.9	M	0.001	LM			0.047	M	10.8	M	15.3	M	0.028	M	85.1	M	0.004	LM	15.6	M	0.034	M
	2/12/2009	02/12/2009Ni45-45a																												
		02/12/2009Ni45-45b																												
	4/16/2009	04/16/2009Ni45-45a																												
		04/16/2009Ni45-45b																												
	7/28/2009	07/28/2009Ni45-45	1.055	M	0.004	LM	0.036	M	10.8	M	0.001	LM	0.012	M	0.005	M	5.091	M	8.45	M	0.031	M	54.09	M	0.004	LM	10.5	M	0.036	M
	10/29/2009	10/29/2009Ni45-45	1.031	M	0.001	JM	0.041	M	11.35	M	0.001	LM	0.005	M	0.024	M	7.535	M	8.29	M	0.019	M	50.73	M	0.002	JM	13.01	M	0.023	M
Ni45-46	6/17/2008	06/17/2008Ni45-46																												
	8/11/2008	08/11/2008Ni45-46	0.94	M	0.005	M			18.8	M	0.001	LM			0.212	M	12.3	M	12.1	M	0.016	M	63.2	M	0.019	M	12.1	M	0.03	M
	10/7/2008	10/07/2008Ni45-46	2.314	M	0.001	LM			21.3	M	0.001	LM			0.087	M	10.3	M	14.4	M	0.042	M	85.9	M	0.006	M	21.7	M	0.069	M
	12/1/2008	12/01/2008Ni45-46	0.753	M	0.041	M			13.8	M	0.001	LM			0.019	M	6.5	M	8.9	M	0.023	M	61.1	M	0.004	LM	15	M	0.035	M
	2/12/2009	02/12/2009Ni45-46																												
	7/22/2009	07/22/2009Ni45-46	0.054	M	0.004	LM	0.003	M	0.7	M	0.001	LM	0.005	M	0.001	LM	0.272	M	0.19	M	0.001	LM	0.54	M	0.007	M	1.26	M	0.01	M
	10/29/2009	10/29/2009Ni45-46	1.066	M	0.002	LM	0.036	M	17.63	M	0.001	LM	0.009	M	0.027	M	7.336	M	7.64	M	0.021	M	34.26	M	0.004	LM	15.43	M	0.052	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Al (mg/L)	Al Flag	As (mg/L)	As Flag	B (mg/L)	B Flag	Ca (mg/L)	Ca Flag	Cr (mg/L)	Cr Flag	Cu (mg/L)	Cu Flag	Fe (mg/L)	Fe Flag	K (mg/L)	K Flag	Mg (mg/L)	Mg Flag	Mn (mg/L)	Mn Flag	Na (mg/L)	Na Flag	Pb (mg/L)	Pb Flag	Si (mg/L)	SI Flag	Zn (mg/L)	Zn Flag
Ni45-47	2/11/2009	02/11/2009Ni45-47																												
	4/17/2009	04/17/2009Ni45-47																												
	7/22/2009	07/22/2009Ni45-47	0.414	M	0.004	LM	0.044	M	16.35	M	0.001	LM	0.017	M	0.047	M	7.968	M	15.85	M	0.002	M	44.25	M	0.006	M	11.79	M	0.009	M
	10/29/2009	10/29/2009Ni45-47	1.004	M	0.004	M	0.035	M	14.35	M	0.001	LM	0.007	M	0.035	M	6.662	M	6.53	M	0.05	M	32.47	M	0.004	M	15.73	M	0.016	M
Ni45-48	8/19/2008	08/19/2008Ni45-48	0.659	M	0.001	LM			17	M	0.003	M			0.146	M	6.4	M	14.2	M	0.019	M	85.7	M	0.004	LM	15.5	M	0.027	M
	12/1/2008	12/01/2008Ni45-48	0.825	M	0.023	M			15	M	0.001	LM			0.062	M	6	M	9.2	M	0.028	M	67.3	M	0.003	JM	13.9	M	0.028	M
	2/11/2009	02/11/2009Ni45-48																												
	4/17/2009	04/17/2009Ni45-48																												
	7/22/2009	07/22/2009Ni45-48	0.671	M	0.004	M	0.063	M	12.97	M	0.001	LM	0.029	M	0.045	M	6.157	M	11.39	M	0.012	M	76.3	M	0.004	M	10.31	M	0.025	M
	10/29/2009	10/29/2009Ni45-48	0.848	M	0.002	LM	0.059	M	24.11	M	0.001	LM	0.007	M	0.035	M	11.965	M	13.23	M	0.02	M	44.33	M	0.004	LM	20.37	M	0.033	M
Ni45-49	8/19/2008	08/19/2008Ni45-49	1.011	M	0.001	LM			23.5	M	0.002	M			0.104	M	11.4	M	13.8	M	0.011	M	85.9	M	0.004	LM	14.2	M	0.033	M
	10/17/2008	10/17/2008Ni45-49	0.091	M	0.011	M			29.7	M	0.001	LM			0.053	M	10	M	17.8	M	0.005	M	72.2	M	0.004	LM	15.3	M	0.064	M
Ni45-50	8/19/2008	08/19/2008Ni45-50	1.169	M	0.001	LM			19.8	M	0.002	M			0.194	M	8.1	M	13.8	M	0.023	M	74.4	M	0.004	LM	14	M	0.083	M
	10/8/2008	10/08/2008Ni45-50	0.628	M	0.001	LM			30.6	M	0.001	LM			0.043	M	15	M	18.1	M	0.011	M	85.7	M	0.004	LM	17.5	M	0.03	M
	12/1/2008	12/01/2008Ni45-50	0.476	M	0.019	M			33.7	M	0.001	LM			0.047	M	13.7	M	18.7	M	0.032	M	89.3	M	0.004	LM	17.7	M	0.018	M
	2/11/2009	02/11/2009Ni45-50																												
	4/17/2009	04/17/2009Ni45-50																												
	7/22/2009	07/22/2009Ni45-50	0.902	M	0.003	JM	0.044	M	11.78	M	0.001	LM	0.013	M	0.015	M	5.082	M	9.47	M	0.008	M	48.76	M	0.002	JM	7.25	M	0.03	M
	10/29/2009	10/29/2009Ni45-50	0.718	M	0.004	M	0.038	M	32.49	M	0.001	LM	0.004	M	0.028	M	13.715	M	14.24	M	0.037	M	43.73	M	0.002	JM	18.19	M	0.039	M
Ni45-51	8/19/2008	08/19/2008Ni45-51	0.149	M	0.001	LM			26.9	M	0.002	M			0.161	M	8.1	M	17.4	M	0.014	M	78.6	M	0.004	LM	14.4	M	0.059	M
	10/17/2008	10/17/2008Ni45-51	0.408	M	0.017	M			13.5	M	0.001	LM			0.047	M	13.4	M	9.2	M	0.025	M	98.8	M	0.004	LM	14.6	M	0.013	M
	12/1/2008	12/01/2008Ni45-51	0.328	M	0.045	M			10.5	M	0.001	LM			0.058	M	9.7	M	8.8	M	0.017	M	91.1	M	0.004	LM	12.8	M	0.009	M
	2/11/2009	02/11/2009Ni45-51																												
	4/17/2009	04/17/2009Ni45-51																												
	7/22/2009	07/22/2009Ni45-51	0.772	M	0.011	M	0.041	M	12.63	M	0.001	LM	0.035	M	0.049	M	4.689	M	9.89	M	0.01	M	47.51	M	0.005	M	5.46	M	0.019	M
	10/29/2009	10/29/2009Ni45-51	0.415	M	0.004	M	0.035	M	18.59	M	0.001	LM	0.004	M	0.029	M	10.985	M	7.78	M	0.016	M	41.45	M	0.004	LM	14.41	M	0.013	M
Ni45-52	8/19/2008	08/19/2008Ni45-52	0.993	M	0.001	LM			18.1	M	0.003	M			0.18	M	8.9	M	13.1	M	0.019	M	79.1	M	0.004	LM	13.8	M	0.076	M
	10/17/2008	10/17/2008Ni45-52	0.658	M	0.007	M			15	M	0.001	LM			0.083	M	13.1	M	9.3	M	0.024	M	89.8	M	0.004	LM	14.6	M	0.017	M
	12/1/2008	12/01/2008Ni45-52	0.844	M	0.028	M			16.7	M	0.001	LM			0.089	M	12.8	M	12.5	M	0.035	M	113.9	M	0.004	LM	13.9	M	0.023	M
	2/11/2009	02/11/2009Ni45-52																												
	4/17/2009	04/17/2009Ni45-52																												
	7/22/2009	07/22/2009Ni45-52	0.531	M	0.004	LM	0.049	M	11.53	M	0.001	LM	0.046	M	0.056	M	4.537	M	7.94	M	0.012	M	59.22	M	0.003	JM	8.08	M	0.017	M
	10/29/2009	10/29/2009Ni45-52	0.649	M	0.01	M	0.034	M	17.54	M	0.001	LM	0.003	M	0.043	M	12.328	M	7.45	M	0.046	M	40.35	M	0.004	LM	14.35	M	0.014	M
Ni45-53	8/19/2008	08/19/2008Ni45-53	0.535	M	0.001	LM			15.9	M	0.002	M			0.094	M	6.4	M	13.5	M	0.039	M	80.1	M	0.004	LM	10.9	M	0.059	M
Ni45-55	8/15/2008	08/15/2008Ni45-55	0.823	M	0.001	LM			11.3	M	0.003	M			0.159	M	4.7	M	10	M	0.018	M	73.5	M	0.004	LM	9.9	M	0.041	M
	10/8/2008	10/08/2008Ni45-55	1.14	M	0.001	LM			13.7	M	0.001	LM			0.064	M	6.3	M	13.3	M	0.01	M	86.4	M	0.004	LM	12.6	M	0.044	M
	12/2/2008	12/02/2008Ni45-55	2.155	M	0.033	M			18.5	M	0.001	LM			0.066	M	10.5	M	15.7	M	0.007	M	92.8	M	0.004	LM	14.9	M	0.044	M
	2/12/2009	02/12/2009Ni45-55																												
	4/17/2009	04/17/2009Ni45-55																												
	7/28/2009	07/28/2009Ni45-55	1.165	M	0.004	LM	0.037	M	12.5	M	0.001	LM	0.006	M	0.019	M	5.957	M	8.99	M	0.028	M	63.45	M	0.003	JM	8.87	M	0.04	M
	10/29/2009	10/29/2009Ni45-55	1.067	M	0.002	LM	0.037	M	8.47	M	0.001	LM	0.005	M	0.029	M	10.277	M	7.88	M	0.004	M	48.56	M	0.004	LM	12.72	M	0.025	M
Ni45-56	8/15/2008	08/15/2008Ni45-56	1.403	M	0.001	LM			16.7	M	0.003	M			0.114	M	8.6	M	14	M	0.008	M	101.2	M	0.004	LM	11.5	M	0.05	M
	10/8/2008	10/08/2008Ni45-56	1.23	M	0.001	M			18.1	M	0.001	LM			0.07	M	9.9	M	15.3	M	0.005	M	81.3	M	0.006	M	14.1	M	0.028	M
	12/2/2008	12/02/2008Ni45-56	1.56	M	0.027	M			24.8	M	0.001	LM			0.116	M	11.9	M	16.2	M	0.028	M	77.2	M	0.004	LM	16.1	M	0.023	M
	2/12/2009	02/12/2009Ni45-56																												
	4/17/2009	04/17/2009Ni45-56																												
	7/28/2009	07/28/2009Ni45-56	1.548	M	0.004	M	0.066	M	14.24	M	0.001	LM	0.017	M	0.019	M	7.001	M	14.41	M	0.01	M	111.3	M	0.008	M	9.32	M	0.028	M
	10/29/2009	10/29/2009Ni45-56	1.011	M	0.004	M	0.046	M	18.43	M	0.001	LM	0.002	M	0.021	M	10.653	M	10.09	M	0.009	M	48.22	M	0.004	LM	15.23	M	0.017	M
Ni45-57	8/15/2008	08/15/2008Ni45-57	1.188	M	0.027	M			16.1	M	0.002	M			0.204	M	8.1	M	13.7	M	0.018	M	90.6	M	0.004	LM	12.6	M	0.036	M
	10/8/2008	10/08/2008Ni45-57	1.304	M	0.006	M			18	M	0.001	LM			0.079	M	12.4	M	13.8	M	0.021	M	85.6	M	0.004	M	14.4	M	0.028	M
	12/2/2008	12/02/2008Ni45-57	1.997	M	0.024	M			25.2	M	0.001	LM			0.001	LM	14.3	M	16.2	M	0.075	M	92	M	0.004	LM	16.5	M	0.033	M
	2/12/2009	02/12/2009Ni45-57																												
	4/17/2009	04/17/2009Ni45-57																												
	7/28/2009	07/28/2009Ni45-57	0.817	M	0.004	M	0.051	M	7.41	M	0.001	LM	0.006	M	0.008	M	4.021	M	8.74	M	0.001	M	52.46	M	0.007	M	8.45	M	0.011	M
	10/29/2009	10/29/2009Ni45-57	0.996	M	0.002	JM	0.044	M	18.66	M	0.001	LM	0.002	M	0.02	M	11.198	M	9.41	M	0.022	M	47.39	M	0.004	LM	15.95	M	0.015	M
Ni45-58	8/15/2008	08/15/2008Ni45-58	1.107	M	0.001	LM			15.7	M	0.003	M			0.145	M	5.9	M	12.9	M	0.014	M	88.9	M	0.004	LM	11.9	M	0.028	M
	10/8/2008	10/08/2008Ni45-58	1.159	M	0.004	M			14.5	M	0.001	LM			0.098	M	6.6	M	12.6	M	0.023	M	76.2	M	0.004	LM	12.7	M	0.023	M
	12/2/2008	12/02/2008Ni45-58	1.602	M	0.028	M			18.5	M	0.001	LM			0.033	M	10.5	M	14.4	M	0.018	M	82.7	M	0.004	LM	14.7	M	0.027	M
	2/12/2009	02/12/2009Ni45-58																												
	4/17/2009	04/17/2009Ni45-58																												
	7/28/2009	07/28/2009Ni45-58	1.379	M	0.004	LM	0.06	M	14.46	M	0.001	LM	0.006	M	0.048	M	6.505	M	14.38	M	0.012	M	104.1	M	0.003	JM	8.83	M	0.028	M
	10/29/2009	10/29/2009Ni45-58	1.18	M	0.005	M	0.043	M	15.45	M	0.001	LM	0.002	M	0.035	M	9.165	M	12.27	M	0.017	M	49.61	M	0.004	LM	13.67	M	0.029	M
Ni45-59	8/15/2008	08/15/2008Ni45-59	2.747	M	0.001	LM			22.1	M	0.002	M			0.253	M	9.9	M	21	M	0.025	M	167	M	0.009	M	12.9	M	0.087	M
