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Environmental Services Division

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

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September 8, 2000

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

Dear Ms. Newcomer:

SUBJECT: Monthly Water Treatment Plant Reports
Reference: Suffolk County Minimum Monitoring Requirements for August 2000

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2000 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 Bacteriological and Operational Reports for August 2000.
Attachment II:	August 2000 Biweekly Water Quality Monitoring Data for BNL Potable Water Wells.
Attachment III:	2000 Third Quarter Radiological Analyses 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.

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,

E. A. Zimmerman, CEP, REM, CEA, CESM
Division Manager

EAZ/MA:rt
Attachments: As noted

cc: K. Brog w/o attachments
W. Chaloupka w/attachments
R. Lee w/attachments
E. Murphy w/attachments
P. Ponturo, SCDHS, w/o attachments
L. Ross w/o attachments
R. Simeone w/attachments

EC61ER.00

ATTACHMENT I

Brookhaven National Laboratory
Potable Water Supply

Monthly Bacteriological and Operational
Reports for August 2000

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WATER TREATMENT PLANT

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	155	per 24hrs	mg/l	Hydroxide	11946882
1	1,517	145	5	0.67	7.1	11948399
2	1,532	132	13	1.03	7.5	11949931
3	1,505	122	10	0.75	7.4	11951436
4	1,499	112+73	10	0.54	7.4	11952935
5	0					
6	0					
7	4,443	60/160	25	0.8	7.5	11957378
8	1,504	60/152	8	1.2	7.4	11958882
9	1,497	60/143	9	0.51	7.6	11960379
10	1,518	60/138	5	0.6	7.6	11961897
11	1,473	60+110/129	9	0.34	7.5	11963370
12	0					
13	0					
14	4,487	151/128	19	0.71	7.7	11967857
15	1,477	143/128	15	0.72	7.5	11969334
16	1,496	132/128	11	0.8	7.5	11970830
17	1,494	121/128	11	0.5	7.5	11972324
18	1,536	110/128	11	0.82	7.4	11973860
19	0					
20	0					
21	4,512	72/128	38	0.51	7.3	11978372
22	1,515	60+70/128	12	1.04	7.4	11979887
23	1,484	120	10	0.89	7.6	11981371
24	1,503	110	10	0.73	7.7	11982874
25	1,486	90	20	0.77	7.7	11984360
26	0					
27	0					
28	4,485	65	25	0.75	7.8	11988845
29	1,508	55	10	0.59	7.9	11990353
30	1,507	45	10	0.52	7.6	11991860
31	1,462	30	15	0.67	7.8	11993322
TOT	46,440		311			
AVG.	1498.06		10.03	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 ✓

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? 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: J O Ross

Date: 9-6-00

Title: WATER SYSTEMS SUPERVISOR

Cert #: 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 4

Source: Ground Water

Did an emergency occur in any part of the water system? yes____ no ✓

Does the system have a chlorination waiver? yes ____ no ✓

	CHLORINATION				pH	
	Treated	Liquid Sodium Hypochlorite		Free Cl2	__ Lime	Totalizer
of	Water	Gallons	Cl2 use	Residual	__ Sodium	Daily Totalizer
onth	K Gals	150	per 24hrs	mg/l	Hydroxide	1393428
1	868	132 +20	18	0.06	6.1	1394296
2	716	141	11	0.01	6	1395012
3	615	130	11	0.03	6	1395627
4	623	119	11	0.01	6	1396250
5	0					
6	0					
7	1,983	85	35	0.03	6.1	1398233
8	650	72	13	0.06	6.1	1398883
9	468	67+133	5	0.06	6	1399351
10	704	190	10	0.12	6.1	1400055
11	509	180	10	0.17	6.1	1400564
12	0					
13	0					
14	1,815	145	35	0.16	6.2	1402379
15	510	132	13	0.05	6	1402889
16	569	122	10	0.48	6	1403458
17	592	111	11	0.07	6.1	1404050
18	529	100	11	0.26	6.1	1404579
19	0					
20	0					
21	1,448	70	30	0	6	1406027
22	608	60+140	10	0.12	6	1406635
23	679	190	10	0.24	6	1407314
24	738	180	10	0.24	6	1408052
25	549	165	15	0.23	6	1408601
26	0					
27	0					
28	1,716	132	33	0.2	6	1410317
29	523	122	10	0.07	6.2	1410840
30	488	110+80	12	0.06	6.2	1411328
31	619	178	12	0.04	6.1	1411947
TOT	18,519		346			
VG	597.39		11.16	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 ✓

