LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUNDWATER AND
ENVIRONMENTAL ENGINEERING SERVICES

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June 30, 2015

Mr. Robert LaColla
Supervisor – Town of Fishkill
807 Route 52
Fishkill, NY 12524

RE: Quarterly Groundwater Sample Collection
May 2015
Snook Road Well Field
(T) Fishkill, New York

Dear Mr. LaColla:

The following is a summary of the results of the May 2015 quarterly groundwater sample collection event completed by Leggette, Brashears & Graham, Inc. (LBG) at the Snook Road Well Field located on Snook Road in the Town of Fishkill, New York (figure 1). A quarterly groundwater sampling program was previously conducted at the well field from June 2009 through July 2010 and was resumed in May 2012.

Groundwater samples were collected from four monitoring well clusters and the two production wells at the well field during the sampling event on May 13, 2015. The well locations are shown on figure 2 and copies of the monitoring well diagrams are included in Appendix I.

Groundwater Sample Collection

Groundwater samples were collected from monitoring wells MW-1A, MW-1B, MW-2A, MW-2B, MW-3A, MW-3B, MW-4A and MW-4B on May 13, 2015. The monitoring well designations A and B signify shallow (crossing the water table) and deep (80 feet) screen settings, respectively.

Depth-to-water measurements collected from the monitoring wells on May 13 are shown on table 1 along with associated groundwater elevations. Groundwater contour maps showing the direction of groundwater flow are shown on figures 2 and 3 for the shallow and deep wells,

respectively. During this groundwater sampling event, the direction of groundwater flow was east to west in the shallow and deep aquifers at the well field.

Three standing well volumes were evacuated from each monitoring well prior to the collection of the groundwater samples. Samples from all of the monitoring wells collected on May 13 were analyzed for sodium and chloride. In addition, samples collected from MW-1A and MW-1B were analyzed for volatile organic compounds (VOCs). The samples were packed on ice after collection and sent to York Analytical Laboratory (York) located in Stratford, Connecticut for analysis. A copy of the York laboratory report for this sampling event is included in Appendix II.

Water-Quality Results

Table 2 contains a summary of the sodium and chloride sample results for the monitoring wells from all the quarterly sampling events completed by LBG at the well field to date. The sample results from May 2015 are also shown on figure 4. Graphs depicting the change in sodium and chloride concentrations in the monitoring wells over time are included in Appendix III.

The sodium concentrations in the shallow monitoring wells in May 2015 ranged from 76.5 mg/l (milligrams per liter) to 95.2 mg/l and the sodium concentrations in the deep wells ranged from 95.0 mg/l to 111 mg/l during this sampling event. Chloride concentrations in the shallow wells ranged from 144 mg/l to 221 mg/l and the chloride concentrations in the deep wells ranged from 179 mg/l to 234 mg/l.

Production well T-1 has been sampled for sodium and chloride twice per month since January 2009 by the Town's water operators, CAMO Pollution Control. Bimonthly sodium and chloride sample collection for production well T-2 was started in January 2014. Graphs of the sodium and chloride concentrations reported in T-1 compared to monthly precipitation and pumping withdrawals from T-1 are included in Appendix IV. A graph of the sodium and chloride concentrations reported in T-2 compared to monthly precipitation is included in Appendix V.

Table 3 shows the sodium and chloride water-quality results from the production wells T-1 and T-2 (aka P-1). The sodium and chloride concentrations in Production Well T-1 from May 13 were 86 mg/l and 161 mg/l, respectively. Since March 2015, the chloride concentrations in Production Well T-1 have shown an increase similar to the seasonal rise which was observed

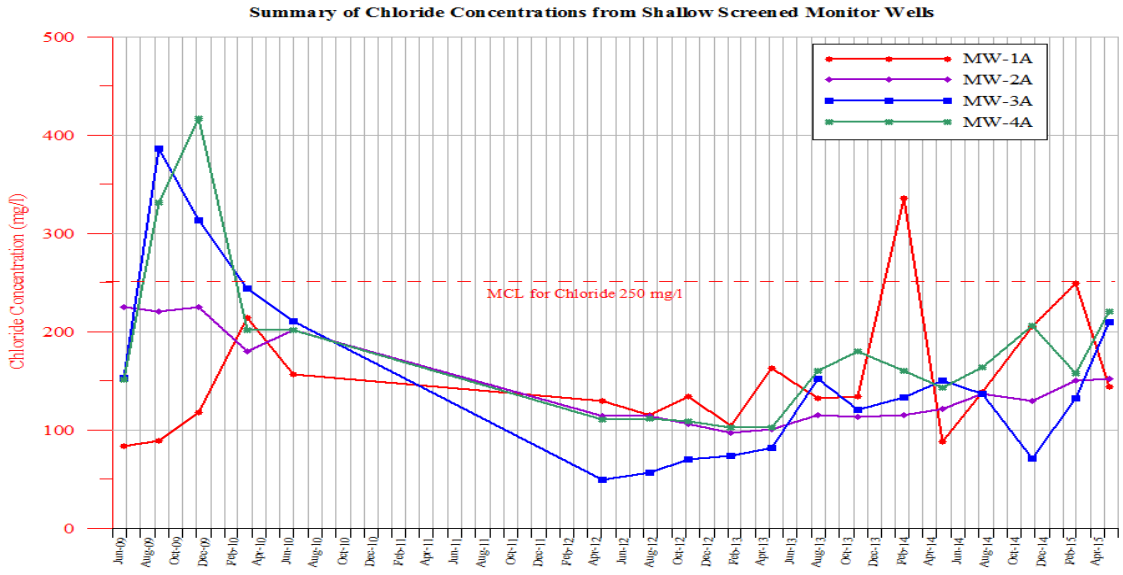
in the well in 2014. The chloride concentration in T-2 was showing an increase concentration until the beginning of March, rising to a peak of 207 mg/l. However, the concentrations in April and May decreased slightly.

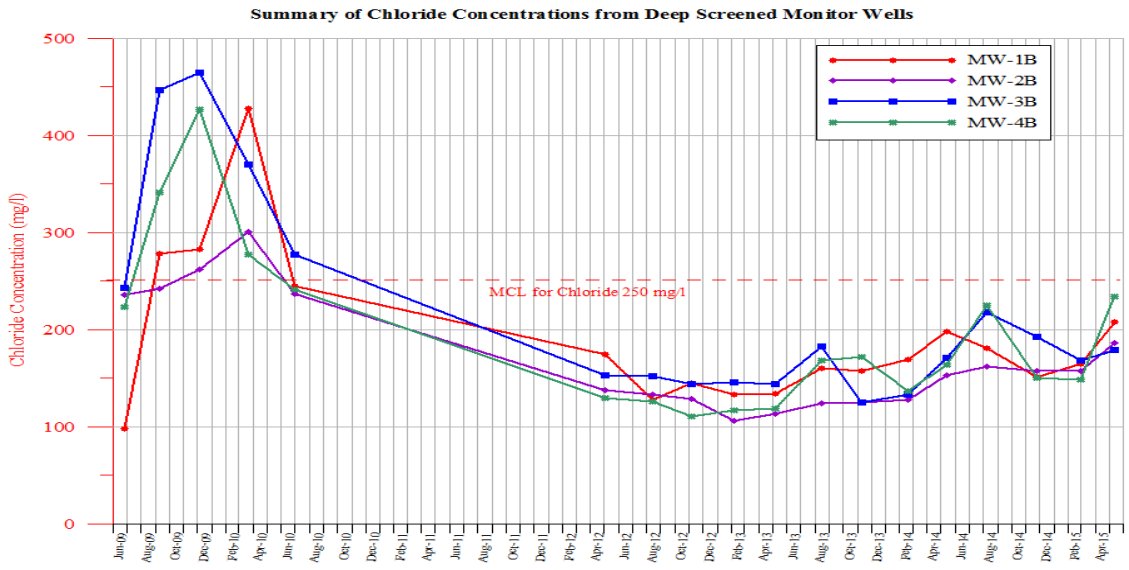
Groundwater samples were also collected from MW-1A and MW1-B for analysis for aromatic VOCs. The results of the VOC analyses are provided on table 4. A trace detection of naphthalene of 0.4 ug/l (microgram per liter) was reported for MW-1A. However, naphthalene was also detected in the method blank. Therefore, the naphthalene detection is likely a result of laboratory contamination. No other VOCs were detected in MW-1A or MW-1B.

Discussion

A significant decrease in the chloride concentrations at the Snook Road well field occurred in 2011 as a result of abnormally high precipitation and a very mild 2011/2012 winter season. Because of the decrease in the chloride concentration in the production well, T-1 was placed on as the primary source of water for the Merritt Park Water District in April 2012, with the Village of Fishkill water as the back-up supply. The quarterly groundwater sampling program was also resumed at the well field in May 2012 to monitor sodium and chloride concentrations in the groundwater.

Overall, the quarterly groundwater sampling program has shown an increase in the chloride concentrations in both the shallow and deep monitoring wells and the production wells at the well field since 2013. The graphs below show an overlay of all of the chloride concentration from the shallow and deep monitoring wells.





The changes in chloride concentrations in groundwater (increases and decreases) are dependent on the lag time between the application of the road salt, its infiltration into groundwater, and the travel time through the aquifer. For example, a significant rise in chloride concentration was reported in MW-1A in February 2014 and again in February 2015. These rises in concentration in this well occurred near the time of the actual application of road salt because the water table in this well is shallow (therefore, quickly recharged by surface-water runoff infiltration) and the well is close to the roadway. For the deep screened monitoring wells, the peak chloride concentrations occurred later in the year because of the travel time of the chloride through the overburden formation to the deep aquifer.

The water-quality data from 2014 and 2015 for the monitoring wells and production wells indicate that seasonal loading of chloride has started to reoccur at the well field. If compounding of chloride from seasonal loading continues, the chloride concentration in the production wells will continue to rise. Exceedance of the NYSDOH MCL for chloride (250 mg/l) in the production wells at some point in the future will likely occur unless there is a change in conditions (i.e., a significantly above average period of precipitation, a series of mild winters, or a significant reduction in road salt application).

The timeframe for the potential exceedance of the chloride MCL in the production wells cannot be estimated because of the dependence on two major varying factors: the amount of precipitation received and the number of winter storms requiring road salt application. As shown on table 5, since 2011 the annual precipitation totals for the region have been below average. This is likely contributing to the rise in chloride concentrations at the well field because of the decreased precipitation available to provide dilution of the chloride in the aquifer.

Conclusions

The combination of abnormally high precipitation in 2011 and a very mild 2011/2012 winter season requiring limited road salt application contributed to a notable decrease in chloride concentrations at the Snook Road Well Field at that time. Because of the decrease in the chloride concentration in the production well, T-1 was placed on as the primary source of water for the Merritt Park Water District in April 2012, with the Village of Fishkill water as the back-up supply.

VOC samples collected from monitoring wells MW-1A and MW-1B as part of the ongoing quarterly groundwater sampling program which started in 2009 have shown no significant detections of VOCs in the wells to date.

The sodium and chloride water-quality data from 2014 and 2015 for the monitoring wells and production wells indicate that seasonal loading of chloride is occurring at the well field. If compounding of chloride from seasonal loading continues, the chloride concentration in the production wells will continue to rise. Exceedance of the NYSDOH MCL for chloride in the production wells at some point in the future will likely occur unless there is a change in conditions (i.e., a significantly above average period of precipitation, a series of mild winters, or a significant reduction in road salt application).

The bi-monthly sample collection from production wells T-1 and T-2 by CAMO and quarterly sample collection from the monitoring wells by LBG will continue to assess the concentration changes in the wells over time. The information will be used to continue to monitor the effects of seasonal loading of chloride at the well field.

Should you have any questions, please feel free to contact LBG.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.

Stacy Stieber, CPG
Associate/Hydrogeologist

Reviewed by:

Thomas P. Cusack, CPG
Principal

SS:cmm
Enclosures
cc: J. Andrews
L. Felshin - Dutchess Co. DOH
M. Tremper - Camo Pollution
H:\Town of Fishkill\2015\May\May 2015 Quarterly Report.doc

TABLES

TABLE 1

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Depth-to-Water Measurements Collected

Well ID	Top of Casing Elevation	Sample Date	DTW (ft btoc)	Water Level Elevation
MW-1A	234.06	6/26/09	22.90	211.19
		9/10/09	26.40	207.69
		12/7/09	25.24	208.85
		3/22/10	17.83	216.26
		7/1/10	26.21	207.91
		5/4/12	25.53	208.56
		8/14/12	26.14	207.92
		11/6/12	24.74	209.32
		2/7/13	23.85	210.21
		5/7/13	24.88	209.18
		8/16/13	24.70	209.36
		11/11/13	28.28	205.78
		2/20/14	24.96	209.10
		5/15/14	22.02	212.04
		8/8/14	24.47	208.59
		11/24/14	27.38	206.68
		2/27/15	24.88	209.18
		5/13/15	23.84	210.22
MW-1B	233.84	6/26/09	22.65	211.19
		9/10/09	26.35	207.49
		12/7/09	24.91	208.93
		3/22/10	17.46	216.38
		7/1/10	26.17	207.67
		5/4/12	25.47	208.37
		8/14/12	25.88	207.96
		11/6/12	24.52	209.32
		2/7/13	23.61	210.23
		5/7/13	24.61	209.23
		8/16/13	24.44	209.40
		11/11/13	28.07	205.77
		2/20/14	24.73	209.11
		5/15/14	21.77	212.07
		8/8/14	25.26	208.58
		11/24/14	27.15	206.69
		2/27/15	24.62	209.22
		5/13/15	23.58	210.26
MW-2A	235.82	6/26/09	24.65	211.17
		9/10/09	24.76	211.06
		12/7/09	27.05	208.77
		3/22/10	19.57	216.25
		7/1/10	28.17	207.65
		5/4/12	27.42	208.40
		8/14/12	27.92	207.90
		11/6/12	26.60	209.22
		2/7/13	25.64	210.18
		5/7/13	26.66	209.16

TABLE 1

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Depth-to-Water Measurements Collected

Well ID	Top of Casing Elevation	Sample Date	DTW (ft btoc)	Water Level Elevation
MW-2A (continued)		8/16/13	26.45	209.37
		11/11/13	30.00	205.82
		2/20/14	26.75	209.07
		5/15/14	23.77	212.05
		8/8/14	27.25	208.57
		11/24/14	29.23	206.59
		2/27/15	26.71	209.11
		5/13/15	25.61	210.21
MW-2B	235.86	6/26/09	24.60	211.27
		9/10/09	24.55	211.32
		12/7/09	26.99	208.88
		3/22/10	19.44	216.43
		7/1/10	28.13	207.75
		5/4/12	27.42	208.45
		8/14/12	27.88	207.98
		11/6/12	26.54	209.32
		2/7/13	25.54	210.32
		5/7/13	26.67	209.19
		8/16/13	26.46	209.40
		11/11/13	30.16	205.70
		2/20/14	26.72	209.14
		5/15/14	23.67	212.19
		8/8/14	27.25	208.61
		11/24/14	29.18	206.68
		2/27/15	26.70	209.16
		5/13/15	25.58	210.28
MW-3A	239.23	6/26/09	27.35	211.98
		9/10/09	29.55	209.73
		12/7/09	30.02	209.26
		3/22/10	21.57	217.71
		7/1/10	31.33	207.94
		5/4/12	30.71	208.57
		8/14/12	31.00	208.23
		11/6/12	29.58	209.65
		2/7/13	28.46	210.77
		5/7/13	29.88	209.35
		8/16/13	29.70	209.53
		11/11/13	33.38	205.85
		2/20/14	29.39	209.84
		5/15/14	26.46	212.77
		8/8/14	30.10	209.13
		11/24/14	32.41	206.82
		2/27/15	26.35	212.88
		5/13/15	28.66	210.57
MW-3B	239.42	6/26/09	27.35	212.09
		9/10/09	29.87	209.57

TABLE 1

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Depth-to-Water Measurements Collected