	10/8/2008	10/08/2008Ni45-59	2.24	M	0.001	LM			18.7	M	0.001	LM			0.096	M	10.9	M	24.6	M	0.026	M	150.6	M	0.004	M	13.5	M	0.076	M
	12/2/2008	12/02/2008Ni45-59	2.037	M	0.04	M			17.2	M	0.001	LM			0.115	M	11.2	M	17.8	M	0.022	M	115.9	M	0.004	LM	13.5	M	0.064	M
	2/12/2009	02/12/2009Ni45-59																												
	4/17/2009	04/17/2009Ni45-59																												
	7/28/2009	07/28/2009Ni45-59	2.49	M	0.003	JM	0.072	M	27.34	M	0.001	LM	0.052	M	0.102	M	9.439	M	24.03	M	0.027	M	132.4	M	0.006	M	13.24	M	0.072	M
	10/29/2009	10/29/2009Ni45-59	1.787	M	0.004	M	0.081	M	23	M	0.001	LM	0.007	M	0.02	M	9.868	M	17.37	M	0.029	M	147.9	M	0.004	LM	14.03	M	0.063	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Al (mg/L)	Al Flag	As (mg/L)	As Flag	B (mg/L)	B Flag	Ca (mg/L)	Ca Flag	Cr (mg/L)	Cr Flag	Cu (mg/L)	Cu Flag	Fe (mg/L)	Fe Flag	K (mg/L)	K Flag	Mg (mg/L)	Mg Flag	Mn (mg/L)	Mn Flag	Na (mg/L)	Na Flag	Pb (mg/L)	Pb Flag	Si (mg/L)	Si Flag	Zn (mg/L)	Zn Flag
Ni45-60	8/19/2008	08/19/2008Ni45-60	1.975	M	0.026	M			20.4	M	0.001	M			0.162	M	8.8	M	17.1	M	0.08	M	158.2	M	0.004	LM	15.7	M	0.104	M
	10/8/2008	10/08/2008Ni45-60	1.934	M	0.007	M			20	M	0.001	LM			0.126	M	9.2	M	16.4	M	0.094	M	133.3	M	0.012	M	16.2	M	0.108	M
	12/2/2008	12/02/2008Ni45-60	2.232	M	0.037	M			24.1	M	0.001	LM			0.288	M	10.3	M	16.7	M	0.134	M	137.4	M	0.004	LM	16	M	0.104	M
	2/12/2009	02/12/2009Ni45-60																												
	4/17/2009	04/17/2009Ni45-60																												
	7/22/2009	07/22/2009Ni45-60	2.22	M	0.005	M	0.067	M	20.84	M	0.001	LM	0.008	M	5.256	M	11.278	M	18.66	M	0.141	M	114.4	M	0.004	LM	14.67	M	0.093	M
	10/29/2009	10/29/2009Ni45-60	2.852	M	0.011	M	0.075	M	29.16	M	0.001	LM	0.007	M	0.119	M	10.69	M	21.99	M	0.063	M	156.7	M	0.002	JM	15.18	M	0.13	M
Ni45-61	8/15/2008	08/15/2008Ni45-61	0.106	M	0.001	LM			9.5	M	0.001	M			0.14	M	4.1	M	7.3	M	0.083	M	46.6	M	0.004	LM	14	M	0.083	M
	12/1/2008	12/01/2008Ni45-61	0.452	M	0.013	M			12.8	M	0.001	LM			0.02	M	7.4	M	9.9	M	0.065	M	53.5	M	0.004	LM	18.1	M	0.057	M
	2/11/2009	02/11/2009Ni45-61																												
	4/17/2009	04/17/2009Ni45-61																												
	7/22/2009	07/22/2009Ni45-61	0.538	M	0.004	LM	0.035	M	12.07	M	0.001	LM	0.03	M	0.017	M	5.086	M	8.55	M	0.035	M	61.69	M	0.002	JM	10.41	M	0.027	M
	10/29/2009	10/29/2009Ni45-61	1.496	M	0.003	JM	0.044	M	25.35	M	0.001	LM	0.012	M	0.022	M	10.563	M	14.89	M	0.055	M	45.34	M	0.003	JM	19.61	M	0.049	M
Ni45-62	7/22/2009	07/22/2009Ni45-62	0.421	M	0.002	JM	0.047	M	10.81	M	0.001	LM	0.015	M	0.03	M	6.325	M	14.79	M	0.002	M	59.29	M	0.01	M	8.9	M	0.006	M
	10/29/2009	10/29/2009Ni45-62	0.913	M	0.007	M	0.035	M	13.24	M	0.001	LM	0.008	M	0.026	M	7.276	M	6.55	M	0.042	M	34.79	M	0.002	JM	14.36	M	0.044	M
Ni45-63	8/19/2008	08/19/2008Ni45-63	0.165	M	0.008	M			20.6	M	0.001	M			0.163	M	10.3	M	13.7	M	0.012	M	79.4	M	0.004	LM	15.3	M	0.01	M
	10/7/2008	10/07/2008Ni45-63	1.318	M	0.002	M			24.8	M	0.001	LM			0.042	M	13.5	M	15.5	M	0.049	M	81.9	M	0.007	M	18.6	M	0.055	M
Ni45-64	8/15/2008	08/15/2008Ni45-64	0.36	M	0.001	LM			19.3	M	0.002	M			0.07	M	9.1	M	13.8	M	0.002	M	83.1	M	0.004	LM	14.2	M	0.011	M
	10/8/2008	10/08/2008Ni45-64	0.402	M	0.001	LM			24.1	M	0.001	LM			0.048	M	13	M	14.5	M	0.041	M	85.5	M	0.006	M	16.8	M	0.027	M
	12/1/2008	12/01/2008Ni45-64	1.567	M	0.018	M			21.2	M	0.001	LM			0.036	M	10.6	M	13.2	M	0.045	M	75.7	M	0.004	LM	17.9	M	0.047	M
	2/11/2009	02/11/2009Ni45-64																												
	4/17/2009	04/17/2009Ni45-64																												
	7/22/2009	07/22/2009Ni45-64	0.707	M	0.004	LM	0.062	M	14.03	M	0.001	LM	0.006	M	0.005	M	6.521	M	11.86	M	0.02	M	64.19	M	0.005	M	5.74	M	0.031	M
	10/29/2009	10/29/2009Ni45-64	0.835	M	0.003	JM	0.043	M	35.62	M	0.001	LM	0.03	M	0.027	M	18.057	M	15.04	M	0.085	M	52.14	M	0.004	LM	21.39	M	0.027	M
Ni45-65	8/15/2008	08/15/2008Ni45-65	0.338	M	0.001	LM			18.6	M	0.003	M			0.128	M	8.9	M	14.5	M	0.018	M	74.8	M	0.004	LM	14.1	M	0.038	M
	10/7/2008	10/07/2008Ni45-65	0.655	M	0.003	M			26.7	M	0.001	LM			0.058	M	13.9	M	16.1	M	0.01	M	80.9	M	0.005	M	18	M	0.032	M
	12/1/2008	12/01/2008Ni45-65	0.883	M	0.019	M			30.7	M	0.001	LM			0.079	M	13.7	M	16	M	0.056	M	113.2	M	0.004	LM	18.8	M	0.037	M
	2/11/2009	02/11/2009Ni45-65																												
	4/17/2009	04/17/2009Ni45-65																												
	7/22/2009	07/22/2009Ni45-65	0.52	M	0.006	M	0.047	M	9.85	M	0.001	LM	0.007	M	0.019	M	5.421	M	10.64	M	0.003	M	43.44	M	0.003	JM	5.73	M	0.017	M
	10/29/2009	10/29/2009Ni45-65	0.579	M	0.01	M	0.034	M	22.35	M	0.001	LM	0.005	M	0.014	M	10.93	M	10.67	M	0.006	M	40.3	M	0.004	LM	15.97	M	0.014	M
Ni45-66	8/15/2008	08/15/2008Ni45-66	0.02	M	0.022	M			13.1	M	0.003	M			0.163	M	4	M	6.3	M	0.004	M	171	M	0.004	LM	12.4	M	0.008	M
	10/8/2008	10/08/2008Ni45-66	0.055	M	0.008	M			22	M	0.001	LM			0.042	M	7	M	9.4	M	0.045	M	112.7	M	0.006	M	15.9	M	0.005	M
	12/1/2008	12/01/2008Ni45-66	0.027	M	0.037	M			38.2	M	0.001	LM			0.043	M	12	M	9.9	M	0.081	M	158.4	M	0.005	M	16	M	0.011	M
	2/11/2009	02/11/2009Ni45-66																												
	4/17/2009	04/17/2009Ni45-66																												
	7/22/2009	07/22/2009Ni45-66	0.007	M	0.005	M	0.073	M	48.39	M	0.001	LM	0.008	M	0.007	M	7.006	M	9.03	M	0.125	M	134	M	0.002	JM	10.14	M	0.001	M
	10/29/2009	10/29/2009Ni45-66	0.007	M	0.007	M	0.05	M	56.17	M	0.001	LM	0.004	M	0.01	M	6.674	M	12	M	0.181	M	49.5	M	0.004	LM	13.48	M	0.005	M
Ni45-67	8/15/2008	08/15/2008Ni45-67	0.32	M	0.009	M			15.1	M	0.002	M			0.095	M	6.7	M	13	M	0.019	M	78.3	M	0.004	LM	11.1	M	0.025	M
	10/7/2008	10/07/2008Ni45-67	0.381	M	0.003	M			19.2	M	0.001	LM			0.057	M	8.8	M	15.6	M	0.023	M	95.4	M	0.012	M	13.7	M	0.032	M
	12/1/2008	12/01/2008Ni45-67	0.765	M	0.045	M			18.6	M	0.001	LM			0.044	M	6.9	M	15.8	M	0.024	M	86.7	M	0.004	LM	13.7	M	0.04	M
	2/11/2009	02/11/2009Ni45-67																												
	4/17/2009	04/17/2009Ni45-67																												
	7/22/2009	07/22/2009Ni45-67	1.014	M	0.003	JM	0.059	M	16.54	M	0.001	LM	0.009	M	0.031	M	5.192	M	11.55	M	0.013	M	93.98	M	0.004	LM	7.25	M	0.026	M
	10/29/2009	10/29/2009Ni45-67	0.497	M	0.008	M	0.05	M	10.74	M	0.001	LM	0.003	M	0.037	M	5.029	M	7.63	M	0.006	M	54.17	M	0.004	LM	11.36	M	0.018	M
Ni45-78	2/13/2009	02/13/2009Ni45-78																												
	4/16/2009	04/16/2009Ni45-78																												
	8/7/2009	08/07/2009Ni45-78	0.248	M	0.004	M	0.031	M	6.75	M	0.001	LM	0.01	M	0.172	M	2.062	M	5.51	M	0.008	M	28.26	M	0.005	M	10.47	M	0.022	M
	11/4/2009	11/04/2009Ni45-78	0.113	M	0.005	M	0.037	M	12.26	M	0.001	LM	0.002	LM	0.083	M	5.804	M	7.68	M	0.011	M	61.57	M	0.004	LM	12.79	M	0.017	M
Ni45-79	2/13/2009	02/13/2009Ni45-79																												
	4/16/2009	04/16/2009Ni45-79																												
	8/7/2009	08/07/2009Ni45-79	0.128	M	0.004	LM	0.047	M	10.62	M	0.001	LM	0.008	M	0.021	M	2.469	M	7.43	M	0.011	M	45.07	M	0.005	M	11.23	M	0.017	M
	11/4/2009	11/04/2009Ni45-79	0.09	M	0.006	M	0.036	M	13.17	M	0.001	LM	0.002	LM	0.069	M	5.477	M	8.64	M	0.013	M	61.68	M	0.004	LM	12.73	M	0.013	M
Ni45-80	2/13/2009	02/13/2009Ni45-80																												
	4/16/2009	04/16/2009Ni45-80																												
	8/7/2009	08/07/2009Ni45-80	0.117	M	0.004	M	0.049	M	14.22	M	0.001	LM	0.01	M	0.001	LM	3.147	M	9.07	M	0.013	M	50.37	M	0.004	LM	12.59	M	0.013	M
	11/4/2009	11/04/2009Ni45-80	0.093	M	0.008	M	0.035	M	15.45	M	0.001	LM	0.002	LM	0.091	M	6.196	M	10.6	M	0.019	M	64.35	M	0.004	LM	12.87	M	0.009	M
Ni45-81	2/13/2009	02/13/2009Ni45-81																												
	4/16/2009	04/16/2009Ni45-81																												
	8/7/2009	08/07/2009Ni45-81	0.111	M	0.004	M	0.055	M	17.01	M	0.001	LM	0.007	M	0.007	M	8.4	M	12.41	M	0.023	M	65.7	M	0.006	M	12.73	M	0.011	M
	11/4/2009	11/04/2009Ni45-81	0.094	M	0.005	M	0.035	M	14.68	M	0.001	LM	0.002	M	0.071	M	7.221	M	10.3	M	0.034	M	58.26	M	0.004	LM	13.24	M	0.012	M
Ni45-82	2/13/2009	02/13/2009Ni45-82																												
	4/16/2009	04/16/2009Ni45-82																												
	8/7/2009	08/07/2009Ni45-82	0.14	M	0.004	LM	0.045	M	10.27	M	0.001	LM	0.009	M	0.015	M	7.169	M	8.52	M	0.02	M	51.65	M	0.004	LM	13.23	M	0.006	M
	11/4/2009	11/04/2009Ni45-82	0.112	M	0.004	M	0.036	M	18.58	M	0.001	LM	0.003	M	0.066	M	8.88	M	15.24	M	0.039	M	68.02	M	0.004	LM	12.89	M	0.009	M
Ni45-83	2/13/2009	02/13/2009Ni45-83																												
	4/16/2009	04/16/2009Ni45-83																												
	8/7/2009	08/07/2009Ni45-83	0.143	M	0.004	M	0.043	M	9.68	M	0.001	LM	0.013	M	0.018	M	7.132	M	8.26	M	0.018	M	51.21	M	0.004	M	12.65	M	0.006	M
	11/4/2009	11/04/2009Ni45-83	0.069	M	0.005	M	0.047	M	30.27	M	0.001	LM	0.002	LM	0.013	M	10.527	M	27.58	M	0.065	M	122.6	M	0.004	LM	12.04	M	0.016	M
Ni45-84	2/13/2009	02/13/2009Ni45-84																												
	4/16/2009	04/16/2009Ni45-84																												
	8/7/2009	08/07/2009Ni45-84	0.134	M	0.003	JM	0.054	M	13.09	M	0.001	LM	0.01	M	0.031	M	5.455	M	11.26	M	0.028	M	69.71	M	0.004	LM	12.39	M	0.019	M
