Environmental and Waste Management Services

BROOKHAVEN
NATIONAL LABORATORY

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

May 9, 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 April 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 April.
Attachment II:	April 2003 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells and Second Quarter Water Quality Data for the BNL Distribution System.
Attachment III:	2003 Second Quarter Bacteriological Reports 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.

NSF
REGISTERED TO
ISO 14001: 1996

The Quality Assurance documentation is available from the Environmental 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 R. Lee at (631) 344-3148, M. Allocco at (631) 344-3166, 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
	W. Chaloupka	w/attachments
	J. Granzen	w/attachments
	R. Lee	w/attachments
	E. Murphy	w/attachments
	P. Ponturo, SCDHS	w/o attachments
	L. Ross	w/o attachments
	T. Sheridan	w/o attachments

File: EC61ER.03

ATTACHMENT I

Brookhaven National Laboratory
Potable Water Supply

Monthly Operational and Bacteriological Reports for April 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: APRIL 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	190	per 24hrs	mg/l	Hydroxide	12829401
1	774	185	5	0.99	7.8	12830175
2	664	180+20	5	0.58	8	12830839
3	644	180	20	0.57	8.2	12831483
4	696	179	1	0.48	8.1	12832179
5	0					
6	0					
7	1,782	176	3	0.6	8.6	12833961
8	590	170	6	0.9	8.2	12834551
9	596	165+35	5	1	8	12835147
10	548	194	6	0.82	8.3	12835695
11	599	190	4	1	7.8	12836294
12	0					
13	0					
14	1,724	180	10	1.11	7.8	12838018
15	620	175	5	0.69	7.3	12838638
16	645	170	5	1.01	9.2	12839283
17	595	162	8	0.89	8.6	12839878
18	841	160	2	0.78	7.6	12840719
19	0					
20	0					
21	3,247	139	21	0.87	7.8	12843966
22	1,081	130	9	0.84	7.4	12845047
23	1,093	123	7	0.45	7.4	12846140
24	1,055	115	8	0.74	7.5	12847195
25	1,080	102+48	13	0.75	7.3	12848275
26	0					
27	0					
28	3,215	142	8	0.7	7.4	12851490
29	774	134+66	8	0.85	7.6	12852264
30	718	190	10	1	7.6	12852982
31	0					
TOT	23,581		169			
AVG.	786.03		5.63	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 or 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: 5-2-03

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: APRIL 2003

LOCATION: **WELL NO. 4**

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

Source: Ground Water

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

	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	1554365
1	269	111	3	0.53	6.1	1554634
2	265	105+45	6	1.2	6.1	1554899
3	237	141	9	0.62	6.1	1555136
4	200	135	6	0.73	6	1555336
5	0					
6	0					
7	343	132	3	0.02	6	1555679
8	88	132	0	0.04	6.1	1555767
9	811	114+36	18	0.24	6	1556578
10	760	132	18	0.02	6.1	1557338
11	148	129	3	0.024	6	1557486
12	0					
13	0					
14	304	125	4	0.22	6.3	1557790
15	113	123	2	0.41	5.9	1557903
16	302	117	6	0.4	5.9	1558205
17	27	116	1	0.4	5.9	1558232
18	337	111+39	5	0.42	5.9	1558569
19	0					
20	0					
21	1,695	111	39	0.57	6.1	1560264
22	458	99	12	0.84	6	1560722
23	576	90	9	1.2	6.1	1561298
24	440	90	0	0.46	6	1561738
25	308	90+60	0	0.21	6	1562046
26	0					
27	0					
28	563	147	3	0.05	6	1562609
29	0	147	0	0.017	6.1	1562609
30	177	138	9	0.02	6.1	1562786
31	0					
TOT	8,421		156			
AVG.	280.70		5.20	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 ✓

