

## APPENDIX G: SEALANT INSTALLATION LOGS

The following table contains the results of the sealant installation monitoring performed by the Quality Assurance Engineer. This table documents the following installation data:

- Pile Identification Number;
- Sheet Pile Length;
- Probe Depth (Sealed Length);
- Date of Primary Sealant Installation;
- Start and Stop Times of Primary Joint Sealant Installation;
- Volume of Sealant Injected During Primary Sealant Installation;
- Date of Secondary Sealant Installation;
- Secondary Sealant Volume, and
- Comments.

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA		PRIMARY SEALANT DATA				SECONDARY DATA		Comments
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Grout Time Start Stop	Grout (C.F.)	Date	C.F.	
5	82.50	82.50	01-Jun-07	11:39:40 AM 11:49:30 AM	1.94	04-Jun-07	0.02	Flowrate: 1 gal = 40 seconds
6	82.50	82.50	01-Jun-07	11:30:20 AM 11:37:40 AM	1.45	04-Jun-07	0.30	
7	82.50	82.50	01-Jun-07	11:20:10 AM 11:27:30 AM	1.45	04-Jun-07	0.00	Sample Taken
8	82.00	82.00	01-Jun-07	11:10:20 AM 11:18:20 AM	1.58	04-Jun-07	0.01	
9	82.00	82.00	01-Jun-07	11:02:10 AM 11:09:30 AM	1.45	04-Jun-07	0.14	
10	80.00	80.00	01-Jun-07	10:55:00 AM 11:01:10 AM	1.21	04-Jun-07	0.00	
11	80.00	80.00	01-Jun-07	10:37:50 AM 10:44:00 AM	1.21	04-Jun-07	0.00	
12	80.00	80.00	01-Jun-07	10:27:10 AM 10:36:40 AM	1.87	04-Jun-07	0.00	
13	80.00	80.00	01-Jun-07	10:20:50 AM 10:26:30 AM	1.12	04-Jun-07	0.00	Sample Taken
14	79.42	79.42	01-Jun-07	10:15:00 AM 10:20:10 AM	1.02	04-Jun-07	0.00	
15	79.50	79.50	31-May-07	2:34:00 PM 2:44:00 PM	1.97	01-Jun-07	0.00	
16	79.50	79.50	31-May-07	2:26:56 PM 2:33:10 PM	1.23	01-Jun-07	0.00	
17	79.50	79.50	31-May-07	2:18:20 PM 2:26:00 PM	1.51	01-Jun-07	0.04	Sample Taken
18	78.08	78.08	31-May-07	2:08:50 PM 2:17:00 PM	1.61	01-Jun-07	0.01	
19	77.92	77.92	31-May-07	1:52:20 PM 2:04:30 PM	2.40	01-Jun-07	0.09	
20	77.92	77.92	31-May-07	1:31:10 PM 1:45:00 PM	2.73	01-Jun-07	0.05	
21	76.00	76.00	31-May-07	1:18:10 PM 1:27:30 PM	1.84	01-Jun-07	0.07	
22	76.00	76.00	31-May-07	1:06:50 PM 1:14:50 PM	1.58	01-Jun-07	0.08	
23	74.92	74.92	31-May-07	12:51:00 PM 12:58:20 PM	1.45	01-Jun-07	0.04	
24	74.83	74.83	31-May-07	12:42:10 PM 12:48:10 PM	1.18	01-Jun-07	0.05	Sample Taken
25	75.00	75.00	31-May-07	12:34:40 PM 12:41:00 PM	1.25	01-Jun-07	0.08	
26	74.50	74.50	31-May-07	11:06:40 AM 11:18:20 AM	2.30	01-Jun-07	0.00	
27	74.50	74.50	31-May-07	10:57:00 AM 11:05:36 AM	1.70	01-Jun-07	0.00	
28	74.67	74.67	31-May-07	10:40:46 AM 10:50:00 AM	1.82	01-Jun-07	0.02	
29	74.50	74.50	31-May-07	10:30:00 AM 10:36:40 AM	1.31	01-Jun-07	0.15	Sample Taken
30	75.50	75.50	31-May-07	10:14:00 AM 10:23:10 AM	1.81	01-Jun-07	0.07	
31	75.58	75.58	31-May-07	10:05:40 AM 10:12:50 AM	1.42	01-Jun-07	0.08	
32	75.83	75.83	31-May-07	9:54:20 AM 10:03:30 AM	1.81	01-Jun-07	0.03	
33	75.92	75.92	31-May-07	9:42:00 AM 9:53:00 AM	2.17	01-Jun-07	0.04	
34	75.92	75.92	31-May-07	9:31:30 AM 9:38:20 AM	1.35	01-Jun-07	0.00	