	11/4/2009	11/04/2009Ni45-84	0.095	M	0.009	M	0.064	M	22.73	M	0.001	LM	0.002	LM	0.021	M	9.143	M	17.32	M	0.058	M	142.3	M	0.004	LM	11.23	M	0.017	M
Ni45-ab	2/12/2009	02/12/2009Ni45-ab																												
	8/7/2009	08/07/2009Ni45-ab	1.227	M	0.004	LM	0.067	M	3.61	M	0.001	LM	0.046	M	1.245	M	3.507	M	4.33	M	0.025	M	49.46	M	0.004	LM	8.2	M	0.027	M
Ni45-ac	8/7/2009	08/07/2009Ni45-ac	0.124	M	0.004	LM	0.067	M	10.27	M	0.001	LM	0.021	M	0.503	M	6.002	M	7.39	M	0.047	M	75.6	M	0.004	LM	3.96	M	0.012	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Al (mg/L)	Al Flag	As (mg/L)	As Flag	B (mg/L)	B Flag	Ca (mg/L)	Ca Flag	Cr (mg/L)	Cr Flag	Cu (mg/L)	Cu Flag	Fe (mg/L)	Fe Flag	K (mg/L)	K Flag	Mg (mg/L)	Mg Flag	Mn (mg/L)	Mn Flag	Na (mg/L)	Na Flag	Pb (mg/L)	Pb Flag	Si (mg/L)	Si Flag	Zn (mg/L)	Zn Flag
Ni45-ae	2/12/2009	02/12/2009Ni45-ae																												
Ni45-EFF	3/4/2008	03/04/2008Ni45-EFF																					85	M						
	4/29/2008	04/29/2008Ni45-EFF	0.002	LM	0.001	LM			19	M	0.001	LM			0.092	M	7.23	M	17.01	M	0.229	M	117.2	M	0.004	LM	9.928	M	0.03	M
	5/13/2008	05/13/2008Ni45-EFF																					6.51	M						
	6/17/2008	06/17/2008Ni45-EFF																					10.5	M						
	7/15/2008	07/15/2008Ni45-EFF																					67.8	M						
	8/19/2008	08/19/2008Ni45-EFF																					799	M						
	8/20/2008	08/20/2008Ni45-EFF	0.05	M	0.001	LM			15.4	M	0.002	M			0.436	M	8.9	M	9.4	M	0.02	M	56.8	M	0.004	LM	12.4	M	0.016	M
	9/16/2008	09/16/2008Ni45-EFF																					86.1	M						
	10/7/2008	10/07/2008Ni45-EFF	0.058	M	0.001	LM			16.5	M	0.001	LM			0.732	M	7.1	M	12.4	M	0.039	M	81	M	0.004	M	12	M	0.012	M
	12/2/2008	12/02/2008Ni45-EFF	0.186	M	0.023	M			15.3	M	0.001	LM			0.575	M	3.2	M	7.5	M	0.036	M	41	M	0.004	LM	10	M	0.044	M
	12/9/2008	12/09/2008Ni45-EFF																					64	M						
	2/11/2009	02/11/2009Ni45-EFF																												
	4/9/2009	04/09/2009Ni45-EFF																												
	8/7/2009	08/07/2009Ni45-EFF	0.002	LM	0.004	M	0.036	M	15.66	M	0.001	LM	0.003	M	0.016	M	8.966	M	8.72	M	0.002	M	49.72	M	0.004	LM	12.53	M	0.003	M
	11/4/2009	11/04/2009Ni45-EFF	0.047	M	0.007	M	0.03	M	18.42	M	0.001	LM	0.001	JM	0.192	M	2.485	M	4.55	M	0.039	M	22.47	M	0.004	LM	9.99	M	0.021	M
Ni45-r	4/17/2008	04/17/2008Ni45-r	0.016	M	0.004	LM			16.5	M	0.001	LM			0.146	M	5.78	M	8.77	M	0.011	M	70.15	M	0.009	M	1.583	M	0.019	M
	4/29/2008	04/29/2008Ni45-r	0.071	M	0.004	LM			9.7	M	0.001	M			0.48	M	3.29	M	4.77	M	0.119	M	32.56	M	0.004	LM	2.37	M	0.015	M
	12/18/2008	12/18/2008Ni45-r	0.428	M	0.001	LM			11.4	M	0.001	LM			0.762	M	1.2	M	5.7	M	0.124	M	37.6	M	0.004	LM	13.5	M	0.018	M
	2/13/2009	02/13/2009Ni45-r																												
	4/17/2009	04/17/2009Ni45-r																												
	8/7/2009	08/07/2009Ni45-r	0.034	M	0.004	LM	0.044	M	14.36	M	0.001	LM	0.059	M	0.588	M	2.333	M	6.56	M	0.03	M	41.73	M	0.004	LM	12.84	M	0.019	M
	11/4/2009	11/04/2009Ni45-r	0.273	M	0.003	JM	0.043	M	10.93	M	0.001	LM	0.001	JM	0.801	M	3.953	M	7.61	M	0.049	M	50.79	M	0.004	LM	10.98	M	0.053	M
Ni45-s	4/17/2008	04/17/2008Ni45-s	0.041	M	0.004	LM			22.7	M	0.003	M			0.029	M	11.26	M	15.23	M	0.004	M	129.6	M	0.004	LM	1.135	M	0.045	M
	4/29/2008	04/29/2008Ni45-s	0.011	M	0.005	M			18.8	M	0.002	M			0.001	LM	10.01	M	13.48	M	0.001	LM	113.3	M	0.008	M	10.13	M	0.037	M
	12/18/2008	12/18/2008Ni45-s	1.088	M	0.001	LM			6.9	M	0.001	LM			0.246	M	2.1	M	6.8	M	0.356	M	46	M	0.004	LM	22	M	0.022	M
	2/13/2009	02/13/2009Ni45-s																												
	4/17/2009	04/17/2009Ni45-s																												
	8/7/2009	08/07/2009Ni45-s	0.032	M	0.004	LM	0.047	M	12.87	M	0.001	LM	0.016	M	0.019	M	6.219	M	9.22	M	0.011	M	59.43	M	0.004	LM	8.63	M	0.025	M
	11/4/2009	11/04/2009Ni45-s	0.588	M	0.001	JM	0.05	M	6.85	M	0.001	LM	0.001	JM	0.483	M	4.534	M	7.37	M	0.1	M	47.61	M	0.004	LM	12.7	M	0.034	M
Ni45-v	4/17/2008	04/17/2008Ni45-v	0.08	M	0.004	M			23.8	M	0.001	JM			0.014	M	11.74	M	18.35	M	0.023	M	130.7	M	0.002	JM	4.445	M	0.087	M
	4/29/2008	04/29/2008Ni45-v	0.145	M	0.004	LM			13.2	M	0.001	LM			0.082	M	9.51	M	10.11	M	0.001	LM	85.62	M	0.004	LM	8.349	M	0.05	M
	12/18/2008	12/18/2008Ni45-v	0.514	M	0.006	M			11.5	M	0.001	LM			0.236	M	6.1	M	8.9	M	0.154	M	79.4	M	0.004	LM	25.5	M	0.018	M
	2/13/2009	02/13/2009Ni45-v																												
	4/17/2009	04/17/2009Ni45-v																												
	11/4/2009	11/04/2009Ni45-v	0.391	M	0.006	M	0.048	M	8.55	M	0.001	LM	0.002	LM	0.234	M	5.75	M	8.17	M	0.063	M	58.75	M	0.004	LM	14.41	M	0.024	M
Ni45-w	4/17/2008	04/17/2008Ni45-w	0.04	M	0.007	M			22.3	M	0.001	LM			0.27	M	6.77	M	9.64	M	0.078	M	84.49	M	0.003	JM	12.42	M	0.04	M
	4/29/2008	04/29/2008Ni45-w	0.029	M	0.009	M			24.8	M	0.002	M			0.083	M	10.75	M	15.65	M	0.031	M	131.6	M	0.002	JM	11.18	M	0.032	M
	12/18/2008	12/18/2008Ni45-w	0.494	M	0.001	LM			17.6	M	0.001	LM			0.28	M	5.4	M	8	M	0.101	M	81.8	M	0.004	LM	21.1	M	0.048	M
	2/13/2009	02/13/2009Ni45-w																												
	4/17/2009	04/17/2009Ni45-w																												
	11/4/2009	11/04/2009Ni45-w	0.421	M	0.007	M	0.052	M	11.77	M	0.001	LM	0.001	JM	0.485	M	5.467	M	7.54	M	0.007	M	58.11	M	0.004	LM	14.23	M	0.052	M
Ni45-x	4/17/2008	04/17/2008Ni45-x	0.026	M	0.004	LM			16.1	M	0.001	M			0.215	M	5.1	M	7.67	M	0.001	LM	73.61	M	0.004	LM	10.16	M	0.06	M
	4/29/2008	04/29/2008Ni45-x	0.089	M	0.003	JM			12.1	M	0.001	JM			0.229	M	3.73	M	6.15	M	0.091	M	46.9	M	0.004	LM	8.021	M	0.018	M
	12/18/2008	12/18/2008Ni45-x	0.368	M	0.009	M			8.8	M	0.001	LM			0.267	M	1.6	M	5.2	M	0.075	M	28.8	M	0.004	LM	12	M	0.018	M
	2/13/2009	02/13/2009Ni45-x																												
	4/17/2009	04/17/2009Ni45-x																												
	8/7/2009	08/07/2009Ni45-x	0.019	M	0.004	LM	0.053	M	11.2	M	0.001	LM	0.045	M	0.168	M	3.873	M	6.91	M	0.004	M	51.22	M	0.004	LM	12.53	M	0.009	M
	11/4/2009	11/04/2009Ni45-x	0.247	M	0.004	M	0.048	M	9.02	M	0.001	LM	0.002	LM	0.723	M	3.48	M	5.88	M	0.085	M	40.45	M	0.004	LM	10.73	M	0.041	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Ortho Phosphate P (mg/L)	Ortho Phosphate P Flag	Total Dissolved P (mg/L)	Total Dissolved P Flag	Ammonium N (mg/L)	Ammonium N Flag	Nitrate N (mg/L)	Nitrate-N Flag	Khjeldahl N (mg/L)	Khjeldahl N Flag	Alkalinity as $CaCO_3$ (mg/L)	Alkalinity Flag	Cl (mg/L)	Cl Flag	Sulfate (mg/L)	Sulfate Flag
Ni44-16	6/17/2008	06/17/2008Ni44-16	0.016	M			0.199	LM	20.74	M	0.46	LM	17.7	M	89	M	21.03	M
	8/13/2008	08/13/2008Ni44-16	0.012	LM			0.199	LM	4	M	0.46	LM			16	M	4.95	M
	10/17/2008	10/17/2008Ni44-16	0.012	LM			0.248	M	0.68	M	1.92	M			7.6	M	2.6	M
	12/18/2008	12/18/2008Ni44-16	0.012	LM			0.199	LM	0.53	M	0.5	M			9.7	M	2.7	M
	2/11/2009	02/11/2009Ni44-16	0.016	M	0.036	M	0.165	JM	0.64	M	0.56	M	0.55	M				
	7/28/2009	07/28/2009Ni44-16	0.012	LM	0.011	M	0.086	LM	0.458	M	0.124	M			15	M	4	M
	11/4/2009	11/04/2009Ni44-16	0.018	M	0.034	M	0.167	M	1.3	M					19	M	3.6	M
Ni45-15	6/18/2008	06/18/2008Ni45-15	0.036	M			0.199	LM	0.91	M	0.25	JM	21	M	15	M	4.2	M
	8/13/2008	08/13/2008Ni45-15	0.006	JM			0.199	LM	0.32	LM	0.46	LM			18	M	3.89	M
	10/8/2008	10/08/2008Ni45-15	0.024	JM			0.353	M	0.26	LM	0.46	LM			16	M	2.8	M
	12/2/2008	12/02/2008Ni45-15	0.007	JM			0.199	LM	0.32	LM	1.86	LM			11	M	2	M
	2/12/2009	02/12/2009Ni45-15	0.018	M	0.19	M	0.227	M	0.32	LM	0.74	M	0.5	LM				
Ni45-17	8/13/2008	08/13/2008Ni45-17	0.012	LM			0.199	LM	0.15	M	0.46	LM			67	M	6.15	M
	7/28/2009	07/28/2009Ni45-17	0.012	LM	0.004	M	0.086	LM	0.397	M	0.62	M			21	M	3.4	M
	11/4/2009	11/04/2009Ni45-17	0.022	M	0.022	M	0.787	M	0.99	M					22	M	3.5	M
Ni45-33	4/17/2008	04/17/2008Ni45-33a	0.012	LM			2.75	M	16.08	M	2.85	M	0.4	JM	187	M	9.757	M
		04/17/2008Ni45-33b	0.04	M			0.83	M	6.41	M	1.05	M	6.5	M	321	M	15.45	M
	6/20/2008	06/20/2008Ni45-33	0.006	JM			2.768	M	7.21	M	9.42	M	2	M	205	M	10.19	M
	8/13/2008	08/13/2008Ni45-33	0.012	LM			1.32	M	6.47	M	1.32	LM			142	M	10.11	M
	10/7/2008	10/07/2008Ni45-33	0.024	JM			0.105	JM	1.1	M	11	M			72	M	5.9	M
	12/18/2008	12/18/2008Ni45-33	0.029	M			0.5	M	2.66	M	1.98	LM			77	M	4.7	M
	2/11/2009	02/11/2009Ni45-33	0.035	M	0.26	M	1.528	M	4.98	M	1.528	M	0.79	M				
	8/7/2009	08/07/2009Ni45-33	0.037	M	0.054	M	0.973	M	3.005	M	0.973	LM	7.7	M	57	M	4.8	M
	11/4/2009	11/04/2009Ni45-33	0.02	M	0.02	M	0.849	M	3.97	M	0.849	M			156	M	8.4	M
Ni45-34	4/16/2008	04/16/2008Ni45-34a	0.78	M			0.199	LM	5.17	M	0.25	M	1.4	M	218	M	10.34	M
		04/16/2008Ni45-34b	0.46	M			0.199	LM	6.23	M	0.56	JM	0.5	LM	348	M	15.86	M
	6/18/2008	06/18/2008Ni45-34	0.217	M			1.12	M	6.12	M	1.12	M	6.7	M	191	M	9.79	M
	8/11/2008	08/11/2008Ni45-34	0.044	M			0.27	M	2.19	M	0.27	M			145	M	7.35	M
	10/7/2008	10/07/2008Ni45-34	0.068	LM			0.199	LM	2.65	M	3.25	M			174	M	9.4	M
	12/2/2008	12/02/2008Ni45-34	0.124	M			0.199	LM	0.74	M	2.86	LM			160	M	8.3	M
	2/12/2009	02/12/2009Ni45-34	0.064	M	0.121	M	0.227	M	4.05	M	1.24	M	1.5	M				
	7/28/2009	07/28/2009Ni45-34	0.199	M	0.209	M	0.973	M	3.687	M	1.394	M	7.7	M	111	M	7.9	M
	10/29/2009	10/29/2009Ni45-34	0.13	M	0.139	M	0.353	M	10.56	M	0.496	M			94	M	7.4	M
