Doc-109

Environmental and Waste Management Services

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BROOKHAVEN
NATIONAL LABORATORY

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

August 7, 2003

Ms. Kathleen Newcomer
Suffolk County Department of Health Services
DH 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 July 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 July.
Attachment II:	July 2003 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells and the BNL Distribution System.
Attachment III:	2003 Third 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. 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.

NSF
REGISTERED TO ISO 14001: 1996

EC61ER.03

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
	J. Tarpinian	w/o attachments

File: EC61ER.03

ATTACHMENT I

Brookhaven National Laboratory
Potable Water Supply

Monthly Operational and Bacteriological Reports for July 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: JULY 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	110	per 24hrs	mg/l	Hydroxide	12914143
1	1,070	100	10	0.75	7.4	12915213
2	1,098	85	15	0.82	7.6	12916311
3	0					
4	2,069	60	25	0.9	7.5	12918380
5	0					
6	0					
7	3,294	18+52	42	0.86	7.3	12921674
8	1,065	48+152	22	0.78	7.6	12922739
9	1,100	187	13	1.1	7.6	12923839
10	1,057	178	9	1.2	7.4	12924896
11	1,048	166	12	0.83	7.5	12925944
12	0					
13	0					
14	3,193	138	28	0.88	7.1	12929137
15	1,081	122	16	1.2	7.3	12930218
16	986	110	12	1	7.4	12931204
17	935	100+100	10	1	7.4	12932139
18	963	190	10	1.2	7.6	12933102
19	0					
20	0					
21	3,056	150	40	0.83	7.8	12936158
22	1,062	133	17	0.81	7.9	12937220
23	979	120	13	1.2	7.5	12938199
24	1,090	105+95	15	0.8	7.9	12939289
25	974	190	10	0.78	7.8	12940263
26	0					
27	0					
28	3,112	160	30	0.87	7.9	12943375
29	1,080	145	15	0.77	7.8	12944455
30	1,073	130	15	0.82	7.8	12945528
31	1,089	112	18	0.78	7.8	12946617
TOT	32,474		397			
AVG.	1047.55		12.81	No. Days:	31	

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 8-1-03

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: JULY 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	1579104
1	405	85	11	0.98	6	1579509
2	480	72+78	13	0.82	6	1579989
3	0					
4	916	120	30	0.69	6	1580905
5	0					
6	0					
7	1.081	96	24	0.37	6	1581986
8	401	81+69	15	0.42	6	1582387
9	375	138	12	0.33	6	1582762
10	557	123	15	0.54	6	1583319
11	391	110+40	13	0.44	6	1583710
12	0					
13	0					
14	1.385	111	39	0.27	6	1585095
15	462	99	12	0.23	6	1585557
16	404	88	11	0.33	6	1585961
17	500	78+72	10	0.55	6.1	1586461
18	357	141	9	0.21	6.1	1586818
19	0					
20	0					
21	901	117	24	0.02	6.2	1587719
22	295	111	6	0.27	6	1588014
23	408	102+48	9	0.01	6	1588422
24	579	132	18	0.07	6	1589001
25	333	123	9	0.03	6	1589334
26	0					
27	0					
28	3.741	100+50	23	1.33	6.2	1593075
29	508	138	12	0.07	6.1	1593583
30	248	135	3	0.03	6.2	1593831
31	400	129	6	0.03	6	1594231
TOT	15.127		324			
AVG.	487.97		10.45	No. Days:	31	

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: 8-1-03

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: JULY 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	126	per 24hrs	mg/l	Hydroxide	393676
1	58	123	3	0.98	6	393734
2	258	116	7	0.82	6	393992
3	0					
4	264	111	5	0.69	6	394256
5	0					
6	0					
7	55	111	0	0.37	6	394311
8	0	111+39	0	0.42	6	394311
9	98	150	0	0.33	6	394409
10	209	138	12	0.54	6	394618
11	118	135+15	3	0.44	6	394736
12	0					
13	0					
14	340	138	12	0.27	6	395076
15	45	137	1	0.23	6	395121
16	180	133	4	0.33	6	395301
17	34	133	0	0.5	6.1	395335
18	66	132	1	0.21	6.1	395401
19	0					
20	0					
21	240	126	6	0.02	6.2	395641
22	0	126	0	NR	NR	395641
23	109	123+27	3	0.01	6	395750
24	194	141	9	0.07	6	395944
25	222	132	9	0.03	6	396166
26	0					
27	0					
28	906	114+18	18	1.33	6.2	397072
29	348	129	3	0.07	6.1	397420
30	1	129	0	0.03	6.2	397421
31	0	129	0	0.03	6	397421
TOT	3,745		96			
AVG	120.81		3.10	No. Days:	31	

