



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

www.bnl.gov

August 6, 2002

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 July 2002**

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2002 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 July 2002.
- Attachment II: July 2002 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells and BNL Distribution System.
- Attachment III: 2002 Second Quarter Radiological Analyses for the BNL Potable Water Wells.
- Attachment IV: 2002 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) except for three bacteriological samples collected from the BNL Potable Water Wells during quarterly sampling. Positive coliform detections were found for samples collected on July 11 from well #6, well #7, and the granulated activated carbon (GAC) treated water of well #11. Resampling of these three locations was completed on July 15 and positive coliform detections were again found for samples collected from well #6 and well #7. A third set of samples was

collected from the two wells on July 17 after the sampling lines were sterilized by heating. Negative coliform detections were found for both wells in original and duplicate samples and therefore, the previous positive results are attributable to bacteriological contamination of the sampling lines and not to the BNL Potable Water Wells.

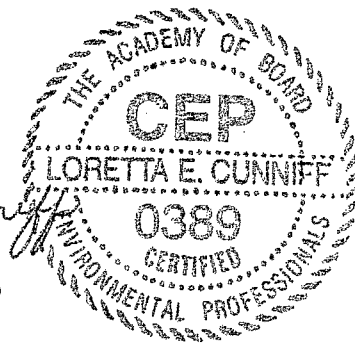
Collection and analysis of these samples are performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water Supply Monitoring Requirements, and the BNL Potable Water System Sampling Plan. Plant Engineering Division personnel using standard operating procedures 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,

*Lori Cunniff*

Lori Cunniff, CEP  
Division Manager



LC/MA:rt

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

EC61ER.02

**ATTACHMENT I**

**Brookhaven National Laboratory  
Potable Water Supply**

**Monthly Bacteriological and Operational  
Reports for July 2002**

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

**PUBLIC WATER SUPPLY PROTECTION**

PROGRAM CODE 169	STATION 11515100	SUFFOLK COUNTY	REPORTING PERIOD: JULY 2002
------------------	------------------	----------------	-----------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer 12616236
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl <sub>2</sub> Residual mg/l	Lime Sodium Hydroxide		
		Gallons	Cl <sub>2</sub> use per 24hrs		_____	_____	
1	112	187	0	0.73	7.7	12616348	
2	0	187	0	0.65	7.6	12616348	
3	0	187	0	0.7	7.6	12616348	
4	0						
5	0	187	0	0.57	7.6	12616348	
6	0						
7	0						
8	0	187	0	0.55	7.9	12616348	
9	0	187	0	0.85	7.5	12616348	
10	0	187	0	0.68	7.5	12616348	
11	0	187	0	0.78	7.5	12616348	
12	0	187	0	7.6	0.65	12616348	
13	0						
14	0						
15	0	187	0	0.85	7.6	12616348	
16	0	187	0	0.62	7.6	12616348	
17	0	187	0	NR	NR	12616348	
18	0	187	0	NR	NR	12616348	
19	0	187	0	NR	NR	12616348	
20	0						
21	0						
22	0	187	0	NR	NR	12616348	
23	923	145	42	5.9	7.5	12617271	
24	558	120	25	6.5	7.4	12617829	
25	866	75	45	7.1	7.4	12618695	
26	1,114	20+180	55	6.4	7.3	12619809	
27	0						
28	0						
29	3,068	165	35	0.61	7	12622877	
30	1,200	148	17	0.99	7.1	12624077	
31	140	146	2	0.7	7	12624217	
TOT	7,981		221				
AVG.	257.45		7.13	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: JC Reed

Date: 8-5-02

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: 2001
------------------	------------------	----------------	------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl <sub>2</sub> Residual mg/l	Lime Sodium Hydroxide	Totalizer	
		Gallons	Cl <sub>2</sub> use per 24hrs				
1	0	130	0	NR	NR	1479844	
2	0	130	0	NR	NR	1479844	
3	0	130	0	NR	NR	1479844	
4	0						
5	0	130	0	NR	NR	1479844	
6	0						
7	0						
8	0	130	0	NR	NR	1479844	
9	0	130	0	NR	NR	1479844	
10	0	130	0	NR	NR	1479844	
11	0	130	0	NR	NR	1479844	
12	0	130	0	NR	NR	1479844	
13	0						
14	0						
15	0	130	0	NR	NR	1479844	
16	0	130	0	NR	NR	1479844	
17	0	130	0	NR	NR	1479844	
18	0	130	0	NR	NR	1479844	
19	0	130	0	NR	NR	1479844	
20	0						
21	0						
22	0	130	0	NR	NR	1479844	
23	0	130	0	NR	NR	1479844	
24	0	130	0	NR	NR	1479844	
25	0	130	0	NR	NR	1479844	
26	0	130	0	NR	NR	1479844	
27	0						
28	0						
29	0	130	0	NR	NR	1479844	
30	0	130	0	NR	NR	1479844	
31	0	130	0	NR	NR	1479844	
TOT	0		0				
AVG.	0.00		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? 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: Jd Row