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 ✓

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 5-2-03

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: ARRIL 2003

LOCATION: **WELL NO. 6**

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

Source: Ground Water

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

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	_ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	_ Sodium	Daily Totalizer
month	K Gals	111	per 24hrs	mg/l	Hydroxide	371809
1	211	105	6	0.53	6.1	372020
2	0	105+45	0	1.2	6.1	372020
3	72	144	6	0.62	6.1	372092
4	44	138	6	0.73	6	372136
5	0					
6	0					
7	0	138	0	NR	NR	372136
8	0	138	0	NR	NR	372136
9	103	135	3	NR	NR	372239
10	25	135	0	NR	NR	372264
11	21	135	0	NR	NR	372285
12	0					
13	0					
14	162	131	4	0.22	6.3	372447
15	0	131	0	0.41	5.9	372447
16	111	129	3	0.4	5.9	372558
17	0	129	0	0.4	5.9	372558
18	95	129	0	0.42	5.9	372653
19	0					
20	0					
21	377	120	9	0.57	6.1	373030
22	0	120	0	0.84	6	373030
23	146	117	3	1.2	6.1	373176
24	124	114	3	0.46	6	373300
25	856	90+60	24	0.21	6	374156
26	0					
27	0					
28	1,398	117	33	0.05	6	375554
29	146	114	3	0.017	6.1	375700
30	227	108	6	0.02	6.1	375927
31	0					
TOT	4,118		109			
AVG.	137.27		3.63	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 ✓

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 ✓

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: [illegible signature]

Date 5-2-03

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: APRIL 2003

LOCATION: **WELL NO. 7**

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

Source: Ground Water

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

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	120	per 24hrs	mg/l	Hydroxide	1059292
1	872	105	15	0.53	6.1	1060164
2	850	102+48	3	1.2	6.1	1061014
3	868	132	18	0.62	6.1	1061882
4	817	117	15	0.73	6	1062699
5	0					
6	0					
7	2,199	81	36	0.02	6	1064898
8	808	66	15	0.04	6.1	1065706
9	124	63+87	3	0.24	6	1065830
10	0	150	0	0.02	6.1	1065830
11	703	129	21	0.024	6	1066533
12	0					
13	0					
14	2,389	90	39	0.22	6.3	1068922
15	800	76	14	0.41	5.9	1069722
16	762	66	10	0.4	5.9	1070484
17	788	53	13	0.4	5.9	1071272
18	1,064	38+112	15	0.42	5.9	1072336
19	0					
20	0					
21	3,449	84	66	0.57	6.1	1075785
22	1,188	63	21	0.84	6	1076973
23	1,207	48	15	1.2	6.1	1078180
24	1,129	27	21	0.46	6	1079309
25	637	20+130	7	0.21	6	1079946
26	0					
27	0					
28	3,754	84	66	0.05	6	1083700
29	952	69+81	15	0.017	6.1	1084652
30	975	132	18	0.02	6.1	1085627
31	0					
TOT	26,335		446			
AVG	877.83		14.87	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 ✓

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 ✓

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: 5-2-03

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: APRIL 2003

LOCATION: **WELL NO. 10**

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

Source: Ground Water

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

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	39	per 24hrs	mg/l	Hydroxide	764819
1	0	39	0	NR	NR	764819
2	0	39	0	NR	NR	764819
3	0	39	0	NR	NR	764819
4	0	39	0	NR	NR	764819
5	0					
6	0					
7	0	39	0	NR	NR	764819
8	0	39	0	NR	NR	764819
9	0	39	0	NR	NR	764819
10	0	39	0	NR	NR	764819
11	0	39	0	NR	NR	764819
12	0					
13	0					
14	0	39	0	NR	NR	764819
15	0	30	0	NR	NR	764819
16	0	30	0	NR	NR	764819
17	0	30	0	NR	NR	764819
18	0	30	0	NR	NR	764819
19	0					
20	0					
21	0	30	0	NR	NR	764819
22	0	30	0	NR	NR	764819
23	0	30	0	NR	NR	764819
24	0	30	0	NR	NR	764819
25	0	30	0	NR	NR	764819
26	0					
27	0					
28	0	30	0	NR	NR	764819
29	0	30	0	NR	NR	764819
30	0	30	0	NR	NR	764819
31	0					
TOT	0		0			
AVG	0.00		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 ✓