Well ID	Top of Casing Elevation	Sample Date	DTW (ft btoc)	Water Level Elevation
MW-3B (continued)		12/7/09	30.06	209.38
		3/22/10	21.69	217.75
		7/1/10	31.40	208.06
		5/4/12	30.66	208.78
		8/14/12	31.02	208.40
		11/6/12	29.45	209.97
		2/7/13	28.48	210.94
		5/7/13	29.93	209.49
		8/16/13	29.70	209.72
		11/11/13	33.54	205.88
		2/20/14	26.43	209.42
		5/15/14	26.46	212.96
		8/8/14	30.51	208.91
		11/24/14	32.52	206.90
		2/27/15	25.98	213.44
		5/13/15	28.62	210.80
MW-4A	235.85	6/26/09	23.90	212.01
		9/10/09	26.20	209.71
		12/7/09	26.55	209.36
		3/22/10	18.40	217.51
		7/1/10	27.62	208.35
		5/4/12	27.19	208.72
		8/14/12	27.55	208.30
		11/6/12	25.99	209.86
		2/7/13	25.03	210.82
		5/7/13	26.39	209.46
		8/16/13	26.20	209.65
		11/11/13	29.94	205.91
		2/20/14	26.11	209.72
		5/15/14	23.07	212.78
		8/8/14	26.94	208.91
		11/24/14	29.00	206.85
		2/27/15	29.90	205.95
		5/13/15	25.17	210.68
MW-4B	235.83	6/26/09	23.45	212.37
		9/10/09	25.96	209.95
		12/7/09	26.21	209.70
		3/22/10	17.60	218.22
		7/1/10	24.43	208.47
		5/4/12	27.18	208.73
		8/14/12	27.19	208.64
		11/6/12	25.56	210.27
		2/7/13	24.58	211.25
		5/7/13	26.04	209.79
		8/16/13	25.89	209.94
		11/11/13	NM	NM

TABLE 1

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Depth-to-Water Measurements Collected

Well ID	Top of Casing Elevation	Sample Date	DTW (ft btoc)	Water Level Elevation
MW-4B (continued)		2/20/14	26.11	209.72
		5/15/14	22.52	213.31
		8/8/14	26.67	209.16
		11/24/14	28.72	207.11
		2/27/15	29.83	206.00
		5/13/15	24.75	211.08

DTW depth to water
ft btoc feet below top of PVC casing
NM not measured

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TABLE 2

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Monitoring Wells

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
MW-1A	6/26/09	62.3	84.1
	9/10/09	59.4	88.8
	12/7/09	78.4	118
	3/22/10	85.8	214
	7/1/10	80.1	157
	5/4/12	120	130
	8/14/12	105	115
	11/6/12	122	134
	2/7/13	103	104
	5/7/13	123	163
	8/16/13	101	132
	11/11/13	110	134
	2/20/14	127	**336**
	5/15/14	71.1	88.1
	8/8/14	108	139
	11/24/14	134	205
	2/27/15	145	249
	5/13/15	95.2	144
MW-1B	6/26/09	58.0	98.4
	9/10/09	126	**278**
	12/7/09	129	**283**
	3/22/10	202	**428**
	7/1/10	158	245
	5/4/12	127	175
	8/14/12	99.5	128
	11/6/12	107	145
	2/7/13	103	133
	5/7/13	103	134
	8/16/13	107	160
	11/11/13	100	158
	2/20/14	105	169
	5/15/14	116	198
	8/8/14	110	181
	11/24/14	96.5	151
	2/27/15	101	165
	5/13/15	107	208
MW-2A	6/26/09	112	225
	9/10/09	104	221
	12/7/09	115	225
	3/22/10	102	180
	7/1/10	130	202
	5/4/12	99.2	114
	8/14/12	87.7	114
	11/6/12	92.2	106
	2/7/13	92.6	97.6
	5/7/13	96.9	101
	8/16/13	97.1	115

TABLE 2
(continued)

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
MW-2A (continued)	11/11/13	98.1	113
	2/20/14	92.1	115
	5/15/14	90.4	122
	8/8/14	95.8	137
	11/24/14	95.5	130
	2/27/15	100	150
	5/13/15	92.3	152
MW-2B	6/26/09	114	236
	9/10/09	112	242
	12/7/09	121	**262**
	3/22/10	136	**301**
	7/1/10	149	237
	5/4/12	112	138
	8/14/12	104	133
	11/6/12	107	129
	2/7/13	97.1	106
	5/7/13	93.6	113
	8/16/13	96.7	124
	11/11/13	99.4	125
	2/20/14	93.6	128
	5/15/14	97.2	153
	8/8/14	103	162
	11/24/14	102	158
	2/27/15	99.1	158
	5/13/15	98.4	186
MW-3A	6/26/09	102	153
	9/10/09	97.9	**386**
	12/7/09	122	**313**
	3/22/10	102	244
	7/1/10	127	211
	5/4/12	85.0	49.1
	8/14/12	69.3	56.6
	11/6/12	67.3	70.4
	2/7/13	56.0	73.7
	5/7/13	56.7	82.0
	8/16/13	67.7	152
	11/11/13	76.6	121
	2/20/14	105	133
	5/15/14	69.8	150
	8/8/14	74.1	137
	11/24/14	71.4	70.9
	2/27/15	76.3	132
	5/13/15	76.5	210
MW-3B	6/26/09	125	243
	9/10/09	174	**447**
	12/7/09	195	**465**

TABLE 2
(continued)

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
MW-3B (continued)	3/22/10	172	**370**
	7/1/10	192	**277**
	5/4/12	137	153
	8/14/12	126	152
	11/6/12	119	144
	2/7/13	118	146
	5/7/13	110	144
	8/16/13	112	183
	11/11/13	81.0	125
	2/20/14	101	133
	5/15/14	95.8	171
	8/8/14	106	218
	11/24/14	113	193
	2/27/15	103	168
	5/13/15	95.0	179
MW-4A	6/26/09	111	151
	9/10/09	118	**331**
	12/7/09	159	**417**
	3/22/10	122	202
	7/1/10	119	202
	5/4/12	109	111
	8/14/12	105	112
	11/6/12	110	109
	2/7/13	98.5	103
	5/7/13	96.9	103
	8/16/13	110	160
	11/11/13	118	180
	2/20/14	114	160
	5/15/14	80.0	143
	8/8/14	86.1	164
	11/24/14	101	206
	2/27/15	98.0	158
	5/13/15	90.7	221
MW-4B	6/26/09	111	**223**
	9/10/09	151	**341**
	12/7/09	168	**427**
	3/22/10	151	**277**
	7/1/10	161	241
	5/4/12	107	130
	8/14/12	103	126
	11/6/12	105	111
	2/7/13	114	117
	5/7/13	122	119
	8/16/13	129	168
	11/11/13	126	172
	2/20/14	108	137

TABLE 2
(continued)

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
MW-4B (continued)	5/15/14	101	164
	8/8/14	103	225
	11/24/14	102	150
	2/27/15	96.5	149
	5/13/15	111	234
NYSDOH Drinking Water Standard		270*	250

Note: Bold denotes drinking water standard exceedance.
* Recommended limit for sodium. NYSDOH does not currently have a drinking water standard.
mg/l milligrams per liter
NYSDOH New York State Department of Health

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TABLE 3

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Production Wells T-1 and T-2

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
T-1	1/9/2009	125	233
	1/19/2009	130	250
	1/21/2009	121	236
	2/4/2009	128	236
	3/24/2009	143	**296**
	4/1/2009	135	**308**
	4/23/2009	139	**293**
	4/29/2009	158	**318**
	5/13/2009	163	**293**
	6/3/2009	162	**327**
	6/26/2009	167	**390**
	6/30/2009	164	**316**
	7/24/2009	161	**294**
	7/30/2009	160	**312**
	8/12/2009	165	**330**
	9/2/2009	145	**303**
	9/10/2009	141	**295**
	9/16/2009	149	**257**
	9/30/2009	152	**266**
	10/14/2009	310	**292**
	10/28/2009	152	**323**
	11/11/2009	138	**267**
	11/24/2009	147	250
	12/7/2009	145	**292**
	12/29/2009	154	**265**
	1/6/2010	151	**269**
	1/20/2010	157	**255**
	2/3/2010	102	**257**
	2/17/2010	148	**264**
	3/3/2010	144	**262**
	3/17/2010	157	**288**
	3/22/2010	162	**318**
	4/7/2010	151	**285**
	4/21/2010	144	**301**
	5/19/2010	150	**346**
	6/8/2010	150	**343**
	6/23/2010	148	**346**
	7/1/2010	154	**246**
	7/7/2010	145	**352**
	7/28/2010	142	**345**
	8/11/2010	127	**342**
	8/17/2010	76.1	163
	9/1/2010	143	**312**

TABLE 3

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Production Wells T-1 and T-2

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
T-1 (continued)	9/15/2010	143	**328**
	9/28/2010	153	**330**
	10/13/2010	148	**318**
	10/27/2010	143	**290**
	11/10/2010	136	**274**
	11/23/2010	133	237
	12/8/2010	140	234
	12/20/2010	143	248
	1/5/2011	133	236
	1/19/2011	140	**258**
	2/9/2011	146	**255**
	3/2/2011	145	**269**
	3/16/2011	139	231
	3/30/2011	141	232
	4/13/2011	131	207
	4/29/2011	137	262
	5/13/2011	135	**266**
	5/25/2011	126	**263**
	6/21/2011	136	**254**
	7/6/2011	137	246
	7/27/2011	135	245
	8/10/2011	125	240
	8/31/2011	131	197
	9/28/2011	108	147
	10/11/2011	114	168
	10/26/2011	114	172
	11/9/2011	105	164
	11/30/2011	116	164
	12/7/2011	123	174
	12/19/2011	121	168
	1/11/2012	125	166
	2/8/2012	116	160
	2/22/2012	112	150
	3/7/2012	117	140
	3/21/2012	119	142
	4/11/2012	112	120
	4/25/2012	101	113
	5/4/2012	106	99.0
	5/9/2012	104	110
	5/23/2012	108	109
	6/6/2012	102	109
	6/20/2012	101	119
	7/11/2012	110	104

TABLE 3

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Production Wells T-1 and T-2

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
T-1 (continued)	7/25/2012	105	113
	8/8/2012	60	102
	8/14/2012	95.7	97.5
	8/22/2012	103	106
	9/5/2012	97.9	107
	9/19/2012	98.6	106
	10/10/2012	98.4	105
	10/24/2012	103	106
	11/6/2012	43.6	70.1
	11/6/2012	93.8	93.0
	12/5/2012	92.4	94
	12/19/2012	104	94
	1/9/2013	102	95.7
	1/23/2013	102	96
	2/7/2013	95.6	95.7
	2/20/2013	111	104
	3/6/2013	117	106
	3/20/2013	116	119
	4/3/2013	112	112
	4/18/2013	104	119
	5/7/2013	91.1	99.7
	5/15/2013	98.4	113
	5/29/2013	103	113
	6/12/2013	97.1	113
	6/26/2013	105	109
	7/3/2013	104	117
	7/17/2013	99.9	108
	8/6/2013	95.7	112
	8/16/2013	89.4	106
	9/4/2013	90.6	112
	9/16/2013	97.3	113
	10/2/2013	91.9	115
	10/16/2013	97	116
	10/30/2013	107	118
	11/13/2013	97.3	122
	12/18/2013	98.4	129
	1/8/2014	94.1	128
	1/22/2014	105	122
	2/12/2014	92	107
	2/20/14	86.9	112
	2/26/2014	95.6	112
	3/11/14	99.2	117
	3/25/14	100	132

TABLE 3

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Production Wells T-1 and T-2

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
T-1 (continued)	4/9/14	107	155
	4/23/14	103	154
	5/7/14	101	171
	5/15/14	90.8	165
	5/21/14	96.4	190
	6/3/2014	96	181
	6/18/2014	101	184
	7/2/2014	97	179
	7/16/2014	95.5	169
	8/8/2014	88	163
	8/27/14	91.6	166
	9/10/14	100	167
	9/23/14	100	164
	10/8/14	100	163
	10/22/14	110	166
	11/5/14	100	164
	11/19/14	90.5	151
	11/24/14	89.4	145
	12/3/14	66	158
	12/22/14	87	147
	1/14/15	110	136
	1/28/15	135	95
	2/11/15	100	141
	2/27/15	85.2	132
	3/11/15	102	147
	3/25/15	110	165
	4/8/15	110	176
	4/22/15	96	180
	5/13/15 (LBG sample)	86	161
	5/13/15 (CAMO sample)	110	170
	5/27/15	140	188
T-2	12/14/06	110	190
	8/17/10	61.6	162
	11/6/12	100	116
	12/18/13	118	138
	1/8/14	108	151
	1/22/14	117	152
	2/12/14	109	154
	2/26/14	115	160
	3/11/14	119	160
	3/25/14	118	164
	4/9/14	116	153
	4/23/14	113	147

TABLE 3

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Sodium and Chloride Water-Quality Results from Production Wells T-1 and T-2

Well ID	Sample Date	Sodium (mg/l)	Chloride (mg/l)
T-2 (continued)	5/7/14	114	146
	5/15/14	98.9	133
	5/21/14	106	149
	6/3/2014	116	157
	6/18/2014	119	164
	7/2/2014	116	172
	7/16/2014	118	166
	8/8/2014	104	162
	8/27/14	113	169
	9/10/14	120	171
	9/23/14	120	169
	10/8/14	120	168
	10/22/14	130	169
	11/5/14	120	163
	11/19/14	72.6	156
	11/24/14	103	153
	12/3/14	104	169
	12/22/14	69.6	178
	1/14/15	120	196
	1/28/15	198	120
	2/11/15	130	204
	2/27/15	106	192
	3/11/15	123	207
	3/25/15	120	200
	4/8/15	120	186
	4/22/15	105	175
	5/13/15 (LBG sample)	98.4	174
	5/13/15 (CAMO sample)	120	183
	5/27/15	120	187
NYSDOH Drinking Water Standard		270*	250

Note: Bold denotes drinking water standard exceedance.
* Recommended limit for sodium. NYSDOH does not currently have a drinking water standard.
mg/l milligrams per liter
NYSDOH New York State Department of Health

H:\Town of Fishkill\2015\May\Table 3.doc

TABLE 4

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Volatile Organic Compound Water-Quality Results from MW-1A and MW-1B

Well ID	Sample Date	Bromo-Dichloro-methane (ug/l)	Bromoform (ug/l)	Chloroform (ug/l)	Dibromo-chloromethane (ug/l)	Acetone (ug/l)	Toluene (ug/l)	Methylene Chloride (ug/l)	Naphthalene (ug/l)	1,2,3-Trichloro-benzene (ug/l)
MW-1A	6/26/09	ND<0.5	ND<0.5	0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/10/09	ND<0.5	ND<0.5	0.9	ND<0.5	2.2[1]	ND<0.5	ND<2.0	ND<0.5	ND<0.5
	12/7/09	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/22/10	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	MD<0.5	ND<0.5
	7/1/10	ND<0.5	ND<0.5	0.4J	ND<0.5	NR	ND<0.5	0.9B	ND<0.5	ND<0.5
	5/4/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	0.9JB	0.4JB	0.2J
	8/14/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	0.3JB	ND<2.0
	11/6/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	2/7/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	5/7/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	0.1	ND<2.0	ND<2.0	ND<2.0
	5/30/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	8/16/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	11/11/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	2/20/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<2.0	ND<0.5
	5/15/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<2.0	ND<0.5
	8/8/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.4B	ND<2.0	ND<0.5
	11/24/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<2.0	ND<0.5
	2/27/15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<2.0	ND<0.5
	5/13/15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	0.4B	ND<0.5
MW-1B	6/26/09	ND<0.5	0.6	ND<0.5	0.6	NR	0.7	ND<0.5	ND<0.5	ND<0.5
	9/10/09	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5
	12/7/09	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/22/10	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/1/10	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	0.8B	ND<0.5	ND<0.5
	5/4/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	0.9JB	0.2JB	ND<2.0
	8/14/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	0.6J	0.2JB	ND<2.0
	11/6/12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	2/7/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	5/7/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	5/30/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	0.1B	ND<2.0
	8/16/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	0.2B	ND<2.0

