



Managed by Brookhaven Science Associates  
for the U.S. Department of Energy

July 10, 2006

Ms. Kathleen Newcomer  
Suffolk County Department of Health Services  
Office of Water Resources  
Bureau of Drinking Water  
Suite 1C  
360 Yaphank Avenue  
Yaphank, New York 11980

Dear Ms. Kathleen Newcomer:

**Subject: Monthly Water Treatment Plant Reports**  
**Reference: Suffolk County Minimum Monitoring Requirements for June 2006**

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2006 SCDHS Minimum Monitoring Requirements for the BNL Potable Water Supply, included please find the following attachments for your records:

- Attachment I: BNL Potable Water Monthly Operational Data for June 2006.
- Attachment II: June 2006 Biweekly Water Quality Monitoring Data for the BNL Distribution System and Potable Water Wells.
- Attachment III: June 2006 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data and Bacteriological Analyses for the BNL Distribution System.

Review of Attachment I shows that a positive total coliform analysis was reported during routine sampling. Repeat analysis of 4 locations could not confirm the original result. All E. coli analyses were negative.


Collection and analysis of these samples is performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water Supply Monitoring Requirements, and the BNL Potable Water System Sampling Plan. Plant Engineering Division personnel using standard operating procedures collect routine monitoring samples; a contractor laboratory using standard methods of analysis performs the subsequent analyses. The Quality Assurance documentation is available from the Environmental and Waste Management Services Division and Plant Engineering



Divisions. Based on this information, we believe the values contained in these reports are representative of the BNL potable water system.

Should there be any questions regarding this report or the analytical or operational data contained herein, please call either J. Higbie at (631) 344-5919, R. Lee at (631) 344-3148, or W. Chaloupka at (631) 344-7136.

Sincerely,



George A. Goode  
Environmental & Waste Management Services  
Division Manager

GAG/JB:car

Attachments: As noted

cc:	L. Ambroszkiewicz, SCDHS	w/attachments
	W. Chaloupka	w/attachments
	J. Granzen	w/attachments
	G. Goode	w/o attachments
	J. Higbie	w/attachments
	R. Lee	w/attachments
	E. Murphy	w/attachments
	P. Ponturo, SCDHS	w/o attachments
	L. Ross	w/o attachments
	J. Tarpinian	w/o attachments

File: EC61ER.06

**ATTACHMENT I**

**Brookhaven National Laboratory**

**Potable Water Supply**

**Monthly Operational Data for June 2006**

**for the BNL Potable Water System**

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
Brookhaven National Laboratory	05/2006	5/4/2006	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID	County	Town, Village, or City	<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination
5111891	Suffolk	Upton, New York 11973	

DATE	Source(s) in Use Well(s) No.:	Treated water volume (1,000 gallons/day)	Chlorination			Other Treatments / Readings				Daily Totalizer
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l) (WTF-624)	Hypochlorite used/day (WTF - 624)	pH Lime Softening (WTF-624)	pH (Incoming RAW Water)	
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					200					386,960
1	6+7	1,353	NA		185	.8	15	7.5	6.1	388,313
2	6+7	1,340	NA		178	.79	7	7.7	6.1	389,653
3		-								
4		-								
5	6+7	3,908	NA		160	.65	18	7.5	6.0	393,561
6	6+7	1,199	NA		145	1.0	15	7.7	6.1	394,760
7	6+7	1,429	NA		130	.9	15	7.6	6.1	396,189
8	6+7	1,421	NA		115	1.0	15	7.6	6.1	397,610
9	6+7	1,442	NA		100	1.1	15	7.5	6.0	399,052
10		-								
11		-								
12	6+7	3,872	NA		60	.63	40	7.5	6.1	402,924
13	6+7	1,450	NA		40	.68	20	7.5	6.1	404,374
14	6+7	1,438	NA		30	.99	10	7.5	6.0	405,812
15	6+7	1,534	NA		15+175	.86	15	7.5	6.0	407,346
16	6+7	1,345	NA		180	.60	20	7.5	6.1	408,691
17		-								
18		-								
19	6+7	4,189	N/A		190	1	25	7.6	6.1	412,880
20	6+7	1,558	NA		180	1.2	10	7.3	6.0	414,438
21	6+7	1,473	N/A		160	.93	20	7.4	6.1	415,911
22	6+7	1,477	NA		145	.90	15	7.5	6.0	417,388
23	6+7	1,415	N/A		132	.9	13	7.4	6.1	418,803
24		-								
25		-								
26	6+7	4,388	NA		85	.97	47	7.3	6.0	423,191
27	6+7	1,480	NA		70	.79	15	7.6	6.1	424,671
28	6+7	1,223	NA		55	.90	15	7.5	6.0	425,894
29	6+7	1,287	NA		40	.92	15	7.5	5.9	427,181
30	6+7	1,183	NA		30+170	1.0	10	7.6	6.1	428,364
31		-								
Total		41,404	DAY							
AVG.		1,335.61								