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 ✓

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: 5-2-03

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: APRIL 2003

LOCATION: **WELL NO. 11**

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

Source: Ground Water

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

Day of month	CHLORINATION Treated Water K Gals	Liquid Sodium Hypochlorite Gallons 13S	Cl2 use per 24hrs	Free Cl2 Residual mg/l	pH _ Lime _ Sodium Hydroxide	Totalizer Daily Totalizer 478652
1	2	138	0	0.51	7	478654
2	32	138	0	0.72	7.1	478686
3	1,007	123	15	0.84	7.3	479693
4	1,086	99	24	0.65	7.4	480779
5	0					
6	0					
7	274	99	0	0.65	7.4	481053
8	28	93	6	0.14	7.6	481081
9	79	90+12	3	0.42	7.2	481160
10	8	102	0	0.45	7.1	481168
11	0	102	0	0.36	7.5	481168
12	0					
13	0					
14	1,998	102	0	0.31	7	483166
15	127	102	0	0.4	7.3	483293
16	12	102	0	0.4	7.1	483305
17	8	102	0	0.6	7	483313
18	4	102	0	1.3	NR	483317
19	0					
20	0					
21	3	102	0	0.21	7	483320
22	4	102	0	1.1	7	483324
23	1	102	0	1.7	7	483325
24	79	102	0	2.1	7.2	483404
25	1	102+48	0	NR	NR	483405
26	0					
27	0					
28	1,142	150	0	0.6	6.5	484547
29	1,223	135	15	0.83	6.5	485770
30	1,150	129	6	0.83	7.2	486920
31	0					
TOT	8,268		69			
AVG	275.60		2.30	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 ✓

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 ✓

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: 5-2-03

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: APRIL 2003

LOCATION: **WELL NO. 12**

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

Source: Ground Water

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

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
Day of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
month	K Gals	102	per 24hrs	mg/l	Hydroxide	622951
1	1,068	90	12	1	7.3	624019
2	915	84+45	6	0.9	8.3	624934
3	1	129	0	1	7.2	624935
4	7	129	0	0.65	7.4	624942
5	0					
6	0					
7	2,189	111	18	1.2	7.8	627131
8	809	102	9	1.3	7.8	627940
9	767	96+54	6	1	7.2	628707
10	758	138	12	1.2	7.2	629465
11	822	126	12	1.1	7.2	630287
12	0					
13	0					
14	2,390	105	21	0.55	7.9	632677
15	862	93	12	0.35	7.8	633539
16	896	83	10	0.84	7.3	634435
17	816	78	5	0.4	7.9	635251
18	180	77+63	1	0.96	NR	635431
19	0					
20	0					
21	586	132	8	0.63	6.7	636017
22	269	129	3	0.57	6.7	636286
23	233	126	3	0.71	6.7	636519
24	75	126	0	0.97	7.2	636594
25	313	126+24	0	NR	NR	636907
26	0					
27	0					
28	936	138	12	0.6	6.1	637843
29	0	138	0	0.64	7.3	637843
30	4	138	0	0.62	7.5	637847
31	0					
TOT	14,896		150			
AVG	496.53		5.00	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 ✓

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 ✓

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: 5-2-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

4/30/03
Pump Data

MONTHLY GALLONAGE REPORT
APRIL 2003.xls

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	269	211	872	0	2	1,068	2,422
2	265	0	850	0	32	915	2,062
3	237	72	868	0	1,007	1	2,185
4	200	44	817	0	1,086	7	2,154
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	343	0	2,199	0	274	2,189	5,005
8	88	0	808	0	28	809	1,733
9	811	103	124	0	79	767	1,884
10	760	25	0	0	8	758	1,551
11	148	21	703	0	0	822	1,694
12	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0
14	304	162	2,389	0	1,998	2,390	7,243
15	113	0	800	0	127	862	1,902
16	302	111	762	0	12	896	2,083
17	27	0	788	0	8	816	1,639
18	337	95	1,064	0	4	180	1,680
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
21	1,695	377	3,449	0	3	586	6,110
22	458	0	1,188	0	4	269	1,919
23	576	146	1,207	0	1	233	2,163
24	440	124	1,129	0	79	75	1,847
25	308	856	637	0	1	313	2,115
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	563	1,398	3,754	0	1,142	936	7,793
29	0	146	952	0	1,223	0	2,321
30	177	227	975	0	1,150	4	2,533
31	0	0	0	0	0	0	0
Total	8,421	4,118	26,335	0	8,268	14,896	62,038