TABLE 4

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Volatile Organic Compound Water-Quality Results from MW-1A and MW-1B

Well ID	Sample Date	Bromo-Dichloro-methane (ug/l)	Bromoform (ug/l)	Chloroform (ug/l)	Dibromo-chloromethane (ug/l)	Acetone (ug/l)	Toluene (ug/l)	Methylene Chloride (ug/l)	Naphthalene (ug/l)	1,2,3-Trichloro-benzene (ug/l)
MW-1B (cont.)	11/11/13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<2.0	ND<2.0	ND<2.0
	2/20/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<2.0	ND<0.5
	5/15/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<2.0	ND<0.5
	8/8/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.3B	ND<2.0	ND<0.5
	11/24/14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<2.0	ND<0.5
	2/27/15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<2.0	ND<0.5
	5/13/15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR	ND<0.5	ND<0.5	ND<2.0	ND<0.5
NYSDOH Drinking Water Standard		5	5	5	5	5	5	5	5	5

ug/l	micrograms per liter
1/	Compound detected in method blank.
NR	not reported
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL); therefore, the result is an estimated concentration.
B	Analyte is found in the associated batch blank.
NYSDOH	New York State Department of Health

H:\Town of Fishkill\2015\May\TABLE 4.doc

TABLE 5

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Monthly Precipitation Observed at Poughkeepsie Weather Station

Year	Month	Precipitation in Inches	30-Year Mean Precipitation in Inches (1981-2010)
2009	January	2.09	3.08
	February	0.81	2.66
	March	1.86	3.57
	April	1.89	3.78
	May	6.31	4.41
	June	9.22	4.43
	July	6.38	4.65
	August	4.87	4.20
	September	1.64	4.28
	October	4.21	4.47
	November	1.45	3.47
	December	3.75	3.53
2009 Annual Precipitation		**44.48**	**46.53**
2010	January	3.08	3.08
	February	2.66	2.66
	March	3.57	3.57
	April	3.78	3.78
	May	4.41	4.41
	June	4.43	4.43
	July	4.65	4.65
	August	4.20	4.20
	September	4.28	4.28
	October	4.47	4.47
	November	3.47	3.47
	December	3.53	3.53
2010 Annual Precipitation		**38.53**	**46.53**
2011	January	1.78	3.08
	February	3.65	2.66
	March	5.17	3.57
	April	4.63	3.78
	May	5.16	4.41
	June	4.40	4.43
	July	2.24	4.65
	August	13.23	4.20
	September	7.50	4.28
	October	4.10	4.47
	November	2.94	3.47
	December	4.39	3.53
2011 Annual Precipitation		**59.19**	**46.53**
2012	January	2.14	3.08
	February	1.47	2.66

TABLE 5

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Monthly Precipitation Observed at Poughkeepsie Weather Station

Year	Month	Precipitation in Inches	30-Year Mean Precipitation in Inches (1981-2010)
2012 (continued)	March	1.19	3.57
	April	2.06	3.78
	May	4.60	4.41
	June	4.01	4.43
	July	3.93	4.65
	August	3.23	4.20
	September	5.60	4.28
	October	3.79	4.47
	November	0.69	3.47
	December	4.22	3.53
2012 Annual Precipitation		**36.93**	**46.53**
2013	January	2.05	3.08
	February	1.61	2.66
	March	1.48	3.57
	April	1.32	3.78
	May	4.19	4.41
	June	9.82	4.43
	July	3.14	4.65
	August	6.61	4.20
	September	2.32	4.28
	October	1.61	4.47
	November	2.43	3.47
	December	3.33	3.53
2013 Annual Precipitation		**39.91**	**46.53**
2014	January	1.50	3.08
	February	2.78	2.66
	March	2.75	3.57
	April	4.43	3.78
	May	2.57	4.41
	June	2.29	4.43
	July	4.97	4.65
	August	3.38	4.20
	September	0.52	4.28
	October	3.76	4.47
	November	2.19	3.47
	December	3.00	3.53
2014 Annual Precipitation		**34.14**	**46.53**

TABLE 5

SNOOOK ROAD WELL FIELD
(T) FISHKILL, NEW YORK

Summary of Monthly Precipitation Observed at Poughkeepsie Weather Station

Year	Month	Precipitation in Inches	30-Year Mean Precipitation in Inches (1981-2010)
2015	January	2.94	3.08
	February	1.36	2.66
	March	2.27	3.57
	April	2.23	3.78
	May	1.97	4.41

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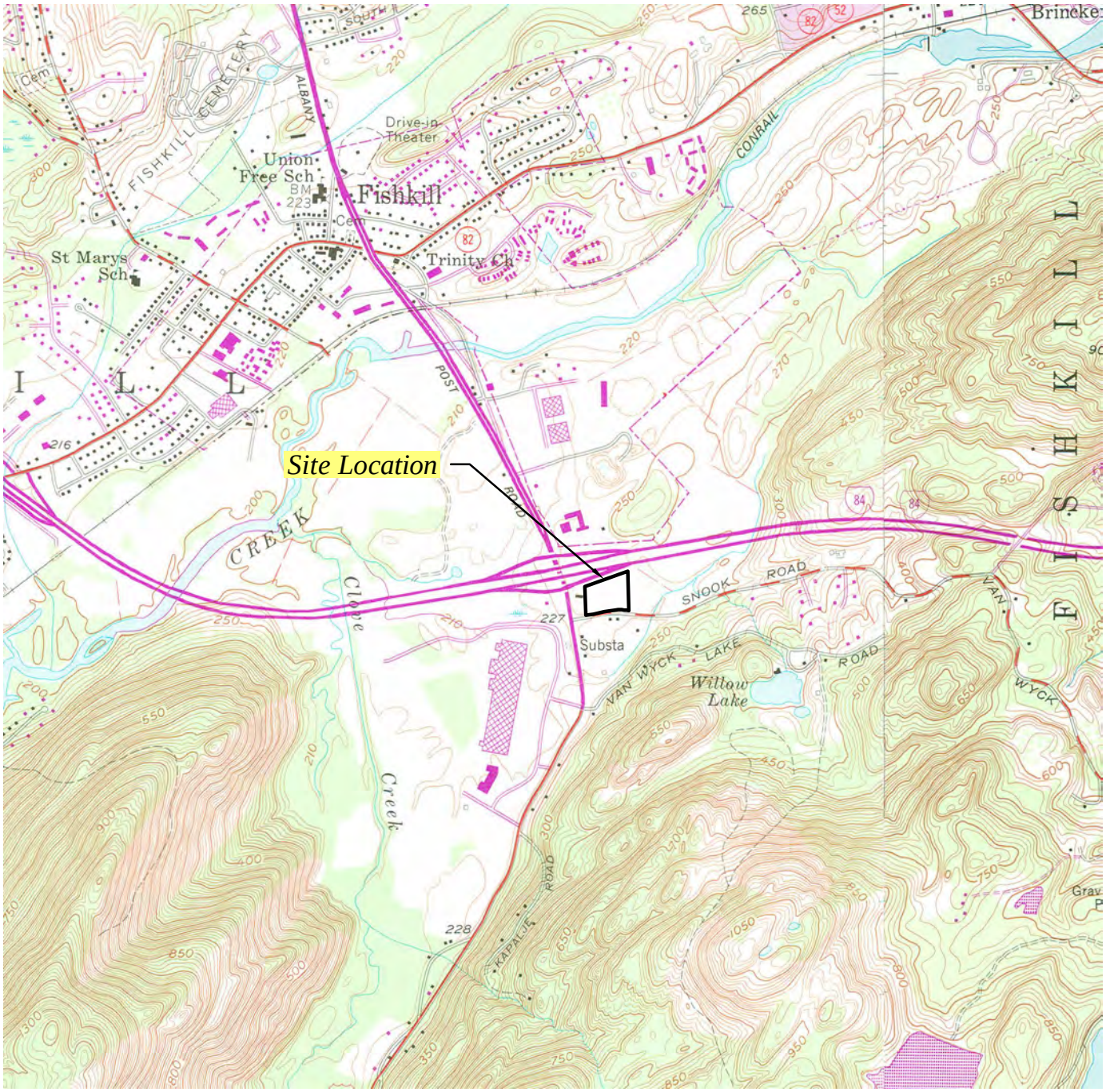
FIGURES



SOURCE: USGS TOPOGRAPHIC QUADRANGLES WAPPINGERS FALLS, NEW YORK (REVISED 1981) AND HOPEWELL JUNCTION, NEW YORK (REVISED 1981).

QUADRANGLE LOCATION

0 2000

SCALE IN FEET

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

SITE LOCATION MAP

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	SS	DATE:	04/05/10	FIGURE:	1

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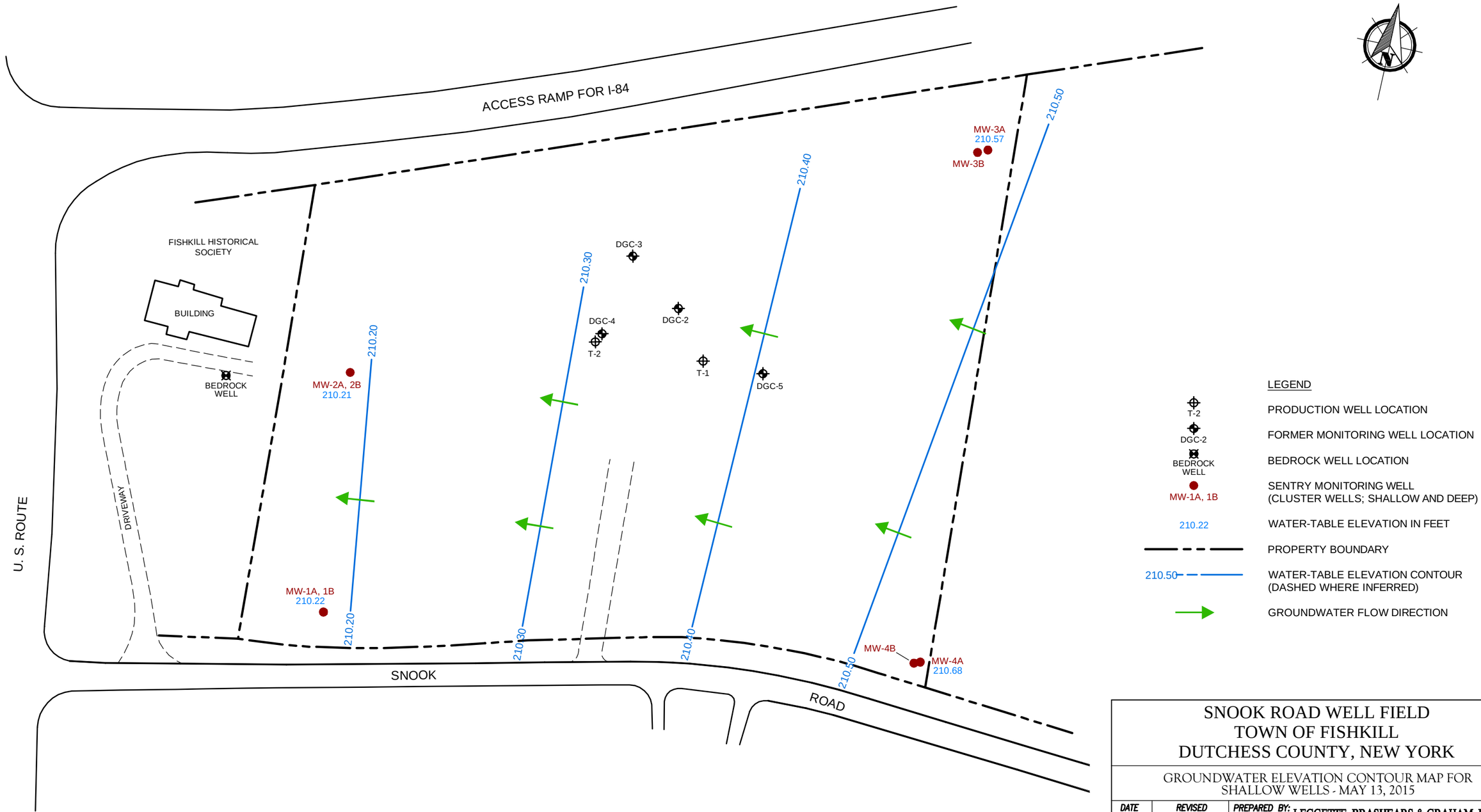

SOURCES:

- HYDROGEOLOGIC INVESTIGATION OF THE SNOOK ROAD SITE, DUNN 1990.
- SNOOK ROAD WATER IMPROVEMENT AREA "AS BUILT WELL PLAN" PREPARED BY ROHDE, SOYKA & ANDREWS CONSULTING ENGINEERS PC, DATED SEPTEMBER 1, 2009 SCALE 1"=60'.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP FOR SHALLOW WELLS - MAY 13, 2015

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	PL	DATE:	05/19/15	FIGURE:	2

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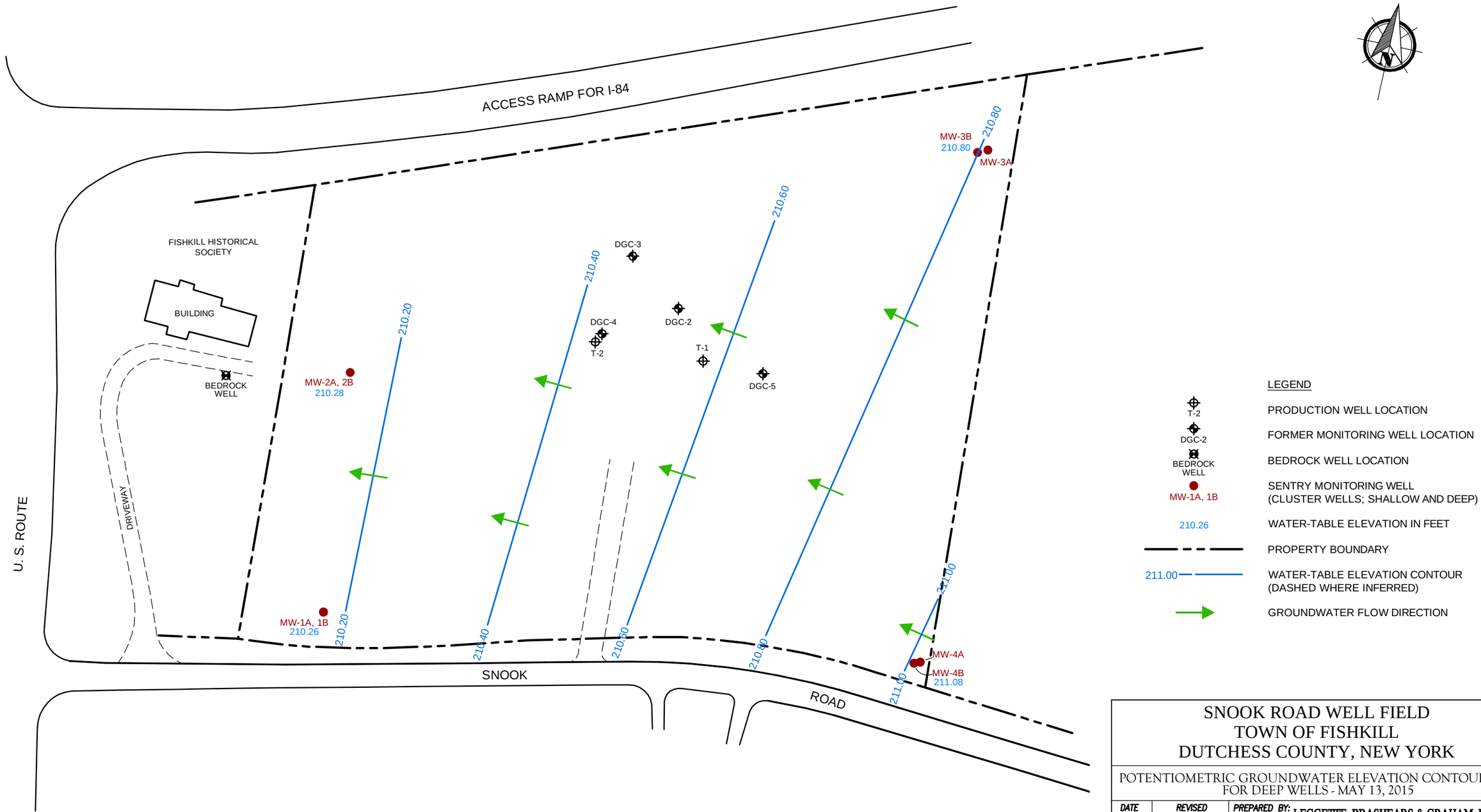