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? 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: 9-6-00

Title WATER SYSTEMS SUPERVISOR

Cert. # 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 6

Source: Ground Water

Did an emergency occur in any part of the water system? yes____ no ✓

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	70	per 24hrs	mg/l	Hydroxide	54539
1	614	58+142-+	12	0.06	6.1	55153
2	561	197	3	0.01	6	55714
3	166	195	2	0.03	6	55880
4	204	190	5	0.01	6	56084
5	0					
6	0					
7	667	180	10	0.03	6.1	56751
8	275	178	2	0.06	6.1	57026
9	130	175	3	0.06	6	57156
10	197	172	3	0.12	6.1	57353
11	229	171	1	0.17	6.1	57582
12	0					
13	0					
14	631	160	11	0.16	6.2	58213
15	161	155	5	0.05	6	58374
16	201	152	3	0.48	6	58575
17	193	151	1	0.07	6.1	58768
18	213	145	6	0.26	6.1	58981
19	0					
20	0					
21	419	140	5	0	6	59400
22	76	140	0	0.12	6	59476
23	174	135	5	0.24	6	59650
24	230	135	0	0.24	6	59880
25	51	135	0	0.23	6	59931
26	0					
27	0					
28	639	120	15	0.2	6	60570
29	0	120	0	0.07	6.2	60570
30	188	114	6	0.06	6.2	60758
31	246	112	2	0.04	6.1	61004
TOT	6,465		100			0
AVG.	208.55		3.23	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 ✓

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? 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: S A Ross

Date: 9-6-00

Title: WATER SYSTEM SUPERVISOR

Cert. # 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 7

Source: Ground Water

Did an emergency occur in any part of the water system? yes_____ no ✓

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	150	per 24hrs	mg/l	Hydroxide	197336
1	1,204	150	0	0.06	6.1	198540
2	1,074	135	15	0.01	6	199614
3	1,266	120	10	0.03	6	200880
4	1,242	108	12	0.01	6	202122
5	0					
6	0					
7	3,969	67+100	41	0.03	6.1	206091
8	1,341	152	15	0.06	6.1	207432
9	1,195	142	10	0.06	6	208627
10	1,262	131	9	0.12	6.1	209889
11	1,145	120	13	0.17	6	211034
12	0					
13	0					
14	3,679	82	38	0.16	6.2	214713
15	1,292	68	14	0.05	6	216005
16	1,257	55	13	0.48	6	217262
17	1,260	115 +41	14	0.07	6.1	218522
18	1,232	145	11	0.26	6.1	219754
19	0					
20	0					
21	3,434	110	35	0	6	223188
22	1,282	98	12	0.12	6	224470
23	1,243	85	13	0.24	6	225713
24	1,388	72	13	0.24	6	227101
25	1,010	60	12	0.23	6	228111
26	0					
27	0					
28	3,630	30/140	30	0.2	6	231741
29	1,325	159	11	0.07	6.2	233066
30	1,108	149	10	0.06	6.2	234174
31	1,261	135	14	0.04	6.1	235435
TOT	38,099		365			0
AVG.	1229.00		11.77	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 ✓

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? 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: J.C. Ross

Date: 9-6-00

Title: WATER SYSTEMS SUPERVISOR

Cert. #: 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 10

Source: Ground Water

Did an emergency occur in any part of the water system? yes_____ no ✓

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	60	per 24hrs	mg/l	Hydroxide	763818
1	0	60	0	0.3	7.9	763818
2	13	60	0	0.3	7.9	763831
3	0	60	0	NR	NR	763831
4	0	60	0	NR	NR	763831
5	0					
6	0					
7	0	60	0	NR	NR	763831
8	0	60	0	NR	NR	763831
9	3	60	0	NR	NR	763834
10	0	60	0	NR	NR	763834
11	0	60	0	NR	NR	763834
12	0					
13	0					
14	0	60	0	NR	NR	763834
15	0	60	0	NR	NR	763834
16	4	60	0	NR	NR	763838
17	18	60	0	NR	NR	763856
18	0	60	0	NR	NR	763856
19	0					
20	0					
21	0	60	0	0	0.6	763856
22	0	60	0	NR	NR	763856
23	0	60	0	NR	NR	763856
24	0	60	0	NR	NR	763856
25	0	60	0	NR	NR	763856
26	0					
27	0					
28	0	60	0	NR	NR	763856
29	0	60	0	NR	NR	763856
30	0	60	0	NR	NR	763856
31	0	60	0	NR	NR	763856
TOT	38		0			0
AVG	1.23		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 ✓