Date: 8-5-02

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: 2001
------------------	------------------	----------------	------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer 328007
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl2 Residual mg/l	Lime Sodium Hydroxide		
		Gallons	Cl2 use per 24hrs				
1	0	141	0	NR	NR	328007	
2	0	141	0	NR	NR	328007	
3	0	141	0	NR	NR	328007	
4	0						
5	0	141	0	NR	NR	328007	
6	0						
7	0						
8	0	141	0	NR	NR	328007	
9	0	141	0	NR	NR	328007	
10	0	141	0	NR	NR	328007	
11	0	141	0	NR	NR	328007	
12	0	141	0	NR	NR	328007	
13	0						
14	0						
15	8	141	0	NR	NR	328015	
16	288	138	3	NR	NR	328303	
17	2	138	0	NR	NR	328305	
18	1,206	110+68	28	NR	NR	329511	
19	265	178	0	NR	NR	329776	
20	0						
21	0						
22	1	178	0	NR	NR	329777	
23	554	163	15	0.03	6.3	330331	
24	358	157	6	0.06	6.3	330689	
25	410	148	9	0.6	5.9	331099	
26	376	140+60	8	0.48	5.9	331475	
27	0						
28	0						
29	1,410	172	28	0.17	5.8	332885	
30	466	162	10	0	5.9	333351	
31	58	120	42	0	5.9	333409	
TOT	5,402		149				
AVG.	174.26		4.81	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

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: SC Averb

Date: 8-5-02

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: 2001
------------------	------------------	----------------	------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl <sub>2</sub> Residual mg/l	Lime Sodium Hydroxide	Totalizer	
		Gallons	Cl <sub>2</sub> use per 24hrs				
1	0	155	0	NR	NR	814060	
2	0	155	0	NR	NR	814060	
3	0	155	0	NR	NR	814060	
4	0						
5	0	155	0	NR	NR	814060	
6	0						
7	0						
8	0	155	0	NR	NR	814060	
9	0	155	0	NR	NR	814060	
10	0	155	0	NR	NR	814060	
11	0	155	0	NR	NR	814060	
12	0	155	0	NR	NR	814060	
13	0						
14	0						
15	9	152	3	NR	NR	814069	
16	306	142	10	NR	NR	814375	
17	1	142	0	NR	NR	814376	
18	1,316	110+90	32	NR	NR	815692	
19	282	200	0	NR	NR	815974	
20	0						
21	0						
22	7	200	0	NR	NR	815981	
23	1,246	171	29	0.6	6.3	817227	
24	584	160	11	0.78	6.3	817811	
25	1,094	138	22	0.6	5.9	818905	
26	1,111	95+105	47	0.48	5.9	820016	
27	0						
28	0						
29	3,420	135	65	0.17	5.8	823436	
30	1,246	120	15	0	5.9	824682	
31	142	120	0	0	5.9	824824	
TOT	10,764		234				
AVG.	347.23		7.55	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? 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: *John Acosta*

Date: 8-5-02

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: 2001
------------------	------------------	----------------	------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer 764327
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl2 Residual mg/l	Lime Sodium Hydroxide		
		Gallons	Cl2 use per 24hrs				
1	0	58	0	NR	NR	764327	
2	0	58	0	NR	NR	764327	
3	0	58	0	NR	NR	764327	
4	0						
5	0	58	0	NR	NR	764327	
6	0						
7	0						
8	0	58	0	NR	NR	764327	
9	0	58	0	NR	NR	764327	
10	0	58	0	NR	NR	764327	
11	0	58	0	NR	NR	764327	
12	0	58	0	NR	NR	764327	
13	0						
14	0						
15	0	58	0	NR	NR	764327	
16	0	58	0	NR	NR	764327	
17	0	58	0	NR	NR	764327	
18	0	58	0	NR	NR	764327	
19	0	58	0	NR	NR	764327	
20	0						
21	0						
22	0	58	0	NR	NR	764327	
23	0	58	0	NR	NR	764327	
24	0	58	0	NR	NR	764327	
25	0	58	0	NR	NR	764327	
26	0	58	0	NR	NR	764327	
27	0						
28	0						
29	0	58	0	NR	NR	764327	
30	0	58	0	NR	NR	764327	
31	0	58	0	NR	NR	764327	
TOT	0		0				
AVG.	0.00		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? 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: J. A. Reed

Date: 8-5-02

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: 2001
------------------	------------------	----------------	------------------------