Ni45-35	4/16/2008	04/16/2008Ni45-35a	0.08	M			0.27	M	2.51	M	0.46	LM	0.5	LM	187	M	12.35	M
		04/16/2008Ni45-35b	0.21	M			0.199	LM	6.23	M	0.25	JM	5.8	M	162	M	11.07	M
	6/17/2008	06/17/2008Ni45-35	0.407	M			0.31	M	6.18	M	0.31	JM	1.1	M	219	M	10.66	M
	8/12/2008	08/12/2008Ni45-35	0.534	M			1.39	M	20.72	M	1.73	M	0.8	M	174	M	9.15	M
	10/7/2008	10/07/2008Ni45-35a	1.34	LM			1.097	M	23.4	M	1.77	M			215	M	10.6	M
		10/07/2008Ni45-35b	1.392	LM			3.265	M	20.92	M	3.265	M			227	M	11	M
	12/1/2008	12/01/2008Ni45-35	1.588	M			0.199	LM	6.13	M	1.24	LM			94	M	7	M
	2/11/2009	02/11/2009Ni45-35a	0.986	M	1.479	M	0.289	M	3.74	M	0.81	M	0.5	LM				
		02/11/2009Ni45-35b	0.145	M	1.346	M	0.413	M	2.68	M	0.93	M	0.38	JM				
	4/16/2009	04/16/2009Ni45-35a	0.741	M	0.898	M	0.199	LM	0.32	LM	0.46	LM	0.5	LM				
		04/16/2009Ni45-35b	0.75	M	0.83	M	0.199	LM	2.94	M	0.25	JM	0.5	LM				
	7/22/2009	07/22/2009Ni45-35	0.5	M	0.663	M	0.043	JM	7.9	M	0.465	M	0.5	LM	129	M	8.7	M
	10/29/2009	10/29/2009Ni45-35	0.386	M	0.397	M	3.079	M	12.85	M	3.079	M			74	M	7.4	M
Ni45-36	4/16/2008	04/16/2008Ni45-36a	0.01	JM			0.199	LM	5.73	M	0.46	LM	17.3	M				
		04/16/2008Ni45-36b	0.012	LM			0.199	LM	7.59	M			12.3	M	226	M	12.16	M
	6/17/2008	06/17/2008Ni45-36	0.204	M			0.199	LM	2.46	M	0.43	JM	9.4	M	127	M	8.13	M
	8/11/2008	08/11/2008Ni45-36	0.264	M			0.4	M	5.42	M	0.46	LM	7.1	M	220	M	11.27	M
	10/7/2008	10/07/2008Ni45-36	0.464	LM			0.415	M	12.19	M	0.46	LM			211	M	10.5	M
	12/2/2008	12/02/2008Ni45-36	0.243	M			0.2	LM	15.12	M	0.46	LM			139	M	7.9	M
	2/12/2009	02/12/2009Ni45-36	0.305	M	0.602	M	0.165	JM	5.35	M	1.05	M	2.2	M				
	7/28/2009	07/28/2009Ni45-36	0.182	M	0.228	M	0.167	M	2.261	M	0.167	M	4.9	M	81	M	5.2	M
	10/29/2009	10/29/2009Ni45-36	0.271	M	0.271	M	0.725	M	15.02	M	1.177	M			113	M	7.3	M
Ni45-37	4/17/2008	04/17/2008Ni45-37a	0.012	LM			1.2	M	17.44	M	1.2	M	0.2	M	291	M	12.97	M
		04/17/2008Ni45-37b	0.01	JM			0.199	LM	0.59	M	0.5	M	3.5	M	387	M	20.37	M
	6/18/2008	06/18/2008Ni45-37	0.058	M			0.19	M	2.89	M	0.81	M	16.9	M	84	M	5.75	M
	8/11/2008	08/11/2008Ni45-37	0.072	M			0.15	M	1.08	M	0.31	M	15.6	M	117	M	6.45	M
	10/7/2008	10/07/2008Ni45-37	0.036	LM			0.199	LM	0.72	M	0.34	JM			183	M	9	M
	12/2/2008	12/02/2008Ni45-37	0.023	M			0.199	LM	2.42	M	0.28	JM			81	M	9.2	M
	2/12/2009	02/12/2009Ni45-37	0.077	M	0.12	M	0.723	M	0.33	M	0.81	M	3.9	M				
	7/28/2009	07/28/2009Ni45-37	0.179	M			0.229	M	0.015	LM	0.527	M	0.6	M	18	M	2.5	M
	10/29/2009	10/29/2009Ni45-37	0.21	M	0.21	M			1.7	M					125	M	8	M
Ni45-38	4/17/2008	04/17/2008Ni45-38	0.012	LM			0.199	LM	18.56	M	0.46	LM	7.3	M	419	M	17.48	M
	6/18/2008	06/18/2008Ni45-38	0.007	M			0.879	M	21.67	M	1.61	M	0.7	M	380	M	15.16	M
	8/12/2008	08/12/2008Ni45-38	0.012	LM			0.4	M	14.89	M	0.46	LM			263	M	12.13	M
	10/8/2008	10/08/2008Ni45-38	0.014	M			0.199	LM	0.26	LM	0.46	LM			137	M	10.2	M
	12/2/2008	12/02/2008Ni45-38	0.011	JM			0.199	LM	5.95	M	0.46	LM			165	M	9.7	M
	2/13/2009	02/13/2009Ni45-38	0.011	JM	2.247	M	1.342	M	19.72	M	1.67	M						
	8/7/2009	08/07/2009Ni45-38	0.012	LM	0.014	M	0.291	M	1.704	M	1.58	M	5.3	M	16	M	2	M
	11/4/2009	11/04/2009Ni45-38	0.034	M	0.034	M	0.539	M	6.88	M	0.539	LM			249	M	13	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Ortho Phosphate P (mg/L)	Ortho Phosphate P Flag	Total Dissolved P (mg/L)	Total Dissolved P Flag	Ammonium N (mg/L)	Ammonium N Flag	Nitrate N (mg/L)	Nitrate-N Flag	Khjeldahl N (mg/L)	Khjeldahl N Flag	Alkalinity as $CaCO_3$ (mg/L)	Alkalinity Flag	Cl (mg/L)	Cl Flag	Sulfate (mg/L)	Sulfate Flag
Ni45-39	4/17/2008	04/17/2008Ni45-39	0.008	JM			0.199	LM	4.06	M	0.46	LM	37.2	M	93	M	12.45	M
	6/18/2008	06/18/2008Ni45-39	0.02	M			0.398	JM	0.29	M	0.87	M	21.2	M	115	M	8.21	M
	8/12/2008	08/12/2008Ni45-39	0.009	JM			0.46	M	0.32	LM	0.46	LM			146	M	12.63	M
	10/8/2008	10/08/2008Ni45-39	0.024	JM			0.167	JM	0.26	LM	0.28	JM			354	M	15.8	M
	12/2/2008	12/02/2008Ni45-39	0.009	JM			0.199	LM	0.32	LM	0.4	JM			152	M	7.5	M
	2/13/2009	02/13/2009Ni45-39	0.017	M	0.017	M	0.351	M	0.52	M	0.62	M						
	8/7/2009	08/07/2009Ni45-39	0.012	LM	0.004	M	0.291	M	0.015	LM	1.952	M	9.3	M	22	M	3.1	M
	11/4/2009	11/04/2009Ni45-39	0.017	M	0.017	M	0.663	M	0.5	M	6.939	M			131	M	9.9	M
Ni45-40	4/17/2008	04/17/2008Ni45-40	0.009	JM			0.199	LM	0.28	M	0.46	LM	4.4	M	346	M	14.91	M
	6/20/2008	06/20/2008Ni45-40	0.021	M			0.042	M	8.38	M	0.74	M	6	M	204	M	10.19	M
	8/12/2008	08/12/2008Ni45-40	0.009	JM			0.33	M	10.62	M	0.46	LM			280	M	13.23	M
	10/8/2008	10/08/2008Ni45-40	0.024	JM			0.229	M	5.31	M	0.34	JM			317	M	15.3	M
	12/2/2008	12/02/2008Ni45-40	0.002	LM			0.199	LM	3.84	M	0.46	M			200	M	18.8	M
	2/13/2009	02/13/2009Ni45-40	0.017	M	0.017	M	0.723	M	28.83	M	0.723	M						
	8/7/2009	08/07/2009Ni45-40	0.012	LM	0.031	M	0.086	LM	0.465	M	0.836	M	2	M	31	M	3.7	M
	11/4/2009	11/04/2009Ni45-40	0.026	M	0.026	M	0.477	M	18.77	M	0.477	LM			172	M	9.8	M
Ni45-41	4/17/2008	04/17/2008Ni45-41	0.012	LM			0.7	M	5.55	M	1.8	M	15.5	M	16	M	3.02	M
	6/20/2008	06/20/2008Ni45-41	0.019	M			0.042	M	0.32	LM	0.74	M	56	M	206	M	10.23	M
	8/12/2008	08/12/2008Ni45-41	0.011	JM			4.11	M	0.77	M	4.11	M			32	M	2.63	M
	10/8/2008	10/08/2008Ni45-41	0.024	JM			0.787	M	0.26	LM	0.787	JM			44	M	4.2	M
	12/2/2008	12/02/2008Ni45-41	0.007	JM			0.199	LM	0.32	LM	1.3	LM			28	M	9.8	M
	2/13/2009	02/13/2009Ni45-41	0.034	M	0.034	M	0.289	M	0.7	M	0.99	M						
	8/7/2009	08/07/2009Ni45-41	0.016	M			0.353	M	0.015	LM	0.651	M	58	M	43	M	3.5	M
	11/4/2009	11/04/2009Ni45-41	0.018	M	0.018	M	0.415	M	0.56	M	0.415	M			39	M	6.7	M
Ni45-42	4/17/2008	04/17/2008Ni45-42	0.017	M			1.32	M	16.14	M	1.32	M	0.6	M	320	M	18.79	M
	6/20/2008	06/20/2008Ni45-42	0.022	M			0.227	M	5.47	M	0.5	M	1	M	408	M	18.19	M
	8/12/2008	08/12/2008Ni45-42	0.012	LM			0.199	LM	0.32	LM	0.31	M			70	M	5.5	M
	10/8/2008	10/08/2008Ni45-42	0.012	LM			0.415	M	0.26	LM	0.71	M			62	M	2.6	M
	12/2/2008	12/02/2008Ni45-42	0.012	LM			0.5	M	0.43	M	1.8	LM			35	M	6.1	M
	2/13/2009	02/13/2009Ni45-42	0.006	JM	0.006	M	0.227	M	1.63	M	1.05	M						
	4/16/2009	04/16/2009Ni45-42	0.025	M	0.025	M	0.199	LM	0.77	M	0.46	LM						
	8/7/2009	08/07/2009Ni45-42	0.06	M			0.415	M	0.015	LM	0.651	M	3	M	14	M	2.6	M
	11/4/2009	11/04/2009Ni45-42	0.012	LM	0.004	M	0.601	M	0.87	M	0.601	LM			117	M	9	M
Ni45-43	6/17/2008	06/17/2008Ni45-43	0.48	LM			0.19	JM	8.9	M	0.46	LM	0.5	LM	275	M	13.36	M
	8/11/2008	08/11/2008Ni45-43	0.534	M			2.94	M	23.88	M	2.94	M	0.9	M	157	M	8.38	M
	10/8/2008	10/08/2008Ni45-43																
	10/17/2008	10/17/2008Ni45-43a	0.294	M			0.186	JM	21.56	M	0.37	JM			108	M	7.2	M
		10/17/2008Ni45-43b	0.142	M			0.558	M	20.88	M	0.56	M			120	M	33.9	M
	12/1/2008	12/01/2008Ni45-43a	0.259	M			0.12	JM	15.37	M	3.24	I			135	M	15.4	M
		12/01/2008Ni45-43b	0.148	M			0.2	LM	16.11	M	0.92	JM			140	M	9.6	M
	2/11/2009	02/11/2009Ni45-43a	0.332	M	0.4	M	0.475	M	6.53	M	0.93	M	0.5	LM				
		02/11/2009Ni45-43b	0.224	M	0.248	M	0.103	JM	7.33	M	0.93	M	0.5	LM				
	4/16/2009	04/16/2009Ni45-43a	0.225	M	0.238	M	2.193	M	5.48	M	2.193	M	0.5	LM				
		04/16/2009Ni45-43b	0.197	M	0.197	M	0.199	LM	5.6	M	0.46	LM	0.4	JM				
	7/22/2009	07/22/2009Ni45-43	0.483	M	0.483	M	0.086	LM	11.184	M	0.589	M	0.5	LM	143	M	8.8	M
	10/29/2009	10/29/2009Ni45-43	0.309	M	0.324	M			21.83	M					76	M	7.6	M
Ni45-44	6/17/2008	06/17/2008Ni45-44	2.64	I			0.19	JM	8.53	M	1.05	M	0.5	LM	346	M	18.01	M
	8/12/2008	08/12/2008Ni45-44	0.131	M			0.52	M	18.55	M	1	M	1	M	189	M	10.05	M
	10/7/2008	10/07/2008Ni45-44	1.372	M							1.46	M			377	M	14.4	M
	12/1/2008	12/01/2008Ni45-44	1.489	M			0.68	M	12.08	M	0.68	JM			133	M	8.9	M
	2/12/2009	02/12/2009Ni45-44	1.184	M	1.184	M	0.199	LM	2.89	M	0.56	M	0.5	LM				
	7/22/2009	07/22/2009Ni45-44	0.178	M	0.178	M	0.211	M	2.169	M	0.774	M	0.9	M	8	M	1.7	M
	10/29/2009	10/29/2009Ni45-44	1.68	M	2.053	M			9.88	M					76	M	6.8	M
Ni45-45	6/20/2008	06/20/2008Ni45-45	0.02	M			0.199	LM	0.32	LM	1.43	M	1.27	LM	19	M	3.18	M
	8/12/2008	08/12/2008Ni45-45	0.17	M			0.15	M	5.91	M	0.46	LM	0.5	LM	184	M	9.8	M
	10/7/2008	10/07/2008Ni45-45a	0.166	M			0.124	M	12.12	M	0.46	LM			224	M	11.9	M
		10/07/2008Ni45-45b	0.419	M			0.867	M	14.85	M	0.867	M			228	M	11.2	M
	12/2/2008	12/02/2008Ni45-45a	0.066	M			0.199	LM	17.35	M	0.46	LM			128	M	7.8	M
		12/02/2008Ni45-45b	0.397	M			0.68	M	21.87	M	0.68	LM			147	M	8.8	M
	2/12/2009	02/12/2009Ni45-45a	0.15	M	1.035	M	0.199	LM	14.11	M	0.74	M	0.5	LM				
		02/12/2009Ni45-45b	0.561	M	0.742	M	0.32	M	16.27	M	0.87	M	0.5	LM				
	4/16/2009	04/16/2009Ni45-45a	0.145	M	0.313	M	0.199	LM	12.91	M	0.25	JM	0.5	LM				
		04/16/2009Ni45-45b	0.491	M	0.614	M	0.199	LM	10.12	M	0.46	LM	0.5	LM				
	7/28/2009	07/28/2009Ni45-45	0.105	M	0.105	M	0.539	M	4.306	M	0.96	M	0.5	LM	125	M	8.5	M
	10/29/2009	10/29/2009Ni45-45	0.259	M	0.374	M	2.646	M	12.91	M	5.143	M			105	M	7.6	M
Ni45-46	6/17/2008	06/17/2008Ni45-46	0.966	M			0.87	M	12.68	M	0.87	M	4.1	M	215	M	11	M
	8/11/2008	08/11/2008Ni45-46	1.602	M			4.3	M	20.53	M	5.2	M	0.7	M	163	M	9.49	M
	10/7/2008	10/07/2008Ni45-46	2.166	M			0.558	M	19.43	M	0.9	M			261	M	11.8	M