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? 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]

Date 9-6-00

Title WATER SYSTEMS SUPERVISOR

Cert # 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 11

Source: Ground Water

Did an emergency occur in any part of the water system? yes_____ no ✓

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	170	per 24hrs	mg/l	Hydroxide	324109
1	0	170	0	0.3	8.1	324109
2	0	170	0	0.4	8.1	324109
3	0	170	0	NR	NR	324109
4	0	170	0	NR	NR	324109
5	0					
6	0					
7	24	168	2	NR	NR	324133
8	2	168	0	NR	NR	324135
9	3	168	0	0.28	8.2	324138
10	2	168	0	0.26	8.1	324140
11	1	168	0	0.21	7.9	324141
12	0					
13	0					
14	4	168	0	0.16	6.2	324145
15	0	168	0	0.4	8.1	324145
16	0	168	0	0.6	8	324145
17	0	168	0	8.7	7.7	324145
18	0	168	0	NR	NR	324145
19	0					
20	0					
21	27	168	0	NR	NR	324172
22	0	168	0	0.07	6.5	324172
23	6	168	0	NR	NR	324178
24	0	168	0	NR	NR	324178
25	0	168	0	NR	NR	324178
26	0					
27	0					
28	0	168	0	1	7.1	324178
29	6	168	0	0.85	7	324184
30	6	168	0	0.87	6.9	324190
31	0	168	0	0.96	7	324190
TOT	81		2			
AVG	2.61		0.06	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 ✓

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? 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: Sa Ross

Date: 9-6-00

Title: WATER SYSTEMS SUPERVISOR

Cert. # 05650

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

Public Water Supply Protection

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD : AUGUST 2000

LOCATION: WELL NO. 12

Source: Ground Water

Did an emergency occur in any part of the water system? yes_____ no ✓

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	148	per 24hrs	mg/l	Hydroxide	240899
1	168	147	1	0.5	8	241067
2	10	145	2	0.5	8	241077
3	606	140	5	1.1	7.5	241683
4	510	138	2	0.74	7.5	242193
5	0					
6	0					
7	935	130	8	0.75	8.2	243128
8	813	122	8	0.8	8	243941
9	974	112+43	10	0.77	8.1	244915
10	895	148	7	0.51	8.2	245810
11	928	140	8	0.83	8.4	246738
12	0					
13	0					
14	1,367	130	10	0.73	7.8	248105
15	429	125	5	0.6	8	248534
16	436	122	3	0.6	7.9	248970
17	631	119	3	0.65	7.7	249601
18	541	112	6	0.72	7.4	250142
19	0					
20	0					
21	1,169	105	7	NR	NR	251311
22	343	105	0	0.6	7.4	251654
23	713	98	7	0.7	7.4	252367
24	413	90	8	NR	MR	252780
25	485	90	0	NR	NR	253265
26	0					
27	0					
28	684	84	6	0.67	6.9	253949
29	240	82	2	0.57	6.8	254189
30	416	80+70	2	0.61	6.9	254605
31	344	148	2	0.62	6.9	254949
TOT	14,050		112			
AVG	453.23		3.61	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 ✓

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? 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]

Date: 9-6-00

Title: WATER SYSTEMS SUPERVISOR

Cert. # 05650

8/31/00
Pump Data

MONTHLY GALLONAGE REPORT
Aug2000

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	868	614	1,204	0	0	168	2,854
2	716	561	1,074	13	0	10	2,374
3	615	166	1,266	0	0	606	2,653
4	623	204	1,242	0	0	510	2,579
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	1,983	667	3,969	0	24	935	7,578
8	650	275	1,341	0	2	813	3,081
9	468	130	1,195	3	3	974	2,773
10	704	197	1,262	0	2	895	3,060
11	509	229	1,145	0	1	928	2,812
12	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0
14	1,815	631	3,679	0	4	1,367	7,496
15	510	161	1,292	0	0	429	2,392
16	569	201	1,257	4	0	436	2,467
17	592	193	1,260	18	0	631	2,694
18	529	213	1,232	0	0	541	2,515
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
21	1,448	419	3,434	0	27	1,169	6,497
22	608	76	1,282	0	0	343	2,309
23	679	174	1,243	0	6	713	2,815
24	738	230	1,388	0	0	413	2,769
25	549	51	1,010	0	0	485	2,095
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	1,716	639	3,630	0	0	684	6,669
29	523	0	1,325	0	6	240	2,094
30	488	188	1,108	0	6	416	2,206
31	619	246	1,261	0	0	344	2,470
Total	18,519	6,465	38,099	38	81	14,050	77,252