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				pH		Totalizer Daily Totalizer
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl2 Residual	Lime	Sodium Hydroxide	
		Gallons	Cl2 use per 24hrs	mg/l			
1	1,469	200	0	0.55	7.2		443403
2	11	200	0	0.56	6.3		444883
3	6	200	0	NR	NR		444889
4	0						
5	197	200	0	NR	NR		445086
6	0						
7	0						
8	0	200	0	0.57	6.3		445086
9	4	200	0	0.66	7.3		445090
10	3	200	0	NR	NR		445093
11	0	200	0	0.21	6.3		445093
12	128	200	0	0.52	6.3		445221
13	0						
14	0						
15	1	200+	0	0.47	7		445222
16	368	200+	0	0.48	7		445590
17	276	200+	0	1	6.1		445866
18	1,349	190+10	10	1	6.9		447215
19	1,407	189	11	1	7.5		448622
20	0						
21	0						
22	3,507	155	34	0.51	7.6		452129
23	121	151	4	NR	NR		452250
24	912	149	6	1.09	7.7		453162
25	170	148	1	NR	NR		453332
26	53	147	1	NR	NR		453385
27	0						
28	0						
29	39	147	0	NR	NR		453424
30	0	147	0	0.62	7.3		453424
31	1,541	130	17	1.1	7.3		454965
TOT	11,562		84				
AVG.	372.97		2.71	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? 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: 5-5-02

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: 2001
------------------	------------------	----------------	------------------------

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

Day of month	CHLORINATION				pH		Totalizer Daily Totalizer
	Treated Water K Gals	Liquid Sodium Hypochlorite		Free Cl2 Residual mg/l	Lime Sodium Hydroxide		
		Gallons	Cl2 use per 24hrs				
1	3,533	105	22	0.73	7.6	553086	
2	1,388	95	10	0.78	7.6	558007	
3	1,373	88+112	7	0.88	7.5	559380	
4	0						
5	2,489	190	10	0.76	7.5	561869	
6	0						
7	0						
8	3,305	168	28	0.78	7.5	565174	
9	1,351	157	11	0.92	7.5	566525	
10	1,401	145	12	0.8	7.5	567926	
11	1,384	135	10	0.93	7.5	569310	
12	1,289	125	10	0.7	7.5	570599	
13	0						
14	0						
15	3,820	100	25	0.63	7.2	574419	
16	1,032	90	10	0.55	7.2	575451	
17	1,050	82	8	0.92	7.3	576501	
18	15	82+118	0	0.91	7.1	576516	
19	0	200	0	0.89	7.2	576516	
20	0						
21	0						
22	0	198	2	0.76	7	576516	
23	1	198	0	NR	NR	576517	
24	669	195	3	NR	NR	577186	
25	797	195	0	NR	NR	577983	
26	18	198	0	NR	NR	578001	
27	0						
28	0						
29	0	195	3	NR	NR	578001	
30	0	195	0	NR	NR	578001	
31	0	195	0	NR	NR	578001	
TOT	24,915		171				
AVG.	803.71		5.52	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? 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: *J. J. Ross*

Date: 8-5-02

Title: Water Systems Supervisor

Certification No. NY0031941

7/31/02  
Pump Data

MONTHLY GALLONAGE REPORT  
2002 JULY

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	0	0	0	0	1,469	3,533	5,002
2	0	0	0	0	11	1,388	1,399
3	0	0	0	0	6	1,373	1,379
4	0	0	0	0	0	0	0
5	0	0	0	0	197	2,489	2,686
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	0	0	0	0	0	3,305	3,305
9	0	0	0	0	4	1,351	1,355
10	0	0	0	0	3	1,401	1,404
11	0	0	0	0	0	1,384	1,384
12	0	0	0	0	128	1,289	1,417
13	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0
15	0	8	9	0	1	3,820	3,838
16	0	288	306	0	368	1,032	1,994
17	0	2	1	0	276	1,050	1,329
18	0	1,206	1,316	0	1,349	15	3,886
19	0	265	282	0	1,407	0	1,954
20	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0
22	0	1	7	0	3,507	0	3,515
23	0	554	1,246	0	121	1	1,922
24	0	358	584	0	912	669	2,523
25	0	410	1,094	0	170	797	2,471
26	0	376	1,111	0	53	18	1,558
27	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0
29	0	1,410	3,420	0	39	0	4,869
30	0	466	1,246	0	0	0	1,712
31	0	58	142	0	1,541	0	1,741
Total	0	5,402	10,764	0	11,562	24,915	52,643
			Totalizer This Month		Totalizer Last Month		Total(x1,000) Gallons
	Well 4		1,479,844		1,479,844		0
	Well 6		333,409		328,007		5,402
	Well 7		824,824		814,060		10,764
	Well 10		764,327		764,327		0
	Well 11		454,965		443,403		11,562
	Well 12		578,001		553,086		24,915
AGS Water Supply Meter			409,188		408,708		480.00
Medical Reactor - Well 105			0		0		0.00

# H2M LABS, INC.

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

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Federal ID 5111891

Collected : 7/11/02 8:30:00 AM

Received : 7/11/02 3:15 00 PM

Collected By : SB99

Copies To : Tony Ross

## LABORATORY RESULTS

Lab No. : 0207356-001A

Sample Information...