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941  
Signature: [Signature] Date: 7-6-06 Operator Grade Level 1A-SW/GUI

# Microbiological Samples and Free Chlorine Residual

Building Location (Sample ID)	Date of Sample	Sample Type 1. Routine 2. Repeat	Total Coliform Positive	E. coli Positive	Free Chlorine Residual (mg/l)	Population Served: <u>3,500</u>
B-49 Water Tower (094-273)	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.77	Number of microbiological monitoring samples required: <u>4</u>
B640Water Tower 076-408	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.75	Number of microbiological monitoring samples taken: <u>12</u>
B-1005-RHIC 045-12	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.3	Did an M&R violation occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B-363 Aprt. Laundry 109-19	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.7	If "Yes," check reason (s) below: Actual number of samples is fewer than required. Did not collect/analyze repeat sample. Did not collect/analyze for E. coli for positive total coliform from routine/repeat sample.
B-725 NSLS 075-602	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.7	Did an MCL violation occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B-490-BLOCK-1ACF 084-69	6/15/2006	1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.5	If "Yes," check reason(s) below (see also Part 5, Table 6 for additional information). For systems collecting less than 40 samples per month: two or more of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).
B-490-BLOCK 4-MRC 084-68	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.4	For systems collecting 40 or more samples per month: more than 5% of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).
Field DUPLICATE Bldg. 725 075-602	6/15/2006	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.74	The original sample was E.coli positive and at least 1 repeat sample was positive for total coliform (= E.coli MCL violation)
B-490-BLOCK 1-ACF 084-69	6/16/2006	2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.6	
B-725 NSLS 075-602	6/16/2006	2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.3	
B-363 Aprt. Laundry 109-19	6/16/2006	2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.8	
B-49 Water Tower (094-273)	6/16/2006	2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.8	Reminder: System must collect a minimum of five (5) routine microbiological monitoring samples during the month following a repeat sample collection.
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Sample Collector(s): (Name)

Name of NYSDOH Certified Laboratory: H2M Labs 575 Broad Hollow Road; Melville, N.Y. 11747

Did any MCL violation occur? If so, please describe: No

Did an emergency or low pressure problem occur? Did source water bypass an existing treatment process in the system? If so, please explain.

No

Comments: \_\_\_\_\_

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
Brookhaven National Laboratory	DATE	DATE	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GUDI
Public Water System ID	County	Town, Village, or City	<input type="checkbox"/> Purchase with subsequent chlorination
5111891	Suffolk	Upton, New York 11973	<input type="checkbox"/> Purchase w/out subsequent chlorination