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA			PRIMARY SEALANT DATA					SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	GROUT Depth (ft)	Date	Start	Stop	GROUT (C.F.)	Date	C.F.			
35	75.92	75.92	31-May-07	9:20:50 AM	9:28:10 AM	1.45	01-Jun-07	0.02	Sample Taken		
36	76.00	76.00	31-May-07	8:56:30 AM	9:03:20 AM	1.35	01-Jun-07	0.03			
37	76.00	76.00	30-May-07	2:33:00 PM	2:39:10 PM	1.03	31-May-07	0.05	Flowrate: 1 gal = 47 seconds		
38	76.33	76.33	30-May-07	2:23:00 PM	2:31:45 PM	1.47	31-May-07	0.06			
39	75.50	75.50	30-May-07	2:14:30 PM	2:21:10 PM	1.12	31-May-07	0.06	Sample Taken		
40	75.00	75.00	30-May-07	2:06:10 PM	2:13:10 PM	1.17	31-May-07	0.06			
41	74.83	74.83	30-May-07	1:58:00 PM	2:05:10 PM	1.20	31-May-07	0.06			
42	74.58	74.58	30-May-07	1:50:00 PM	1:56:20 PM	1.06	31-May-07	0.03			
43	74.58	74.58	30-May-07	1:42:20 PM	1:49:00 PM	1.12	31-May-07	0.01			
44	74.67	74.67	30-May-07	1:38:40 PM	1:45:20 PM	1.12	31-May-07	0.05			
45	74.58	74.58	30-May-07	1:31:15 PM	1:37:10 PM	0.99	31-May-07	0.03	Sample Taken		
46	74.58	74.58	30-May-07	1:24:15 PM	1:30:30 PM	1.05	31-May-07	0.02	Flowrate: 1 gal = 50 seconds		
47	74.67	74.67	24-May-07	11:43:07 AM	11:50:30 AM	1.17	25-May-07	0.01			
48	74.75	75.75	24-May-07	11:13:15 AM	11:20:00 AM	1.06	25-May-07	0.00			
49	74.75	74.75	24-May-07	11:04:40 AM	11:10:50 AM	0.97	25-May-07	0.00			
50	74.75	74.75	24-May-07	10:56:30 AM	11:03:10 AM	1.05	25-May-07	0.00			
51	74.92	74.92	24-May-07	10:47:30 AM	10:55:40 AM	1.29	25-May-07	0.00			
52	74.92	74.92	24-May-07	10:25:00 AM	10:32:00 AM	1.10	25-May-07	0.00			
53	74.67	74.67	23-May-07	2:36:50 PM	2:42:00 PM	1.02	24-May-07	0.22	Flowrate: 1 gal = 40 seconds, Sample Taken		
54	74.67	74.67	23-May-07	2:30:30 PM	2:36:00 PM	1.08	24-May-07	0.26			
55	75.00	75.00	23-May-07	2:22:00 PM	2:29:30 PM	1.48	24-May-07	0.07			
56	75.00	75.00	23-May-07	2:06:50 PM	2:12:40 PM	1.15	24-May-07	0.05			
57	75.08	75.08	23-May-07	2:00:30 PM	2:06:00 PM	1.08	24-May-07	0.06			
58	75.08	75.08	23-May-07	1:53:50 PM	1:59:45 PM	1.17	24-May-07	0.05			
59	75.17	75.17	23-May-07	1:46:45 PM	1:53:00 PM	1.23	24-May-07	0.02	Sample Taken		
60	75.17	75.17	23-May-07	1:40:30 PM	1:46:00 PM	1.08	24-May-07	0.04			
61	74.92	74.92	23-May-07	9:38:45 AM	9:45:00 AM	1.23	24-May-07	0.02			
62	75.42	75.42	23-May-07	9:21:00 AM	9:26:10 AM	1.02	24-May-07	0.01			
63	75.33	75.33	23-May-07	9:46:00 AM	9:51:10 AM	1.02	24-May-07	0.14			
64	75.17	75.17	23-May-07	9:36:30 AM	9:42:25 AM	1.17	24-May-07	0.10			