	12/1/2008	12/01/2008Ni45-46	1.001	M			0.199	LM	9.85	M	1.36	LM			107	M	8.1	M
	2/12/2009	02/12/2009Ni45-46	0.994	M	1.043	M	0.199	LM	3.82	M	0.9	M	0.5	LM				
	7/22/2009	07/22/2009Ni45-46	0.028	M			0.086	LM	0.341	M	0.805	M	0.5	LM	1	M	0.9	M
	10/29/2009	10/29/2009Ni45-46	0.866	M	1.13	M	0.477	M	23.88	M	0.477	LM			66	M	6.5	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Ortho Phosphate P (mg/L)	Ortho Phosphate P Flag	Total Dissolved P (mg/L)	Total Dissolved P Flag	Ammonium N (mg/L)	Ammonium N Flag	Nitrate N (mg/L)	Nitrate-N Flag	Khjeldahl N (mg/L)	Khjeldahl N Flag	Alkalinity as $CaCO_3$ (mg/L)	Alkalinity Flag	Cl (mg/L)	Cl Flag	Sulfate (mg/L)	Sulfate Flag
Ni45-47	2/11/2009	02/11/2009Ni45-47	0.925	M	2.065	M	0.217	M	3.94	M	1.21	M						
	4/17/2009	04/17/2009Ni45-47	0.532	M	0.572	M	0.199	LM	6.03	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-47	0.504	M	0.623	M	0.601	M	26.363	M	0.96	M	18.6	M	78	M	5.8	M
	10/29/2009	10/29/2009Ni45-47	0.633	M	0.81	M	0.105	M	10.81	M	0.105	JM			67	M	6.6	M
Ni45-48	8/19/2008	08/19/2008Ni45-48	0.426	M			0.199	LM	20.6	M	0.25	M			198	M	10.4	M
	12/1/2008	12/01/2008Ni45-48	0.604	M			0.37	M	6.82	M	1.48	LM			124	M	18.6	M
	2/11/2009	02/11/2009Ni45-48	0.421	M	0.915	M	0.199	LM	4.32	M	0.96	M						
	4/17/2009	04/17/2009Ni45-48	0.455	M	0.501	M	0.199	LM	5	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-48	0.487	M	0.69	M	0.954	M	25.217	M	0.954	M	0.5	LM	162	M	9.2	M
	10/29/2009	10/29/2009Ni45-48	0.546	M	0.563	M			27.53	M					84	M	8.3	M
Ni45-49	8/19/2008	08/19/2008Ni45-49	0.266	M			1.88	M	18.56	M	12.14	M			243	M	10.8	M
	10/17/2008	10/17/2008Ni45-49	0.012	LM			0.199	LM	25.53	M	0.68	M			113	M	9	M
Ni45-50	8/19/2008	08/19/2008Ni45-50	0.032	M			0.199	LM	20.54	M	0.68	M			149	M	8.5	M
	10/8/2008	10/08/2008Ni45-50	0.012	LM			3.346	M	21.62	M	3.59	M			142	M	8.8	M
	12/1/2008	12/01/2008Ni45-50	0.061	M			0.199	LM	23.79	M	0.46	LM			164	M	10.1	M
	2/11/2009	02/11/2009Ni45-50	0.176	M	0.18	M	0.199	LM	4.63	M	1.08	M						
	4/17/2009	04/17/2009Ni45-50	0.102	M	0.161	M	0.204	M	4.5	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-50	0.012	LM	0.136	M	0.167	M	12.547	M	0.774	M	141.2	M	87	M	6.7	M
	10/29/2009	10/29/2009Ni45-50	0.072	M	0.087	M	1.221	M	35.59	M	1.221	LM			94	M	7.1	M
Ni45-51	8/19/2008	08/19/2008Ni45-51	0.452	M			24.74	M	23.08	M	24.74	M			167	M	10.3	M
	10/17/2008	10/17/2008Ni45-51	0.119	M			14.808	M	18.96	M	14.808	M			183	M	10.3	M
	12/1/2008	12/01/2008Ni45-51	0.336	M			5.95	M	13.01	M	5.95	M			159	M	8.7	M
	2/11/2009	02/11/2009Ni45-51	0.211	M	0.148	M	0.155	JM	4.56	M	0.9	M						
	4/17/2009	04/17/2009Ni45-51	0.269	M	0.275	M	1.258	M	2.52	M	1.258	LM						
	7/22/2009	07/22/2009Ni45-51	0.294	M	0.335	M	0.167	M	25.062	M	0.713	M			93	M	6.7	M
	10/29/2009	10/29/2009Ni45-51	0.222	M	0.245	M	5.372	M	22.33	M	5.372	JM			88	M	7.3	M
Ni45-52	8/19/2008	08/19/2008Ni45-52	0.043	M			2.646	M	18.259	M	3.41	M			188	M	9.2	M
	10/17/2008	10/17/2008Ni45-52	0.012	LM			12.454	M	19.27	M	12.454	M			165	M	8.1	M
	12/1/2008	12/01/2008Ni45-52	0.067	M			7.13	M	21.62	M	7.13	M			225	M	10.1	M
	2/11/2009	02/11/2009Ni45-52	0.017	M	0.009	M	2.2	M	9.46	M	2.32	M						
	4/17/2009	04/17/2009Ni45-52	0.065	M	0.078	M	0.199	LM	2.77	M	0.25	JM						
	7/22/2009	07/22/2009Ni45-52	0.06	M	0.087	M	0.105	M	12.423	M	0.558	M			119	M	8.5	M
	10/29/2009	10/29/2009Ni45-52	0.073	M	0.157	M	4.69	M	22.89	M	4.69	M			89	M	7.4	M
Ni45-53	8/19/2008	08/19/2008Ni45-53	0.012	M			0.539	M	3.079	M	1.36	M			222	M	13.7	M
Ni45-55	8/15/2008	08/15/2008Ni45-55	0.012	LM			1.76	M	2.63	M	1.76	LM			181	M	9.7	M
	10/8/2008	10/08/2008Ni45-55	0.009	JM			0.199	LM	11.88	M	0.46	LM			233	M	11.5	M
	12/2/2008	12/02/2008Ni45-55	0.021	M			0.43	M	29.18	M	2.42	M			165	M	12.4	M
	2/12/2009	02/12/2009Ni45-55	0.046	M	0.009	M	0.199	LM	14.29	M	0.65	M						
	4/17/2009	04/17/2009Ni45-55	0.032	M	0.032	M	0.328	M	14.23	M	0.46	LM						
	7/28/2009	07/28/2009Ni45-55	0.05	M	0.084	M	0.086	LM	5.05	M	0.372	M			153	M	9.1	M
	10/29/2009	10/29/2009Ni45-55	0.119	M	0.167	M	6.115	M	13.35	M	6.115	M			113	M	7.5	M
Ni45-56	8/15/2008	08/15/2008Ni45-56	0.75	M			1.69	M	11.68	M	2.42	M			248	M	11.6	M
	10/8/2008	10/08/2008Ni45-56	0.782	M			1.43	M	21.1	M	1.52	M			231	M	11	M
	12/2/2008	12/02/2008Ni45-56	0.599	M			0.56	M	26.46	M	0.56	LM			140	M	8.2	M
	2/12/2009	02/12/2009Ni45-56	0.918	M	0.654	M	0.199	LM	1.28	M	1.33	M						
	4/17/2009	04/17/2009Ni45-56	0.945	M	1.12	M	0.266	M	9.52	M	0.46	LM						
	7/28/2009	07/28/2009Ni45-56	0.588	M	0.846	M	0.043	JM	10.75	M	0.434	M			276	M	13	M
	10/29/2009	10/29/2009Ni45-56	1.229	M	1.229	M	4.442	M	23.88	M	4.442	M			104	M	8.2	M
Ni45-57	8/15/2008	08/15/2008Ni45-57	0.6	M			2.99	M	13.72	M	3.53	M			225	M	10.9	M
	10/8/2008	10/08/2008Ni45-57	0.729	M			2.85	M	21.85	M	6.63	M			239	M	10.4	M
	12/2/2008	12/02/2008Ni45-57	0.624	M			2.42	M	22.8	M	2.42	JM			171	M	8.5	M
	2/12/2009	02/12/2009Ni45-57	1.151	M			0.199	LM	5.93	M	1.83	M						
	4/17/2009	04/17/2009Ni45-57	0.741	M	0.882	M	0.143	JM	4.32	M	0.46	LM						
	7/28/2009	07/28/2009Ni45-57	2.131	M	2.131	M	0.105	M	10.812	M	0.991	M			101	M	7.4	M
	10/29/2009	10/29/2009Ni45-57	0.945	M	0.945	M	3.823	M	12.42	M	3.823	M			103	M	8.2	M
Ni45-58	8/15/2008	08/15/2008Ni45-58	0.05	M			0.39	M	12.48	M	0.46	LM			257	M	13.6	M
	10/8/2008	10/08/2008Ni45-58	0.053	M			0.372	M	15.78	M	1.24	M			205	M	10.6	M
	12/2/2008	12/02/2008Ni45-58	0.054	M			3.04	M	19.39	M	3.04	LM			159	M	9.1	M
	2/12/2009	02/12/2009Ni45-58	0.13	M	0.13	M	1.698	M	13.59	M	2.08	M						
	4/17/2009	04/17/2009Ni45-58	0.066	M	0.078	M	0.514	M	10.14	M	0.514	LM						
	7/28/2009	07/28/2009Ni45-58	0.087	M	0.087	M	0.167	M	6.475	M	0.62	M			255	M	13	M
	10/29/2009	10/29/2009Ni45-58	0.014	M	0.034	M	2.292	M	21.5	M	2.292	M			118	M	8.6	M
Ni45-59	8/15/2008	08/15/2008Ni45-59	0.02	M			0.199	LM	15.58	M	0.46	LM			809	M	36.6	M
	10/8/2008	10/08/2008Ni45-59	0.012	LM			0.372	M	18.82	M	1.12	M			427	M	22.2	M
	12/2/2008	12/02/2008Ni45-59	0.015	M			0.99	M	19.24	M	1.36	LM			210	M	17.3	M
	2/12/2009	02/12/2009Ni45-59	0.029	M	0.029	M	0.351	M	0.32	LM	1.43	M						
	4/17/2009	04/17/2009Ni45-59	0.03	M	0.03	M	0.7	M	5.19	M	0.7	LM						
	7/28/2009	07/28/2009Ni45-59	0.011	JM	0.011	M	0.105	M	18.804	M	0.867	M			328	M	12	M
	10/29/2009	10/29/2009Ni45-59	0.031	M	0.031	M	0.496	M	10.97	M	0.496	LM			392	M	24	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Ortho Phosphate P (mg/L)	Ortho Phosphate P Flag	Total Dissolved P (mg/L)	Total Dissolved P Flag	Ammonium N (mg/L)	Ammonium N Flag	Nitrate N (mg/L)	Nitrate-N Flag	Khjeldahl N (mg/L)	Khjeldahl N Flag	Alkalinity as $CaCO_3$ (mg/L)	Alkalinity Flag	Cl (mg/L)	Cl Flag	Sulfate (mg/L)	Sulfate Flag
Ni45-60	8/19/2008	08/19/2008Ni45-60	0.04	LM			0.167	M	0.32	LM	0.43	M			436	M	34.9	M
	10/8/2008	10/08/2008Ni45-60	0.012	LM			0.805	M	0.35	M	1.86	M			381	M	43.9	M
	12/2/2008	12/02/2008Ni45-60	0.015	M			1.24	M	0.4	M	2.36	LM			279	M	35.6	M
	2/12/2009	02/12/2009Ni45-60	0.014	M	0.014	M	0.413	M	0.32	LM	1.86	M						
	4/17/2009	04/17/2009Ni45-60	0.012	LM	0.014	M	0.638	M	0.32	LM	0.638	LM						
	7/22/2009	07/22/2009Ni45-60	0.012	LM	0.005	M	1.221	M	0.465	M	1.221	M			312	M	33	M
	10/29/2009	10/29/2009Ni45-60	0.012	LM	0.04	M	0.991	M	1.92	M	0.991	LM			443	M	44	M
Ni45-61	8/15/2008	08/15/2008Ni45-61	0.11	M			0.199	LM	7.96	M	0.74	M			151	M	11.1	M
	12/1/2008	12/01/2008Ni45-61	0.116	M			0.31	M	12.11	M	0.46	LM			96	M	6.1	M
	2/11/2009	02/11/2009Ni45-61	0.061	M	0.061	M	0.199	LM	3.08	M	6.29	M						
	4/17/2009	04/17/2009Ni45-61	0.052	M	0.052	M	0.266	M	5.25	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-61	0.021	M	0.021	M	0.086	LM	4.182	M	0.124	M			142	M	8.8	M
	10/29/2009	10/29/2009Ni45-61	0.032	M	0.032	M	1.053	M	30.11	M	1.053	M			107	M	8.9	M
Ni45-62	7/22/2009	07/22/2009Ni45-62	0.737	M	0.92	M	0.229	M	6.599	M	0.229	M			146	M	8.5	M
	10/29/2009	10/29/2009Ni45-62	0.546	M	0.704	M	2.354	M	12.89	M	2.354	M			83	M	7.8	M
Ni45-63	8/19/2008	08/19/2008Ni45-63	0.62	M			1.406	M	22.29	M	2.17	M			283	M	13.1	M
	10/7/2008	10/07/2008Ni45-63	0.782	M			0.867	M	23.21	M	1.55	M			230	M	11.1	M
Ni45-64	8/15/2008	08/15/2008Ni45-64	0.59	M			1.2	M	19.86	M	1.2	LM			325	M	15.1	M
	10/8/2008	10/08/2008Ni45-64	0.13	M			3.594	M	19.06	M	4.46	M			244	M	11.7	M
	12/1/2008	12/01/2008Ni45-64	0.656	M			0.5	M	20.54	M	0.5	LM			138	M	11.9	M
	2/11/2009	02/11/2009Ni45-64	0.994	M	0.994	M	0.211	M	3	M	2.82	M						
	4/17/2009	04/17/2009Ni45-64	1.008	M	1.008	M	0.199	LM	4.19	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-64	0.507	M	0.546	M	0.086	LM	11.239	M	6.63	M			141	M	8.8	M
	10/29/2009	10/29/2009Ni45-64	0.592	M	0.654	M	1.487	M	42.01	M	1.487	LM			122	M	6.8	M
Ni45-65	8/15/2008	08/15/2008Ni45-65	0.46	M			0.33	M	19.42	M	0.93	M			256	M	12.8	M
	10/7/2008	10/07/2008Ni45-65	0.366	M			1.735	M	24.7	M	1.735	JM			216	M	9.4	M
	12/1/2008	12/01/2008Ni45-65	0.649	M			1.61	M	18.87	M	2.24	LM			232	M	11.5	M
	2/11/2009	02/11/2009Ni45-65	1.135	M	1.135	M	0.351	M	3.44	M	0.84	M						