SOURCES:

- HYDROGEOLOGIC INVESTIGATION OF THE SNOOK ROAD SITE, DUNN 1990.
- SNOOK ROAD WATER IMPROVEMENT AREA "AS BUILT WELL PLAN" PREPARED BY ROHDE, SOYKA & ANDREWS CONSULTING ENGINEERS PC, DATED SEPTEMBER 1, 2009 SCALE 1"=60'.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP FOR DEEP WELLS - MAY 13, 2015

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	SS	DATE:	05/22/15	FIGURE:	3

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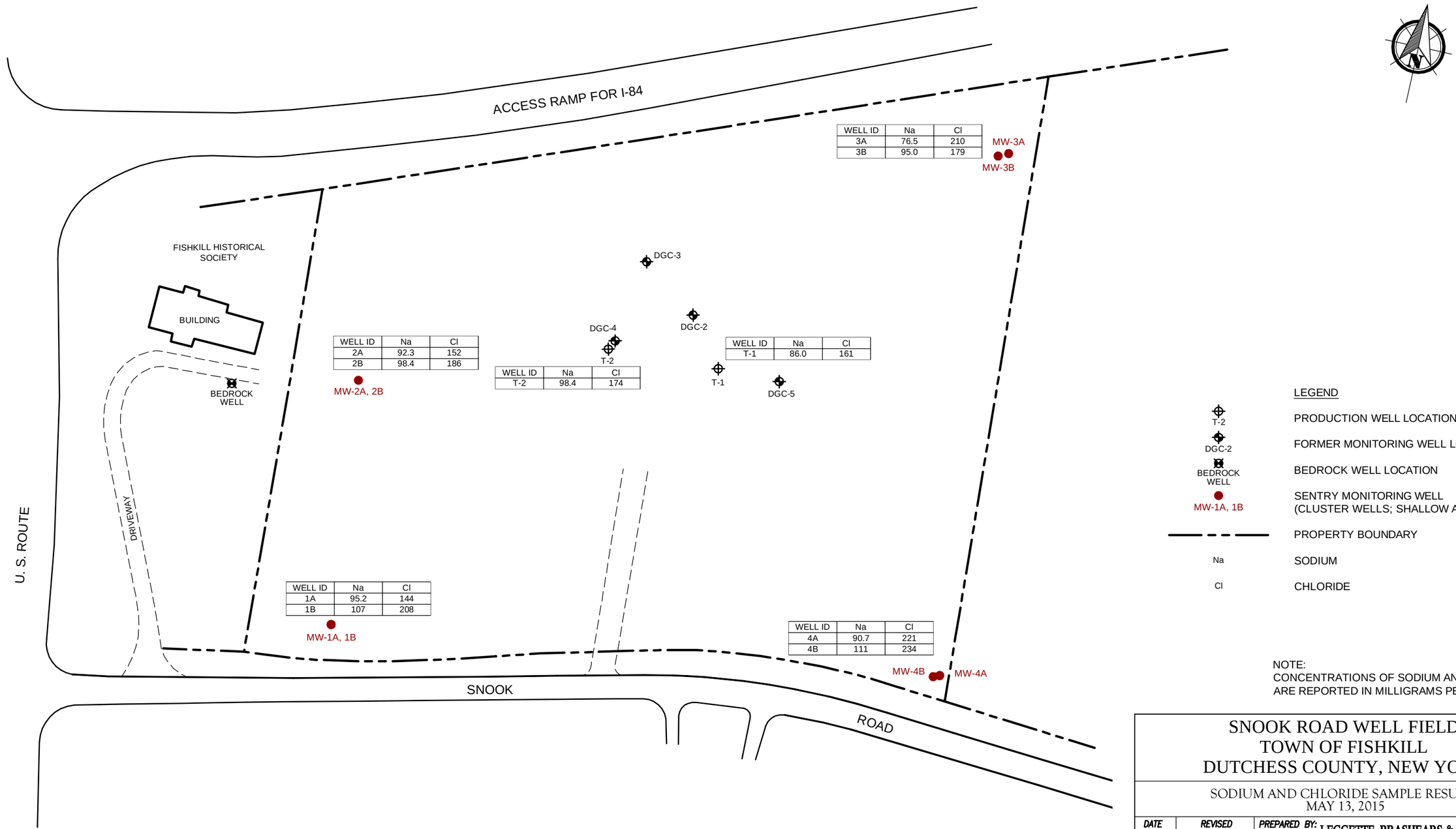

WELL ID	Na	Cl
3A	76.5	210
3B	95.0	179

WELL ID	Na	Cl
2A	92.3	152
2B	98.4	186

WELL ID	Na	Cl
T-2	98.4	174

WELL ID	Na	Cl
T-1	86.0	161

WELL ID	Na	Cl
1A	95.2	144
1B	107	208

WELL ID	Na	Cl
4A	90.7	221
4B	111	234

LEGEND

T-2	PRODUCTION WELL LOCATION
DGC-2	FORMER MONITORING WELL LOCATION
BEDROCK WELL	BEDROCK WELL LOCATION
MW-1A, 1B	SENTRY MONITORING WELL (CLUSTER WELLS; SHALLOW AND DEEP)
	PROPERTY BOUNDARY
Na	SODIUM
Cl	CHLORIDE

NOTE:
CONCENTRATIONS OF SODIUM AND CHLORIDE ARE REPORTED IN MILLIGRAMS PER LITER (mg/L).

SOURCES:
- HYDROGEOLOGIC INVESTIGATION OF THE SNOOK ROAD SITE, DUNN 1990.
- SNOOK ROAD WATER IMPROVEMENT AREA "AS BUILT WELL PLAN" PREPARED BY ROHDE, SOYKA & ANDREWS CONSULTING ENGINEERS PC, DATED SEPTEMBER 1, 2009 SCALE 1"=60'.

0 80
SCALE IN FEET

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

SODIUM AND CHLORIDE SAMPLE RESULTS
MAY 13, 2015

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN: RAC | CHECKED: SS | DATE: 05/22/15 | FIGURE: 4

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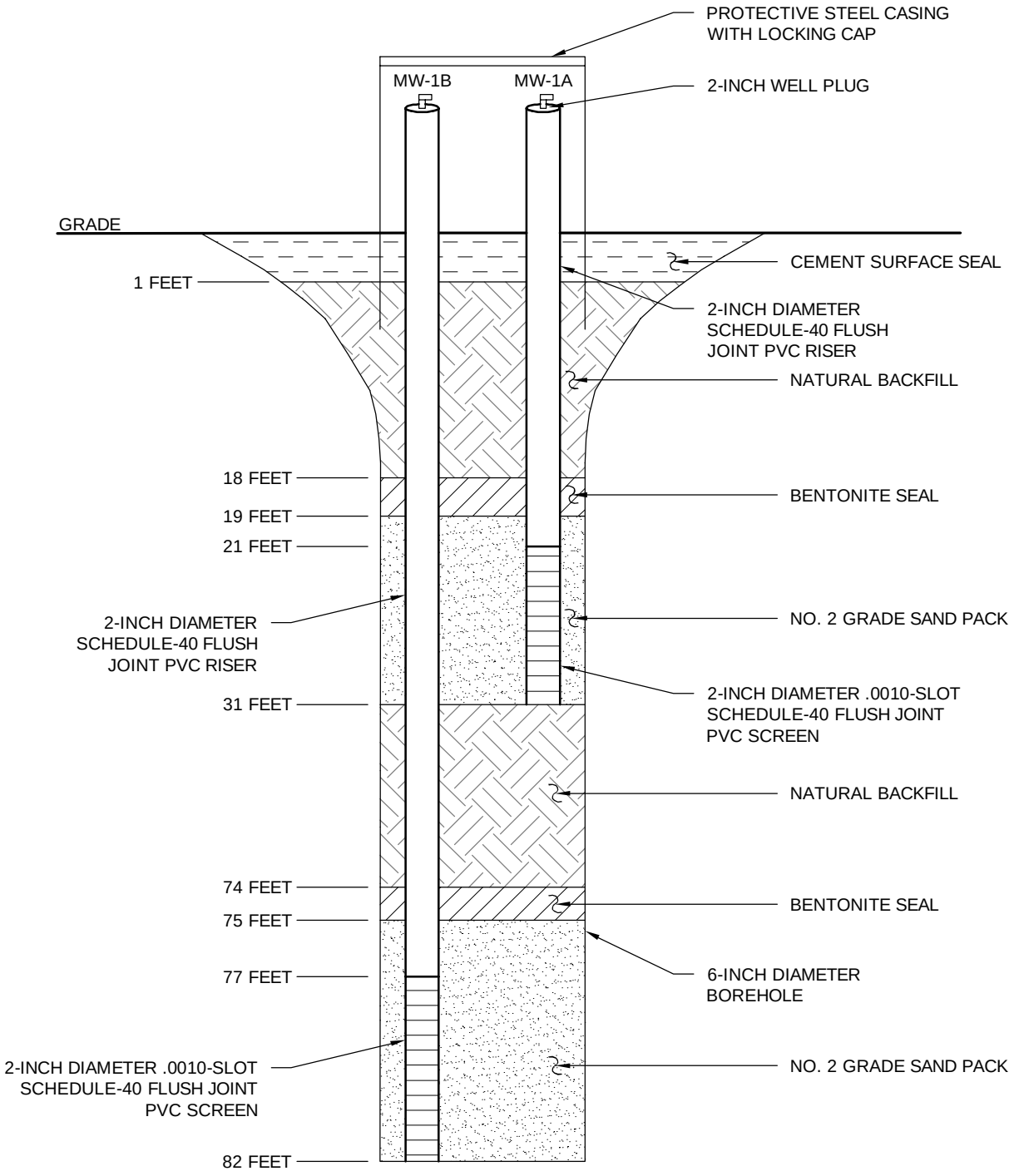
APPENDIX I



SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

WELL CONSTRUCTION DIAGRAM OF MW-1A AND MW-1B

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

NOT TO SCALE

DRAWN:	RAC	CHECKED:	SS	DATE:	04/19/10	FIGURE:	–

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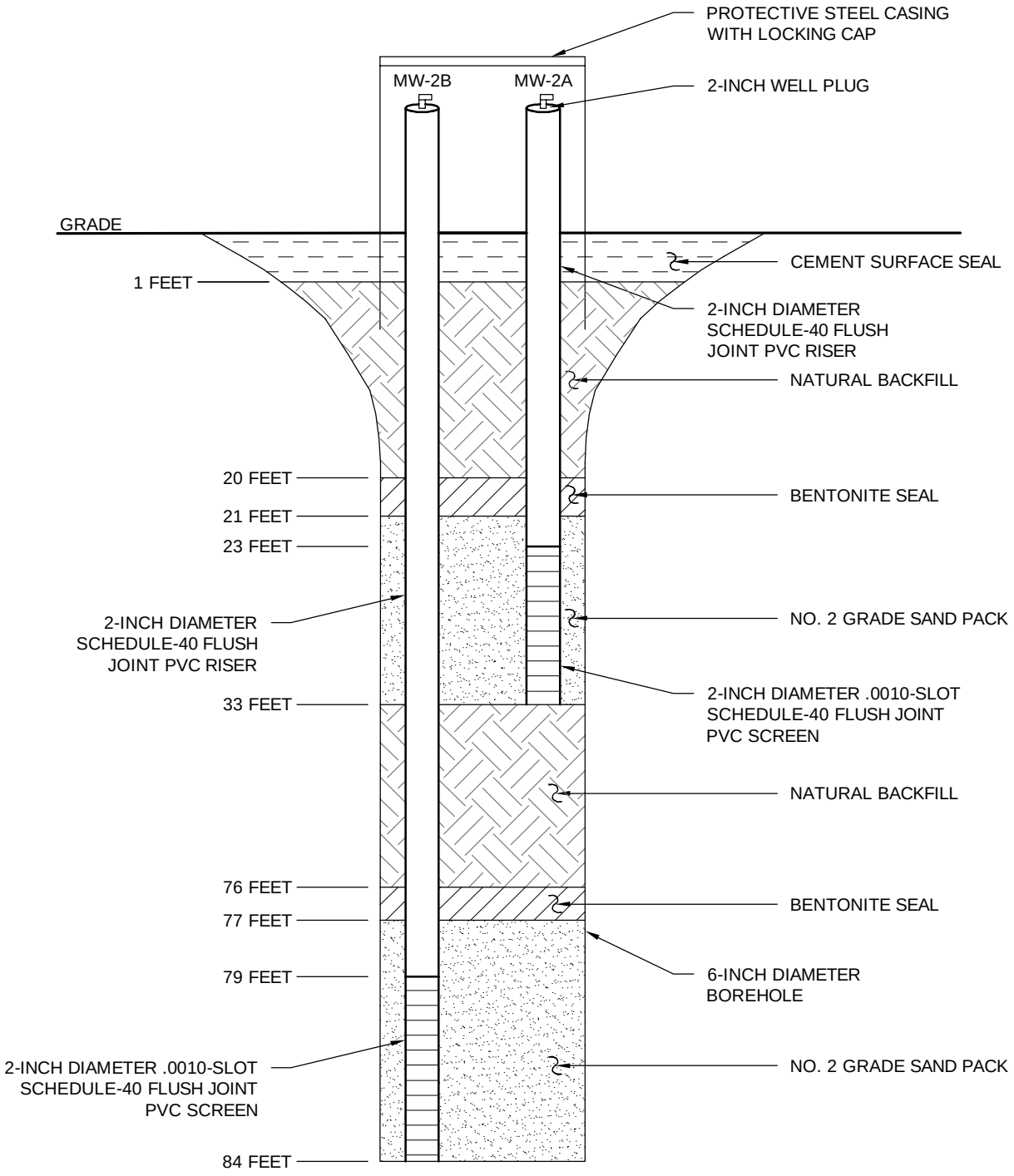

