Environmental and Waste Management Services

BROOKHAVEN
NATIONAL LABORATORY

120 E. Fifth Ave., Bldg. 860
P. O. Box 5000
Upton, NY 11973-5000
Phone 631 344-4549
Fax 631 344-7334
goode@bnl.gov

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

October 6, 2003

Ms. Kathleen Newcomer
Suffolk County Department of Health Services
Drinking Water Supply Section
220 Rabro Drive East
Hauppauge, New York 11788

Dear Ms. Kathleen Newcomer:

Subject: Monthly Water Treatment Plant Reports
Reference: Suffolk County Minimum Monitoring Requirements for September 2003

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2003 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 and Bacteriological Reports for September.

Attachment II: September 2003 Biweekly Water Quality Monitoring Data for the BNL Distribution System and Semi-Annual Water Quality Monitoring Data for the BNL Potable Water Wells.

All analytical results have been reviewed and have been found to be within New York State Department of Health Drinking Water Standards (NYSDOH DWS). Collection and analysis of these samples are 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.

NSF
REGISTERED TO ISO 14001: 1996
NSF's Registration Program is accredited by the American National Standards Institute-Registrar Accreditation Board

Should there be any questions regarding this report or the analytical or operational data contained herein, please call either M. Allocco at (631) 344-3166, R. Lee at (631) 344-3148, or W. Chaloupka at (631) 344-7136.

Sincerely,

George A. Goode
Environmental & Waste Management Services
Division Manager

GAG/MA:car
Attachments: As noted

cc:	M. Allocco	w/attachments
	L. Ambroszkiewicz, SCDHS	w/attachments
	W. Chaloupka	w/attachments
	J. Granzen	w/attachments
	G. Goode	w/o 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.03

ATTACHMENT I

Brookhaven National Laboratory
Potable Water Supply

Monthly Operational and Bacteriological Reports for September 2003
for the BNL Potable Water System

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **Water Treatment Facility**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	78	per 24hrs	mg/l	Hydroxide	12979737
1	0	78	0	0.82	7.4	12979737
2	892	68	10	1.1	7.3	12980629
3	648	57	11	0.85	7.3	12981277
4	862	45	12	1.2	7.4	12982139
5	793	35	10	1.3	7.3	12982932
6	0					
7	0					
8	2,361	125	45	0.72	7.3	12985293
9	845	110	15	0.7	7.6	12986138
10	700	93	17	0.9	7.5	12986838
11	799	77	16	0.94	7.5	12987637
12	772	60+40	17	0.8	7.7	12988409
13	0					
14	0					
15	2,318	55	45	0.54	7.3	12990727
16	931	30+170	15	1.2	7.3	12991658
17	844	190	10	1.13	7.6	12992502
18	809	180	10	1.19	7.5	12993311
19	771	165	15	1.23	7.8	12994082
20	0					
21	0					
22	2,505	130	35	1.2	7.2	12996587
23	920	120	10	1.1	7.3	12997507
24	844	110	10	1.1	7.3	12998351
25	836	100	10	1.2	7.4	12999187
26	845	90	10	1	7.4	13000032
27	0					
28	0					
29	2,367	60	30	1	7.4	13002399
30	743	50	10	1.1	7.4	13003142
31	0					
TOT	23,405		363			
AVG.	780.17		12.10	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 4**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	96	per 24hrs	mg/l	Hydroxide	1609483
1	0	96	0	0.42	6	1609483
2	293	90	6	0.15	6.1	1609776
3	341	84	6	0.08	6.2	1610117
4	416	77+73	7	0.47	6.2	1610533
5	416	141	9	0.27	6.1	1610949
6	0					
7	0					
8	1,152	123	18	0.22	6.1	1612101
9	352	117	6	0.18	6	1612453
10	334	111+49	6	0.17	6.1	1612787
11	148	150	0	0.22	6.1	1612935
12	383	135	15	0.15	6	1613318
13	0					
14	0					
15	1,090	113	22	0.2	6	1614408
16	453	110+40	3	0.12	6	1614861
17	472	138	12	0.1	6	1615333
18	424	129	9	0.11	6	1615757
19	476	122+28	7	0.12	6.1	1616233
20	0					
21	0					
22	1,029	132	18	0.02	6	1617262
23	430	123	9	0.1	6	1617692
24	386	117	6	0.03	6.1	1618078
25	384	114	3	0.3	6	1618462
26	390	105+45	9	0.36	6	1618852
27	0					
28	0					
29	1,071	129	21	0.14	6.2	1619923
30	284	126	3	0.24	6.2	1620207
31	0					
TOT	10,724		195			
AVG.	357.47		6.50	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____Actual number of samples fewer than required.

____Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____Positive E. Coli result followed by a positive total coliform repeat sample.

____Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 6**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	129	per 24hrs	mg/l	Hydroxide	401335
1	0	129	0	0.42	6	401335
2	35	129	0	0.15	6.1	401370
3	211	123	6	0.08	6.2	401581
4	241	117+33	6	0.47	6.2	401822
5	37	147	3	0.27	6.1	401859
6	0					
7	0					
8	315	138	9	0.22	6.1	402174
9	35	138	0	0.18	6	402209
10	109	136	2	0.17	6.1	402318
11	560	123	13	0.22	6.1	402878
12	117	120	3	0.15	6	402995
13	0					
14	0					
15	200	116	4	0.2	6	403195
16	161	110	6	0.12	6	403356
17	77	110	0	0.1	6	403433
18	112	108	2	0.11	6	403545
19	182	105+45	3	0.12	6.1	403727
20	0					
21	0					
22	306	138	12	0.02	6	404033
23	155	132	6	0.1	6	404188
24	126	129	3	0.03	6.1	404314
25	92	129	0	0.3	6	404406
26	120	126+24	3	0.36	6	404526
27	0					
28	0					
29	270	141	9	0.14	6.2	404796
30	102	140	1	0.24	6.2	404898
31	0					
TOT	3,563		91			
AVG.	118.77		3.03	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 7**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	84	per 24hrs	mg/l	Hydroxide	1223955
1	0	84	0	0.42	6	1223955
2	906	69	15	0.15	6.1	1224861
3	623	60	9	0.08	6.2	1225484
4	888	42+108	18	0.47	6.2	1226372
5	1,048	132	18	0.27	6.1	1227420
6	0					
7	0					
8	2,586	87	45	0.22	6.1	1230006
9	979	69	18	0.18	6	1230985
10	827	54+96	15	0.17	6.1	1231812
11	653	132	18	0.22	6.1	1232465
12	890	117	15	0.15	6	1233355
13	0					
14	0					
15	2,606	67	50	0.2	6	1235961
16	1,082	48+102	19	0.12	6	1237043
17	939	129	21	0.1	6	1237982
18	816	115	14	0.11	6	1238798
19	835	102+48	13	0.12	6.1	1239633
20	0					
21	0					
22	2,840	102	48	0.02	6	1242473
23	1,039	81	21	0.1	6	1243512
24	942	63	18	0.03	6.1	1244454
25	991	45	18	0.3	6	1245445
26	937	21+129	24	0.36	6	1246382
27	0					
28	0					
29	2,711	97	53	0.14	6.2	1249093
30	845	84	13	0.24	6.2	1249938
31	0					
TOT	25,983		483			
AVG.	866.10		16.10	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: T.A. Rose