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	1,411,947	1,393,428	18,519
Well 6	61,004	54,539	6,465
Well 7	235,435	197,336	38,099
Well 10	763,856	763,818	38
Well 11	324,190	324,109	81
Well 12	254,949	240,899	14,050
AGS Water Supply Meter	157,354	142,200	15154.00
Medical Reactor - Well 105	80,005,470	76,812,240	3193.23
Biology Building - Well 9	5,704,260	5,689,130	15.13

H2M LABS,INC.
575 Broad Hollow Road, Melville, NY 11747-5076
(631)694-3040 . FAX:(631)420-8436 NYSDOH ID# 10478

LABORATORY RESULTS

BROOKHAVEN NATIONAL LAB.-BNLM
70 BELL AVE.
UPTON, NY 11973
Federal ID : 5111891

Received : 04-AUG-2000 15:25
Collected By : JK99
Sample Type : Potable Water
Proj. Number : 4469

Copies To : SCHD

Lab Number	Collected	Location	Units Method Limits	T.COLI. BACT. *NONE* *SM#9223* *NEGATIVE*	E.COLI. *NONE* *SM#9223* *ABSENT*	CHLORINE RESIDUAL *mg/L* *SM#4500-C1G* *N/A*
20000804-035 ROUTINE DISTRIBUTION	04-AUG-2000 07:45	B-49 WATER TOWER		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.6 04-AUG-2000
20000804-036 ROUTINE DISTRIBUTION	04-AUG-2000 06:30	B-640 WATER TOWER		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.7 04-AUG-2000
20000804-037 ROUTINE DISTRIBUTION	04-AUG-2000 06:45	B-1005 RHIC		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	<0.1 04-AUG-2000
20000804-038 ROUTINE DISTRIBUTION	04-AUG-2000 08:00	B-363 APT. LAUNDRY		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.4 04-AUG-2000
20000804-039 ROUTINE DISTRIBUTION	04-AUG-2000 07:00	B-725 NSLS		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.4 04-AUG-2000
20000804-040 ROUTINE DISTRIBUTION	04-AUG-2000 07:25	B-490 BLOCK 1 ACF		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.4 04-AUG-2000
20000804-041 ROUTINE DISTRIBUTION	04-AUG-2000 07:15	B-490 BLOCK 4-MRC		NEGATIVE 04-AUG-2000 16:00	ABSENT 04-AUG-2000 16:00	0.4 04-AUG-2000

Date Issued : 08/28/2000

ORIGINAL
Report for client information only

Joann M. Slavin

ATTACHMENT II

Brookhaven National Laboratory
Potable Water Supply

August 2000 Biweekly 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
August 2000

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity (μmhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	8/1/00	7.1	60	109	NR	NR
WTP	8/3/00	7.4	60	126	NR	NR
WTP	8/8/00	7.4	58	135	NR	NR
WTP	8/10/00	7.6	57	127	NR	NR
WTP	8/15/00	7.5	60	130	NR	NR
WTP	8/17/00	7.5	61	131	NR	NR
WTP	8/22/00	7.4	59	126	NR	NR
WTP	8/24/00	7.6	60	129	NR	NR
WTP	8/29/00	7.9	56	134	NR	NR
WTP	8/31/00	7.8	56	136	NR	NR
Well 12	8/1/00	8.0	56	200	NR	NR
Well 12	8/3/00	7.6	56	156	NR	NR
Well 12	8/8/00	8.0	56	163	NR	NR
Well 12	8/10/00	8.2	56	155	NR	NR
Well 12	8/17/00	7.7	56	160	NR	NR
Well 12	8/22/00	7.4	58	157	NR	NR
Well 12	8/24/00	7.4	58	159	NR	NR
Well 12	8/29/00	6.8	56	157	NR	NR
Well 12	8/31/00	6.9	56	156	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

2000 Third Quarter Radiological Analyses
for the BNL Potable Water Wells

ATTACHMENT III

Table 2
Summary of Radiological Results for the
BNL Potable Water Wells
2000 Third Quarter Monitoring Results

Well ID	Gross Alpha (pCi/L)	Gross Beta (pCi/L)	Tritium (pCi/L)
Well # 4	0.96	3.81	< 320
Well # 6	1.29	3.58	< 320
Well # 7	< 0.82	2.88	< 320
Well # 10	0.97	2.79	< 320
Well # 11	< 0.82	3.48	< 320

C. O. C. Number
20072406

Contractor Number
1

Page 1 of 1

BROOKHAVEN NATIONAL LABORATORY
RADIOLOGICAL CONTROL DIVISION

ANALYTICAL SERVICES LABORATORY
BLDG 490
UPTON, N.Y. 11973-5000

Chain of Custody Information

ERD COC No.: 7079
Ship to:
Pick Up by:
Attention:

Bioassay samples will not be accepted if bottles are filled above the shoulder.