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA		PRIMARY SEALANT DATA				SECONDARY DATA		Comments	
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Grout Time		Date	C.F.		
				Start	Stop				
						Grout (C.F.)			
65	75.33	75.33	23-May-07	9:29:30 AM	9:35:30 AM	1.18	24-May-07	0.00	Sample Taken
66	75.08	75.08	23-May-07	9:22:45 AM	9:28:30 AM	1.20	24-May-07	0.00	
67	75.00	75.00	23-May-07	9:15:00 AM	9:21:30 AM	1.28	24-May-07	0.00	
68	75.00	75.00	21-May-07	3:08:50 PM	3:15:40 PM	1.25	22-May-07	0.31	Flowrate: 1 gal = 43 seconds
69	75.17	75.17	21-May-07	3:00:00 PM	3:06:00 PM	1.10	22-May-07	0.31	
70	76.25	76.25	21-May-07	2:38:00 PM	2:56:40 PM	3.42	22-May-07	0.04	
71	76.83	76.83	21-May-07	2:36:00 PM	2:45:30 PM	1.74	22-May-07	0.27	
72	76.83	76.83	21-May-07	2:11:30 PM	2:33:10 PM	3.98	22-May-07	0.27	
73	77.08	77.08	21-May-07	2:05:00 PM	2:11:00 PM	1.10	22-May-07	0.27	Sample Taken
74	77.08	77.08	21-May-07	1:58:00 PM	2:03:45 PM	1.06	22-May-07	0.02	
75	77.08	77.08	21-May-07	1:51:30 PM	1:57:00 PM	1.01	22-May-07	0.05	
76	76.17	76.17	18-May-07	11:06:30 AM	11:12:30 AM	1.18	19-May-07	0.25	Flowrate: 1 gal = 40 seconds
77	76.17	76.17	18-May-07	11:00:00 AM	11:05:50 AM	1.15	19-May-07	0.26	
78	76.17	76.17	18-May-07	10:51:20 AM	10:58:35 AM	1.43	19-May-07	0.25	
79	76.00	73.00	18-May-07	10:42:33 AM	10:48:55 AM	1.26	19-May-07	0.07	Sample Taken
80	76.08	73.00	18-May-07	10:35:00 AM	10:40:15 AM	1.03	19-May-07	0.02	
81	76.58	76.58	14-May-07	10:24:00 AM	10:29:35 AM	1.10	16-May-07	0.00	
82	75.75	75.75	14-May-07	10:30:10 AM	10:35:50 AM	1.12	16-May-07	0.00	Sample Taken
83	75.75	75.75	14-May-07	10:36:40 AM	10:42:00 AM	1.05	16-May-07	0.00	
84	75.75	75.75	14-May-07	10:42:40 AM	10:48:00 AM	1.05	16-May-07	0.00	
85	75.75	75.75	14-May-07	10:48:25 AM	10:53:30 AM	1.00	16-May-07	0.00	Sample Taken
86	75.75	75.75	14-May-07	10:53:50 AM	10:59:00 AM	1.02	16-May-07	0.00	
87	75.75	75.75	14-May-07	10:59:45 AM	11:05:00 AM	1.03	16-May-07	0.00	
88	75.67	75.67	14-May-07	11:05:35 AM	11:12:15 AM	1.31	16-May-07	0.00	
89	75.67	72.00	16-May-07	4:48:30 PM	4:54:10 PM	1.12	17-May-07	0.00	
90	75.67	72.00	16-May-07	4:59:45 PM	4:45:30 PM	1.13	17-May-07	0.00	
91	75.67	75.67	14-May-07	11:15:30 AM	11:21:25 AM	1.17	16-May-07	0.31	
92	75.67	75.67	14-May-07	11:21:55 AM	11:28:05 AM	1.21	16-May-07	0.31	Sample Taken
93	75.92	73.90	14-May-07	11:28:40 AM	11:36:10 AM	1.48	16-May-07	0.11	
94	76.00	76.00	16-May-07	3:28:00 PM	3:34:20 PM	1.25	17-May-07	0.01	Sample Taken

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

Pile ID	SHEET PILE DATA		PRIMARY SEALANT DATA				SECONDARY DATA			Comments
	Sheet Length (ft)	Grout Depth (ft)	Date	Start	Stop	Grout (C.F.)	Date	C.F.		
95	76.33	74.00	16-May-07	2:59:30 PM	3:05:45 PM	1.23	17-May-07	0.12		
96	76.33	75.00	16-May-07	2:39:00 PM	2:44:50 PM	1.15	17-May-07	0.00		
97	76.75	73.00	16-May-07	1:58:20 PM	2:03:15 PM	0.97	17-May-07	0.01		
98	76.75	76.75	16-May-07	1:50:30 PM	1:57:40 PM	1.42	17-May-07	0.00		
99	77.00	75.00	16-May-07	11:30:50 AM	11:37:00 AM	1.21	17-May-07	0.06		
100	77.00	75.00	16-May-07	11:10:00 AM	11:16:15 AM	1.23	17-May-07	0.00		
101	77.00	75.00	16-May-07	10:14:00 AM	10:19:30 AM	1.08	17-May-07	0.02	Sample Taken	
102	76.92						17-May-07	0.00	Joint Welded for Sewer Penetration	
103	76.92	73.00	16-May-07	10:00:30 AM	10:06:20 AM	1.15	17-May-07	0.06		
104	74.00	74.00	16-May-07	9:52:45 AM	9:58:30 AM	1.13	17-May-07	0.00		
105	74.00	72.00	16-May-07	9:29:30 AM	9:36:20 AM	1.35	17-May-07	0.01		
106	74.17	73.00	16-May-07	9:23:00 AM	9:28:50 AM	1.15	17-May-07	0.02		
107	74.00	74.00	16-May-07	9:14:50 AM	9:20:20 AM	1.08	17-May-07	0.01		
108	74.00	74.00	15-May-07	4:44:00 PM	4:50:00 PM	1.18	16-May-07	0.02		
109	74.25	72.00	15-May-07	4:37:10 PM	4:43:00 PM	1.15	16-May-07	0.02		
110	73.75	73.75	15-May-07	4:30:15 PM	4:36:30 PM	1.23	16-May-07	0.01	Sample Taken	
111	73.75	72.00	12-May-07	10:42:20 AM	10:50:00 AM	1.12	14-May-07	0.06	Flowrate: 1 gal = 54 seconds	
112	73.75	70.00	12-May-07	10:34:30 AM	10:41:50 AM	1.07	14-May-07	0.02		
113	73.75	72.00	12-May-07	10:26:30 AM	10:34:00 AM	1.10	15-May-07	0.05		
114	73.75	72.00	11-May-07	11:53:15 AM	12:00:00 PM	0.99	14-May-07	0.05		
115	73.75	72.00	11-May-07	11:45:30 AM	11:52:50 AM	1.07	14-May-07	0.20		
116	73.75	72.00	11-May-07	11:37:20 AM	11:44:55 AM	1.11	14-May-07	0.00		
117	72.67	72.67	11-May-07	11:29:00 AM	11:36:45 AM	1.13	14-May-07	0.00		
118	72.50	72.50	11-May-07	11:20:40 AM	11:28:30 AM	1.15	14-May-07	0.05		
119	76.08	76.08	11-May-07	11:12:40 AM	11:20:05 AM	1.08	14-May-07	0.00		
120	75.92	75.00	11-May-07	11:04:35 AM	11:12:00 AM	1.08	14-May-07	0.00		
121	77.50	77.50	11-May-07	10:56:00 AM	11:04:00 AM	1.17	14-May-07	0.00		
122	77.25	73.00	11-May-07	10:48:20 AM	10:55:30 AM	1.05	14-May-07	0.00		
123	77.75	77.75	11-May-07	10:40:00 AM	10:47:45 AM	1.13	14-May-07	0.00		
124	77.67	73.00	11-May-07	10:32:00 AM	10:39:20 AM	1.07	14-May-07	0.00		