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 10**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	38	per 24hrs	mg/l	Hydroxide	765479
1	0	38	0	NR	NR	765479
2	0	38	0	NR	NR	765479
3	0	38	0	NR	NR	765479
4	0	38	0	NR	NR	765479
5	2,977	38	0	NR	NR	768456
6	0					
7	0					
8	164	38	0	NR	NR	768620
9	0	38	0	NR	NR	768620
10	0	38	0	NR	NR	768620
11	0	38	0	NR	NR	768620
12	0	38	0	NR	NR	768620
13	0					
14	0					
15	0	38	0	NR	NR	768620
16	0	38	0	NR	NR	768620
17	0	38	0	NR	NR	768620
18	0	38	0	NR	NR	768620
19	0	38	0	NR	NR	768620
20	0					
21	0					
22	0	38	0	NR	NR	768620
23	0	38	0	NR	NR	768620
24	0	38	0	NR	NR	768620
25	0	38	0	NR	NR	768620
26	0	38	0	NR	NR	768620
27	0					
28	0					
29	0	38	0	NR	NR	768620
30	0	38	0	NR	NR	768620
31	0					
TOT	3,141		0			
AVG.	104.70		0.00	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 11**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	108	per 24hrs	mg/l	Hydroxide	507717
1	0	108	0	NR	NR	507717
2	0	108	0	NR	NR	507717
3	59	108	0	NR	NR	507776
4	0	108+42	0	NR	NR	507776
5	3	147	3	NR	NR	507779
6	0					
7	0					
8	0	147	0	NR	NR	507779
9	0	147	0	NR	NR	507779
10	0	147	0	NR	NR	507779
11	0	147	0	NR	NR	507779
12	0	147	0	NR	NR	507779
13	0					
14	0					
15	0	92	0	NR	NR	507779
16	0	92	0	NR	NR	507779
17	0	92	0	NR	NR	507779
18	0	92	0	NR	NR	507779
19	0	92	0	NR	NR	507779
20	0					
21	0					
22	0	92	0	NR	NR	507779
23	0	92	0	NR	NR	507779
24	0	92	2	NR	NR	507779
25	0	92	0	NR	NR	507779
26	0	92	0	NR	NR	507779
27	0					
28	0					
29	0	92	0	NR	NR	507779
30	0	92	0	NR	NR	507779
31	0					
TOT	62		5			
AVG.	2.07		0.17	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: SEPT 2003

LOCATION: **WELL NO. 12**

Did an emergency occur in any part of the water system? YES ____ NO X

Source: Ground Water

Does the system have a chlorination waiver? YES ____ NO X

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	114	per 24hrs	mg/l	Hydroxide	647210
1	0	114	0	NR	NR	647210
2	0	114	0	NR	NR	647210
3	59	111	3	NR	NR	647269
4	11	110+40	1	NR	NR	647280
5	8	150	0	NR	NR	647288
6	0					
7	0					
8	0	147	0	NR	NR	647288
9	0	147	0	NR	NR	647288
10	0	147	0	NR	NR	647288
11	0	147	0	NR	NR	647288
12	0	147	0	NR	NR	647288
13	0					
14	0					
15	0	147	0	NR	NR	647288
16	0	80*	0	NR	NR	647288
17	9	78	2	NR	NR	647297
18	0	78	2	NR	NR	647297
19	0	78	0	NR	NR	647297
20	0					
21	0					
22	0	78	0	NR	NR	647297
23	0	78	0	NR	NR	647297
24	0	78	0	NR	NR	647297
25	0	78	0	NR	NR	647297
26	0	78	0	NR	NR	647297
27	0					
28	0					
29	0	78	0	NR	NR	647297
30	0	78	0	NR	NR	647297
31	0					
TOT	87		8			
AVG.	2.90		0.27	No. Days:	30	

Population Served 3,500

Number of routine samples 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

____ Failure to analyze repeat samples.

Does an MCL violation exist? YES ____ NO X

If yes, check reason(s) below.

____ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

____ Positive E. Coli result followed by a positive total coliform repeat sample.

____ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: [signature]

Date: 10-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

9/30/2003
Pump Data

MONTHLY GALLONAGE REPORT
SEPT 2003.xls

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	0	0	0	0	0	0	0
2	293	35	906	0	0	0	1,234
3	341	211	623	0	59	59	1,293
4	416	241	888	0	0	11	1,556
5	416	37	1,048	2,977	3	8	4,489
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	1,152	315	2,586	164	0	0	4,217
9	352	35	979	0	0	0	1,366
10	334	109	827	0	0	0	1,270
11	148	560	653	0	0	0	1,361
12	383	117	890	0	0	0	1,390
13	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0
15	1,090	200	2,606	0	0	0	3,896
16	453	161	1,082	0	0	0	1,696
17	472	77	939	0	0	9	1,497
18	424	112	816	0	0	0	1,352
19	476	182	835	0	0	0	1,493
20	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0
22	1,029	306	2,840	0	0	0	4,175
23	430	155	1,039	0	0	0	1,624
24	386	126	942	0	0	0	1,454
25	384	92	991	0	0	0	1,467
26	390	120	937	0	0	0	1,447
27	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0
29	1,071	270	2,711	0	0	0	4,052
30	284	102	845	0	0	0	1,231
31	0	0	0	0	0	0	0
Total	10,724	3,563	25,983	3,141	62	87	43,560