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: 8-1-03

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: JULY 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	81	per 24hrs	mg/l	Hydroxide	1155179
1	1,210	63	18	0.98	6	1156389
2	1,211	45+105	18	0.82	6	1157600
3	0					
4	2,278	111	39	0.69	6	1159878
5	0					
6	0					
7	3,596	87	24	0.37	6	1163474
8	1,007	87+63	0	0.42	6	1164481
9	1,267	129	21	0.33	6	1165748
10	1,207	108	21	0.54	6	1166955
11	1,205	84+66	24	0.44	6	1168160
12	0					
13	0					
14	3,662	93	57	0.27	6	1171822
15	1,264	75	18	0.23	6	1173086
16	1,178	60	15	0.33	6	1174264
17	1,039	42+108	18	0.55	6.1	1175303
18	1,171	132	18	0.21	6.1	1176474
19	0					
20	0					
21	3,587	78	54	0.02	6.2	1180061
22	1,244	66	12	0.27	6	1181305
23	1,054	96+54	12	0.01	6	1182359
24	1,255	129	21	0.07	6	1183614
25	824	129	0	0.03	6	1184438
26	0					
27	0					
28	367	128	1	1.33	6.2	1184805
29	1,028	123	5	0.07	6.1	1185833
30	1,236	117	6	0.03	6.2	1187069
31	1,157	111	6	0.03	6	1188226
TOT	33,047		408			
AVG.	1066.03		13.16	No. Days:	31	

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 8-1-03

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: JULY 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	
Day of month	Treated Water ll Gals	Liquid Sodium Hypochlorite Gallons 38	Cl2 use per 24hrs	Free Cl2 Residual mg/l	Lime Sodium Hydroxide	Totalizer Daily Totalizer 764819
1	0	38	0	NR	NR	764819
2	0	38	0	NR	NR	764819
3	0					
4	0	38	0	NR	NR	764819
5	0					
6	0					
7	0	38	0	NR	NR	764819
8	0	38	0	NR	NR	764819
9	0	38	0	NR	NR	764819
10	0	38	0	NR	NR	764819
11	0	38	0	NR	NR	764819
12	0					
13	0					
14	370	38	0	NR	NR	765189
15	0	38	0	NR	NR	765189
16	0	38	0	NR	NR	765189
17	50	38	0	NR	NR	765239
18	0	38	0	NR	NR	765239
19	0					
20	0					
21	0	38	0	NR	NR	765239
22	0	38	0	NR	NR	765239
23	0	38	0	NR	NR	765239
24	0	38	0	NR	NR	765239
25	0	38	0	NR	NR	765239
26	0					
27	0					
28	5	38	0	NR	NR	765244
29	0	38	0	NR	NR	765244
30	0	38	0	NR	NR	765244
31	0	38	0	NR	NR	765244
TOT	425		0			
AVG	13.71		0.00	No. Days.	31	

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: 8-1-03

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: JULY 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	99	per 24hrs	mg/l	Hydroxide	499475
1	124	96	3	0.35	7	499599
2	117	95	1	NR	NR	499716
3	0					
4	324	93	2	NR	NR	500040
5	0					
6	0					
7	0	93	0	NR	NR	500040
8	395	80+70	13	0.43	6.1	500435
9	389	150	0	1.3	6	500824
10	346	145	5	0.9	7.3	501170
11	187	145	0	0.45	7.3	501357
12	0					
13	0					
14	577	144	1	0.93	7.2	501934
15	236	141	3	1.1	6.9	502170
16	550	136	5	NR	NR	502720
17	467	132	4	1	7.2	503187
18	525	129	3	NR	NR	503712
19	0					
20	0					
21	389	129	0	0.1	7.6	504101
22	130	129	0	1	7.7	504231
23	324	129	0	1.5	7.4	504555
24	155	129	0	0.76	6.8	504710
25	304	126	3	NR	NR	505014
26	0					
27	0					
28	8	126	0	1.2	7.6	505022
29	310	126	0	1.3	7.4	505332
30	148	123	3	1.2	7.6	505480
31	123	123	0	1.2	7.6	505603
TOT	6,128		46			
AVG.	197.68		1.48	No. Days:	31	