**PRIMARY GROUT LOG**  
 Bay Shore, Long Island, New York  
 Waterloo Barrier System

SHEET PILE DATA		PRIMARY SEALANT DATA				SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Grout Time Start Stop	Grout (C.F.)	Date	C.F.		
125	72.67	72.67	12-May-07	10:18:00 AM 10:26:00 AM	1.17	14-May-07	0.02		
126	72.67	72.67	12-May-07	10:10:00 AM 10:17:30 AM	1.10	14-May-07	0.06		
127	74.17	74.17	07-May-08	2:02:24 PM 2:22:25 PM	1.44	08-May-08	0.06	Flowrate: 1 gal = 110 seconds	
128	74.17	74.17	07-May-08	1:42:07 PM 2:02:06 PM	1.43	08-May-08	0.01	Sample Taken	
129	74.17	74.17	07-May-08	1:21:47 PM 1:41:50 PM	1.44	08-May-08	0.05		
130	74.17	74.17	07-May-08	1:01:10 PM 1:21:12 PM	1.44	08-May-08	0.01		
131	74.17	74.17	07-May-08	12:40:52 PM 1:00:50 PM	1.43	08-May-08	0.03		
132	74.17	74.17	07-May-08	12:20:47 PM 12:40:34 PM	1.42	08-May-08	0.02		
133	74.17					08-May-08	0.00	Male - Male Starting Sheet, No Joint to Grout	
134	75.00	74.00	07-May-08	12:00:04 PM 12:20:15 PM	1.45	08-May-08	0.03		
140	74.00	74.00	05-May-08	12:36:46 PM 12:46:49 PM	1.44	07-May-08	0.00		
141	74.00	74.00	05-May-08	12:05:53 PM 12:26:02 PM	1.44	07-May-08	0.00	Sample Taken	
142	73.00	73.00	05-May-08	11:45:38 AM 12:05:21 PM	1.42	07-May-08	0.00		
143	74.00	74.00	05-May-08	11:24:32 AM 11:44:34 AM	1.44	07-May-08	0.00		
144	74.00	74.00	05-May-08	11:03:33 AM 11:23:57 AM	1.46	07-May-08	0.00		
145	74.00	74.00	05-May-08	10:42:02 AM 11:02:30 AM	1.47	07-May-08	0.00		
146	72.29	72.29	05-May-08	10:21:07 AM 10:41:30 AM	1.46	07-May-08	0.00		
147	74.00	74.00	05-May-08	10:00:50 AM 10:20:47 AM	1.43	07-May-08	0.00	Sample Taken	
148	74.00	74.00	05-May-08	9:40:00 AM 10:00:25 AM	1.46	07-May-08	0.00		
149	74.00	74.00	05-May-08	9:16:30 AM 9:36:51 AM	1.46	07-May-08	0.00		
150	73.00	73.00	05-May-08	8:56:00 AM 9:16:02 AM	1.44	07-May-08	0.00		
151	73.21	73.21	30-Apr-08	2:38:27 PM 2:59:31 PM	2.22	05-May-08	0.03	Flowrate: 1 gal = 75 seconds	
152	74.00	74.00	30-Apr-08	2:23:40 PM 2:38:06 PM	1.52	05-May-08	0.01		
153	74.00	74.00	30-Apr-08	2:02:55 PM 2:23:07 PM	2.12	05-May-08	0.04		
154	74.00	74.00	30-Apr-08	1:48:10 PM 2:02:20 PM	1.49	05-May-08	0.05		
155	74.00	74.00	30-Apr-08	1:32:50 PM 1:47:01 PM	1.49	05-May-08	0.04		
156	74.00	74.00	30-Apr-08	1:18:05 PM 1:32:10 PM	1.48	05-May-08	0.03		
157	74.00	74.00	30-Apr-08	1:03:20 PM 1:17:52 PM	1.49	05-May-08	0.03	Sample Taken	
158	74.00	74.00	30-Apr-08	12:42:31 PM 1:02:50 PM	2.14	05-May-08	0.02		
159	74.00	74.00	30-Apr-08	12:28:06 PM 12:42:09 PM	1.48	05-May-08	0.02		