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	1,562,786	1,554,365	8,421
Well 6	375,927	371,809	4,118
Well 7	1,085,627	1,059,292	26,335
Well 10	764,819	764,819	0
Well 11	486,920	478,652	8,268
Well 12	637,847	622,951	14,896
AGS Water Supply Meter	458,954	447,062	11892.00
Medical Reactor - Well 105			0.00
Binary Building - Well 9	6,743,710	6,740,360	3.35

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. : 0304131-001

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

Federal ID 5111891
Client ID. : 16027-001
Collected 4/3/2003 8:15:00 AM Point No 094-273
Received 4/3/2003 3:05:00 PM Location: B-49 Water Tower
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	151	µmhos/cm		E120.1	4/3/2003
PH (FIELD)	7.8	pH units		E150.1	4/3/2003
Temperature	12	°C		E170.1	4/3/2003
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Alkalinity, Total (As CaCO3)	23.0	mg/L		M2320 B	4/4/2003 9:44:00 AM
Total Residual Chlorine	0.9	mg/L		M4500-Cl G	4/3/2003

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 : 4/28/2003

BNLM134 S31

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

16027-001

Lab Name: H2M LABS, INC. Contract:

Lab Code: 10478 Case No. SAS No.: SDG No.: BNLM134

Matrix (soil/water): WATER Lab Sample ID: 0304131-001

Level (low/med): LOW Date Received: 4/3/2003

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	9070			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED 4/25/03

BNLM134 S30

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. : 0304131-004

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

Federal ID 5111891
Client ID. : 16027-004
Collected 4/3/2003 8:58:00 AM Point No 109-19
Received 4/3/2003 3:05:00 PM Location: B-363 Apt.Laundry
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	147	µmhos/cm		E120.1	4/3/2003
PH (FIELD)	7.7	pH units		E150.1	4/3/2003
Temperature	12	°C		E170.1	4/3/2003
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Alkalinity, Total (As CaCO3)	23.7	mg/L		M2320 B	4/4/2003 9:55:00 AM
Total Residual Chlorine	0.7	mg/L		M4500-Cl G	4/3/2003

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 : 4/28/2003

BNLM134 S36

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

16027-004

Lab Name: H2M LABS, INC. Contract:

Lab Code: 10478 Case No. SAS No.: SDG No.: BNLM134

Matrix (soil/water): WATER Lab Sample ID: 0304131-004

Level (low/med): LOW Date Received: 4/3/2003

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	10100			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED 4/25/03

BNLM134 S35

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. : 0304131-002

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

Federal ID 5111891
Client ID. : 16027-002
Collected 4/3/2003 8:40:00 AM Point No 076-408
Received 4/3/2003 3:05:00 PM Location: B-640 Water Tower
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Specific Conductance	138	µmhos/cm		E120.1	4/3/2003
PH (FIELD)	7.7	pH units		E150.1	4/3/2003
Temperature	13	°C		E170.1	4/3/2003
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Alkalinity, Total (As CaCO3)	53.4	mg/L		M2320 B	4/4/2003 9:49:00 AM
Total Residual Chlorine	1.1	mg/L		M4500-Cl G	4/3/2003

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 : 4/28/2003

BNLM134 S33

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

16027-002

Lab Name: H2M LABS, INC. Contract:

Lab Code: 10478 Case No. SAS No.: SDG No.: BNLM134

Matrix (soil/water): WATER Lab Sample ID: 0304131-002

Level (low/med): LOW Date Received: 4/3/2003

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	5680			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED 4/25/03

BNLM134 S32

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. : 0304131-005

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

Federal ID 5111891
Collected 4/3/2003 9:27:00 AM Point No 075-602
Received 4/3/2003 3:05:00 PM Location: B-725 NSLS
Collected By CLIENT

Client ID. : 16027-005

Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Total Residual Chlorine	1.2	mg/L		M4500-Cl G	4/3/2003

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S37

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. : 0304131-003

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

Federal ID 5111891
Collected 4/3/2003 9:10:00 AM
Received 4/3/2003 3:05:00 PM
Collected By CLIENT
Copy : Original
CC