Type : Potable Water

Origin : Dist.

Routine

Client ID. : 14848-001

Point No: 094-273

Location B-49 Water Tower

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

*Joann M. Slawin*

Date Reported:

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 421-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Lab No. : 0207356-002A

Sample Information...

Type : Potable Water

Origin : Dist.

Routine

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Federal ID 5111891

Client ID. : 14848-002

Collected : 7/11/02 8:40:00 AM

Point No: 076-408

Received : 7/11/02 3:15:00 PM

Location: B-640 Water Tower

Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

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

Date Reported -

*Joann M. Slawin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(516) 694-3040 FAX: (516) 421-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Lab No. : 0207356-003A

Sample Information...

Type : Potable Water

Origin : Dist.

Routine

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARF/PITTA

Client ID. : 14848-003

Federal ID 5111891

Collected : 7/11/02 9:00:00 AM

Point No.: 045-12

Received : 7/11/02 3:15 00 PM

Location: B-1005 Rhic

Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported:

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207356-004A

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

Brookhaven National Lab.-BNLM  
70 Bell Ave.  
Upton, NY 11973  
Attn To : S. SCAR.PITTA

Client ID. : 14848-004

Federal ID : 5111891  
Collected : 7/11/02 8:55:00 AM Point No: 109-19  
Received : 7/11/02 3:15:00 PM Location: B-363 Apt.Laundry  
Collected By : SB99  
Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported :

**H2M LABS, INC.**

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

Brookhaven National Lab.-BNLM  
 70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARF PITTA

Federal ID 5111891

Collected : 7/11/02 9:24:00 AM

Received : 7/11/02 3:14:00 PM

Collected By : SB99

Copies To : Tony Ross

Point No: 054-187

Location: B-930 Linac

**LABORATORY RESULTS**

Lab No. : 0207356-005A

Client ID. : 14848-005

Sample Information...

Type : Potable Water

Origin : Dist.

Routine

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

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

Date Reported :

*Joann M. Slavin*



# 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. SCARF/PITTA

Lab No. : 0207356-006A

Sample Information...

Type : Potable Water

Origin : Dist

Routine

Federal ID 5111891

Client ID. : 14848-006

Collected : 7/11/02 10:00:00 AM

Point No: 084-70

Received : 7/11/02 3:15:00 PM

Location: B-490 Outpatient Clinic

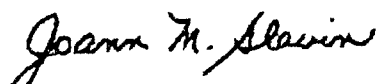
Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported :



# H2M LABS, INC.

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

Brookhaven National Lab.-BNLM  
70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Federal ID 5111891

Collected : 7/11/02 10:15:00 AM

Received : 7/11/02 3:15:00 PM

Collected By : SB99

Copies To : Tony Ross

Point No: 084-67

Location: B-490 Block 11

## LABORATORY RESULTS

Lab No. : 0207356-007A

Client ID. : 14848-007

Sample Information...

Type : Potable Water

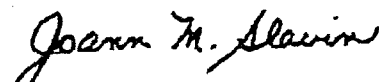
Origin : Dist.

Routine

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported :



**ATTACHMENT II**

**Brookhaven National Laboratory  
Potable Water Supply**

**July 2002 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 2002**

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity (µmhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	7/2/02	7.6	62	153	NR	NR
WTP	7/9/02	7.5	62	165	NR	NR
WTP	7/11/02	7.5	62	169	NR	NR
WTP	7/16/02	7.6	64	168	NR	NR
WTP	7/18/02	7.5	64	203	NR	NR
WTP	7/23/02	7.5	63	208	NR	NR
WTP	7/25/02	7.4	63	153	NR	NR
WTP	7/30/02	7.1	57	147	NR	NR
Well 11	7/2/02	6.3	55	258	NR	NR
Well 11	7/9/02	7.3	55	190	NR	NR
Well 11	7/11/02	6.3	56	170	NR	NR
Well 11	7/16/02	7.0	55	177	NR	NR
Well 11	7/18/02	6.9	55	151	NR	NR
Well 11	7/23/02	NR	NR	NR	NR	NR
Well 11	7/25/02	NR	NR	NR	NR	NR
Well 11	7/30/02	7.3	55	152	NR	NR
Well 12	7/2/02	7.6	55	173	NR	NR
Well 12	7/9/02	7.5	56	166	NR	NR
Well 12	7/11/02	7.5	54	184	NR	NR
Well 12	7/16/02	7.2	56	166	NR	NR
Well 12	7/18/02	7.1	56	210	NR	NR
Well 12	7/23/02	NR	NR	NR	NR	NR
Well 12	7/25/02	NR	NR	NR	NR	NR
Well 12	7/30/02	NR	NR	NR	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**