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA		PRIMARY SEALANT DATA				SECONDARY DATA		Comments	
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Grout Time Start Stop	Grout (C.F.)	Date	C.F.		
160	74.00	74.00	30-Apr-08	12:09:57 PM	12:27:34 PM	1.85	05-May-08	0.05	
161	74.00	74.00	30-Apr-08	11:55:30 AM	12:09:26 PM	1.46	05-May-08	0.03	
162	74.00	74.00	30-Apr-08	11:41:00 AM	11:55:02 AM	1.48	05-May-08	0.02	
163	74.00	74.00	12-Sep-07	12:12:30 PM	12:22:00 PM	1.36	13-Sep-07	0.00	Flowrate: 1 gal = 55 seconds
164	74.00	74.00	12-Sep-07	12:02:30 PM	12:11:50 PM	1.34	13-Sep-07	0.04	
165	74.00	74.00	12-Sep-07	11:54:30 AM	12:02:00 PM	1.08	13-Sep-07	0.01	
166	74.00	74.00	12-Sep-07	11:44:00 AM	11:54:00 AM	1.44	13-Sep-07	0.03	Sample Taken
167	74.00	74.00	12-Sep-07	11:30:00 AM	11:39:30 AM	1.36	13-Sep-07	0.03	
168	74.00	74.00	12-Sep-07	11:19:30 AM	11:28:00 AM	1.22	13-Sep-07	0.02	
169	74.00	74.00	12-Sep-07	11:11:30 AM	11:18:50 AM	1.05	13-Sep-07	0.04	
170	74.00	74.00	12-Sep-07	11:03:10 AM	11:11:00 AM	1.12	13-Sep-07	0.15	
171	74.00	74.00	12-Sep-07	10:55:30 AM	11:02:40 AM	1.03	13-Sep-07	0.17	Cylinder Test Done
172	74.00	74.00	12-Sep-07	10:47:30 AM	10:54:50 AM	1.05	13-Sep-07	0.01	Sample Taken
173	74.00	74.00	12-Sep-07	10:39:30 AM	10:46:50 AM	1.05	13-Sep-07	0.03	
174	74.00	74.00	12-Sep-07	10:31:00 AM	10:38:40 AM	1.10	13-Sep-07	0.02	
175	73.00	73.00	12-Sep-07	10:20:00 AM	10:29:30 AM	1.36	13-Sep-07	0.01	
176	74.00	74.00	12-Sep-07	10:04:00 AM	10:16:00 AM	1.72	13-Sep-07	0.02	
177	72.83	72.83	11-Sep-07	1:23:00 PM	1:32:00 PM	1.65	12-Sep-07	0.08	Flowrate: 1 gal = 43 seconds
178	74.00	74.00	11-Sep-07	1:15:30 PM	1:22:10 PM	1.22	12-Sep-07	0.04	Sample Taken
179	74.00	74.00	11-Sep-07	1:02:10 PM	1:14:50 PM	2.32	12-Sep-07	0.07	
180	74.00	74.00	11-Sep-07	12:50:20 PM	1:01:00 PM	1.96	12-Sep-07	0.10	
181	74.00	74.00	11-Sep-07	12:00:30 PM	12:15:30 PM	2.75	12-Sep-07	0.09	
182	74.00	74.00	11-Sep-07	11:53:30 AM	12:00:00 PM	1.19	12-Sep-07	0.04	
183	74.00	74.00	11-Sep-07	11:45:30 AM	11:53:00 AM	1.37	12-Sep-07	0.02	
184	73.17	73.17	11-Sep-07	11:38:30 AM	11:45:00 AM	1.19	12-Sep-07	0.04	Sample Taken
185	74.00	74.00	11-Sep-07	11:27:00 AM	11:36:00 AM	1.65	12-Sep-07	0.02	
186	74.00	74.00	11-Sep-07	11:21:00 AM	11:26:30 AM	1.01	12-Sep-07	0.05	
187	75.00	75.00	11-Sep-07	11:12:00 AM	11:20:00 AM	1.47	12-Sep-07	0.01	
188	75.00	75.00	11-Sep-07	11:03:30 AM	11:11:10 AM	1.41	12-Sep-07	0.02	
189	75.00	75.00	11-Sep-07	10:57:00 AM	11:03:00 AM	1.10	12-Sep-07	0.06	