	4/17/2009	04/17/2009Ni45-65	0.862	M	1	M	0.199	LM	3.33	M	1.12	M						
	7/22/2009	07/22/2009Ni45-65	0.645	M	0.713	M	0.086	LM	15.824	M	1.177	M			91	M	6.9	M
	10/29/2009	10/29/2009Ni45-65	0.789	M	0.789	M	3.656	M	25.77	M	3.656	M			89	M	8.9	M
Ni45-66	8/15/2008	08/15/2008Ni45-66	0.03	M			0.199	LM	14.28	M	0.99	M			209	M	29.6	M
	10/8/2008	10/08/2008Ni45-66	0.012	LM			0.199	LM	20.98	M	1.05	M			176	M	10.5	M
	12/1/2008	12/01/2008Ni45-66	0.01	JM			0.99	M	13.85	M	2.1	LM			231	M	10	M
	2/11/2009	02/11/2009Ni45-66	0.009	JM	0.009	M	0.847	M	4.62	M	2.57	M						
	4/17/2009	04/17/2009Ni45-66	0.017	M	0.04	M	0.199	LM	3.45	M	0.46	LM						
	7/22/2009	07/22/2009Ni45-66	0.012	M	0.012	M	0.706	M	4.052	M	0.706	M			304	M	13	M
	10/29/2009	10/29/2009Ni45-66	0.021	M	0.021	M	1.859	M	22.24	M	1.859	LM			97	M	7.7	M
Ni45-67	8/15/2008	08/15/2008Ni45-67	0.13	M			0.229	M	6.86	M	3.78	M			191	M	12.4	M
	10/7/2008	10/07/2008Ni45-67	0.067	M			0.991	M	18.9	M	0.991	M			269	M	14.2	M
	12/1/2008	12/01/2008Ni45-67	0.105	M			0.31	M	14.53	M	0.56	M			175	M	22.3	M
	2/11/2009	02/11/2009Ni45-67	0.366	M	0.473	M	0.289	M	0.4	M	3.38	M						
	4/17/2009	04/17/2009Ni45-67	0.169	M	0.169	M	5.967	M	5.12	M	5.967	M						
	7/22/2009	07/22/2009Ni45-67	0.24	M	0.299	M	0.086	LM	5.043	M	0.372	M			226	M	13	M
	10/29/2009	10/29/2009Ni45-67	0.101	M	0.101	M	1.053	M	20.26	M	1.053	M			112	M	7.9	M
Ni45-78	2/13/2009	02/13/2009Ni45-78	0.02	M	0.02	M	0.103	JM	0.53	M	0.37	JM						
	4/16/2009	04/16/2009Ni45-78	0.011	JM	0.011	M	0.199	LM	0.32	LM	0.46	LM						
	8/7/2009	08/07/2009Ni45-78	0.012	LM	0.043	M	3.247	M	0.397	M	3.247	M			54	M	5.4	M
	11/4/2009	11/04/2009Ni45-78	0.018	M	0.018	M	1.654	M	0.31	M	1.654	LM			166	M	9.4	M
Ni45-79	2/13/2009	02/13/2009Ni45-79	0.034	M	0.034	M	0.351	M	0.22	JM	6.75	M						
	4/16/2009	04/16/2009Ni45-79	0.012	LM	0.031	M	0.199	LM	0.17	JM	0.68	M						
	8/7/2009	08/07/2009Ni45-79	0.012	LM	0.004	M	0.086	LM	0.015	LM	0.496	M			64	M	12	M
	11/4/2009	11/04/2009Ni45-79	0.017	M	0.017	M	0.539	M	0.99	M	0.539	M			167	M	9.2	M
Ni45-80	2/13/2009	02/13/2009Ni45-80	0.011	JM	0.011	M	0.199	LM	0.6	M	0.31	JM						
	4/16/2009	04/16/2009Ni45-80	0.007	JM			0.199	LM	0.64	M	0.46	LM						
	8/7/2009	08/07/2009Ni45-80	0.009	JM	0.017	M	0.086	LM	3.618	M	0.744	M			90	M	11	M
	11/4/2009	11/04/2009Ni45-80	0.035	M	0.035	M	0.725	M	0.93	M	0.725	M			188	M	10	M
Ni45-81	2/13/2009	02/13/2009Ni45-81	0.014	M	0.02	M	0.199	LM	0.91	M	4.15	M						
	4/16/2009	04/16/2009Ni45-81	0.01	JM	0.01	M	0.199	LM	3.74	M	0.46	LM						
	8/7/2009	08/07/2009Ni45-81	0.012	LM	0.02	M	1.45	M	13.098	M	1.45	M			133	M	9.8	M
	11/4/2009	11/04/2009Ni45-81	0.017	M	0.017	M	1.592	M	0.25	M	1.592	LM			169	M	9.3	M
Ni45-82	2/13/2009	02/13/2009Ni45-82	0.01	JM	0.026	M	0.413	M	0.48	M	0.46	LM						
	4/16/2009	04/16/2009Ni45-82	0.007	JM	0.034	M	0.199	LM	2.87	M	0.25	JM						
	8/7/2009	08/07/2009Ni45-82	0.012	LM	0.026	M	0.706	M	4.486	M	2.478	M			98	M	7.9	M
	11/4/2009	11/04/2009Ni45-82	0.032	M	0.032	M	0.601	M	1.36	M	0.601	M			216	M	11	M
Ni45-83	2/13/2009	02/13/2009Ni45-83	0.01	JM	0.01	M	0.413	M	0.32	LM	0.81	M						
	4/16/2009	04/16/2009Ni45-83	0.011	JM	0.011	M	0.199	LM	0.21	JM	0.46	LM						
	8/7/2009	08/07/2009Ni45-83	0.012	LM	0.004	M	0.954	M	3.928	M	0.954	M			98	M	7.8	M
	11/4/2009	11/04/2009Ni45-83	0.017	M	0.017	M	0.725	M	0.74	M					419	M	17	M
Ni45-84	2/13/2009	02/13/2009Ni45-84	0.012	LM			0.413	M	0.17	JM	0.74	M						
	4/16/2009	04/16/2009Ni45-84	0.02	M	0.02	M	0.199	LM	0.21	JM	0.46	LM						
	8/7/2009	08/07/2009Ni45-84	0.012	LM	0.054	M	0.086	LM	4.424	M	0.186	M			135	M	8.8	M
	11/4/2009	11/04/2009Ni45-84	0.052	M	0.052	M	0.601	M	2.66	M					393	M	17	M
Ni45-ab	2/12/2009	02/12/2009Ni45-ab	0.011	JM			0.227	0	0.32	LM	0.87	M						
	8/7/2009	08/07/2009Ni45-ab	0.012	LM			0.086	LM	0.015	LM	0.682	M			102	M	4.7	M
Ni45-ac	8/7/2009	08/07/2009Ni45-ac	0.012	M			2.751	M	0.015	LM	2.751	M			178	M	5.8	M

Appendix 2b. Results of laboratory water quality analyses.

Site Identifier	Date Sampled	Sample Identifier	Ortho Phosphate P (mg/L)	Ortho Phosphate P Flag	Total Dissolved P (mg/L)	Total Dissolved P Flag	Ammonium N (mg/L)	Ammonium N Flag	Nitrate N (mg/L)	Nitrate-N Flag	Khjeldahl N (mg/L)	Khjeldahl N Flag	Alkalinity as $CaCO_3$ (mg/L)	Alkalinity Flag	Cl (mg/L)	Cl Flag	Sulfate (mg/L)	Sulfate Flag
Ni45-ae	2/12/2009	02/12/2009Ni45-ae	0.007	JM			0.165	JM	0.85	M	0.5	M						
Ni45-EFF	3/4/2008	03/04/2008Ni45-EFF					0.612	M	1.65	M					170	M		
	4/29/2008	04/29/2008Ni45-EFF	0.098	M			5.411	M	4.12	M	31.475	M	34	M	324	M	17.63	M
	5/13/2008	05/13/2008Ni45-EFF			0.386	M	2.51	M	1.25	M					115	M		
	6/17/2008	06/17/2008Ni45-EFF			1.37	M	7.9	M	2.13	M					187	M		
	7/15/2008	07/15/2008Ni45-EFF			1.92	M	16.7	M	2.17	M					133	M		
	8/19/2008	08/19/2008Ni45-EFF			5.09	M	25.4	M	1.39	M					1780	M		
	8/20/2008	08/20/2008Ni45-EFF	1.43	M			5.929	M	16.71	M	27.57	M			125	M	6.2	M
	9/16/2008	09/16/2008Ni45-EFF			1.35	M	9.26	M	2.34	M					155	M		
	10/7/2008	10/07/2008Ni45-EFF	1.398	M			8.55	M	2.73	M	8.55	M			228	M	10.7	M
	12/2/2008	12/02/2008Ni45-EFF	0.41	LM			0.5	M	6.76	LM	6.08	LM			75	M	11.4	M
	12/9/2008	12/09/2008Ni45-EFF			0.45	M	2.44	M							132	M		
	2/11/2009	02/11/2009Ni45-EFF	0.096	M			0.413	M	2.58	M	0.43	JM	5.4	M				
	4/9/2009	04/09/2009Ni45-EFF	0.2	M	0.2	M	0.199	LM	1.82	M	0.25	JM	50.3	M				
	8/7/2009	08/07/2009Ni45-EFF	2.479	M			29.455	M	0.025	M	29.455	M			108	M	6.9	M
	11/4/2009	11/04/2009Ni45-EFF	0.06	M			0.663	M	1.98	M	0.663	LM			48	M	5.6	M
Ni45-r	4/17/2008	04/17/2008Ni45-r	0.008	JM			0.27	M	0.28	JM	0.43	M	6.9	M	174	M	8.96	M
	4/29/2008	04/29/2008Ni45-r	0.009	JM			5.41	M	4.12	M	31.48	M	34.4	M	85	M	6.49	M
	12/18/2008	12/18/2008Ni45-r	0.012	LM			0.199	LM	0.62	M	1.43	M			69	M	7.2	M
	2/13/2009	02/13/2009Ni45-r	0.006	JM			0.537	M	5.25	M	0.62	M						
	4/17/2009	04/17/2009Ni45-r	0.011	JM	0.034	M	0.199	LM	0.32	LM	1.73	M	11	M				
	8/7/2009	08/07/2009Ni45-r	0.011	JM			3.185	M	0.149	M	3.185	M			93	M	3.7	M
	11/4/2009	11/04/2009Ni45-r	0.021	M	0.021	M	0.787	M	0.5	M	0.787	LM			127	M	6.5	M
Ni45-s	4/17/2008	04/17/2008Ni45-s	0.019	M			0.199	LM	15.27	M	0.81	M	32.6	M	359	M	15.89	M
	4/29/2008	04/29/2008Ni45-s	0.012	M			1.03	M	0.84	M	1.03	LM	13.4	M	305	M	14.41	M
	12/18/2008	12/18/2008Ni45-s	0.012	M			0.199	LM	1.8	M	2.48	LM			78	M	7.1	M
	2/13/2009	02/13/2009Ni45-s	0.018	M			1.095	M	8.22	M	2.23	M						
	4/17/2009	04/17/2009Ni45-s	0.012	LM	0.02	M	0.199	LM	0.64	M	0.46	LM	14.8	M				
	8/7/2009	08/07/2009Ni45-s	0.014	M			2.627	M	1.202	M	2.627	M			138	M	9.8	M
	11/4/2009	11/04/2009Ni45-s	0.034	M	0.034	M	0.849	M	2.6	M	0.849	LM			112	M	7.1	M
Ni45-v	4/17/2008	04/17/2008Ni45-v	0.011	JM			0.199	LM	4.31	M	0.87	M	0.1	LM	614	M	26.9	M
	4/29/2008	04/29/2008Ni45-v	0.012	LM			0.58	M	27.97	M	1.18	M	20.3	M	222	M	10.92	M
	12/18/2008	12/18/2008Ni45-v	0.006	JM			0.199	LM	2.79	M	1.98	LM			160	M	8.5	M
	2/13/2009	02/13/2009Ni45-v	0.022	M			0.537	M	0.72	M	0.537	JM						
	4/17/2009	04/17/2009Ni45-v	0.012	LM	0.054	M	0.199	LM	0.52	M	0.31	JM	14.1	M				
	11/4/2009	11/04/2009Ni45-v	0.022	M	0.022	M	0.787	M	2.29	M	0.787	LM			141	M	8.7	M
Ni45-w	4/17/2008	04/17/2008Ni45-w	0.012	LM			0.08	M	4.99	M	0.81	JM	26.8	M	349	M	20.42	M
	4/29/2008	04/29/2008Ni45-w	0.01	JM			0.199	LM	0.32	LM	0.46	LM	25.1	M	358	M	16.05	M
	12/18/2008	12/18/2008Ni45-w	0.006	JM			0.199	LM	0.43	M	1.73	M			162	M	9.4	M
	2/13/2009	02/13/2009Ni45-w	0.038	M			0.537	M	10.76	M	1.55	M						
	4/17/2009	04/17/2009Ni45-w	0.025	M	0.028	M	0.199	LM	1.08	M	0.62	M	16.6	M				
	11/4/2009	11/04/2009Ni45-w	0.039	M	0.039	M	0.849	M	0.81	M	0.849	LM			139	M	7.1	M
Ni45-x	4/17/2008	04/17/2008Ni45-x	0.012	LM			0.39	M	15.27	M	0.62	M	12.1	M	185	M	10.07	M
	4/29/2008	04/29/2008Ni45-x	0.027	M			0.199	LM	0.59	M	0.56	M	12.6	M	121	M	11.73	M
	12/18/2008	12/18/2008Ni45-x	0.012	LM			0.199	LM	0.32	LM	1.55	M			49	M	6	M
	2/13/2009	02/13/2009Ni45-x	0.022	M			0.165	JM	0.54	M	1.12	M						
	4/17/2009	04/17/2009Ni45-x	0.134	M	0.338	M	0.199	LM	0.32	LM	1.8	M	3.4	M				
	8/7/2009	08/07/2009Ni45-x	0.011	JM			0.086	LM	0.458	M	0.867	M			85	M	4.7	M
	11/4/2009	11/04/2009Ni45-x	0.023	M	0.023	M	0.663	M	0.12	M	0.663	LM			92	M	4.1	M

Appendix 2. Results of water sample analyses. The following notes apply to this appendix. Flag values indicate concentration units (M- mg/L) and if the reported value is estimated (J) or less than (L) the number reported . Sample identifiers ending with “a” represent results from samples collected from the top of the screened interval of that well. Sample identifiers ending with “b” represent results from samples collected from the bottom of the screened interval. Additional discussion of estimated values and detection limits is contained in the methods section of the report. Additional discussion of issues related to dissolved oxygen and redox potential in mixed redox environments is contained in the results and discussion section of the report.