DATE	Source(s) in Use Well No.: 4	Treated water volume (1,000 gallons/day)	Chlorination				Free chlorine residual at entry point (mg/l) (WTF-raw)	Hypochlorite used/day	Other Treatments / Readings	Daily Totalizer
			Gaseous		Liquid					
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons)	Hypochlorite in Tank				
1		-	NA		0				1,648,622	
2		-	NA		0				1,648,622	
3		-								
4		-								
5		-	NA		0				1,648,622	
6		-	NA		0				1,648,622	
7		-	NA		0				1,648,622	
8		-	NA		0				1,648,622	
9		-	NA		0				1,648,622	
10		-								
11		-								
12		-	NA		0				1,648,622	
13		-	NA		0				1,648,622	
14		-	NA		0				1,648,622	
15		-	NA		0				1,648,622	
16		-	NA		0				1,648,622	
17		-								
18		-								
19		-	NA		0				1,648,622	
20		-	NA		0				1,648,622	
21		-	NA		0				1,648,622	
22		-	NA		0				1,648,622	
23		-	NA		0				1,648,622	
24		-								
25		-								
26		-	NA		0				1,648,622	
27		-	NA		0				1,648,622	
28		-	NA		0				1,648,622	
29		-	NA		0				1,648,622	
30		-	NA		0				1,648,622	
31		-								
Total		-	Days	30						
AVG.		-								

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941

Signature: *Lowell Ross* Date: 7-6-06 Operator Grade Level 1A-SW/GUI

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
Brookhaven National Laboratory	DATE	DATE	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID	County	Town, Village, or City	<input type="checkbox"/> Purchase with subsequent chlorination
5111891	Suffolk	Upton, New York 11973	<input type="checkbox"/> Purchase w/out subsequent chlorination

DATE	Source(s) in Use Well No.: 6	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			Daily Totalizer
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l) (WTF-RAW)	Hypochlorite used/day			
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					150					642,488
1	6	544	NA		135	0.15	15			643,032
2	6	615	NA		122	0.07	13			643,647
3		-								
4		-								
5	6	934	NA		60	0.20	62			644,581
6	6	254	NA		48	0.18	12			644,835
7	6	299	NA		42+108	0.13	6			645,134
8	6	266	NA		147	0.30	3			645,400
9	6	392	NA		147	0.13				645,792
10		-								
11		-								
12	6	1,302	NA		120	0.09	27			647,094
13	6	329	NA		120	0.10				647,423
14	6	147	NA		120	0.11				647,570
15	6	175	NA		114+36	0.12	6			647,745
16	6	464	NA		138	0.11	12			648,209
17		-								
18		-								
19	6	1,724	NA		93	0.10	45			649,933
20	6	649	NA		75	0.04	18			650,582
21	6	462	NA		69+72	0.10	6			651,044
22	6	288	NA		132	0.04	9			651,332
23	6	412	NA		123+27	0.10	9			651,744
24		-								
25		-								
26	6	228	NA		144	0.01	6			651,972
27	6	-	NA		141	0.01	3			651,972
28	6	-	NA		141	0.01				651,972
29	6	89	NA		141	0.02				652,061
30	6	-	NA		141	0.03				652,061
31										
<b>Total</b>		<b>9,573</b>	<b>Days</b>	<b>30</b>			<b>252</b>			
<b>AVG.</b>		<b>319.10</b>				<b>0.097727273</b>	<b>8.4</b>			

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941  
Signature: [Signature] Date: 7-6-00 Operator Grade Level: 1A-SW/GUI

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
Brookhaven National Laboratory	DATE	DATE	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID	County	Town, Village, or City	<input type="checkbox"/> Purchase with subsequent chlorination
5111891	Suffolk	Upton, New York 11973	<input type="checkbox"/> Purchase w/out subsequent chlorination