**PRIMARY GROUT LOG**  
 Bay Shore, Long Island, New York  
 Waterloo Barrier System

SHEET PILE DATA			PRIMARY SEALANT DATA				SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	GROUT Depth (ft)	Date	Start	Stop	GROUT (C.F.)	Date	C.F.		
190	75.00	75.00	11-Sep-07	10:51:30 AM	10:56:45 AM	0.96	12-Sep-07	0.02	Sample Taken	
191	75.00	75.00	11-Sep-07	10:44:20 AM	10:51:00 AM	1.22	12-Sep-07	0.05		
192	75.00	75.00	11-Sep-07	10:38:00 AM	10:44:00 AM	1.10	12-Sep-07	0.03		
193	75.00	75.00	11-Sep-07	10:29:10 AM	10:37:00 AM	1.44	12-Sep-07	0.03		
194	75.00	75.00	10-Sep-07	2:02:00 PM	2:08:30 PM	1.19	11-Sep-07	0.02		
195	75.00	75.00	10-Sep-07	1:55:00 PM	2:00:50 PM	1.07	11-Sep-07	0.01		
196	75.00	75.00	10-Sep-07	1:48:00 PM	1:54:05 PM	1.12	11-Sep-07	0.02	Sample Taken	
197	75.00	75.00	10-Sep-07	1:39:30 PM	1:46:00 PM	1.19	11-Sep-07	0.02		
198	75.00	75.00	10-Sep-07	1:28:30 PM	1:36:00 PM	1.37	11-Sep-07	0.05		
199	75.00	75.00	10-Sep-07	1:18:30 PM	1:25:00 PM	1.19	11-Sep-07	0.05		
200	75.00	75.00	10-Sep-07	11:34:50 AM	11:42:30 AM	1.41	11-Sep-07	0.01		
201	75.00	75.00	10-Sep-07	11:25:10 AM	11:33:50 AM	1.59	11-Sep-07	0.04		
202	75.00	75.00	10-Sep-07	11:18:00 AM	11:24:30 AM	1.19	11-Sep-07	0.00	Sample Taken	
203	75.00	75.00	10-Sep-07	11:10:30 AM	11:17:00 AM	1.19	11-Sep-07	0.02		
204	75.00	75.00	10-Sep-07	11:03:40 AM	11:09:00 AM	0.98	11-Sep-07	0.01		
205	75.00	75.00	10-Sep-07	10:52:10 AM	11:03:00 AM	1.99	11-Sep-07	0.03		
206	75.00	75.00	10-Sep-07	10:41:20 AM	10:50:00 AM	1.59	11-Sep-07	0.02		
207	75.00	75.00	10-Sep-07	10:21:00 AM	10:28:00 AM	1.28	11-Sep-07	0.02		
208	75.00	75.00	10-Sep-07	10:13:50 AM	10:20:30 AM	1.22	11-Sep-07	0.02		
209	75.00	75.00	10-Sep-07	10:06:00 AM	10:12:45 AM	1.24	11-Sep-07	0.02	Sample Taken	
210	75.00	75.00	07-Sep-07	12:59:30 PM	1:07:40 PM	1.43	10-Sep-07	0.13	Flowrate: 1 gal = 45 seconds	
211	75.00	75.00	07-Sep-07	12:51:00 PM	12:59:00 PM	1.40	10-Sep-07	0.06		
212	75.00	75.00	07-Sep-07	12:29:30 PM	12:37:00 PM	1.31	10-Sep-07	0.01		
213	75.00	75.00	07-Sep-07	11:45:30 AM	11:53:30 AM	1.40	10-Sep-07	0.01		
214	75.00	75.00	07-Sep-07	11:36:00 AM	11:44:00 AM	1.40	10-Sep-07	0.06	Sample Taken	
215	75.00	75.00	07-Sep-07	11:21:00 AM	11:35:30 AM	2.54	10-Sep-07	0.02		
216	75.00	75.00	07-Sep-07	11:11:00 AM	11:20:00 AM	1.58	10-Sep-07	0.02		
217	75.00	75.00	07-Sep-07	11:03:25 AM	11:10:20 AM	1.21	10-Sep-07	0.02		
218	75.00	75.00	07-Sep-07	10:56:50 AM	11:03:00 AM	1.08	10-Sep-07	0.02		
219	75.00	75.00	07-Sep-07	10:50:10 AM	10:56:30 AM	1.11	10-Sep-07	0.01		