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

WELL CONSTRUCTION DIAGRAM OF MW-2A AND MW-2B

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

NOT TO SCALE

DRAWN:	RAC	CHECKED:	SS	DATE:	04/19/10	FIGURE:	–

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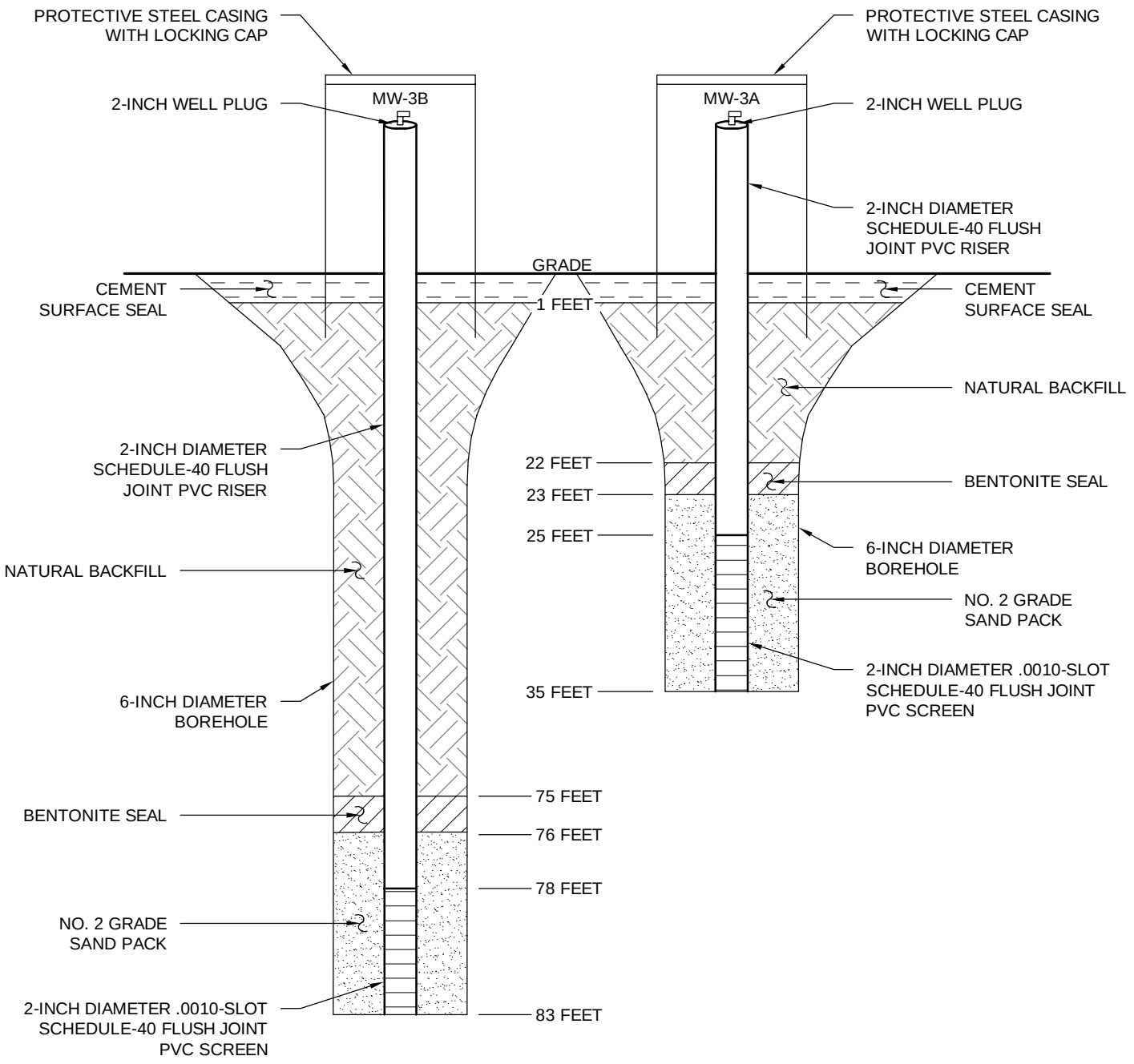

NOT TO SCALE

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

WELL CONSTRUCTION DIAGRAM OF MW-3A AND MW-3B

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
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Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	SS	DATE:	04/19/10	FIGURE:	–

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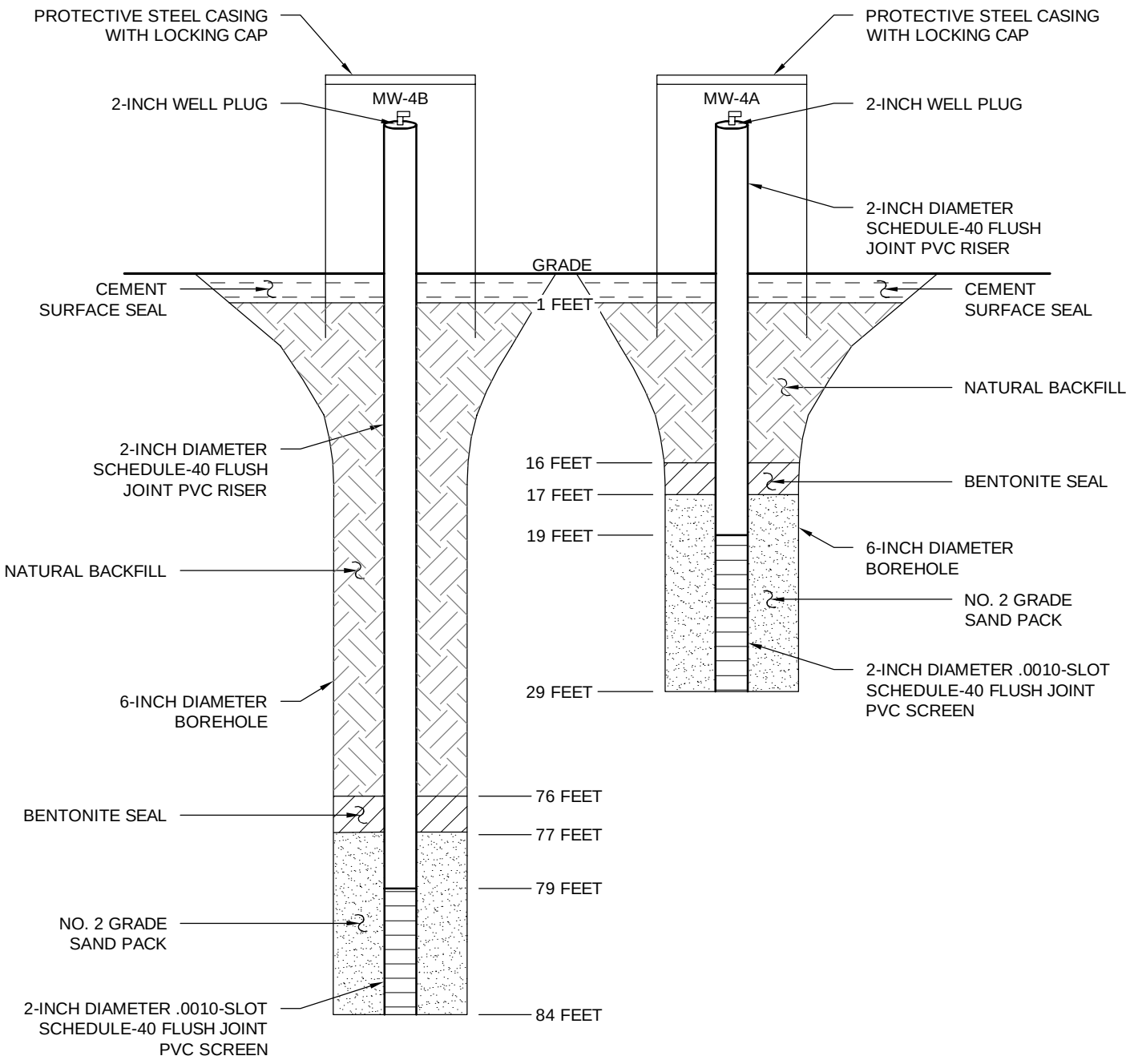

NOT TO SCALE

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL
DUTCHESS COUNTY, NEW YORK

WELL CONSTRUCTION DIAGRAM OF MW-4A AND MW-4B

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	SS	DATE:	04/19/10	FIGURE:	–

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APPENDIX II

Technical Report

prepared for:

Leggette Brashears & Graham Shelton Office
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Stacy Stieber

Report Date: 05/22/2015
Client Project ID: Snook Rd
York Project (SDG) No.: 15E0607

Report Date: 05/22/2015
Client Project ID: Snook Rd
York Project (SDG) No.: 15E0607

Leggette Brashears & Graham Shelton Office
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Stacy Stieber

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 15, 2015 and listed below. The project was identified as your project: **Snook Rd**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15E0607-01	MW-1A	Water	05/13/2015	05/15/2015
15E0607-02	MW-1B	Water	05/13/2015	05/15/2015
15E0607-03	MW-2A	Water	05/13/2015	05/15/2015
15E0607-04	MW-2B	Water	05/13/2015	05/15/2015
15E0607-05	MW-3A	Water	05/13/2015	05/15/2015
15E0607-06	MW-3B	Water	05/13/2015	05/15/2015
15E0607-07	MW-4A	Water	05/13/2015	05/15/2015
15E0607-08	MW-4B	Water	05/13/2015	05/15/2015
15E0607-09	T-1	Water	05/13/2015	05/15/2015
15E0607-10	T-2	Water	05/13/2015	05/15/2015

General Notes for York Project (SDG) No.: 15E0607

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:

Date: 05/22/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **MW-1A** **York Sample ID:** **15E0607-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:56 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-86-1	Bromobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-97-5	Bromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.06	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-25-2	Bromoform	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-83-9	Bromomethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854		
104-51-8	n-Butylbenzene	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-90-7	Chlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-00-3	Chloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
67-66-3	Chloroform	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-87-3	Chloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-43-4	4-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-49-8	2-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
96-12-8	* 1,2-Dibromo-3-chloropropane	ND		ug/L	0.3	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH		
124-48-1	Dibromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-93-4	* 1,2-Dibromoethane	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH		
74-95-3	Dibromomethane	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-1A** **York Sample ID:** **15E0607-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:56 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
594-20-7	2,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.04	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-41-4	Ethyl Benzene	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-82-8	Isopropylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-09-2	Methylene chloride	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	**Naphthalene**	**0.4**	B	ug/L	0.06	2.0	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
103-65-1	n-Propylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-42-5	Styrene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-1A** **York Sample ID:** **15E0607-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:56 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
127-18-4	Tetrachloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-88-3	Toluene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-01-6	Trichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-01-4	Vinyl Chloride	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-47-6	* o-Xylene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:			
179601-23-1	* p- & m- Xylenes	ND		ug/L	0.2	1.0	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications:			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 18:25	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.9 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*103 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*97.1 %*	*81-117*

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: **MW-1A** **York Sample ID:** **15E0607-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:56 pm	05/15/2015

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**95.2**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:21	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**144**		mg/L	0.690	5.00	10	EPA 300.0	05/19/2015 23:16	05/19/2015 23:16	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-1B** **York Sample ID:** **15E0607-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:54 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-86-1	Bromobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-97-5	Bromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-27-4	Bromodichloromethane	ND		ug/L	0.06	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-25-2	Bromoform	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-83-9	Bromomethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854		
104-51-8	n-Butylbenzene	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-23-5	Carbon tetrachloride	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-1B** **York Sample ID:** **15E0607-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:54 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-00-3	Chloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
67-66-3	Chloroform	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
74-87-3	Chloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-43-4	4-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-49-8	2-Chlorotoluene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
96-12-8	* 1,2-Dibromo-3-chloropropane	ND		ug/L	0.3	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH		
124-48-1	Dibromochloromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-93-4	* 1,2-Dibromoethane	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH		
74-95-3	Dibromomethane	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
594-20-7	2,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-1B** **York Sample ID:** **15E0607-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:54 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.04	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
100-41-4	Ethyl Benzene	ND		ug/L	0.09	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
87-68-3	Hexachlorobutadiene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
98-82-8	Isopropylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-09-2	Methylene chloride	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
91-20-3	Naphthalene	ND		ug/L	0.06	2.0	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
103-65-1	n-Propylbenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
100-42-5	Styrene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
127-18-4	Tetrachloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-88-3	Toluene	ND		ug/L	0.05	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.08	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-01-6	Trichloroethylene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: **MW-1B** **York Sample ID:** **15E0607-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:54 pm	05/15/2015

Volatile Organics, 502.2 + MTBE List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-01-4	Vinyl Chloride	ND		ug/L	0.1	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-47-6	* o-Xylene	ND		ug/L	0.07	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:			
179601-23-1	* p- & m- Xylenes	ND		ug/L	0.2	1.0	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications:			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.2	0.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1.5	1	EPA 524.2	05/19/2015 08:05	05/19/2015 19:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*91.4 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*106 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*96.1 %*	*81-117*

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**107**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:25	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**208**		mg/L	0.690	5.00	10	EPA 300.0	05/19/2015 23:35	05/19/2015 23:35	AD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: **MW-2A** **York Sample ID:** **15E0607-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 1:39 pm	05/15/2015

Sample Information

Client Sample ID: MW-2A **York Sample ID:** 15E0607-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 1:39 pm	05/15/2015

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**92.3**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:31	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**152**		mg/L	0.690	5.00	10	EPA 300.0	05/19/2015 23:54	05/19/2015 23:54	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: MW-2B **York Sample ID:** 15E0607-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 1:35 pm	05/15/2015

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**98.4**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:36	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**186**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 00:14	05/20/2015 00:14	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: MW-3A **York Sample ID:** 15E0607-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 9:30 am	05/15/2015

Sample Information

Client Sample ID: MW-3A **York Sample ID:** 15E0607-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 9:30 am	05/15/2015

Sodium by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**76.5**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:41	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**210**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 00:33	05/20/2015 00:33	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: MW-3B **York Sample ID:** 15E0607-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 9:18 am	05/15/2015

Sodium by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**95.0**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:46	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**179**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 00:52	05/20/2015 00:52	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: MW-4A **York Sample ID:** 15E0607-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:15 pm	05/15/2015

Sample Information

Client Sample ID: MW-4A **York Sample ID:** 15E0607-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:15 pm	05/15/2015

Sodium by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**90.7**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:51	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**221**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 01:11	05/20/2015 01:11	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: MW-4B **York Sample ID:** 15E0607-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 12:14 pm	05/15/2015

Sodium by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**111**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 05:56	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**234**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 01:30	05/20/2015 01:30	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: T-1 **York Sample ID:** 15E0607-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 10:05 am	05/15/2015

Sample Information

Client Sample ID: T-1 **York Sample ID:** 15E0607-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 10:05 am	05/15/2015

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**86.0**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 06:01	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**161**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 01:49	05/20/2015 01:49	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: T-2 **York Sample ID:** 15E0607-10

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0607	Snook Rd	Water	May 13, 2015 10:09 am	05/15/2015

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**98.4**		mg/L	0.100	0.100	1	EPA 6010C	05/20/2015 13:42	05/21/2015 06:06	MW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**174**		mg/L	0.690	5.00	10	EPA 300.0	05/20/2015 02:08	05/20/2015 02:08	AD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15E0607-01	MW-1A	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15E0607-02	MW-1B	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Notes and Definitions

M-ACCB	Analyte in CCB. Run is bracketed by acceptable CCBs.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.
For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15E0607 ~~15E0602~~

YOUR Information

Company: LBG, Inc.
Address: 4 Research Dr. Suite 204, Shelton, CT 06484
Phone No. 203-929-8555
Contact Person: Stacy Stieber
E-Mail Address: sstieber@lbgct.com

Report To:

Company:
Address: SAME
Phone No.
Attention:
E-Mail Address:

Invoice To:

Company: Town of Fishkill
Address: ~~307 Rt. 52~~ Fishkill, NY 12524
Phone No.
Attention: Robert Lacolm
E-Mail Address:

YOUR Project ID

Snook Rd

Purchase Order No.