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: 8-1-03

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: JULY 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	75	per 24hrs	mg/l	Hydroxide	645876
1	19	75	0	0.6	7	645895
2	25	75	0	NR	NR	645920
3	0					
4	59	75	0	NR	NR	645979
5	0					
6	0					
7	0	75	0	NR	NR	645979
8	1	75+75	0	0.25	6.3	645980
9	6	150	0	0.59	6.1	645986
10	0	150	0	NR	NR	645986
11	27	150	0	0.8	7.4	646013
12	0					
13	0					
14	2	144	6	0.73	7.7	646015
15	0	143	1	0.83	6.5	646015
16	3	143	0	NR	NR	646018
17	0	143	0	1	7.1	646018
18	2	143	0	NR	NR	646020
19	0					
20	0					
21	0	143	0	0.84	7.2	646020
22	1	141	2	0.88	7	646021
23	3	141	0	0.94	6.8	646024
24	0	141	0	0.74	6.6	646024
25	160	141	0	NR	NR	646184
26	0					
27	0					
28	0	141	0	0.98	7.2	646184
29	2	141	0	0.97	7	646186
30	0	141	0	0.94	7.3	646186
31	1	141	0	0.91	7.2	646187
TOT	311		9			
AVG.	10.03		0.29	No. Days:	31	

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: 8-1-03

Title: **Water Systems Supervisor**

Certification No. **NY0031941**

7/31/03
Pump Data

MONTHLY GALLONAGE REPORT
JULY 2003.xls

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	405	58	1,210	0	124	19	1,816
2	480	258	1,211	0	117	25	2,091
3	0	0	0	0	0	0	0
4	916	264	2,278	0	324	59	3,841
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	1,081	55	3,596	0	0	0	4,732
8	401	0	1,007	0	395	1	1,804
9	375	98	1,267	0	389	6	2,135
10	557	209	1,207	0	346	0	2,319
11	391	118	1,205	0	187	27	1,928
12	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0
14	1,385	340	3,662	370	577	2	6,336
15	462	45	1,264	0	236	0	2,007
16	404	180	1,178	0	550	3	2,315
17	500	34	1,039	50	467	0	2,090
18	357	66	1,171	0	525	2	2,121
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
21	901	240	3,587	0	389	0	5,117
22	295	0	1,244	0	130	1	1,670
23	408	109	1,054	0	324	3	1,898
24	579	194	1,255	0	155	0	2,183
25	333	222	824	0	304	160	1,843
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	3,741	906	367	5	8	0	5,027
29	508	348	1,028	0	310	2	2,196
30	248	1	1,236	0	148	0	1,633
31	400	0	1,157	0	123	1	1,681
Total	15,127	3,745	33,047	425	6,128	311	58,783

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	1,594,231	1,579,104	15,127
Well 6	397,421	393,676	3,745
Well 7	1,188,226	1,155,179	33,047
Well 10	765,244	764,819	425
Well 11	505,603	499,475	6,128
Well 12	646,187	645,876	311
AGS Water Supply Meter	469,936	469,759	177.00
Medical Reactor - Well 105			0.00
Biology Building - Well 9	6,787,370	6,785,670	1.70

H2M LABS, INC.

575 Broad Hollow Road, Melvile 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. : 0307365-001A

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

Federal ID 5111891
Collected : 7/10/03 12:12:00 PM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 094-273
Location : B-49 Water Tower

Client ID. : 16841-001

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	1.2	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : **0307365-002A**

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

Federal ID 5111891
Collected : 7/10/03 12:20:00 PM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 076-408
Location : B-640 Water Tower

Client ID. : 16841-002

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	0.8	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307365-004A

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

Federal ID 5111891
Collected : 7/10/03 8:35:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 109-19
Location : B-363 Apt.Laundry

Client ID. : 16841-00

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	0.5	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307365-007A

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

Federal ID 5111891
Client ID. : 16841-007
Collected : 7/10/03 1:13:00 PM
Point No : 084-67
Received : 7/10/03 4:15:00 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	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	0.7	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
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 : S. Scarpilta

Lab No. : 0307365-006A

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

Federal ID 5111891
Client ID. : 16841-00
Collected : 7/10/03 1:20:00 PM
Point No : 084-70
Received : 7/10/03 4:15:00 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	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	1.1	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin

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 : S. Scarpita

Lab No. : 0307365-005A

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

Federal ID 5111891
Collected : 7/10/03 8:45:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 054-187
Location : B-930 LINAC

Client ID. : 16841-00

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	1.1	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
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 : S. Scarpilta

Lab No. : 0307365-003A

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

Federal ID 5111891
Collected : 7/10/03 11:26:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 045-12
Location : B-1005 RHIC

Client ID. : 16841-00:

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM
Total Residual Chlorine	1.1	mg/L		M4500-Cl G	7/10/03

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

Date Reported :

Joann M. Slavin
Laboratory Manager

ATTACHMENT II

Brookhaven National Laboratory
Potable Water Supply

July 2003 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells and the BNL Distribution System