**PRIMARY GROUT LOG**  
 Bay Shore, Long Island, New York  
 Waterloo Barrier System

SHEET PILE DATA			PRIMARY SEALANT DATA				SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	GROUT Depth (ft)	Date	Start	Stop	GROUT (C.F.)	Date	C.F.		
220	75.00	75.00	07-Sep-07	10:43:50 AM	10:49:50 AM	1.05	10-Sep-07	0.04	Sample Taken	
221	75.00	75.00	07-Sep-07	10:37:20 AM	10:43:30 AM	1.08	10-Sep-07	0.02		
222	75.00	75.00	07-Sep-07	10:27:30 AM	10:37:00 AM	1.66	10-Sep-07	0.01		
223	74.58						10-Sep-07	0.00	Male - Male Starting Sheet, No Joint to Grout	
224	75.00	75.00	07-Sep-07	10:14:10 AM	10:27:00 AM	2.25	10-Sep-07	0.01		
225	74.00	74.00	20-Aug-07	1:13:20 PM	1:20:10 PM	1.12	23-Aug-07	0.04	Flowrate: 1 gal = 48 seconds	
226	74.00	74.00	20-Aug-07	1:03:15 PM	1:12:30 PM	1.52	23-Aug-07	0.06	Sample Taken	
227	74.00	74.00	20-Aug-07	12:56:00 PM	1:02:25 PM	1.06	23-Aug-07	0.02		
228	74.00	74.00	20-Aug-07	12:49:45 PM	12:55:30 PM	0.94	23-Aug-07	0.02		
229	74.00	74.00	20-Aug-07	12:39:20 PM	12:48:30 PM	1.51	23-Aug-07	0.02		
230	74.00	74.00	20-Aug-07	12:31:00 PM	12:38:40 PM	1.26	23-Aug-07	0.02		
231	74.00	74.00	20-Aug-07	12:19:00 PM	12:25:45 PM	1.11	23-Aug-07	0.02		
232	74.00	74.00	20-Aug-07	12:10:10 PM	12:18:30 PM	1.37	23-Aug-07	0.02	Sample Taken	
233	74.00	74.00	20-Aug-07	12:02:00 PM	12:09:30 PM	1.23	23-Aug-07	0.01		
234	74.00	74.00	20-Aug-07	11:51:30 AM	12:01:00 PM	1.56	23-Aug-07	0.01		
235	74.00	74.00	20-Aug-07	11:29:30 AM	11:36:00 AM	1.07	23-Aug-07	0.02		
236	73.50	73.50	20-Aug-07	11:22:40 AM	11:29:00 AM	1.04	23-Aug-07	0.02		
237	74.00	74.00	20-Aug-07	11:14:50 AM	11:22:00 AM	1.18	23-Aug-07	0.02		
238	74.00	74.00	20-Aug-07	11:06:00 AM	11:14:00 AM	1.31	23-Aug-07	0.02	Sample Taken	
239	74.00	74.00	20-Aug-07	10:58:00 AM	11:05:10 AM	1.18	23-Aug-07	0.02		
240	74.00	74.00	20-Aug-07	10:51:00 AM	10:57:30 AM	1.07	23-Aug-07	0.03		
241	74.00	74.00	20-Aug-07	10:44:30 AM	10:50:30 AM	0.99	23-Aug-07	0.02		
242	74.00	74.00	20-Aug-07	10:38:30 AM	10:44:15 AM	0.94	23-Aug-07	0.03		
243	74.00	74.00	20-Aug-07	10:32:00 AM	10:38:00 AM	0.99	23-Aug-07	0.04		
244	74.00	74.00	20-Aug-07	10:24:00 AM	10:31:30 AM	1.23	23-Aug-07	0.01	Sample Taken	
245	74.00	74.00	20-Aug-07	10:10:00 AM	10:18:30 AM	1.40	23-Aug-07	0.01		
246	74.00	74.00	20-Aug-07	10:03:10 AM	10:09:30 AM	1.04	23-Aug-07	0.01		
247	74.00	74.00	17-Aug-07	12:58:30 PM	1:03:30 PM	1.13	20-Aug-07	0.06	Flowrate: 1 gal = 35 seconds	
248	74.00	74.00	17-Aug-07	12:42:30 PM	12:48:30 PM	1.35	20-Aug-07	0.05		
249	74.00	74.00	17-Aug-07	12:36:00 PM	12:41:30 PM	1.24	20-Aug-07	0.04		

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA			PRIMARY SEALANT DATA				SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Start	Stop	Grout (C.F.)	Date	C.F.		
250	74.00	74.00	17-Aug-07	12:30:30 PM	12:35:50 PM	1.20	20-Aug-07	0.07	Sample Taken	
251	74.00	74.00	17-Aug-07	12:24:30 PM	12:30:00 PM	1.24	20-Aug-07	0.05		
252	74.00	74.00	17-Aug-07	12:17:30 PM	12:23:30 PM	1.35	20-Aug-07	0.07		
253	74.00	74.00	17-Aug-07	12:12:00 PM	12:17:00 PM	1.13	20-Aug-07	0.07		
254	74.00	74.00	17-Aug-07	12:06:00 PM	12:11:00 PM	1.13	20-Aug-07	0.06		
255	74.00	74.00	17-Aug-07	11:59:00 AM	12:05:00 PM	1.35	20-Aug-07	0.09		
256	74.00	74.00	17-Aug-07	11:53:45 AM	11:58:30 AM	1.07	20-Aug-07	0.05	Sample Taken	
257	74.00	74.00	17-Aug-07	11:41:30 AM	11:47:00 AM	1.24	20-Aug-07	0.03		
258	74.00	74.00	17-Aug-07	11:25:00 AM	11:31:00 AM	1.35	20-Aug-07	0.08		
259	74.00	74.00	17-Aug-07	10:58:00 AM	11:09:00 AM	2.02	20-Aug-07	0.02	Flowrate: 1 gal = 43 seconds	
260	74.00	74.00	17-Aug-07	10:44:36 AM	10:52:00 AM	1.36	20-Aug-07	0.03		
261	74.00	74.00	17-Aug-07	10:36:20 AM	10:43:00 AM	1.22	20-Aug-07	0.00		
262	74.00	74.00	17-Aug-07	10:26:30 AM	10:34:00 AM	1.37	20-Aug-07	0.01		
263	74.00	74.00	17-Aug-07	10:19:00 AM	10:26:00 AM	1.28	20-Aug-07	0.00	Sample Taken, Cylinder Test Done	
264	74.00	74.00	17-Aug-07	10:12:30 AM	10:18:30 AM	1.10	20-Aug-07	0.01		
265	74.00	74.00	17-Aug-07	10:06:00 AM	10:12:00 AM	1.10	20-Aug-07	0.01		
266	74.00	74.00	17-Aug-07	9:58:30 AM	10:05:30 AM	1.28	20-Aug-07	0.04		
267	74.00	74.00	17-Aug-07	9:48:20 AM	9:57:20 AM	1.65	20-Aug-07	0.01		
268	74.00	74.00	17-Aug-07	9:41:30 AM	9:47:25 AM	1.08	20-Aug-07	0.01		
269	74.00	74.00	17-Aug-07	8:52:40 AM	9:01:10 AM	1.56	20-Aug-07	0.00	Sample Taken	
270	74.00	74.00	17-Aug-07	8:43:00 AM	8:51:30 AM	1.56	20-Aug-07	0.00		
271	74.00	74.00	16-Aug-07	2:38:00 PM	2:44:10 PM	1.16	17-Aug-07	0.11	Flowrate: 1 gal = 42 seconds	
272	74.00	74.00	16-Aug-07	2:32:00 PM	2:37:20 PM	1.00	17-Aug-07	0.07		
273	74.00	74.00	16-Aug-07	2:26:10 PM	2:31:30 PM	1.00	17-Aug-07	0.04		
274	74.00	74.00	16-Aug-07	2:20:10 PM	2:25:40 PM	1.03	17-Aug-07	0.12		
275	74.00	74.00	16-Aug-07	2:14:10 PM	2:19:45 PM	1.05	17-Aug-07	0.00		
276	74.00	74.00	16-Aug-07	2:08:50 PM	2:13:50 PM	0.94	17-Aug-07	0.07	Sample Taken	
277	74.00	74.00	16-Aug-07	2:03:30 PM	2:08:30 PM	0.94	17-Aug-07	0.06		
278	74.00	74.00	16-Aug-07	1:58:10 PM	2:03:10 PM	0.94	17-Aug-07	0.05		
279	74.00	74.00	16-Aug-07	1:52:45 PM	1:57:50 PM	0.95	17-Aug-07	0.06		