Project Name: potable wells			
Requested by: b lee	**E-Mail Reports to:**	**SAMPLER:** lettieri	**Priority Authorization**
Life Number: 20222 3148	**EP Manager:** b lee	**SAMPLER:**	**Group Leader or Higher CALL**
Account No.: 07089 **Dept. Code:** ES	**FSS Manager:**	**SAMPLER:**	x3630, x2502 (Rad), x4860 (Non-Rad)

FILL OUT ONLY SHADED AREAS. **CANNOT ACCEPT SAMPLES WITH ACTIVITY >1mR/hr**

ASL Number	Sample Information									Container		Analysis Requested***									
	Grid	-ID	Date	-C	Time	Bldg. #	Matrix	Description		#	vol.	αβ	3H	γ	624	MET	WQ	VOA	PCB	pH	
20072406-01			000724		1350		w	083-400-10	Potable Well #4			x	x	x	x	x	x				
20072406-02			000724		1341		w	093-400-10	Potable Well #6			x	x	x	x	x	x				
20072406-03			000724		1334		w	092-400-10	Potable Well #7			x	x	x	x	x	x				
20072406-04			000724		1420		w	055-400-10	Potable Well #10			x	x	x	x	x	x				
20072406-05			000724		1410		w	056-400-10	Potable Well #11			x	x	x	x	x	x				
20072406-06			000724		1410		w	056-400-11	Potable Well #11 - Dup.			x	x	x	x	x	x				
20072406-07			000724		1300		w	076-400	Trip Blank.						x						

Must be one of the samplers

Transferred to :	lettieri	RA Brown			
Signed by:	lettieri	RA Brown			
Date/time	7/24/00 1543	7/24/00 1558			

***OTHER ANALYSIS NOT LISTED

COMMENTS

BNL F 2963B White Copy: Sample Custodian Yellow Copy: Analyst Pink Copy: Receiver or Intra-Lab Transfer Goldenrod Copy:

C.O.C. NUMBER
20072406

BROOKHAVEN NATIONAL LABORATORY
RADIOLOGICAL CONTROL DIVISION
Analytical Services Laboratory

RADIOLOGICAL REPORT

Analyzed by: Robert R Gaschott

Reviewed by: RRG 08/18/00

SAMPLE I.D. NUMBER	ALPHA uCi/mL	ALPHA Error	BETA uCi/mL	BETA Error	TRITIUM uCi/mL	TRITIUM Error	MDL - uCi/mL Alpha	Beta	Tritium	
20072406-01	9.61E-10	5.49E-10	3.81E-09	1.35E-09	8.76E-08	1.87E-07	8.21E-10	2.06E-09	3.20E-07	
20072406-02	1.29E-09	5.82E-10	3.58E-09	1.35E-09	-2.73E-08	1.86E-07	8.21E-10	2.06E-09	3.20E-07	
20072406-03	3.56E-10	4.82E-10	2.88E-09	1.32E-09	2.68E-08	1.85E-07	8.21E-10	2.06E-09	3.20E-07	
20072406-04	9.71E-10	5.49E-10	2.79E-09	1.32E-09	3.00E-09	1.90E-07	8.21E-10	2.06E-09	3.04E-07	
20072406-05	4.12E-10	4.87E-10	3.48E-09	1.34E-09	1.97E-07	1.87E-07	8.21E-10	2.06E-09	3.04E-07	
20072406-06	2.37E-10	4.18E-10	3.15E-09	1.45E-09	5.18E-08	1.85E-07	7.37E-10	2.28E-09	3.04E-07	

C.O.C. Number
20072406

Brookhaven National Laboratory
Radiological Control Division
Analytical Services Laboratory

GAMMA RESULTS

Analyzed by: Robert R. Gaschott
Reviewed by: RRG 9/6/00

Sample I.D.	Nuclide Name	Activity uCi/mL	1-Sigma % Error
20072406-01	TL-208	2.54E-09	29.97
20072406-02	TL-208	1.95E-09	42.42
20072406-03	There are no nuclides meeting summary criteria		
20072406-04	K-40	2.60E-08	46.29
20072406-05	There are no nuclides meeting summary criteria		
20072406-06	There are no nuclides meeting summary criteria		