Appendix 2a. Field water quality data.

Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni44-16	5/6/2008	05/06/2008Ni44-16	110	5.9	18.46	222.7		8.22	M
	6/17/2008	06/17/2008Ni44-16	115	6.16	15.72	174.6		5.57	M
	8/13/2008	08/13/2008Ni44-16	119	6.08	15.59	176.9		6.78	M
	10/17/2008	10/17/2008Ni44-16	124	5.01	15.11			3.7	M
	12/18/2008	12/18/2008Ni44-16	119	6.02	15.3	48.3		4.64	M
	2/11/2009	02/11/2009Ni44-16	114	5.76	15.62	249.5	L	6.46	L
	7/28/2009	07/28/2009Ni44-16	128	5.79	14.98	104		5.82	M
	11/4/2009	11/04/2009Ni44-16	132	5.7	15.07	140.9		6.87	M
Ni44-b	3/17/2008	03/17/2008Ni44-b	83.5		7.6				
	4/29/2008	04/29/2008Ni44-b	94	6	14	83		6.95	M
Ni44-c	3/17/2008	03/17/2008Ni44-c	54.5		7.8				
Ni45-15	5/6/2008	05/06/2008Ni45-15	106	4.5	16.24	112.8		2.57	M
	6/18/2008	06/18/2008Ni45-15	100	4.96	14.96	-13.7		4.37	M
	8/13/2008	08/13/2008Ni45-15	88	4.38	16.18	-78.9	L	0.59	M
	10/8/2008	10/08/2008Ni45-15	86	4.32	16.9	-14.5	L	0.66	M
	12/2/2008	12/02/2008Ni45-15	79	4.26	16.64	-32.5	L	0.81	M
	2/12/2009	02/12/2009Ni45-15	93	4.33	15	31	L	1.32	L
Ni45-16	5/6/2008	05/06/2008Ni45-16	144	5.07	18.24	-27.3		6.24	M
	7/28/2009	07/28/2009Ni45-16	128	5.79	14.98	104		5.82	M
Ni45-17	5/6/2008	05/06/2008Ni45-17	129	5.06	16.43	180.7		8.44	M
	8/13/2008	08/13/2008Ni45-17	133	4.82	15.35	204.3		6	M
	7/28/2009	07/28/2009Ni45-17	143	5.01	14.72	149		6.93	M
	11/4/2009	11/04/2009Ni45-17	92	4.85	16.53	154.6		8.05	M
Ni45-33	4/17/2008	04/17/2008Ni45-33	744	4.67	15.6	150.2		0.36	M
	6/20/2008	06/20/2008Ni45-33	700	4.81	16.1	182.8		5	M
	8/13/2008	08/13/2008Ni45-33	449	5.05	16.31	172.3		4.86	M
	10/7/2008	10/07/2008Ni45-33	450	4.9	15.79			0.38	M
	12/18/2008	12/18/2008Ni45-33	621	4.84	15.76	53.7		0.88	M
	2/11/2009	02/11/2009Ni45-33	625	4.97	16.06	219	L	1.6	L
	8/7/2009	08/07/2009Ni45-33	407	5.13	15.99	55.5		0.31	M
	11/4/2009	11/04/2009Ni45-33	580	5.25	15.86	117.3		0.6	M
Ni45-34	4/10/2008	04/10/2008Ni45-34	1020	4.83	16.2	-57		0.1	LM
	4/16/2008	04/16/2008Ni45-34	1018	4.9	16.1	-146.2		0.51	M
	6/18/2008	06/18/2008Ni45-34	700	4.92	16.84	156.5		0.97	M
	8/11/2008	08/11/2008Ni45-34	741	4.77	16.26			0.31	M
	10/7/2008	10/07/2008Ni45-34	743	4.72	16.52	250	L	0.55	M
	12/2/2008	12/02/2008Ni45-34	886	4.73	16.52	288.2		6.1	M
	2/12/2009	02/12/2009Ni45-34	846	4.79	16.48	282.4	L	0.75	M
	7/28/2009	07/28/2009Ni45-34	675	5.03	16.35	139		0.87	M
	10/29/2009	10/29/2009Ni45-34	648	4.55	16.32	199		0.4	M
Ni45-35	4/10/2008	04/10/2008Ni45-35	5400	5.29	18	-77			
	4/16/2008	04/16/2008Ni45-35	498	4.7	17.2	63.6		11.62	M
	6/17/2008	06/17/2008Ni45-35	841	4.95	14.36	-52.8		5.76	M
	8/12/2008	08/12/2008Ni45-35	751	4.8	13.86			1.75	M
	10/7/2008	10/07/2008Ni45-35	842	4.78	16.58	351	L	1.05	M
	12/1/2008	12/01/2008Ni45-35	570	4.49	18.7	282.8		1.48	M
	2/11/2009	02/11/2009Ni45-35	378	4.35	19.48	287.1	L	4.07	L
	4/16/2009	04/16/2009Ni45-35	550	4.96		37		4.22	M
	7/22/2009	07/22/2009Ni45-35	576	5.52	13	40.1		3.23	M
	10/29/2009	10/29/2009Ni45-35	438	4.92	16.83	187.6		0.45	M

Appendix 2a. Field water quality data.

Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni45-36	4/16/2008	04/16/2008Ni45-36	680	5.15	17.1	9.8		6.95	M
	6/17/2008	06/17/2008Ni45-36	586	5.18	17.36	134.1		1.18	M
	8/11/2008	08/11/2008Ni45-36	700	5.05	16.38			0.51	M
	10/7/2008	10/07/2008Ni45-36	742	4.97	16.05	278.1	L	0.48	M
	12/2/2008	12/02/2008Ni45-36	812	4.96	15.98	118.4		0.45	M
	2/12/2009	02/12/2009Ni45-36	481	5.21	16.91	263.6	L	0.71	M
	7/28/2009	07/28/2009Ni45-36	664	5.53	16.2	145		1.16	M
	10/29/2009	10/29/2009Ni45-36	550	4.79	15.21	192.6		0.42	M
Ni45-37	4/16/2008	04/16/2008Ni45-37	988	5.55	15.7	28		2.09	M
	6/18/2008	06/18/2008Ni45-37	933	5.44	15.85	136.4		0.42	M
	8/11/2008	08/11/2008Ni45-37	890	5.4	16.39	197.6		0.3	M
	10/7/2008	10/07/2008Ni45-37	909	5.43	16.93			0.38	M
	12/2/2008	12/02/2008Ni45-37	788	5.46	17.06	173.4	L	0.73	M
	2/12/2009	02/12/2009Ni45-37	719	5.5	16.24	260.9	L	0.83	L
	7/28/2009	07/28/2009Ni45-37	634	5.98	16.2	144		0.5	M
	10/29/2009	10/29/2009Ni45-37	565	5.4	17.07	136.5		0.41	M
Ni45-38	4/17/2008	04/17/2008Ni45-38	1213	4.82	15.8	153.2		0.43	M
	5/6/2008	05/06/2008Ni45-38	1274	4.68	15.2	50		0.93	M
	5/22/2008	05/22/2008Ni45-38	1187	4.64	15.25	201		0.47	M
	6/5/2008	06/05/2008Ni45-38	1120	4.7	15.63	-186		0.22	M
	6/18/2008	06/18/2008Ni45-38	1237	4.68	16.73	174.6		0.45	M
	8/12/2008	08/12/2008Ni45-38	970	4.75	17.8			0.5	LM
	10/8/2008	10/08/2008Ni45-38	475	4.98	17.45	-6.7	L	0.82	LM
	12/2/2008	12/02/2008Ni45-38	761	4.79	13.82	274	L	1.06	M
	2/13/2009	02/13/2009Ni45-38	730	4.77	13.78	99.2	L	1.13	L
	8/7/2009	08/07/2009Ni45-38	535	5.77	17.36	-3.1		0.46	M
	11/4/2009	11/04/2009Ni45-38	755	5.3	15.65	134.4		1.6	M
Ni45-39	4/17/2008	04/17/2008Ni45-39	371	5.19	14.6	-112.8		0.79	M
	5/6/2008	05/06/2008Ni45-39	391	5.17	14.96	-168.7		0.46	M
	5/22/2008	05/22/2008Ni45-39	367	5.27	15.56	-189		0.4	M
	6/5/2008	06/05/2008Ni45-39	710	5.48	15.73	-260.5		0.19	M
	6/18/2008	06/18/2008Ni45-39	794	5.52	16.84	-208.9		0.46	M
	8/12/2008	08/12/2008Ni45-39	499	5.34	18	-140	L	1	LM
	10/8/2008	10/08/2008Ni45-39	850	5.33	17.91	-140.9	L	1.3	LM
	12/2/2008	12/02/2008Ni45-39	610	5.24	13.82	-92.9	L	2.44	M
	2/13/2009	02/13/2009Ni45-39	367	4.82	11.96	68.6	L	2.4	M
	8/7/2009	08/07/2009Ni45-39	381	6.02	18.01	-92		1.57	M
	11/4/2009	11/04/2009Ni45-39	474	5.7	16.29	-142.8		1.2	M
Ni45-40	4/17/2008	04/17/2008Ni45-40	1002	5.39	15.7	139.6		0.87	M
	5/6/2008	05/06/2008Ni45-40	1240	5.16	15.03	-110		0.58	M
	5/22/2008	05/22/2008Ni45-40	979	5.15	15.28	-78.2		1.05	M
	6/5/2008	06/05/2008Ni45-40	752	5.41	16.8	-91.7		2.24	M
	6/20/2008	06/20/2008Ni45-40	779	5.16	17.34	237.1		2.12	M
	8/12/2008	08/12/2008Ni45-40	895	5.28	17.5	36		1	LM
	10/8/2008	10/08/2008Ni45-40	893	5.52	17.4			1.27	LM
	12/2/2008	12/02/2008Ni45-40	800	5.57	15.17	164.3	L	0.83	M
	2/13/2009	02/13/2009Ni45-40	847	5.4	13.51	84.1	L	1.69	L
	8/7/2009	08/07/2009Ni45-40	560	5.24	16.81	51		0.43	M
	11/4/2009	11/04/2009Ni45-40	672	5.66	15.4	-13.7		1.63	M

Appendix 2a. Field water quality data.

Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni45-41	4/17/2008	04/17/2008Ni45-41	139	6.4	14.2	-148.5		0.37	M
	5/6/2008	05/06/2008Ni45-41	162	6.07	14.97	-245.9		0.34	M
	5/22/2008	05/22/2008Ni45-41	148	6.11	15.39	-255		0.2	M
	6/5/2008	06/05/2008Ni45-41	171	5.88	16.31	-237.3		0.26	M
	6/20/2008	06/20/2008Ni45-41	195	6	18.03	-160.1		0.87	M
	8/12/2008	08/12/2008Ni45-41	202	5.87	19.7	-190	L	1	LM
	10/8/2008	10/08/2008Ni45-41	240	5.85	18.57	-159.4	L	1.12	LM
	12/2/2008	12/02/2008Ni45-41	265	5.83	12.92	-139	L	1.36	M
	2/13/2009	02/13/2009Ni45-41	453	5.93	10.7	-17.7	L	1.4	M
	8/7/2009	08/07/2009Ni45-41	281	6.35	19.35	-115.8		1.28	M
	11/4/2009	11/04/2009Ni45-41	247	6.25	15.89	-136		1.23	M
Ni45-42	4/17/2008	04/17/2008Ni45-42	828	5.2	15	-5.2		0.56	M
	5/6/2008	05/06/2008Ni45-42	678	5.17	14.9	-143.7		0.53	M
	5/22/2008	05/22/2008Ni45-42	892	5.17	15	-111		0.6	M
	6/5/2008	06/05/2008Ni45-42	1072	5.23	16.25	17		0.98	M
	6/20/2008	06/20/2008Ni45-42	1055	5.04	16.72	135.6		0.74	M
	8/12/2008	08/12/2008Ni45-42	233	5.41	18.7	-109		1	LM
	10/8/2008	10/08/2008Ni45-42	227	5.32	18			0.96	LM
	12/2/2008	12/02/2008Ni45-42	220	5.32	27.4			0.88	M
	2/13/2009	02/13/2009Ni45-42	442	5.38	11.8	92	L	0.99	L
	4/16/2009	04/16/2009Ni45-42	323	5.32	13.14	118.3		0.73	M
	8/7/2009	08/07/2009Ni45-42	372	5.33	18.6	45		0.96	M
	11/4/2009	11/04/2009Ni45-42	406	5.5	15.37	29.1		0.69	M
Ni45-43	6/17/2008	06/17/2008Ni45-43	750	4.65	13.5	190		6.29	M
	8/11/2008	08/11/2008Ni45-43	684	4.72	4.72			1.02	M
	10/17/2008	10/17/2008Ni45-43	834	4.93	20.25	221	L	2.25	M
	12/1/2008	12/01/2008Ni45-43	755	4.86	20.73	304.7		2.52	M
	2/11/2009	02/11/2009Ni45-43	512	4.69	16.56	238.3	L	3.83	L
	4/16/2009	04/16/2009Ni45-43	688	4.55	13.46	218.2		3.78	M
	7/22/2009	07/22/2009Ni45-43	593	4.68	14.38	169		6.9	M
	10/29/2009	10/29/2009Ni45-43	595	5.12	20.5	177		1.9	M
Ni45-44	6/17/2008	06/17/2008Ni45-44	726	4.55	13.5	194		2.42	M
	8/12/2008	08/12/2008Ni45-44	705	4.58	4.58			6.25	M
	10/7/2008	10/07/2008Ni45-44	1147	4.48	20.32	370.7	L	0.85	M
	12/1/2008	12/01/2008Ni45-44	672	4.15	20.75	309.8	L	0.63	M
	2/12/2009	02/12/2009Ni45-44	294	4.26	17.65	296.6	L	2.97	L
	7/22/2009	07/22/2009Ni45-44	490	5.02	15.14	145		1.46	M
	10/29/2009	10/29/2009Ni45-44	430	4.33	21.15	190		0.8	M
Ni45-45	6/20/2008	06/20/2008Ni45-45	679	4.3	16.7	270		5.48	M
	8/12/2008	08/12/2008Ni45-45	727	4.33	16.52			3.55	M
	10/7/2008	10/07/2008Ni45-45	781	4.28	16.18	312.8	L	2.41	M
	12/2/2008	12/02/2008Ni45-45	782	4.23	16.15	320.2	L	0.87	M
	2/12/2009	02/12/2009Ni45-45	600	4.32	16.25	271.7	L	2.32	L
	4/16/2009	04/16/2009Ni45-45	610	4.13	28.51	212.8		2.7	M
	7/28/2009	07/28/2009Ni45-45	676	4.54	15.98	162		3.98	M
	10/29/2009	10/29/2009Ni45-45	536	4.27	15.36	218		0.89	

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Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni45-46	6/17/2008	06/17/2008Ni45-46	808	5.36	14.25	173		4.64	M