**PRIMARY GROUT LOG**

Bay Shore, Long Island, New York  
Waterloo Barrier System

SHEET PILE DATA			PRIMARY SEALANT DATA				SECONDARY DATA			Comments
Pile ID	Sheet Length (ft)	Grout Depth (ft)	Date	Start	Stop	Grout (C.F.)	Date	C.F.		
280	74.00	74.00	16-Aug-07	1:47:10 PM	1:52:30 PM	1.00	17-Aug-07	0.04		
281	74.00	74.00	16-Aug-07	1:40:10 PM	1:46:35 PM	1.21	17-Aug-07	0.03	Sample Taken	
282	74.00	74.00	16-Aug-07	1:31:40 PM	1:38:40 PM	1.31	17-Aug-07	0.05		
283	74.00	74.00	16-Aug-07	1:23:30 PM	1:30:30 PM	1.31	17-Aug-07	0.02		
284	74.00	74.00	15-Aug-07	1:14:10 PM	1:28:30 PM	2.51	16-Aug-07	0.05	Flowrate: 1 gal = 45 seconds	
285	74.00	74.00	15-Aug-07	12:55:10 PM	1:12:45 PM	3.08	16-Aug-07	0.05		
286	74.00	74.00	15-Aug-07	12:46:00 PM	12:52:30 PM	1.14	16-Aug-07	0.04		
287	74.00	74.00	15-Aug-07	12:38:10 PM	12:45:00 PM	1.20	16-Aug-07	0.03	Sample Taken	
288	72.08	72.08	15-Aug-07	12:25:20 PM	12:31:00 PM	0.99	16-Aug-07	0.03		
289	71.75	71.75	15-Aug-07	12:16:30 PM	12:24:40 PM	1.43	16-Aug-07	0.04		
290	72.58	72.58	15-Aug-07	12:04:30 PM	12:12:00 PM	1.31	16-Aug-07	0.02		
291	72.42	72.42	15-Aug-07	11:40:30 AM	11:46:40 AM	1.08	16-Aug-07	0.02		
292	72.58	72.58	15-Aug-07	11:33:00 AM	11:39:00 AM	1.05	16-Aug-07	0.01	Sample Taken	
293	72.50	72.50	15-Aug-07	11:26:30 AM	11:32:00 AM	0.97	16-Aug-07	0.01		
294	72.17	72.17	15-Aug-07	11:19:10 AM	11:25:15 AM	1.07	16-Aug-07	0.03		
295	71.92	71.92	15-Aug-07	11:12:00 AM	11:18:10 AM	1.08	16-Aug-07	0.04		
296	71.25	71.25	15-Aug-07	11:05:00 AM	11:11:00 AM	1.05	16-Aug-07	0.03		
297	72.75	72.75	15-Aug-07	10:53:10 AM	11:02:10 AM	1.58	16-Aug-07	0.02		
298	72.08	72.08	15-Aug-07	10:46:00 AM	10:52:10 AM	1.08	16-Aug-07	0.03		
299	72.67	72.67	15-Aug-07	10:34:00 AM	10:45:00 AM	1.93	16-Aug-07	0.01	Sample Taken	
300	72.33	72.33	15-Aug-07	10:13:20 AM	10:21:40 AM	1.46	16-Aug-07	0.01		
301	67.92	67.92	15-Aug-07	10:03:30 AM	10:11:30 AM	1.40	16-Aug-07	0.00		