Samples from: CT___ NY X NJ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report ___
- Summary w/ QA Summary ___
- CT RCP Package ___
- CTRCP DQA/DUE Pkg ___
- NY ASP A Package ___
- NY ASP B Package ___
- NJDEP Red. Deliv. ___

Electronic Data Deliverables (EDD)

- Simple Excel X
- NYSDEC EQuIS ___
- EQuIS (std) ___
- EZ-EDD (EQuIS) ___
- NJDEP SRP HazSite EDD ___
- GIS/KEY (std) ___
- Other ___
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Jonathan Strickland
Name (printed)

Matrix Codes

- S - soil
- Other - specify(oil, etc.)
- WW - wastewater
- GW - groundwater
- DW - drinking water
- Air-A - ambient air
- Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
*8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
MW-1A	5/13/15 12:56	GW	Na, Cl, 502.2, MTBE	3-40ml Voas, 2-250ml
MW-1B	12:54		Na, Cl, 502.2, MTBE	3-40ml Voas, 2-250ml
MW-2A	13:39		Na, CL	2-250ml
MW-2B	13:35		Na, Cl	
MW-3A	09:30		Na, Cl	
MW-3B	09:18		Na, Cl	
MW-4A	12:15		Na, Cl	
MW-4B	12:14		Na, Cl	
T-1	10:05		Na, Cl	
T-2	10:09		Na, Cl	

Comments

Preservation Check those Applicable: 4°C X Frozen___ HCl___ MeOH___ HNO_3___ H_2SO_4___ NaOH___ ZnAc___ Ascorbic Acid___ Other___

Special Instructions
Field Filtered ☐
Lab to Filter ☐

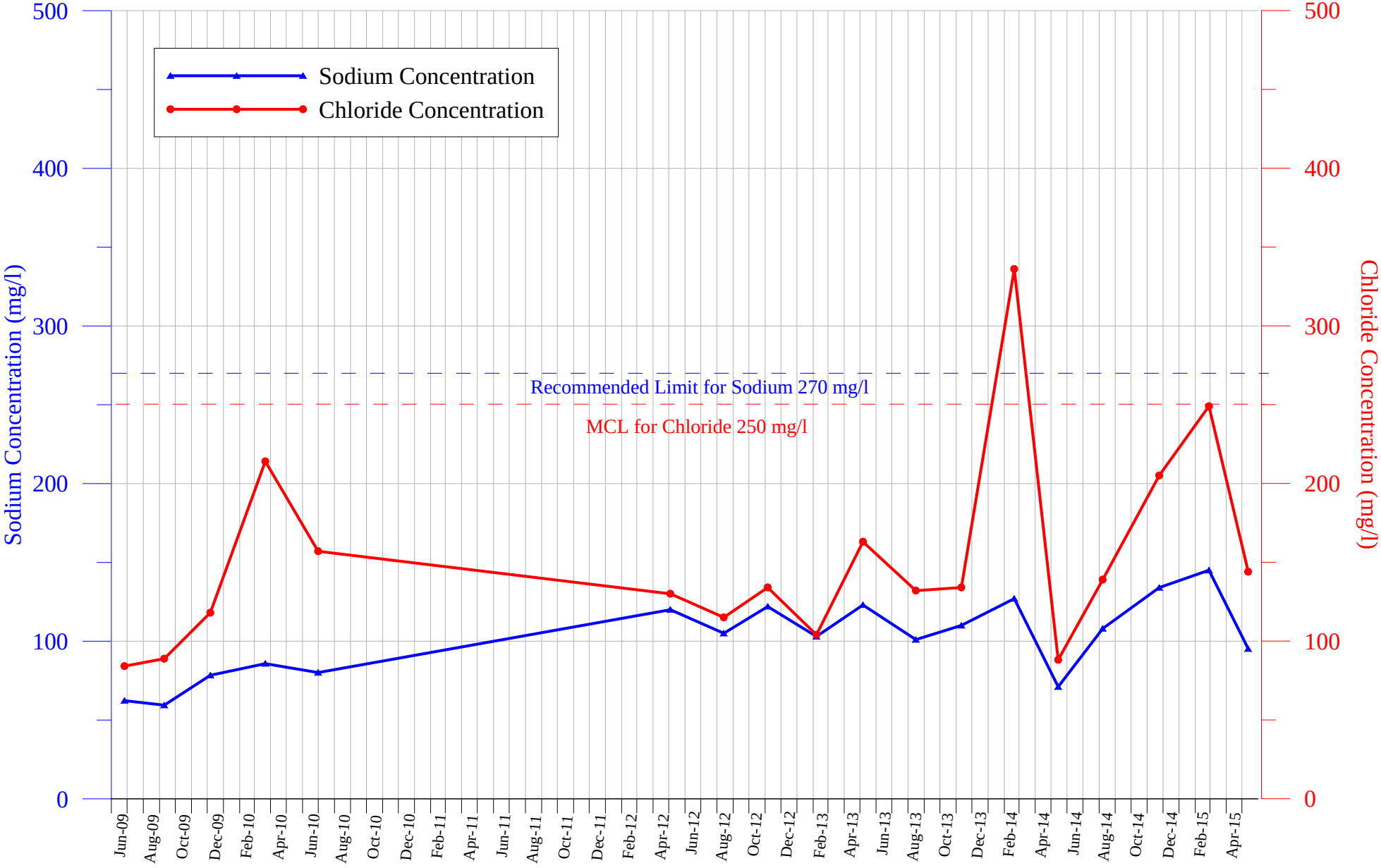
Samples Relinquished By	Date/Time	Samples Received By	Date/Time
[signature]	5/14/15 08:00	LBG Fridge	5/14/15 08:00
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
[signature]		[signature] D Grace	5/15/15 11:45 5-15-15 1210

Temperature on Receipt: 4.6°C

APPENDIX III

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-1A

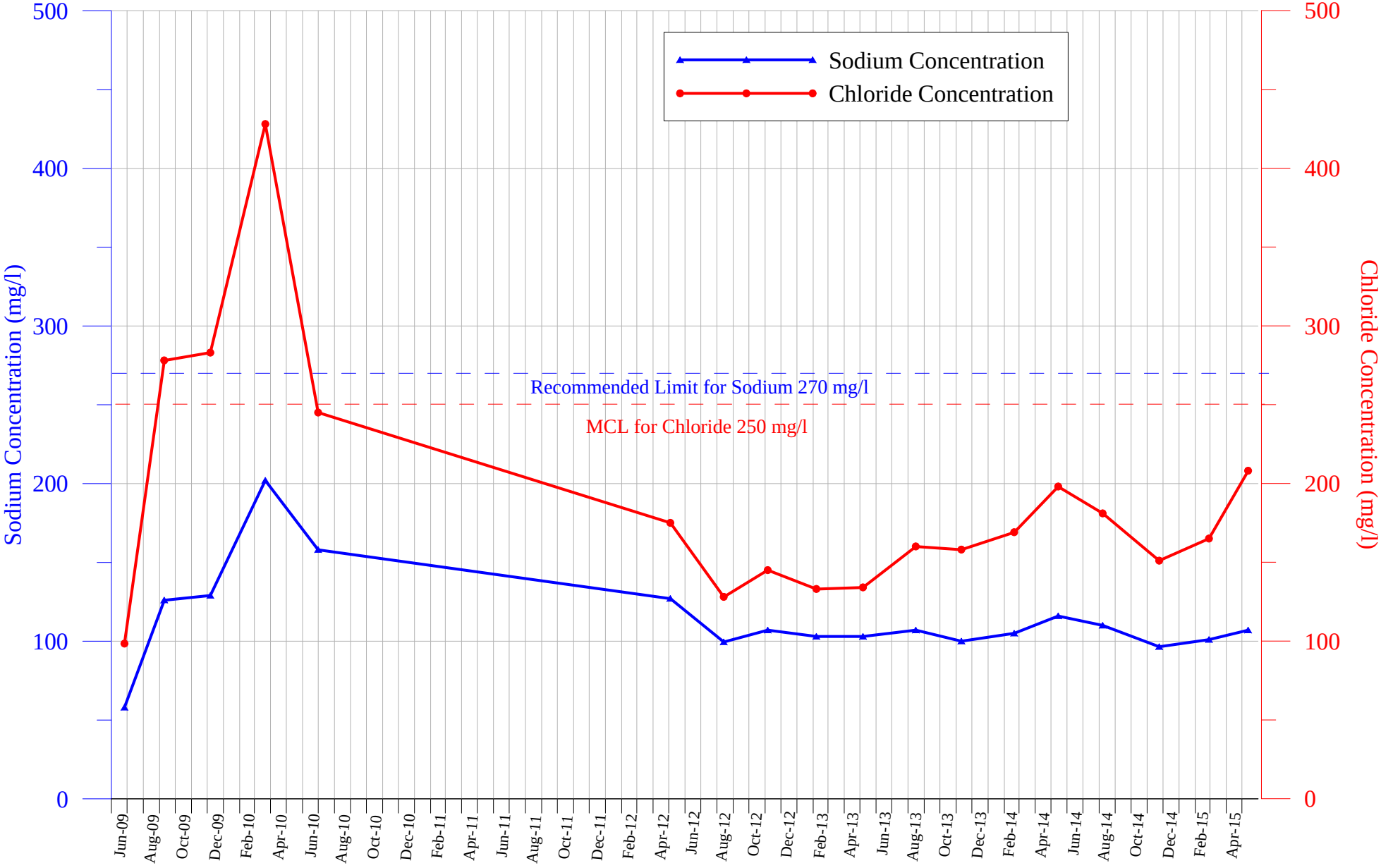


K:\Jobs\Town of Fishkill\Snook Road Well Field\2015\May 2015\MW-1A full graph.grf

LEGGETTE, BRASHEARS & GRAHAM, INC.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-1B

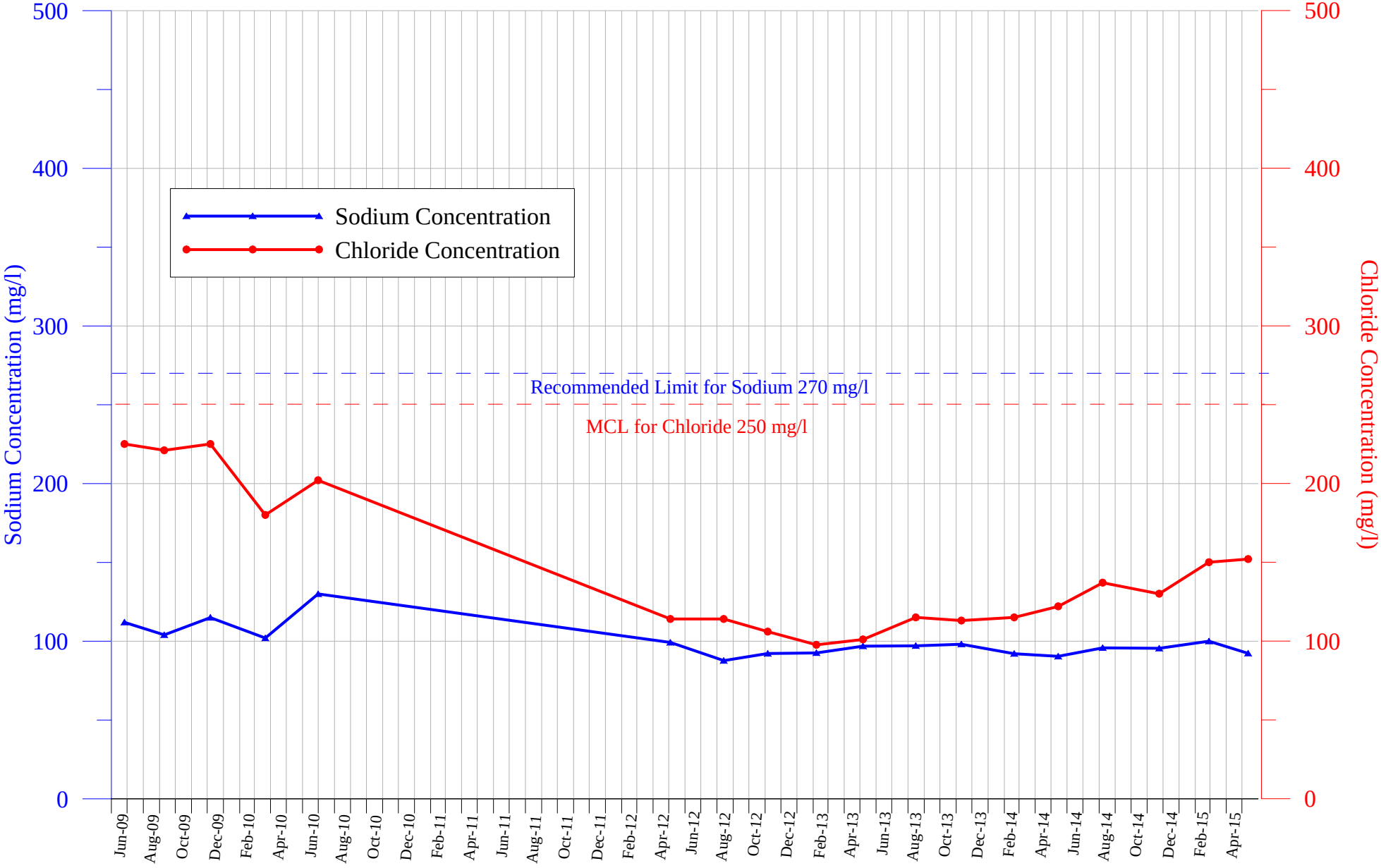


K:\Jobs\Town of Fishkill\Snook Road Well Field\2015\May 2015\MW-1B full graph.grf

LEGGETTE, BRASHEARS & GRAHAM, INC.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-2A



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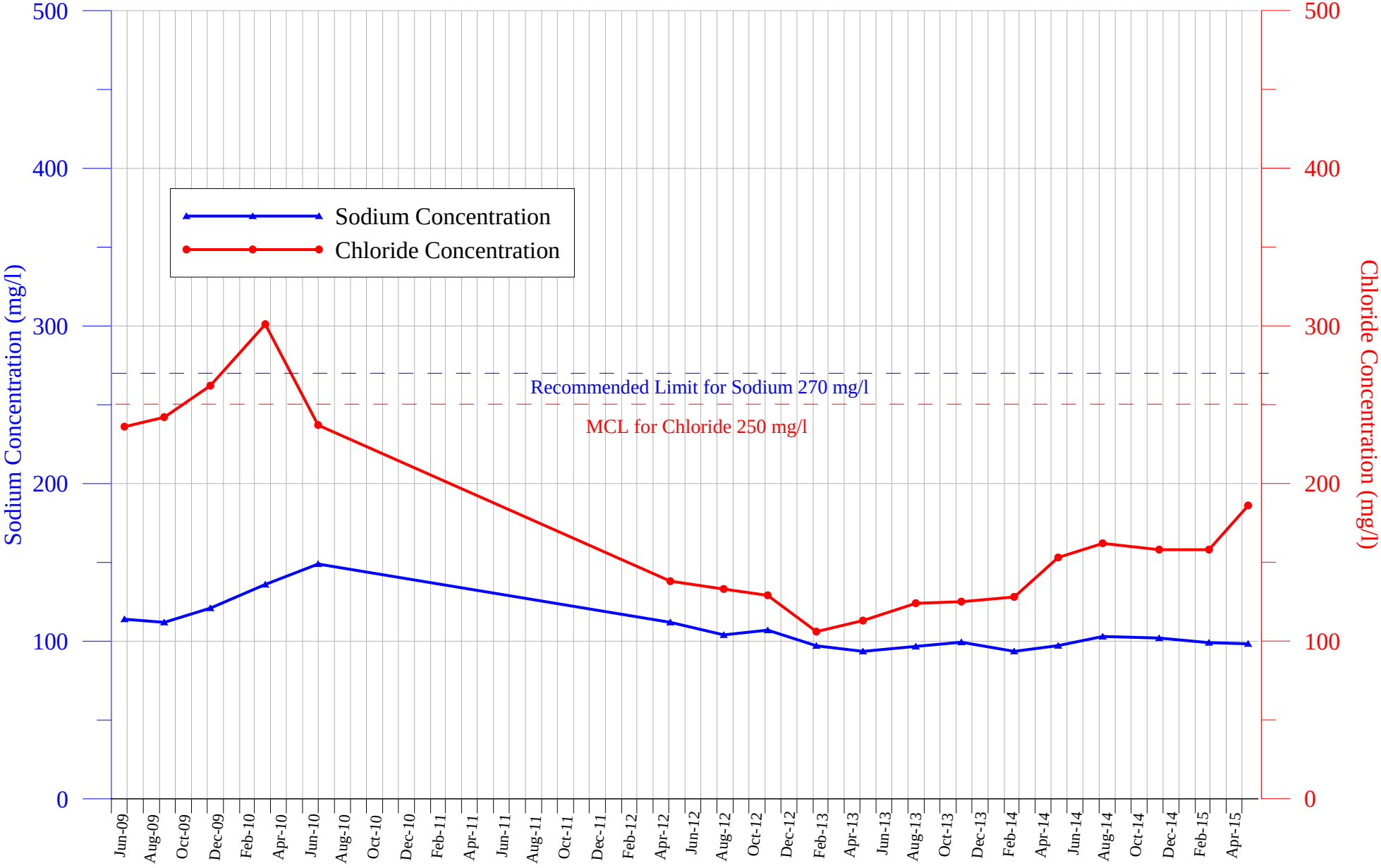
LEGGETTE, BRASHEARS & GRAHAM, INC.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-2B