DATE	Source(s) in Use Well No.: 7	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings		Daily Totalizer
			Gaseous		Liquid		Hypochlorite used/day		
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)	Free chlorine residual at entry point (mg/l) (WTF-RAW)			
					150			1,997,933	
1	7	1,536	NA		138	0.15	12	1,999,469	
2	7	1,418	NA		120	0.07	18	2,000,887	
3		-							
4		-							
5	7	4,199	NA		70	0.20	50	2,005,086	
6	7	1,242	NA		51	0.02	19	2,006,328	
7	7	1,523	NA		36+114	0.13	15	2,007,851	
8	7	1,508	NA		135	0.30	15	2,009,359	
9	7	1,447	NA		117+33	0.13	18	2,010,806	
10		-							
11		-							
12	7	4,232	NA		105	0.09	45	2,015,038	
13	7	1,564			78	0.01	27	2,016,602	
14	7	1,491	NA		60	0.11	18	2,018,093	
15	7	1,599	NA		42+108	0.12	18	2,019,692	
16	7	1,406	NA		135	0.11	15	2,021,098	
17		-							
18		-							
19	7	4,497			90	0.10	45	2,025,595	
20	7	1,499	NA		60	0.04	30	2,027,094	
21	7	1,463	NA		36+114	0.10	24	2,028,557	
22	7	1,495	NA		135	0.04	15	2,030,052	
23	7	1,597	NA		117+33	0.10	18	2,031,649	
24		-							
25		-							
26	7	4,728	NA		99	0.01	101	2,036,377	
27	7	1,554	NA		81	0.01	18	2,037,931	
28	7	1,329	NA		63	0.01	18	2,039,260	
29	7	1,352	NA		47	0.02	16	2,040,612	
30	7	1,284	NA		36+114	0.03	11	2,041,896	
31									
<b>Total</b>		<b>43,963</b>	<b>Days</b>	<b>30</b>			<b>566</b>		
<b>AVG.</b>		<b>1465.43333</b>				<b>0.086272727</b>	<b>18.86666667</b>		

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941

Signature: *Lowell Ross* Date: 7-6-06 Operator Grade Level: 1A-SW/GUI



Public Water System Name Brookhaven National Laboratory	Reporting Month/Year DATE	Date Report Submitted DATE	Source Water Type(s) <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID 5111891	County Suffolk	Town, Village, or City Upton, New York 11973	<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination

DATE	Source(s) in Use Well No.: 10	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			Daily Totalizer
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	pH Sodium Hydroxide		
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					0				772,135	
1					0				772,135	
2		-			0				772,135	
3		-								
4		-								
5		-			0				772,135	
6		-			0				772,135	
7		-			0				772,135	
8		-			0				772,135	
9		-			0				772,135	
10		-								
11		-								
12		-			0				772,135	
13		-			0				772,135	
14		-			0				772,135	
15		78			0				772,213	
16		-			0				772,213	
17		-								
18		-								
19		-			0				772,213	
20		-			0				772,213	
21		-			0				772,213	
22		-			0				772,213	
23		-			0				772,213	
24		-								
25		-								
26		-			0				772,213	
27		-			0				772,213	
28		-			0				772,213	
29		-			0				772,213	
30		-			0				772,213	
31		-								
<b>Total</b>		78	Days	30						
<b>AVG.</b>		2.6								

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941

Signature: *Lowell Ross* Date: 7-6-06 Operator Grade Level 1A-SW/GUI

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
Brookhaven National Laboratory	DATE	DATE	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID	County	Town, Village, or City	<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination
5111891	Suffolk	Upton, New York 11973	

DATE	Source(s) in Use Well No.: 11	Treated water volume (1,000 gallons/day)	Chlorination				Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	pH Sodium Hydroxide	Daily Totalizer
			Gaseous		Liquid					
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					45				722,862	
1			NA		45				722,862	
2		-	NA		45				722,862	
3		-								
4		-	NA							
5		-	NA		45				722,862	
6		-	NA		45				722,862	
7		-	NA		45				722,862	
8		-	NA		45				722,862	
9		-	NA		45				722,862	
10		-								
11		-								
12		-	NA		45				722,862	
13		-	NA		45				722,862	
14		-	NA		45				722,862	
15		43	NA		42				722,905	
16		-	NA		42				722,905	
17		-								
18		-								
19		-	NA		42				722,905	
20		-	NA		42				722,905	
21		-	NA		39		3		722,905	
22		-	NA		39				722,905	
23		-	NA		39				722,905	
24		-								
25		-								
26		27	NA		39				722,932	
27		-	NA		39				722,932	
28		-	NA		39				722,932	
29		-	NA		39				722,932	
30		-	NA		39				722,932	
31										
<b>Total</b>		70	Days	30			3			
<b>AVG.</b>		2					0.1			