Point No 045-12
Location: B-1005 RHIC

Client ID. : 16027-003

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Total Residual Chlorine	1.3	mg/L		M4500-Cl G	4/3/2003

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S34

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. : 0304131-006

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

Federal ID 5111891
Collected 4/3/2003 9:50:00 AM
Received 4/3/2003 3:05:00 PM
Collected By CLIENT
Copy : **Original**
CC

Point No 084-69
Location: B-490 Block 1 ACF

Client ID. : 16027-006

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Total Residual Chlorine	0.5	mg/L		M4500-Cl G	4/3/2003

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S38

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. : 0304131-007

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

Federal ID 5111891
Collected 4/3/2003 9:40:00 AM
Received 4/3/2003 3:05:00 PM
Collected By CLIENT
Copy : Original
CC

Point No 084-68
Location: B-490 Block 4 MRC

Client ID. : 16027-007

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM
Total Residual Chlorine	0.6	mg/L		M4500-Cl G	4/3/2003

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S39

ATTACHMENT II

Brookhaven National Laboratory
Potable Water Supply

April 2003 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells

and Second Quarter Water Quality Data for the BNL Distribution System

ATTACHMENT III

Brookhaven National Laboratory
Potable Water Supply

2003 Second Quarter Bacteriological Reports for the BNL Potable Water Wells

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. : 0304131-008

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

Federal ID 5111891
Collected 4/3/2003 10:23:00 AM Point No 8
Received 4/3/2003 3:05:00 PM Location: Well #4 Raw
Collected By CLIENT
Copy : Original
CC

Client ID. : 16027-008

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S42

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. : 0304131-009

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

Federal ID 5111891
Collected 4/3/2003 10:35:00 AM Point No 9
Received 4/3/2003 3:05:00 PM Location: Well #6 Raw
Collected By CLIENT
Copy : Original
CC

Client ID. : 16027-009

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 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 : 4/28/2003

BNLM134 S45

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. : 0304131-010

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

Federal ID 5111891
Collected 4/3/2003 10:50:00 AM Point No 10
Received 4/3/2003 3:05:00 PM Location: Well #7 Raw
Collected By CLIENT
Copy : Original
CC

Client ID. : 16027-010

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 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 : 4/28/2003

BNLM134 S48

HZM 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. : 0304131-011

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

Federal ID 5111891
Collected 4/3/2003 11:07:00 AM Point No 12
Received 4/3/2003 3:05:00 PM Location: Well #11 Raw
Collected By CLIENT
Copy : Original
CC

Client ID. : 16027-011

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S51

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. : 0304131-014

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

Federal ID 5111891
Collected 4/3/2003 11:20:00 AM Point No 13
Received 4/3/2003 3:05:00 PM Location: Well #12 Raw
Collected By CLIENT
Copy : Original
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Client ID. : 16027-014

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 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 : 4/28/2003

BNLM134 S57

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. : 0304131-016

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

Federal ID 5111891
Collected 4/3/2003 12:45:00 PM Point No 13
Received 4/3/2003 3:05:00 PM Location: Well #12 Raw
Collected By CLIENT
Copy : Original
CC

Client ID. : 16027-016

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 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 : 4/28/2003

BNLM134 S60

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. : 0304131-018

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

Federal ID 5111891
Client ID. : 16027-018
Collected 4/3/2003 11:10:00 AM
Point No 056-31
Received 4/3/2003 3:05:00 PM
Location: Well #11 Gac Filter 655
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S62

FZM 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. : 0304131-013

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

Federal ID 5111891
Client ID. : 16027-013
Collected 4/3/2003 11:27:00 AM Point No 056-32
Received 4/3/2003 3:05:00 PM Location: Well #12 Gac Filter 657
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 AM

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

Date Reported : 4/28/2003

Joann M. Slavin
Laboratory Manager

BNLM134 S54

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. : 0304131-017

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

Federal ID 5111891
Client ID. : 16027-017
Collected 4/3/2003 12:45:00 PM Point No 14
Received 4/3/2003 3:05:00 PM Location: Wtf Packed Tower 648
Collected By CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	4/4/2003 10:30:00 AM
E_Coliform	Absent		Absent	M9223	4/4/2003 10:30:00 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 : 4/28/2003

BNLM134 S61