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

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity (µmhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	7/1/03	7.4	56	186	NR	NR
WTP	7/8/03	7.6	57	189	NR	NR
WTP	7/10/03	7.4	57	213	NR	NR
WTP	7/15/03	7.5	58	250	NR	NR
WTP	7/17/03	7.4	58	255	NR	NR
WTP	7/22/03	7.9	57	148	NR	NR
WTP	7/24/03	7.9	56	148	NR	NR
WTP	7/29/03	7.8	56	140	NR	NR
WTP	7/31/03	7.8	56	141	NR	NR
Well 11	7/1/03	7.0	55	190	NR	NR
Well 11	7/8/03	6.1	55	140	NR	NR
Well 11	7/10/03	7.3	55	158	NR	NR
Well 11	7/15/03	6.9	55	257	NR	NR
Well 11	7/17/03	7.2	55	282	NR	NR
Well 11	7/22/03	7.7	55	265	NR	NR
Well 11	7/24/03	6.8	55	NR	NR	NR
Well 11	7/29/03	7.4	55	151	NR	NR
Well 11	7/31/03	7.6	55	161	NR	NR
Well 12	7/1/03	7.0	56	158	NR	NR
Well 12	7/8/03	6.3	55	188	NR	NR
Well 12	7/10/03	NR	NR	NR	NR	NR
Well 12	7/15/03	6.5	55	179	NR	NR
Well 12	7/17/03	7.1	55	227	NR	NR
Well 12	7/22/03	7.0	56	174	NR	NR
Well 12	7/24/03	6.6	56	NR	NR	NR
Well 12	7/29/03	7.0	56	145	NR	NR
Well 12	7/31/03	7.2	56	147	NR	NR

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.

ATTACHMENT III

Brookhaven National Laboratory
Potable Water Supply

2003 Third 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. : 0307359-001A

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

Federal ID 5111891
Collected : 7/10/03 10:20:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 8
Location : Well #4 Raw

Client ID. : 16841-008

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307359-002A

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

Federal ID 5111891
Client ID. : 16841-009
Collected : 7/10/03 8:55:00 AM
Point No : 9
Received : 7/10/03 4:15:00 PM
Location : Well #6 Raw
Collected By : CLIENT
Copy : Original
CC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307359-003A

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

Federal ID 5111891
Collected : 7/10/03 9:05:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 10
Location : Well #7 Raw

Client ID. : 16841-010

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307406-021A

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

Federal ID 5111891
Collected : 7/11/03 11:00:00 AM
Received : 7/11/03 5:30:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 11
Location : Well #10 Raw

Client ID. : 16845-02'

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/12/03 12:15:00 PM
E_Coliform	Absent		Absent	M9223	7/12/03 12:15:00 PM

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

Date Reported :

Joann M. Slavin

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 : S. Scarpitta

Lab No. : 0307359-004A

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

Federal ID 5111891
Collected : 7/10/03 11:15:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 12
Location : Well #11 Raw

Client ID. : 16841-011

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin

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 : S. Scarpilta

Lab No. : 0307359-005A

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

Federal ID 5111891
Client ID. : 16841-01!
Collected : 7/10/03 10:50:00 AM
Point No : 13
Received : 7/10/03 4:15:00 PM
Location : Well #12 Raw
Collected By : CLIENT
Copy : Original
GC

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpilta

Lab No. : 0307406-023A

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

Federal ID 5111891
Collected : 7/11/03 11:15:00 AM
Received : 7/11/03 5:30:00 PM
Collected By : CLIENT
Copy : Original
CC

Client ID. : 15845-02:

Point No : 055-36
Location : Well #10 Gac Filter 654

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/12/03 12:15:00 PM
E_Coliform	Absent		Absent	M9223	7/12/03 12:15:00 PM

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

Date Reported :

Joann M. Slavin

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 : S. Scarpitta

Lab No. : 0307365-009A

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

Federal ID 5111891
Client ID. : 16841-01
Collected : 7/10/03 11:15:00 AM
Point No : 056-31
Received : 7/10/03 4:15:00 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	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307365-010A

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

Federal ID 5111891
Collected : 7/10/03 10:55:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Client ID. : 16841-01E
Point No : 056-32
Location : Well #12 Gac Filter 657

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpita

Lab No. : 0307365-011A

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

Federal ID 5111891
Collected : 7/10/03 10:55:00 AM
Received : 7/10/03 4:15:30 PM
Collected By : CLIENT
Copy : Original
CC

Client ID. : 16841-011
Point No : 056-32
Location : Well #12 Gac Filter 657 - Duplicate

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin
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 : S. Scarpitta

Lab No. : 0307365-008A

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

Federal ID 5111891
Collected : 7/10/03 11:25:00 AM
Received : 7/10/03 4:15:00 PM
Collected By : CLIENT
Copy : Original
CC

Point No : 14
Location : Wtf Packed Tower 648

Client ID. : 16841-01!

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/11/03 12:00:00 PM
E_Coliform	Absent		Absent	M9223	7/11/03 12:00:00 PM

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

Date Reported :

Joann M. Slavin

Laboratory Manager