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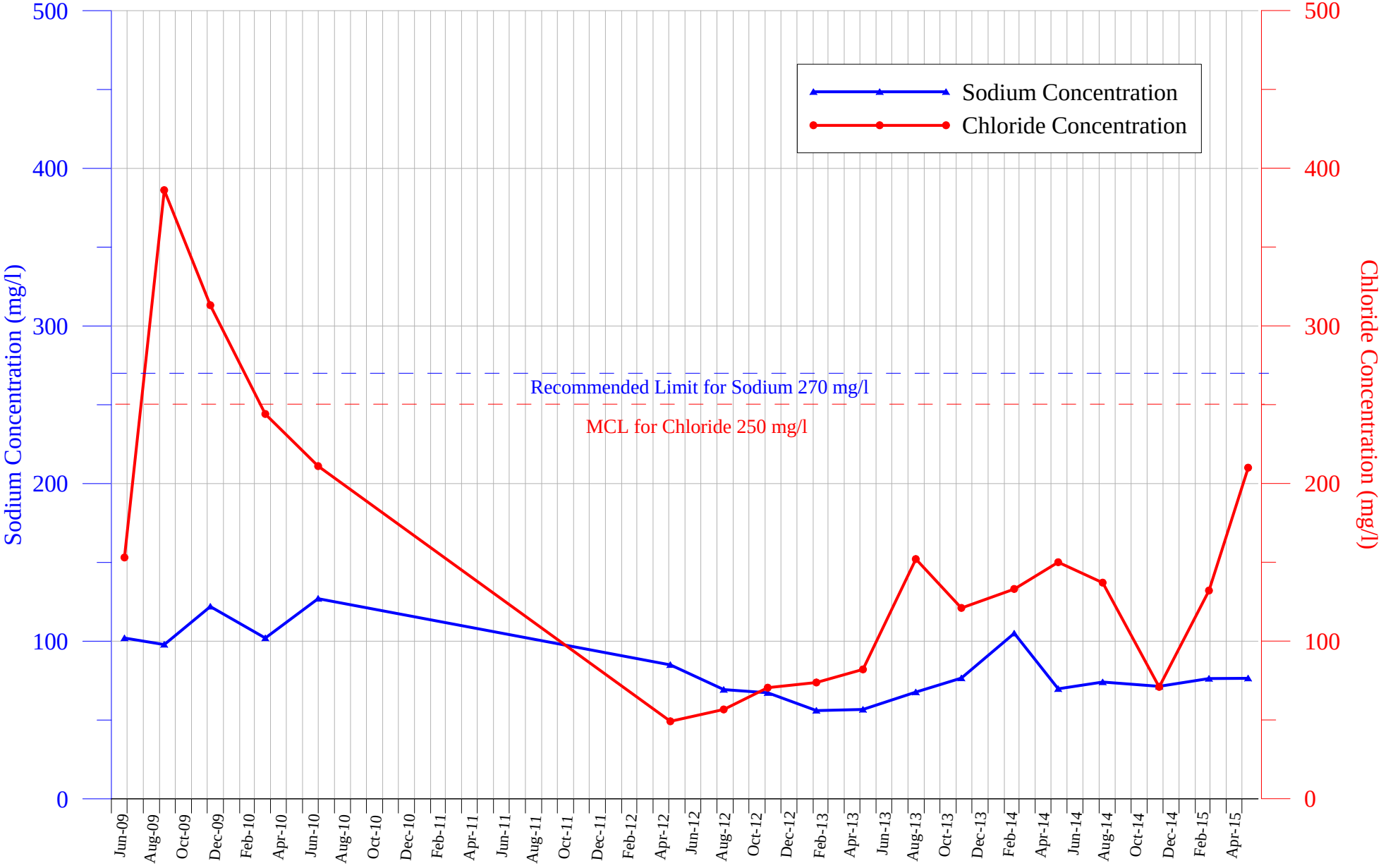
SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-3A



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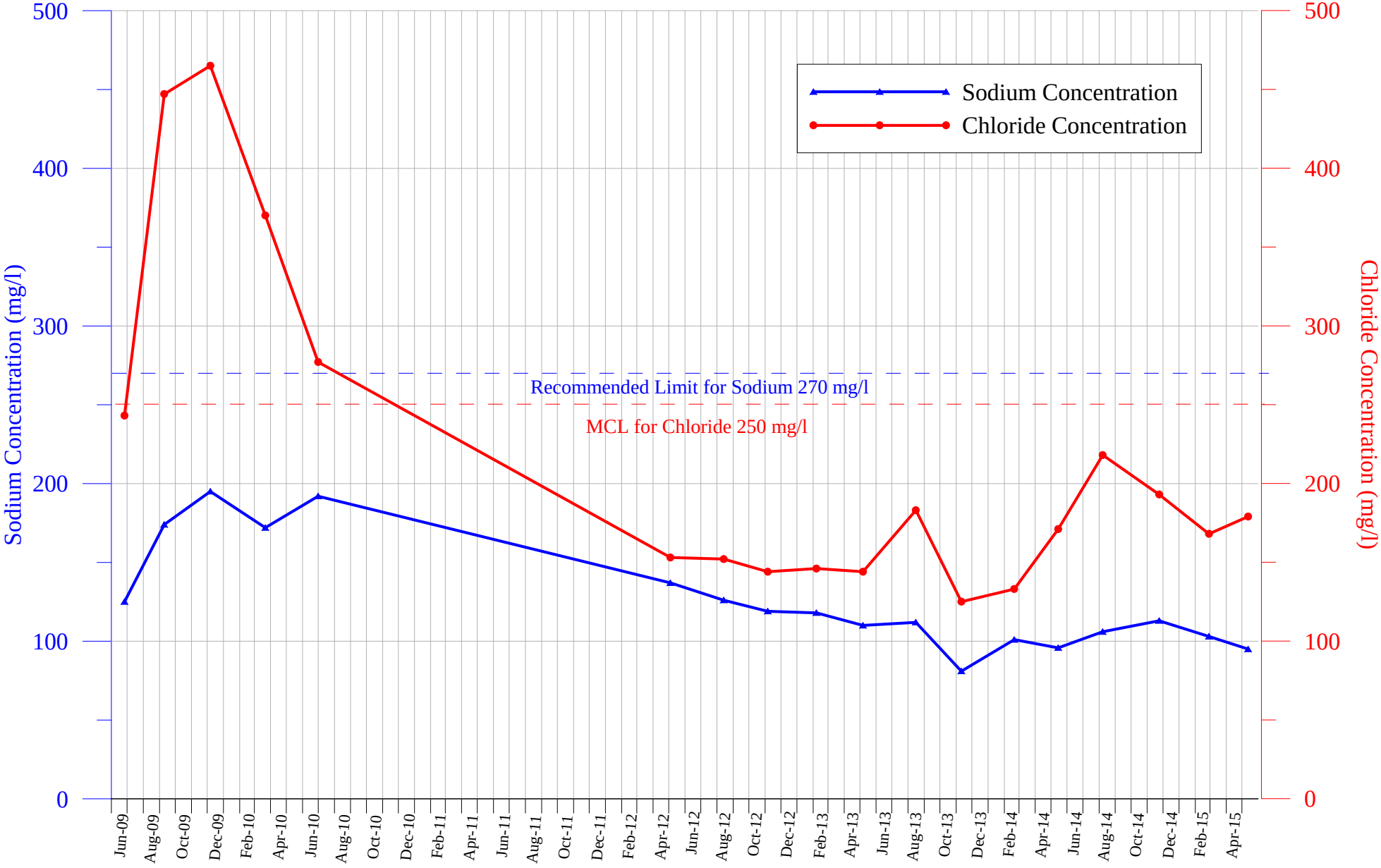
SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-3B



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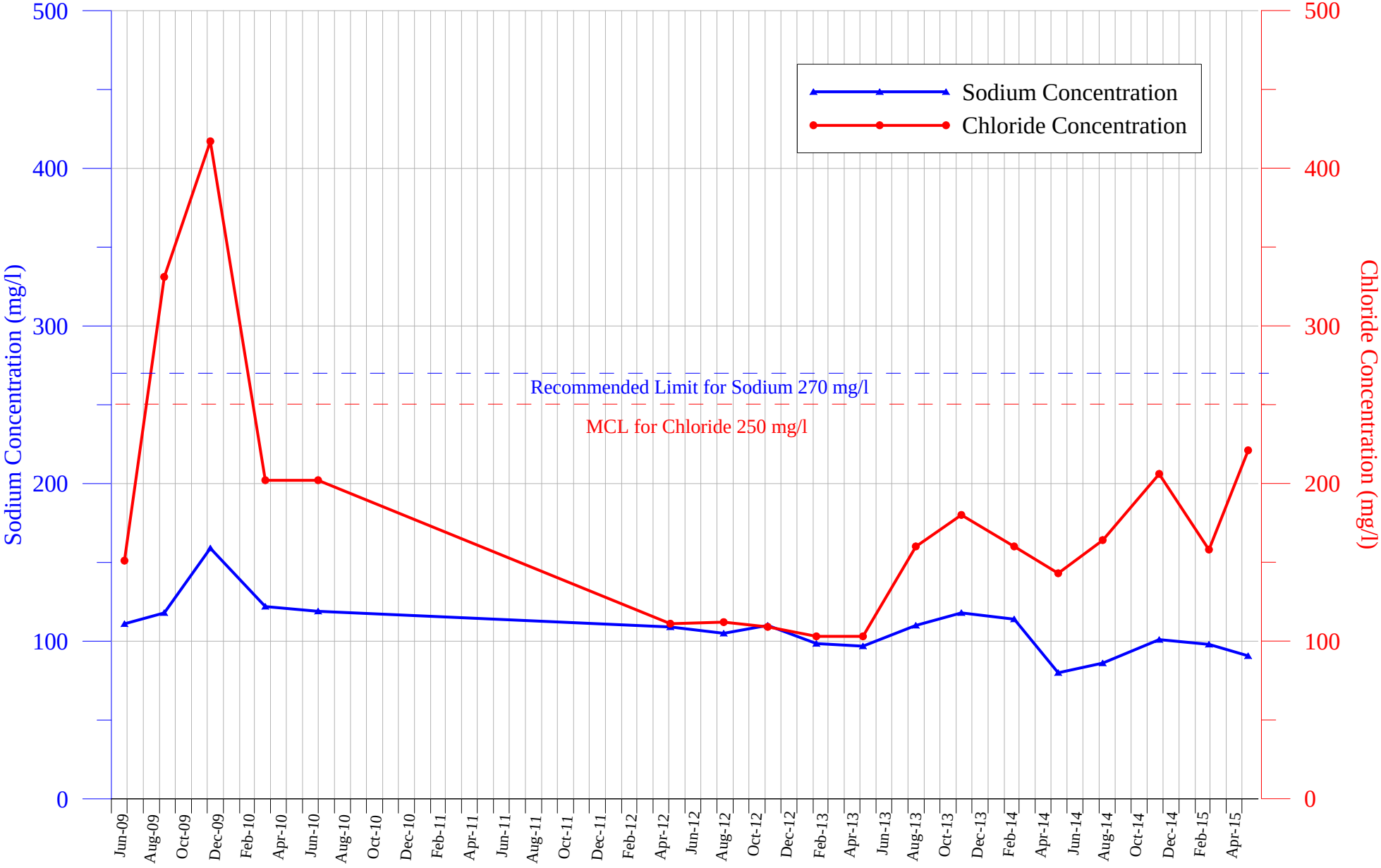
SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-4A



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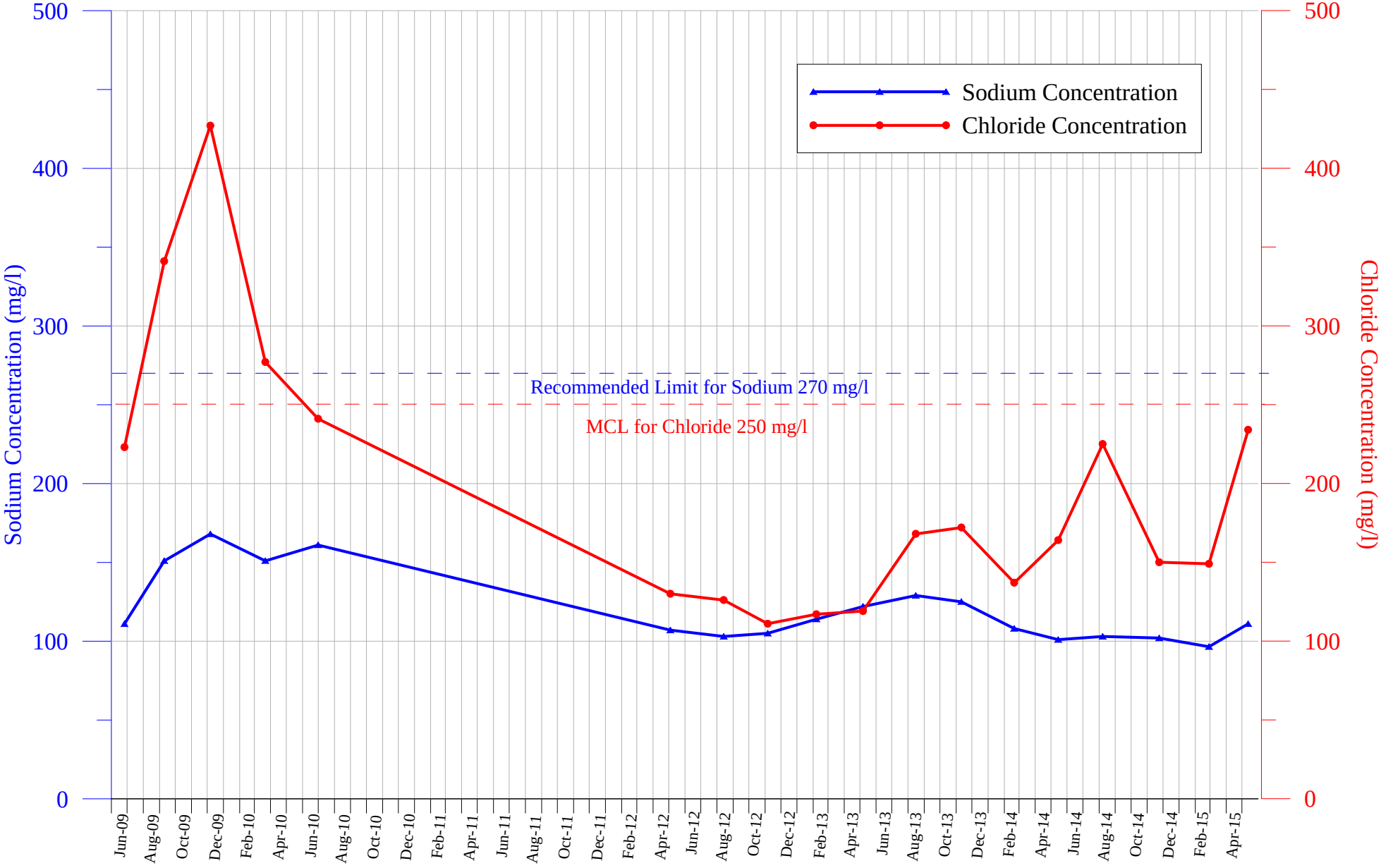
SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Monitor Well MW-4B