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941  
Signature: [Signature] Date: 7-6-06 Operator Grade Level 1A-SW/GUI

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

Water Systems Operation Report

Well No. 12 - Direct Supply to Distribution System

Public Water System Name Brookhaven National Laboratory	Reporting Month/Year DATE	Date Report Submitted DATE	Source Water Type(s) <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI
Public Water System ID 5111891	County Suffolk	Town, Village, or City Upton, New York 11973	<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination

DATE	Source(s) in Use Well No.: 12	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings		Daily Totalizer	
			Gaseous		Liquid		Free chlorine residual at entry point (mg/l)	Hypochlorite used/day		pH Sodium Hydroxide
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					60				804,228	
1			NA		60				804,228	
2		-	NA		60				804,228	
3		-								
4		-								
5		-	NA		60				804,228	
6		-	NA		60				804,228	
7		-	NA		60				804,228	
8		246	NA		60				804,474	
9		-	NA		60				804,474	
10		-								
11		-								
12		34	NA		60				804,508	
13		-	NA		60				804,508	
14		184	NA		45		15		804,692	
15		42	NA		45				804,734	
16		-	NA		45				804,734	
17		-								
18		-								
19		649			40		5		805,383	
20		241	NA		40				805,624	
21		339	NA		39		1		805,963	
22		176	NA		39				806,139	
23		650	NA		24+111		15		806,789	
24		-								
25		-								
26		293	NA		132		3		807,082	
27		302	NA		127		5		807,384	
28		-	NA		127				807,384	
29		-	NA		127				807,384	
30		-	NA		127				807,384	
31										
<b>Total</b>		<b>3,156</b>	<b>Days</b>	<b>30</b>			<b>44</b>			
<b>AVG.</b>		<b>105.2</b>					<b>1.46666667</b>			

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell Ross Title: Water Systems Supervisor NYS DOH Operator Certification Number: NY0031941  
 Signature: *Lowell Ross* Date: 7-6-06 Operator Grade Level 1A-SW/GUI

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	0	544	1,536	0	0	0	2,080
2	0	615	1,418	0	0	0	2,033
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	0	934	4,199	0	0	0	5,133
6	0	254	1,242	0	0	0	1,496
7	0	299	1,523	0	0	0	1,822
8	0	266	1,508	0	0	246	2,020
9	0	392	1,447	0	0	0	1,839
10	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0
12	0	1,302	4,232	0	0	34	5,568
13	0	329	1,564	0	0	0	1,893
14	0	147	1,491	0	0	184	1,822
15	0	175	1,599	78	43	42	1,937
16	0	464	1,406	0	0	0	1,870
17	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0
19	0	1,724	4,497	0	0	649	6,870
20	0	649	1,499	0	0	241	2,389
21	0	462	1,463	0	0	339	2,264
22	0	288	1,495	0	0	176	1,959
23	0	412	1,597	0	0	650	2,659
24	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
26	0	228	4,728	0	27	293	5,276
27	0	0	1,554	0	0	302	1,856
28	0	0	1,329	0	0	0	1,329
29	0	89	1,352	0	0	0	1,441
30	0	0	1,284	0	0	0	1,284
31	0	0	0	0	0	0	0
Total	0	9,573	43,963	78	70	3,156	56,840