**2002 Second Quarter Radiological Analyses  
for the BNL Potable Water Wells**

**ATTACHMENT III**  
**Table 2**  
**Brookhaven National Laboratory**  
**Potable Water Supply**

<b>Summary of Radiological Results for the BNL Potable Water Wells 2002 Second Quarter Monitoring Results</b>				
<b>Well ID</b>	<b>Gross Alpha pCi/L</b>	<b>Gross Beta pCi/L</b>	<b>Tritium pCi/L</b>	<b>Sr-90 pCi/L</b>
Well # 6	0.64	< 1.47	< 353	< 1.0
Well # 7	< 0.57	1.86	< 353	< 1.0
Well # 11	0.80	1.79	< 353	< 1.0
Well # 12	< 0.57	< 1.47	< 353	< 1.0
Well # 7 (Duplicate)	< 0.57	< 1.47	< 353	< 1.0

ASL C.O.C. No:  
**22041808**

BROOKHAVEN NATIONAL LABORATORY  
RADIOLOGICAL CONTROL DIVISION

ERD COC No.: 13064

Contractor Number

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

Ship to: \_\_\_\_\_  
Pick Up by: \_\_\_\_\_  
Attention: \_\_\_\_\_

Page 1 of 1

Chain of Custody Information

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

Project Name: <b>ES F-Wells Potable</b>		E-Mail Reports to: <b>D Paquette</b>		SAMPLER: <b>C Ogeka</b>	Priority Authorization <b>Group Leader or Higher CALL</b> x3630, x2502 (Rad), x4860 (Non-Rad)
Requested by: <b>D Paquette</b>	Life Number: <b>14314</b>	x7046	SAMPLER:	SAMPLER:	
Account No.: <b>07089</b>	Dept. Code: <b>ES</b>		SAMPLER:		
***OTHER ANALYSIS NOT LISTED				COMMENTS	

ASL Number	Sample Description							Container		Analysis Requested***										
	Grid	-ID	Date	-C	Time	Depth	Matrix	#	vol.	αβ	3H	γ	Sr90	MET	WQ	VOA	PCB	pH		
22041808-01	056	401	04/18/02		1332	92-137	W Well #12	2	4.5 L	X	X	X								
22041808-02	056	400	04/18/02		1339	93-142	W Well #11	2	4.5 L	X	X	X								
22041808-03	092	400	04/18/02		1350	99-150	W Well #7	2	4.5 L	X	X	X								
22041808-04	093	400	04/18/02		1404	99-150	W Well #6	2	4.5 L	X	X	X								
22041808-05	BD-1		04/18/02				W Blind dup - Well #7	2	4.5 L	X	X	X								

Must be one of the samplers

Transferred to :	C Ogeka	V Lettieri		
Signed by:	C Ogeka	V Lettieri		
Date/time	4/18/02 1533	4/18/02 1537		







59204

Chain of Custody No

ASL Prefix No. 22041903

Page 1 of 1

BROOKHAVEN NATIONAL LABORATORY

Carrier/Waybill #

P.O.# 31572

13063

Requires EDD 1 DQL

SAMPLING CHAIN OF CUSTODY

Analysis Requested By		Sampling Contractor		Analytical Laboratory	
Name:	D. Paquette	Name:	ESD	Name:	SEC
Life No:	14314	Contact:		Address:	
Ext:	7046	Phone:		City:	St. Zip:
Acct. No:	07089	Dept:	ES	Contact:	
Email Reports To:	D. Paquette	Email/Fax:		Phone:	
1		Sampler:	Coyeka	Email/Fax:	
2					
Project Name:		Project Number:			
ES F-wells Potable		D. Paquette			

Comments:

Analysis Requested									
Alpha/Beta	Tridium	Gamma	Selenium	5242	624	Nuclide-specific Alpha	PCBs	Micals	
			X						
			X						
			X						
			X						
			X						
			X						

Sample Information										
LID	UID	Site ID/Bldg/Life #	Depth/RWP	Date	Time	How	Name/Description	Conc./Vol./Units	Conc. Type	Preservative
001	g	056-401	92-137	4/18/02	1332	W	Well # 12	4L	P	HNO3
002	g	056-400	93-142		133A	W	Well # 11	4L	P	HNO3
003	g	092-400	99-150		1350	W	Well # 7	4L	P	HNO3
004	g	093-400	99-150		1404	W	Well # 6	4L	P	HNO3
005	g	BD-1	-		-	W	Blind dup-well # 7	4L	P	HNO3