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	1,620,207	1,609,483	10,724
Well 6	404,898	401,335	3,563
Well 7	1,249,938	1,223,955	25,983
Well 10	768,620	765,479	3,141
Well 11	507,779	507,717	62
Well 12	647,297	647,210	87
AGS Water Supply Meter	470,828	470,828	0.00
Medical Reactor - Well 105	0	0	0.00
Biology Building - Well 9	6,789,330	6,788,400	0.93

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 : S. Scarpitta

Lab No. : 0309132-001

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-001
Collected 9/4/2003 12:35:00 PM
Point No 094-273
Received 9/4/2003 3:15:00 PM
Location: B-49 Water Tower
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	1.4	mg/L		M4500-Cl G	9/4/2003

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with ★ Exceed Regulatory Limit(s). Limit noted.

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A29

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 : S. Scarpitta

Lab No. : 0309132-002

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-002
Collected 9/4/2003 10:45:00 AM Point No 076-408
Received 9/4/2003 3:15:00 PM Location: B-640 Water Tower
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	0.9	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A30

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 : S. Scarpitta

Lab No. : 0309132-003

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-003
Collected 9/4/2003 9:20:00 AM
Point No 045-12
Received 9/4/2003 3:15:00 PM
Location: B-1005 RHIC
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	0.8	mg/L		M4500-Cl G	9/4/2003

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with ★ Exceed Regulatory Limit(s). Limit noted.

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A31

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 : S. Scarpitta

Lab No. : 0309132-004

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-004
Collected 9/4/2003 9:00:00 AM
Point No 109-19
Received 9/4/2003 3:15:00 PM
Location: B-363 Apt.Laundry
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	0.8	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A32

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 : S. Scarpitta

Lab No. : 0309132-005

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Collected 9/4/2003 9:30:00 AM
Received 9/4/2003 3:15:00 PM
Collected By CLIENT
Copy : Original
CC

Point No 054-187
Location: B-930 LINAC

Client ID. : 16844-005

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	1.3	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A33

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 : S. Scarpitta

Lab No. : 0309132-006

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-006
Collected 9/4/2003 11:00:00 AM
Point No 084-70
Received 9/4/2003 3:15:00 PM
Location: B-490 Outpatient Clinic
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	1.3	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A34

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 : S. Scarpitta

Lab No. : **0309132-007**

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-007
Collected 9/4/2003 11:00:00 AM Point No 084-67
Received 9/4/2003 3:15:00 PM Location: B-490 Block 11
Collected By CLIENT
Copy : **Original**
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	1.2	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A35

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 : S. Scarpitta

Lab No. : 0309132-008

Sample Information...
Type : Potable Water
Origin: Dist.

Federal ID 5111891
Client ID. : 16844-008
Collected 9/4/2003 11:10:00 AM
Point No 1
Received 9/4/2003 3:15:00 PM
Location: Duplicate - B-490 Block 11
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	9/5/2003 10:45:00 AM
E_Coliform	Absent		Absent	M9223	9/5/2003 10:45:00 AM
Total Residual Chlorine	1.2	mg/L		M4500-Cl G	9/4/2003

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/8/2003

BNLM139 A36

ATTACHMENT II

Brookhaven National Laboratory
Potable Water Supply

September 2003 Biweekly Water Quality Monitoring Data for the BNL Distribution System and Semi-Annual Water Quality Monitoring Data for the BNL Potable Water Wells

Attachment II
Table 1 - Summary of Water Quality Analyses
for the BNL Potable Water System
September 2003

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity (µmhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	9/2/03	7.3	57	219	NR	NR
WTP	9/4/03	7.4	58	250	NR	NR
WTP	9/9/03	7.6	57	156	NR	NR
WTP	9/11/03	7.5	56	254	NR	NR
WTP	9/16/03	7.3	57	206	NR	NR
WTP	9/18/03	7.5	57	146	NR	NR
WTP	9/23/03	7.3	58	238	NR	NR
WTP	9/25/03	7.4	58	208	NR	NR
WTP	9/30/03	7.4	56	195	NR	NR
Well 4	9/4/03	6.3	57	156	11.5	4.83
Well 6	9/4/03	6.1	59	160	10.4	4.56
Well 7	9/4/03	6.1	59	142	12.3	4.87
Well 11	9/4/03	6.1	64	128	17.6	5.64
Well 12	9/4/03	6.2	64	138	22.4	6.73