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	1,648,622	1,648,622	0
Well 6	652,061	642,488	9,573
Well 7	2,041,896	1,997,933	43,963
Well 10	772,213	772,135	78
Well 11	722,932	722,862	70
Well 12	807,384	804,228	3,156

AGS Water Supply Meter	606,961	593,533	13428.00
Medical Reactor - Well 105			0.00
Biology Building - Well 9	6,793,140	6,793,140	0.00

**ATTACHMENT II**

**Brookhaven National Laboratory**

**Potable Water Supply**

**June 2006 Biweekly Water Quality Monitoring Data**

**for the BNL Distribution System and Potable Water Wells**

**Attachment II**  
**Table 1 - Summary of Water Quality Analyses**  
**for the BNL Potable Water System**  
**June 2006**

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity ( $\mu$ mhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	6/6/06	7.7	56	145	ANR	ANR
WTP	6/8/06	7.6	56	142	ANR	ANR
WTP	6/13/06	7.5	55	138	ANR	ANR
WTP	6/15/06	7.5	55	141	ANR	ANR
WTP	6/20/06	7.3	58	144	ANR	ANR
WTP	6/22/06	7.5	57	142	ANR	ANR
WTP	6/27/06	7.6	59	145	ANR	ANR
WTP	6/29/06	7.3	58	150	ANR	ANR

ANR- Analysis Not Required

NR- Not Reported

**Note:** Field parameters are only conducted for facilities that are in operation on the day of measurement.

**ATTACHMENT III**

**Brookhaven National Laboratory**

**Potable Water Supply**

**June 2006 Stage 1 Disinfectants & Disinfection Byproduct Rule**

**Monitoring Data and Bacteriological Analyses for the BNL Distribution System**

**Attachment III**

**June 2006 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data  
Table II - Maximum Residual Disinfectant Level (MRDL) Compliance**

Location	Total Residual Chlorine (mg/L)											
	July 05	Aug. 05	Sept. 05	Oct. 05	Nov. 05	Dec. 05	Jan. 06	Feb. 06	Mar. 06	Apr. 06	May 06	June 06
Bldg. 49 Water Tower	0.7	0.9	0.5	0.7	0.9	0.9	1.0	0.8	1.2	0.7	0.6	0.8
Bldg. 640 Water Tower	0.5	0.8	0.7	1.2	0.4	0.4	0.9	0.7	0.9	0.4	0.5	0.8
Bldg. 363 Apt. Laundry	0.6	0.5	0.3	0.6	1.0	0.3	0.5	0.5	0.3	0.5	0.4	0.7
Bldg. 1005 RHIC	0.5	0.8	0.7	0.5	0.6	0.7	0.8	0.7	0.6	0.3	0.6	0.3
Bldg. 930 LINAC	0.8	NS	0.8	NS	0.8	NS	0.9	NS	0.8	NS	0.7	NS
Bldg. 725 NSLS	NS	0.8	NS	0.8	NS	0.4	NS	0.8	NS	1.0	NS	0.7
Bldg. 490 Outpatient Clinic	0.5	NS	0.6	NS	0.5	NS	0.7	NS	0.9	NS	0.5	NS
Bldg. 490 Block 11	0.5	NS	0.3	NS	0.9	NS	0.5	NS	0.8	NS	0.4	NS
Bldg. 490 Block 1 ACF	NS	0.7	NS	0.5	NS	0.8	NS	0.6	NS	1.1	NS	0.5
Bldg. 490 Block 4 MRC	NS	0.7	NS	1.0	NS	0.4	NS	0.5	NS	0.9	NS	0.4
<b>Monthly Average</b>	<b>0.6</b>	<b>0.7</b>	<b>0.6</b>	<b>0.8</b>	<b>0.7</b>	<b>0.6</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>	<b>0.7</b>	<b>0.5</b>	<b>0.6</b>

NA - Not Applicable

NS- Not Scheduled for sampling

**Running Annual Average (mg/L) 0.7 (Total Residual Chlorine)**  
**MRDL (mg/L) 4.0**



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 0606652-001A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Federal ID 5111891