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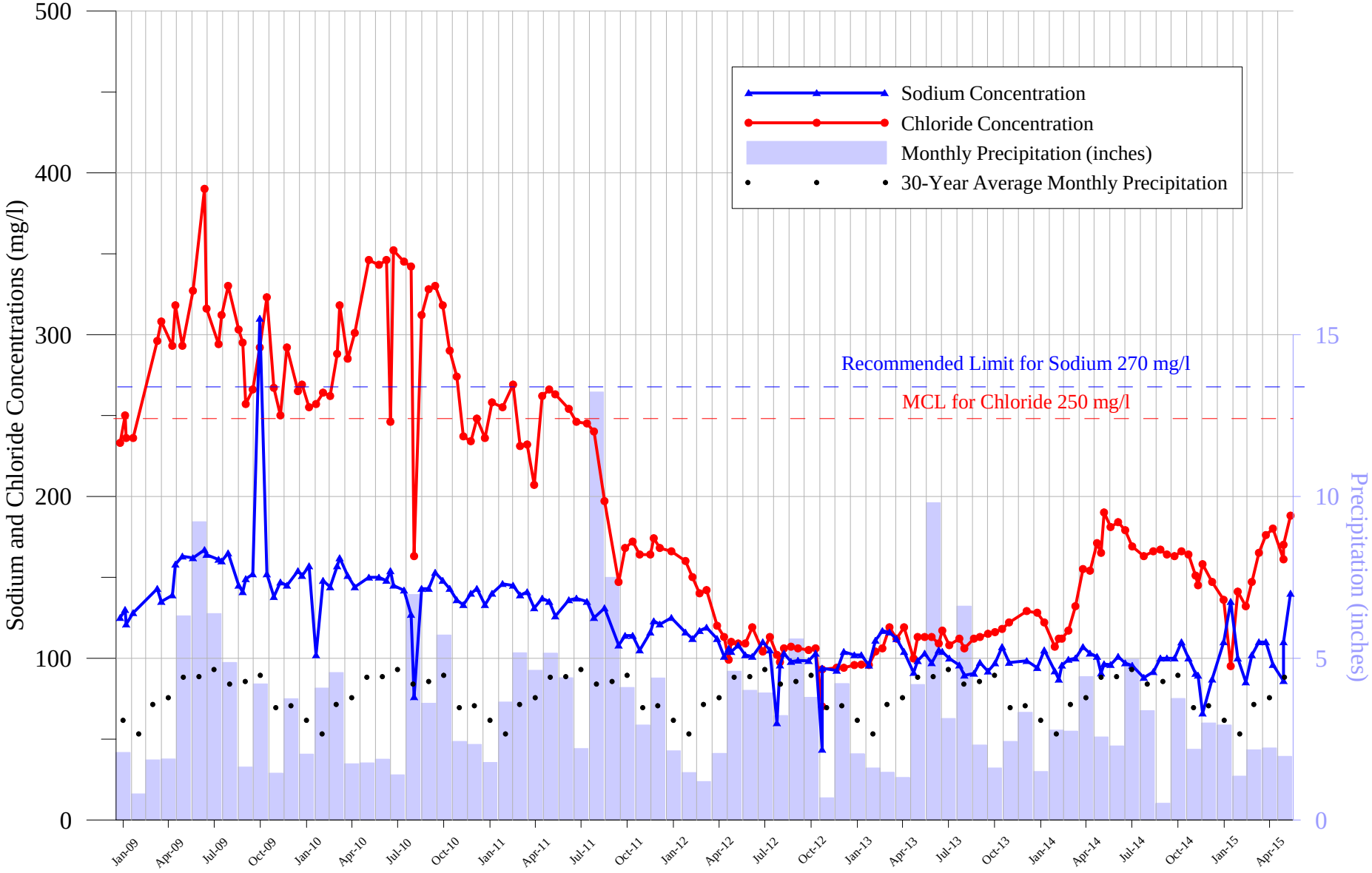
LEGGETTE, BRASHEARS & GRAHAM, INC.

APPENDIX IV

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Production Well T-1 Compared with Monthly Precipitation Totals

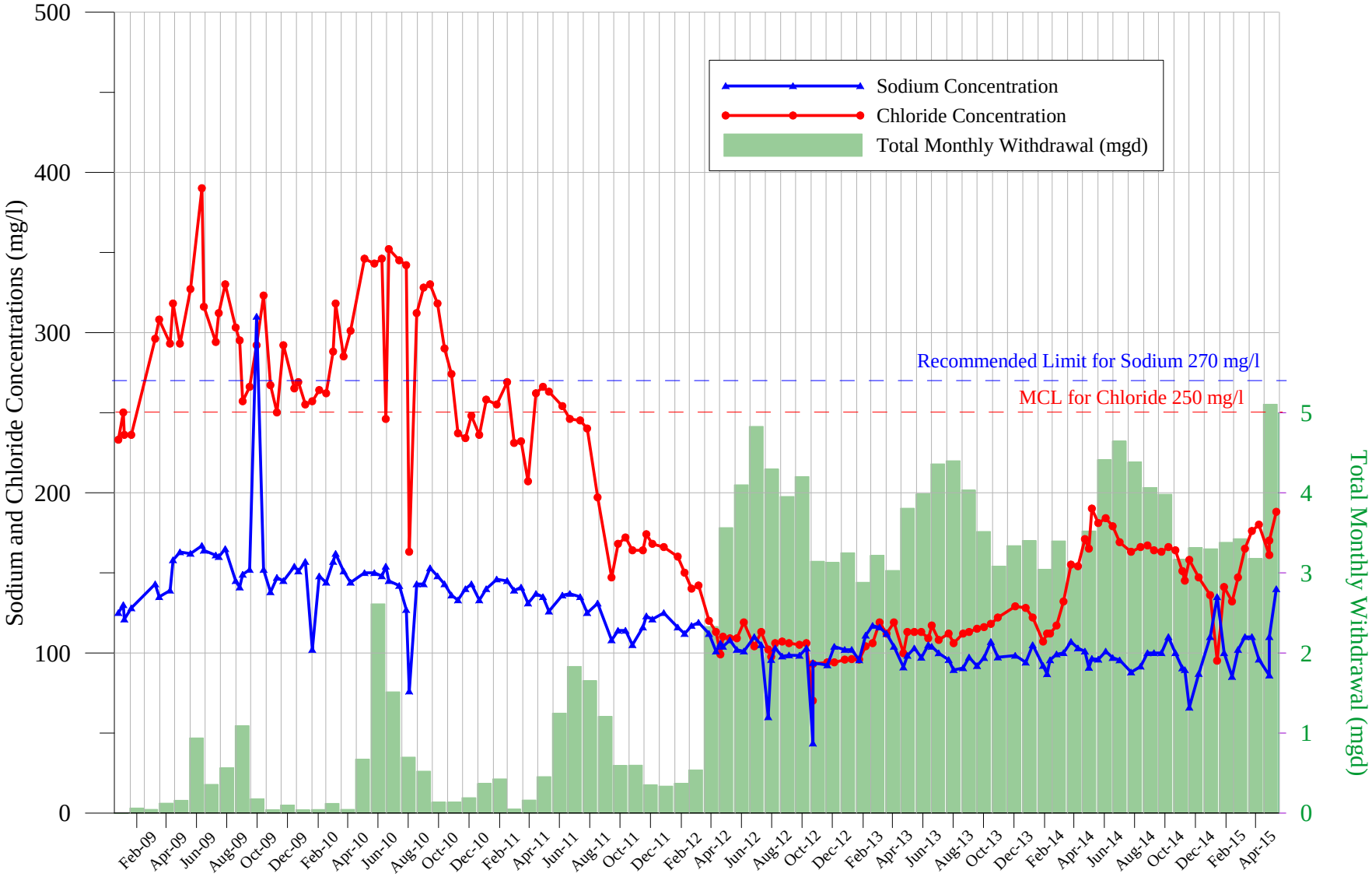


K:\Jobs\Town of Fishkill\Snook Road Well Field\2015\May 2015\T-1 conc with precip.grf

LEGGETTE, BRASHEARS & GRAHAM, INC.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Production Well T-1 Compared with Monthly Pumping Withdrawal at the Well Field



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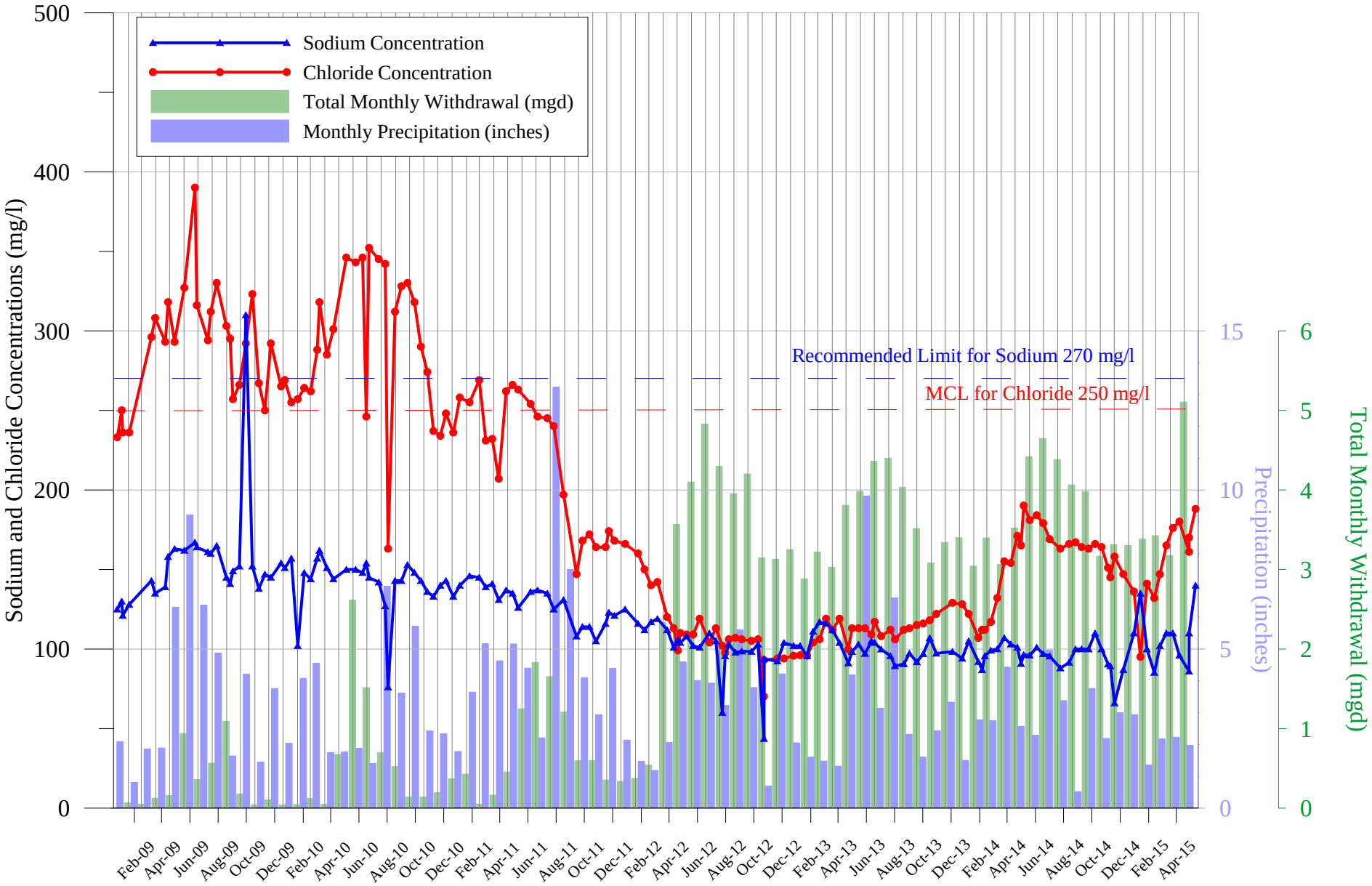
LEGGETTE, BRASHEARS & GRAHAM, INC.

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Production Well T-1 Compared with Monthly Precipitation and Pumping Withdrawal at the Well Field



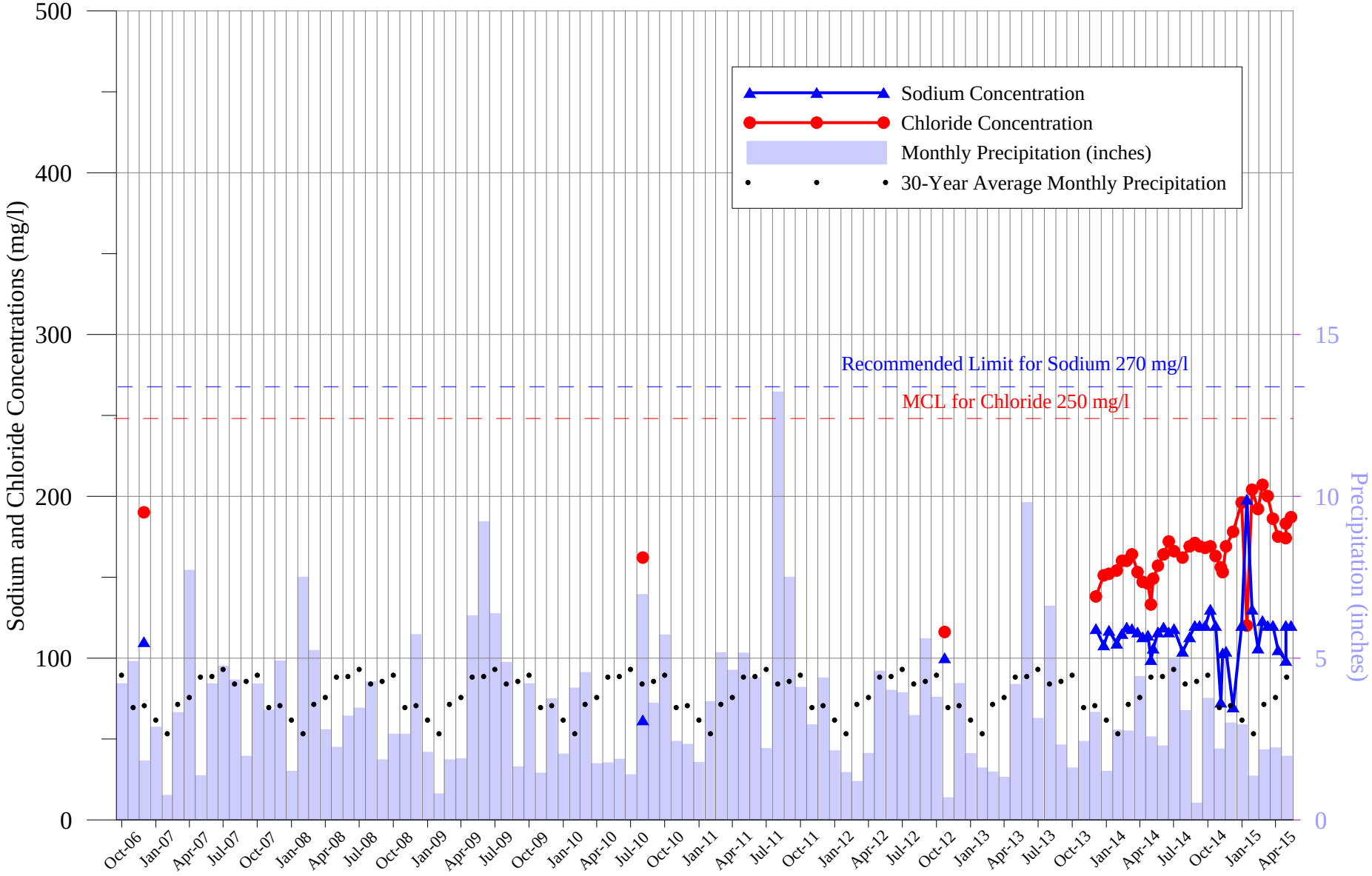
K:\Jobs\Town of Fishkill\Snook Road Well Field\2015\May 2015\T-1 conc with pumpage with precip.grf

LEGGETTE, BRASHEARS & GRAHAM, INC.

APPENDIX V

SNOOK ROAD WELL FIELD
TOWN OF FISHKILL, NEW YORK

Summary of Sodium and Chloride Concentrations from Production Well T-2 Compared with Monthly Precipitation Totals



K:\Jobs\Town of Fishkill\Snook Road Well Field\2015\May 2015\T-2 conc with precip.grf

LEGGETTE, BRASHEARS & GRAHAM, INC.