1 Relinquished By/Date/Time	2 Relinquished By/Date/Time	3 Relinquished By/Date/Time
Print: C. Oseta 4/19/02	Print:	Print:
Signature: C. Oseta 1000	Signature:	Signature:
4 Received By/Date/Time	5 Received By/Date/Time	6 Received By/Date/Time
Print:	Print:	Print:
Signature:	Signature:	Signature:

Contractor Lab Sample Disposal

Return To Client     Disposal by Lab

Archive For \_\_\_\_\_ Months

Data Package:     Full     Summary

Turn-Around Time Required:

Rush (1 Day)     14 Days     30 Days

7 Days     Other ( )



# GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

## Certificate of Analysis

Company: Brookhaven National Laboratory  
Address: Bell Avenue and Building 490  
Upton, New York 11973

Report Date: May 14, 2002

Contact: Sal Scarpitta  
Project: ESD Contract w/EDD

Page 1 of 1

Client Sample ID: BRKL002  
Sample ID: 59204005  
Matrix: Water  
Collect Date: 18-APR-02 00:00  
Receive Date: 20-APR-02 08:35  
Collector: Client

Project: BRKL00101  
Client ID: BRKL002  
COC: 22041903/13063  
Samp Recv.: 22041903/13063  
Client Desc.: BD-1

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Rad Gas Flow</b>										
GFPC, Sr90, liquid Strontium-90	U	0.414	+/-0.238	0.434	.100	pCi/L	LOM104/30/02	1924	160311	1

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	

### Notes:

The Qualifiers in this report are defined as follows :

- DL Failed required detection limit.
- H Holding time exceeded
- J Estimated value; the result was greater than the MDA but less than the required detection limit.
- JN Presumptive evidence of the analyte at an estimated quantity.
- R The data are unusable (radionuclide may or may not be present).
- U Undetected; sample result < MDA
- UI Uncertain identification for gamma spectroscopy.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

Potable Well #7  
Duplicate



# GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

## Certificate of Analysis

Company: Brookhaven National Laboratory  
Address: Bell Avenue and Building 490  
Upton, New York 11973

Report Date: May 14, 2002

Contact: Sal Scarpitta  
Project: ESD Contract w/EDD

Page 1 of 1

Client Sample ID: BRKL002  
Sample ID: 59204004  
Matrix: Water  
Collect Date: 18-APR-02 14:04  
Receive Date: 20-APR-02 08:35  
Collector: Client

Project: BRKL00101  
Client ID: BRKL002  
COC: 22041903/13063  
Samp Recv.: 22041903/13063  
Client Desc.: 093-400

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow										
GFPC, Sr90, liquid										
Strontium-90	J	0.466 +/-0.241	0.434	1.00	pCi/L		LOM104/30/02	1741	160311	1

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	

### Notes:

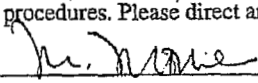
The Qualifiers in this report are defined as follows:

- DL Failed required detection limit.
- H Holding time exceeded
- J Estimated value; the result was greater than the MDA but less than the required detection limit.
- JN Presumptive evidence of the analyte at an estimated quantity.
- R The data are unusable (radionuclide may or may not be present).
- U Undetected; sample result < MDA
- UI Uncertain identification for gamma spectroscopy.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

Potable Well #6



# GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

## Certificate of Analysis

Company: Brookhaven National Laboratory  
Address: Bell Avenue and Building 490  
Upton, New York 11973

Report Date: May 14, 2002

Contact: Sal Scarpitta  
Project: ESD Contract w/EDD

Page 1 of 1

Client Sample ID: BRKL002  
Sample ID: 59204003  
Matrix: Water  
Collect Date: 18-APR-02 13:50  
Receive Date: 20-APR-02 08:35  
Collector: Client

Project: BRKL00101  
Client ID: BRKL002  
COC: 22041903/13063  
Samp Recv.: 22041903/13063  
Client Desc.: 092-400

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow										
GFPC, Sr-90, liquid Strontium-90	DL	0.196 +/-0.514	1.15	1.00	pCi/L		LOM1 04/30/02	1741	160311	1

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	

### Notes:

The Qualifiers in this report are defined as follows :

- DL Failed required detection limit.
- H Holding time exceeded
- J Estimated value; the result was greater than the MDA but less than the required detection limit.
- JN Presumptive evidence of the analyte at an estimated quantity.
- R The data are unusable (radionuclide may or may not be present).
- U Undetected; sample result < MDA
- UI Uncertain identification for gamma spectroscopy.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