NR - Analysis Not Required or Not Reported
WTP – Water Treatment Plant
Note: Field parameters are only conducted for facilities that are in operation on the day of measurement

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 : S. Scarpitta

Lab No. : 0309139-001

Sample Information...
Type : Potable Water
Origin: Raw Well

Federal ID 5111891
Client ID. : 16844-009
Collected 9/4/2003 2:00:00 PM Point No 8
Received 9/4/2003 3:15:00 PM Location: Well #4 Raw
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	156	µmhos/cm		E120.1	9/4/2003
PH (FIELD)	6.3	pH units		E150.1	9/4/2003
Temperature	14	°C		E170.1	9/4/2003
Calcium	4830	µg/L		E200.7	9/9/2003 11:46:00 AM
Alkalinity, Total (As CaCO3)	11.5	mg/L		M2320 B	9/10/2003 11:01:00 AM

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/23/2003

BNLM139 A20

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 : S. Scarpitta

Lab No. : 0309139-002

Sample Information...
Type : Potable Water
Origin: Raw Well

Federal ID 5111891
Client ID. : 16844-010
Collected 9/4/2003 1:55:00 PM Point No 9
Received 9/4/2003 3:15:00 PM Location: Well #6 Raw
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	160	µmhos/cm		E120.1	9/4/2003
PH (FIELD)	6.1	pH units		E150.1	9/4/2003 12:01:00 AM
Temperature	15	°C		E170.1	9/4/2003
Calcium	4560	µg/L		E200.7	9/9/2003 12:19:00 PM
Alkalinity, Total (As CaCO3)	10.4	mg/L		M2320 B	9/10/2003 11:05:00 AM

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/23/2003

BNLM139 A22

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 : S. Scarpitta

Lab No. : 0309139-003

Sample Information...
Type : Potable Water
Origin: Raw Well

Federal ID 5111891
Collected 9/4/2003 1:45:00 PM
Received 9/4/2003 3:15:00 PM
Collected By CLIENT
Copy : **Original**
CC

Point No 10
Location: Well #7 Raw

Client ID. : 16844-011

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	142	µmhos/cm		E120.1	9/4/2003
PH (FIELD)	6.1	pH units		E150.1	9/4/2003 12:02:00 AM
Temperature	15	°C		E170.1	9/4/2003
Calcium	4870	µg/L		E200.7	9/9/2003 12:27:00 PM
Alkalinity, Total (As CaCO3)	12.3	mg/L		M2320 B	9/10/2003 11:09:00 AM

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

Date Reported : 9/23/2003

Joann M. Slavin
Laboratory Manager

BNLM139 A24

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 : S. Scarpitta

Lab No. : 0309139-005

Sample Information...
Type : Potable Water
Origin: Raw Well

Federal ID 5111891
Client ID. : 16844-013
Collected 9/4/2003 1:40:00 PM Point No 12
Received 9/4/2003 3:15:00 PM Location: Well #11 Raw
Collected By CLIENT
Copy : **Original**
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	128	µmhos/cm		E120.1	9/4/2003
PH (FIELD)	6.1	pH units		E150.1	9/4/2003 12:03:00 AM
Temperature	18	°C		E170.1	9/4/2003
Calcium	5640	µg/L		E200.7	9/9/2003 12:35:00 PM
Alkalinity, Total (As CaCO3)	17.6	mg/L		M2320 B	9/10/2003 11:13:00 AM

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/23/2003

BNLM139 A26

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 : S. Scarpitta

Lab No. : 0309139-006

Sample Information...
Type : Potable Water
Origin: Raw Well

Federal ID 5111891
Client ID. : 16844-014
Collected 9/4/2003 1:25:00 PM Point No 13
Received 9/4/2003 3:15:00 PM Location: Well #12 Raw
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	138	µmhos/cm		E120.1	9/4/2003
PH (FIELD)	6.2	pH units		E150.1	9/4/2003 12:04:00 AM
Temperature	18	°C		E170.1	9/4/2003
Calcium	6730	µg/L		E200.7	9/9/2003 12:43:00 PM
Alkalinity, Total (As CaCO3)	22.4	mg/L		M2320 B	9/10/2003 11:19:00 AM

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

Joann M. Slavin
Laboratory Manager

Date Reported : 9/23/2003

BNLM139 A28