Client ID. : 21970-001

Collected : 6/15/06 7:45:00 AM

Point No : 094-273

Received : 6/15/06 1:20:00 PM

Location : B-49 Water Tower

Collected By : Client

Copy : Bob Lee

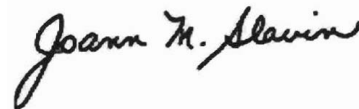
CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.8		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted  
D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606652-002A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Routine

Federal ID 5111891

Client ID. : 21970-002

Collected : 6/15/06 7:53:00 AM

Point No : 076-408

Received : 6/15/06 1:20:00 PM

Location : B-640 Water Tower

Collected By : Client

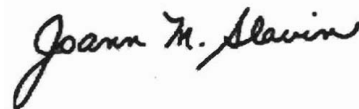
Copy : Bob Lee

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<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.8		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.  
D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID #10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606652-003A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Routine

Federal ID 5111891

Client ID. : 21970-003

Collected : 6/15/06 7:33:00 AM

Point No : 109-19

Received : 6/15/06 1:20:00 PM

Location : B-363 Apt.Laundry

Collected By : Client

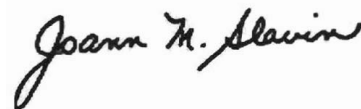
Copy : Bob Lee

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.7		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.  
D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Federal ID 5111891

Collected : 6/15/06 8:30:00 AM

Received : 6/15/06 1:20:00 PM

Collected By : Client

Copy : Bob Lee

CC

Lab No. : 0606652-004A

Client ID. : 21970-004

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Point No : 045-12

Location : B-1005 RHIC

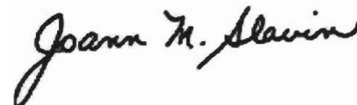
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.3		1	mg/L		M4500-CI G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted

D.F. = Dilution Factor

Date Reported : 7/5/06



Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631)694-3040 . FAX: (631)420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606652-005A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Routine

Federal ID 5111891

Client ID. : 21970-005

Collected : 6/15/06 8:40:00 AM

Point No : 075-602

Received : 6/15/06 1:20:00 PM

Location : B-725 NSLS

Collected By : Client

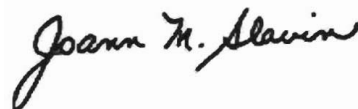
Copy : Bob Lee

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.7		1	mg/L		M4500-CI G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.  
D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040. FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606652-006A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Routine

Federal ID 5111891

Client ID. : 21970-006

Collected : 6/15/06 10:15:00 AM

Point No : 084-69

Received : 6/15/06 1:20:00 PM

Location : B-490 Block 1 ACF

Collected By : Client

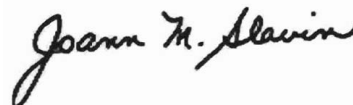
Copy : Bob Lee

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<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
* Total Coliform	* Positive		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.5		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.  
D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631)694-3040 . FAX: (631)420-8436 NYSDOH ID #10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 0606652-007A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Federal ID 5111891

Client ID. : 21970-007

Collected : 6/15/06 10:10:00 AM

Point No : 084-68

Received : 6/15/06 1:20:00 PM

Location : B-490 Block 4 MRC

Collected By : Client

Copy : Bob Lee

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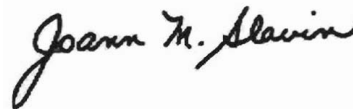
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.4		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.