Potable Well #7



# GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Bell Avenue and Building 490  
 Upton, New York 11973

Report Date: May 14, 2002

Contact: Sal Scarpitta  
 Project: ESD Contract w/EDD

Page 1 of 1

Client Sample ID:	BRKL002	Project:	BRKL00101
Sample ID:	59204002	Client ID:	BRKL002
Matrix:	Water	COC:	22041903/13063
Collect Date:	18-APR-02 13:39	Sample Recv.:	22041903/13063
Receive Date:	20-APR-02 08:35	Client Desc.:	056-400
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rad Gas Flow</b>											
GFPC, Sr90, liquid											
Strontium-90	J	0.450	+/-0.205	0.340	1.00	pCi/L	LOM1	04/30/02	1741	160311	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	

Notes:

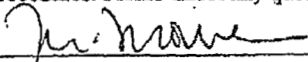
The Qualifiers in this report are defined as follows :

- DL Failed required detection limit.
- H Holding time exceeded
- J Estimated value; the result was greater than the MDA but less than the required detection limit.
- JN Presumptive evidence of the analyte at an estimated quantity.
- R The data are unusable (radionuclide may or may not be present).
- U Undetected; sample result < MDA
- UI Uncertain identification for gamma spectroscopy.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

*Potable Well # 11*



# GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Bell Avenue and Building 490  
Upton, New York 11973

Contact: Sal Scarpitta  
Project: ESD Contract w/EDD

Report Date: May 14, 2002

Page 1 of 1

Client Sample ID: BRKL002      Project: BRKL00101  
Sample ID: 59204001      Client ID: BRKL002  
Matrix: Water      COC: 22041903/13063  
Collect Date: 18-APR-02 13:32      Samp Recv.: 22041903/13063  
Receive Date: 20-APR-02 08:35      Client Desc.: 056-401  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow										
GFPC, Sr90, liquid										
Strontium-90	U	0.491	+-0.275	0.530	1.00	pCi/L	LOM1 04/30/02	1741	160311	1

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	

### Notes:

The Qualifiers in this report are defined as follows :

- DL Failed required detection limit.
- H Holding time exceeded
- J Estimated value; the result was greater than the MDA but less than the required detection limit.
- JN Presumptive evidence of the analyte at an estimated quantity.
- R The data are unusable (radionuclide may or may not be present).
- U Undetected; sample result < MDA
- UI Uncertain identification for gamma spectroscopy.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, Inc. standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

Potable Water #12

**ATTACHMENT IV**

**Brookhaven National Laboratory  
Potable Water Supply**

**2002 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) 420-8435 NYSDOH ID# 10478

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

## LABORATORY RESULTS

Lab No. : 0207356-008A

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

Federal ID : 5111891  
Collected : 7/11/02 10:22:00 AM  
Received : 7/11/02 3:15:00 PM  
Collected By : SB99  
Copies To : Tony Ross

Client ID. : 14848-009

Point No: 9  
Location: Well #6 Raw

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
* Total Coliform	* Positive		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported:

*Joann M. Alavin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville, NY 11747  
(631) 694-3040 . FAX: (631) 420-3435 NYSDOH ID# 10478

## LABORATORY RESULTS

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

Lab No. : 0207356-009A

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

Client ID. : 14848-010

Federal ID : 5111891  
Collected : 7/11/02 9:16:00 AM Point No: 10  
Received : 7/11/02 3:15:00 PM Location : Well #7 Raw  
Collected By : SB99  
Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
* Total Coliform	* Positive		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 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*

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207356-010A

Sample Information...

Type : Potable Water

Origin : Raw Well

Routine

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Federal ID 5111891

Client ID. : 14848-012

Collected : 7/11/02 10:40:00 AM

Point No: 12

Received : 7/11/02 3:15:00 PM

Location: Well #11 Raw

Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

*Joann M. Alavin*

# H2M LABS, INC.

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

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

## LABORATORY RESULTS

Lab No. : 0207356-011A

Sample Information...

Type : Potable Water

Origin : Raw Well

Routine

Client ID. : 14848-013

Federal ID 5111891

Collected : 7/11/02 10:50:00 AM

Point No: 13

Received : 7/11/02 3:15:00 PM

Location: Well #12 Raw

Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported :

*Joann M. Slavin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 421-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Lab No. : 0207356-012A

Sample Information...

Type : Potable Water

Origin : Treated Well

Routine

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARBITTA

Federal ID 5111891

Client ID. : 14848-014

Collected : 7/11/02 9:30:00 AM

Point No. : 14

Received : 7/11/02 3:15:00 PM

Location: Wlf Packed Tower 648

Collected By : SB99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

Date Reported :

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(516) 694-3040, FAX: (516) 420-1436 NYSDOH ID# 10478

## LABORATORY RESULTS

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

Lab No. : 0207356-013A

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

Federal ID : 5111891  
Collected : 7/11/02 10:40:00 AM  
Received : 7/11/02 3:15:00 PM  
Collected By : SB99  
Copies To : Tony Ross

Client ID. : 14848-016

Point No : 056-31  
Location : Well #11 Gac Filter 655

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
* Total Coliform	* Positive		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

Result(s) reported meet(a) Regulatory Limit(s).  
Result(s) flagged with \* : Exceed Regulatory Limit(s), Limit noted.