	8/11/2008	08/11/2008Ni45-46	634	5.05	18.57			1.28	M
	10/7/2008	10/07/2008Ni45-46	897	4.17	20.6	343.5	L	2.21	M
	12/1/2008	12/01/2008Ni45-46	542	4.62	20.37	270.2	L	2.58	M
	2/12/2009	02/12/2009Ni45-46	490	4.78	15.58	263.3	L	4.75	L
	7/22/2009	07/22/2009Ni45-46	562	5.67	15.82	117		1.94	M
	10/29/2009	10/29/2009Ni45-46	459	3.87	20.41	203		4.17	M
Ni45-47	7/22/2009	07/22/2009Ni45-47	541	4.28	18.9	159		6.8	M
	10/29/2009	10/29/2009Ni45-47	396	4.13	20.48	191		6.69	M
Ni45-48	12/1/2008	12/01/2008Ni45-48	579	4.11	19.05	314.4		5.81	M
	2/11/2009	02/11/2009Ni45-48	623	4.14	15.83	265.5	L	6.15	L
Ni45-49	8/19/2008	08/19/2008Ni45-49	765	5.26	17.95			5.6	M
	10/17/2008	10/17/2008Ni45-49	837	5.17	21	216.4	L	4.11	M
Ni45-50	12/1/2008	12/01/2008Ni45-50	865	4.6	19.07	273.9	L		
	2/11/2009	02/11/2009Ni45-50	426	4.72	16.3	264.6	L	5.02	M
	4/17/2009	04/17/2009Ni45-50	553	4.63	13.65	218.2		5.83	
	7/22/2009	07/22/2009Ni45-50	473	4.92	17.7	145		5.9	M
	10/29/2009	10/29/2009Ni45-50	621	4.48	20.07	185.1		2.48	M
Ni45-51	8/19/2008	08/19/2008Ni45-51	822	4.39	18.18	249		2.8	M
	10/17/2008	10/17/2008Ni45-51	786	5.2	21.33			7.05	M
	12/1/2008	12/01/2008Ni45-51	726	4.42	19.38	300.1	L	2.75	M
Ni45-52	10/17/2008	10/17/2008Ni45-52	873	4.47	20.2			1.91	M
	12/1/2008	12/01/2008Ni45-52	930	4.39	19.06	303.6	L	3.19	M
	2/11/2009	02/11/2009Ni45-52	853	4.57	16.8	249.6	L	1.87	L
	4/17/2009	04/17/2009Ni45-52	728	4.58	14.32	225		3.86	M
	7/22/2009	07/22/2009Ni45-52	522	4.4	18.2	168		4.1	M
	10/29/2009	10/29/2009Ni45-52	499	4.47	19.32	196.2		2.77	M
Ni45-53	8/19/2008	08/19/2008Ni45-53	741	4.77	21.97			0.31	M
Ni45-55	8/27/2008	08/27/2008Ni45-55	2180	4.41	17.19	281.6		2.93	M
	10/8/2008	10/08/2008Ni45-55	1096	4.56	16.51			0.87	M
	12/2/2008	12/02/2008Ni45-55	800	4.35	15.18	326.3		4.62	M
	2/12/2009	02/12/2009Ni45-55	816	4.39	15.45	272.8	L	1.24	L
	4/17/2009	04/17/2009Ni45-55	676	4.35	15.62	261.2		2.02	
	7/28/2009	07/28/2009Ni45-55	573	4.5	17.3	158		4.07	M
	10/29/2009	10/29/2009Ni45-55	507	4.45	15.72	208.8		0.76	M
Ni45-56	8/27/2008	08/27/2008Ni45-56	1206	4.34	17.15	279.9		1.55	M
Ni45-57	8/27/2008	08/27/2008Ni45-57	1133	4.19	17.11	274.4		2.34	M
	10/8/2008	10/08/2008Ni45-57	833	4.35	16.41			1.32	M
	12/2/2008	12/02/2008Ni45-57	875	4.16	15.2	288.1		5.1	M
	2/12/2009	02/12/2009Ni45-57	368	4.34	15.46	248.1	L	4.55	L
	4/17/2009	04/17/2009Ni45-57	567	4.13	15.93	229.9		4.67	
	7/28/2009	07/28/2009Ni45-57	470	4.4	17.55	168		4	M
	10/29/2009	10/29/2009Ni45-57	547	4.24	15.41	207.8		0.78	
Ni45-58	8/27/2008	08/27/2008Ni45-58	1317	4.11	16.9	272.6		1.59	M
Ni45-59	8/27/2008	08/27/2008Ni45-59	1078	4.49	17.28	272.4		6.12	M
Ni45-60	8/27/2008	08/27/2008Ni45-60	1906	4.5	17.36			1.65	M
	10/8/2008	10/08/2008Ni45-60	1096	4.56	16.54			0.87	M
	12/2/2008	12/02/2008Ni45-60	1057	4.49	14.68	238.5		6.11	M
	2/12/2009	02/12/2009Ni45-60	875	4.46	15.18	228.2	L	1.54	L
	4/17/2009	04/17/2009Ni45-60	837	4.31	15.66	202		1.59	
	7/28/2009	07/28/2009Ni45-60	1035	4.35	18.4	157		1.09	M
	10/29/2009	10/29/2009Ni45-60	1301	4.4	15.6	180		0.87	M

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Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni45-61	8/15/2008	08/15/2008Ni45-61	357	5.11	17.53				
	12/1/2008	12/01/2008Ni45-61	473	4.63	16.96	263.4	L	4.8	M
	2/11/2009	02/11/2009Ni45-61	297	4.43	17.43	298.1	L	4.78	M
	4/17/2009	04/17/2009Ni45-61	320	4.64	16.53	247.8		4.23	
	7/22/2009	07/22/2009Ni45-61	533	4.57	16.25	140		5.85	M
	10/29/2009	10/29/2009Ni45-61	561	4.37	16.47	208.9		6.93	M
Ni45-63	8/19/2008	08/19/2008Ni45-63	734	5.02	15.18				
	10/7/2008	10/07/2008Ni45-63	836	4.72	17.41	343	L	4.3	M
Ni45-64	12/1/2008	12/01/2008Ni45-64	603	4.31	16.15	283.7	L	2.56	M
	2/11/2009	02/11/2009Ni45-64	406	4.68	17.73	282.2	L	4.99	L
	4/17/2009	04/17/2009Ni45-64	422	4.27	17.02	267.9		3.03	
	7/22/2009	07/22/2009Ni45-64	591	4.93	19.2	117		5.78	M
	10/29/2009	10/29/2009Ni45-64	706	4.25	16.43	206.2		2.78	M
Ni45-65	8/15/2008	08/15/2008Ni45-65	711	5.1	16.1				
	10/7/2008	10/07/2008Ni45-65	833	4.67	16.86	319.7	L	3.37	M
Ni45-67	10/7/2008	10/07/2008Ni45-67	795	5.22	18.24			2.37	M
	12/1/2008	12/01/2008Ni45-67	734	4.72	15.8	234.4		1.6	M
	2/11/2009	02/11/2009Ni45-67	736	4.45	16.68	283.8	L	2.55	L
	4/17/2009	04/17/2009Ni45-67	938	4.38	17.68	305.1		1.73	
	7/22/2009	07/22/2009Ni45-67	798	4.72	18.87	125		1.11	M
	10/29/2009	10/29/2009Ni45-67	490	4.62	16.06	197.8		1.17	M
Ni45-73	7/9/2009	07/09/2009Ni45-73	539	7.25	21.41	-100		2.4	
Ni45-78	2/13/2009	02/13/2009Ni45-78	278	5.49	11.9	-16.9	L	1	M
	4/16/2009	04/16/2009Ni45-78	211	5.55	12.57	-10		0.44	
	8/7/2009	08/07/2009Ni45-78	241	5.76	19.7	-68		0.44	M
Ni45-79	2/13/2009	02/13/2009Ni45-79	339	5.41	12.48	36.4	L	0.83	M
Ni45-81	2/13/2009	02/13/2009Ni45-81	685	5.43	13.77	59.8	L	0.4	M
	4/16/2009	04/16/2009Ni45-81	740	5.34	14	221.3		0.48	M
	8/7/2009	08/07/2009Ni45-81	614	5.49	17.11	22.3		0.34	M
Ni45-84	2/13/2009	02/13/2009Ni45-84	759	5.66	15.2	68.7	L	0.34	M
	4/16/2009	04/16/2009Ni45-84	755	5.78	14.81	156		0.5	
	8/7/2009	08/07/2009Ni45-84	544	5.62	16.19	26.2		0.27	M
Ni45-aa	4/29/2008	(blank)	200	5.57	14.2	-22		3.22	L
Ni45-ab	4/9/2009	04/09/2009Ni45-ab	252	4.28	9.86	228		5.26	M
	8/7/2009	08/07/2009Ni45-ab	357		22.77	32		4.53	M
Ni45-ac	4/9/2009	04/09/2009Ni45-ac	464	5.74	8.22	-70		3.67	M
	8/7/2009	08/07/2009Ni45-ac	520		45.44	-11		5.13	M
Ni45-EFF	6/6/2008	06/06/2008Ni45-EFF	675	6.88	19.49	273.1		5.31	
	4/9/2009	04/09/2009Ni45-EFF	1277	6.96	11.62	317		12.05	
	5/28/2009	05/28/2009Ni45-EFF	360	6.8	17.2	315		8.76	M
	6/23/2009	06/23/2009Ni45-EFF	480	7	19.2	75		3.3	M
	7/22/2009	07/22/2009Ni45-EFF	651	6.99	22.32	225		1.52	M
Ni45-r	3/14/2008	03/14/2008Ni45-r	168	6.23	10.8				
	5/22/2008	05/22/2008Ni45-r	648	5.97	15.21	-126.3		2.88	M
	6/5/2008	06/05/2008Ni45-r	345	6.01	19.13	-136		0.8	M
	12/18/2008	12/18/2008Ni45-r	324	4.02	6.98	252.6		3.45	M
	2/13/2009	02/13/2009Ni45-r	615	5.96	8.35	74.1	L	4.04	L
	4/9/2009	04/09/2009Ni45-r	290	6.54	10.5	157		5.23	
	4/17/2009	04/17/2009Ni45-r	223	5.94	12.17	148.8		5.48	
	8/7/2009	08/07/2009Ni45-r	418	6.01	21.21	15.1		0.8	M
	11/4/2009	11/04/2009Ni45-r	405	5.84	12.16	-31.5		0.81	M

Appendix 2a. Field water quality data.

Site Identifier	Date Sampled	Sample Identifier	Specific Conductance (uSiemens)	pH	Temperature (degree C)	Redox Potential (mVolts)	Flag	Dissolved Oxygen (mg/L)	Flag
Ni45-s	3/14/2008	03/14/2008Ni45-s	251	4.76	18.9				
	4/17/2008	04/17/2008Ni45-s	988	6.07	21.2	3.6		18.05	M
	4/29/2008	04/29/2008Ni45-s	880	6	14.1	37.5		12.5	M
	5/22/2008	05/22/2008Ni45-s	1000	5.51	15	108.9		4.26	M
	6/5/2008	06/05/2008Ni45-s	863	5.34	17.61	-52.6		3.07	M
	12/18/2008	12/18/2008Ni45-s	425	4.96	7.5	195.6		3.19	M
	2/13/2009	02/13/2009Ni45-s	617	5.45	11.13	96.5	L	3.84	L
	4/17/2009	04/17/2009Ni45-s	317	5.5	12.76	205		4.8	
	8/7/2009	08/07/2009Ni45-s	463	6.09	19.73	-82		3.23	M
	11/4/2009	11/04/2009Ni45-s	513	5.45	12.32	100.1		1.07	M
Ni45-t	3/14/2008	03/14/2008Ni45-t	136	5.78	13.9				
	4/17/2008	04/17/2008Ni45-t	744	6.41	13.8	164.1		12.98	M
Ni45-v	3/17/2008	03/17/2008Ni45-v	191		17.4				
	4/17/2008	04/17/2008Ni45-v	1011	6.06	12.4	-54.3		14.53	M
	5/22/2008	05/22/2008Ni45-v	878	5.58	14.34	-212.1		0.45	M
	6/5/2008	06/05/2008Ni45-v	418	5.55	18.25	-211.9		1.69	M
	12/18/2008	12/18/2008Ni45-v	676	5.04	9.11	188.4		1.77	M
	2/13/2009	02/13/2009Ni45-v	546	5.71	8.61	25	L	4.37	L
	4/17/2009	04/17/2009Ni45-v	463	5.56	12.76	158.1		1.28	
	8/7/2009	08/07/2009Ni45-v	495	6.12	19.08	-106		2.95	M
	11/4/2009	11/04/2009Ni45-v	511	5.9	12.62	-18		0.94	M
Ni45-w	3/17/2008	03/17/2008Ni45-w	193		16.4				
	4/17/2008	04/17/2008Ni45-w	919	6.16	17.5	-159.5		7.6	M
	4/29/2008	04/29/2008Ni45-w	990	6.2	14.3	15.3		8.88	M
	5/22/2008	05/22/2008Ni45-w	992	5.86	14.07	-54		3.46	M
	6/5/2008	06/05/2008Ni45-w	790	5.83	17.18	-179		1.18	M
	12/18/2008	12/18/2008Ni45-w	517	4.78	9.45	168.9		2.6	M
	2/13/2009	02/13/2009Ni45-w	685	5.78	9.75	75.4	L	3.02	L
	4/17/2009	04/17/2009Ni45-w	412	5.78	14.56	141.2		8.65	
	8/7/2009	08/07/2009Ni45-w	736	5.99	18.83	33.5		0.25	M
	11/4/2009	11/04/2009Ni45-w	517	6.1	12.4	-55.3		1.08	M
Ni45-x	3/17/2008	03/17/2008Ni45-x	157						
	4/17/2008	04/17/2008Ni45-x	487	5.77	19.6	58.8		2.78	M
	4/29/2008	04/29/2008Ni45-x	300	6.47	14.4	-80		6.67	M
	5/22/2008	05/22/2008Ni45-x	462	5.56	15.21	-70.2		1.64	M
	6/5/2008	06/05/2008Ni45-x	372	5.87	18.46	-195.9		3.74	M
	12/18/2008	12/18/2008Ni45-x	292	4.9	7.55	138.2		3.24	M
	2/13/2009	02/13/2009Ni45-x	452	5.62	6.46	-83.5	L	3.02	L
	4/9/2009	04/09/2009Ni45-x	270	6.56	9.63	163		4.78	
	4/17/2009	04/17/2009Ni45-x	204	5.84	11.63	153.5		6.76	
	8/7/2009	08/07/2009Ni45-x	397	5.99	21.3	23.6		1.38	M
	11/4/2009	11/04/2009Ni45-x	347	5.88	11.35	-85.9		0.5	M
Ni45-y	3/17/2008	03/17/2008Ni45-y	120						
	4/29/2008	04/29/2008Ni45-y	378	5.76	14.4	-116		3.56	M