D.F. = Dilution Factor

Date Reported : 7/5/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631)694-3040 . FAX: (631)420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 0606652-013A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Federal ID 5111891

Client ID. : 21970-013

Collected : 6/15/06 8:40:00 AM

Point No : 075-602

Received : 6/15/06 1:20:00 PM

Location : B-725 NSLS

Collected By : Client

Copy : Bob Lee

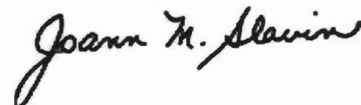
CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/15/2006 3:15 PM
E_Coliform	Absent		1		Absent	M9223	06/15/2006 3:15 PM
Total Residual Chlorine	0.7		1	mg/L		M4500-Cl G	06/15/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted  
D.F. = Dilution Factor

Date Reported : 7/5/06





# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606676-001A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Repeat

Federal ID 5111891

Client ID. : 21971-001

Collected : 6/16/06 2:05:00 PM

Point No : 084-69

Received : 6/16/06 3:20:00 PM

Location : B-490 Block 1 ACF

Collected By : JK00

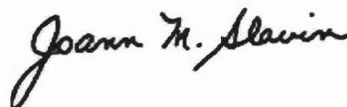
Copy : Bob Lee

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/17/2006 12:00 PM
E_Coliform	Absent		1		Absent	M9223	06/17/2006 12:00 PM
Total Residual Chlorine	0.6		1	mg/L		M4500-Cl G	06/16/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted  
D.F. = Dilution Factor

Date Reported : 6/26/06



Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040, FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Lab No. : 0606676-002A

Sample Information...  
Type : Potable Water  
Origin : Distribution  
Repeat

Federal ID 5111891

Client ID. : 21971-003

Collected : 6/16/06 1:55:00 PM

Point No : 075-602

Received : 6/16/06 3:20:00 PM

Location : B-725 NSLS

Collected By : JK00

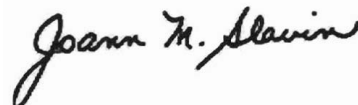
Copy : Bob Lee

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/17/2006 12:00 PM
E_Coliform	Absent		1		Absent	M9223	06/17/2006 12:00 PM
Total Residual Chlorine	0.3		1	mg/L		M4500-Cl G	06/16/2006

Result(s) reported meet(s) Regulatory Limit(s).  
Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted  
D.F. = Dilution Factor

Date Reported : 6/26/06



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040, FAX: (631) 420-8436 NYSDOH ID # 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 0606676-003A

Sample Information...

Type : Potable Water

Origin : Distribution

Repeat

Federal ID 5111891

Client ID. : 21971-004

Collected : 6/16/06 1:40:00 PM

Point No : 109-19

Received : 6/16/06 3:20:00 PM

Location : B-363 Apt.Laundry

Collected By : JK00

Copy : Bob Lee

CC

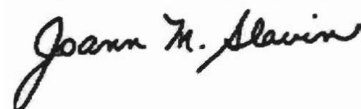
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/17/2006 12:00 PM
E_Coliform	Absent		1		Absent	M9223	06/17/2006 12:00 PM
Total Residual Chlorine	0.8		1	mg/L		M4500-Cl G	06/16/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.

D.F. = Dilution Factor

Date Reported : 6/26/06



Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 0606676-004A

Sample Information...

Type : Potable Water

Origin : Distribution

Repeat

Federal ID 5111891

Client ID. : 21971-002

Collected : 6/16/06 1:48:00 PM

Point No : 094-273

Received : 6/16/06 3:20:00 PM

Location : B-49 Water Tower

Collected By : JK00

Copy : Bob Lee

CC

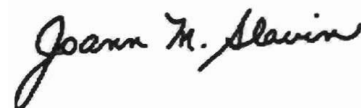
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		1		Negative	M9223	06/17/2006 12:00 PM
E_Coliform	Absent		1		Absent	M9223	06/17/2006 12:00 PM
Total Residual Chlorine	0.8		1	mg/L		M4500-CI G	06/16/2006

Result(s) reported meet(s) Regulatory Limit(s).

Result(s) flagged with \* Exceed Regulatory Limit(s). Limit noted.

D.F. = Dilution Factor

Date Reported : 6/26/06



Laboratory Manager