Date Reported :

*Joann M. Slavin*

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207356-014A

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

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

Federal ID : 5111891  
 Collected : 7/11/02 10:30:00 AM  
 Received : 7/11/02 3:13:00 PM  
 Collected By : SB99  
 Copies To : Tony Ross

Client ID. : 14848-017  
 Point No : 056-32  
 Location : Well #12 Gac Filter 657

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 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*

Date Reported :

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 FAX: (631) 420-8435 NYSDOH ID# 10478

## LABORATORY RESULTS

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

Lab No. : 0207356-015A

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

Federal ID : 5111891  
Collected : 7/11/02 10:30:00 AM  
Received : 7/11/02 3:15:00 PM  
Collected By : SB99  
Copies To : Tony Ross

Client ID. : 14848-018

Point No : 056-32  
Location : Well #12 Gac Filter 657

Parameter(s)	Results	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		Negative	M9223	7/12/02 10:30:00 AM
E_Coliform	Absent		Absent	M9223	7/12/02 10:30:00 AM

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

*Joanna M. Alavin*



**H2M LABS, INC.**

575 Broad Hollow Road, Melville NY 11747  
 (631) 694-3040, FAX: (631) 421-8436 NYSDOH ID# 10478

Brookhaven National Lab.-BNLM  
 70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Federal ID 5111891

Collected : 7/15/02 3:15:00 PM

Received : 7/15/02 4:03:00 PM

Collected By : JK00

Copies To : Tony Ross

Point No : 10

Location : Well #7 Raw

Client ID. : 14878-001

LABORATORY RESULTS

Lab No. : 0207436-001A

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
* Total Coliform	* Positive		Negative	M9223	7/15/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/15/02 4:15:00 PM

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

*Joann M. Slavin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 421-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

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

Lab No. : 0207436-002A

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

Federal ID 5111891

Client ID. : 14879-002

Collected : 7/15/02 3:10:00 PM

Point No : 9

Received : 7/15/02 4:02:00 PM

Location : Well #6 Raw

Collected By : JK00

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
* Total Coliform	* Positive		Negative	M9223	7/15/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/15/02 4:15:00 PM

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

*Joann M. Slawin*

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207436-003A

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : S. SCARPITTA

Client ID. : 14879-003

Federal ID 5111891

Collected : 7/15/02 3:00:00 PM

Point No. : 056-31

Received : 7/15/02 4:00:00 PM

Location : Well #11 Gac Filter 655

Collected By : JK00

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/15/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/15/02 4:15:00 PM

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

*Osama M. Alawin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040, FAX: (631) 421-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Lab No. : 0207535-001A

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Client ID. : 14908-001

Federal ID 5111891

Collected : 7/17/02 2:15:00 PM

Point No: 10

Received : 7/17/02 3:32:00 PM

Location: Well #7 Raw

Collected By : JK99

Copies To : Tony Rosi

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/17/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/17/02 4:15:00 PM

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

*Barbara M. Slavina*

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207535-002A

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Federal ID 5111891

Collected : 7/17/02 2:15:00 PM

Received : 7/17/02 3:32:00 PM

Collected By : JK99

Copies To : Tony Ross

Client ID. : 14908-002

DUPLICATE

Point No : 10  
Location : Well #7 Raw

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/17/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/17/02 4:15:00 PM

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

*Norm M. Alavin*

# H2M LABS, INC.

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

## LABORATORY RESULTS

Lab No. : 0207535-003A

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

Client ID. : 14908-003

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Federal ID 5111891

Collected : 7/17/02 2:20:00 PM

Point No : 9

Received : 7/17/02 3:32:00 PM

Location : Well #6 Raw

Collected By : JK99

Copies To : Tony Ross

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/17/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/17/02 4:15:00 PM

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

*Joann M. Alavin*

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
 (631) 694-3040, FAX: (631) 420-3436 NYSDOH ID# 10478

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Federal ID : 5111891

Collected : 7/17/02 2:20:00 PM

Received : 7/17/02 3:32:00 PM

Collected By : JK99

Copies To : Tony Ross

Point No : 9

Location : Well #6 Raw

## LABORATORY RESULTS

Lab No. : 0207535-004A

Client ID. : 14908-004

DUPLICATE

Sample Information...

Type : Potable Water

Origin : Raw Well

Repeat

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Limit</u>	<u>Method Number</u>	<u>Analyzed</u>
Total Coliform	Negative		Negative	M9223	7/17/02 4:15:00 PM
E_Coliform	Absent		Absent	M9223	7/17/02 4:15:00 PM

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

Date Reported : 7/22/02

*Joann M. Slavina*