



December 7, 2005

Ms. Kathleen Newcomer
Suffolk County Department of Health Services
Office of Water Resources
Bureau of Drinking Water
Suite 1C
360 Yaphank Avenue
Yaphank, New York 11980

Dear Ms. Kathleen Newcomer:

Subject: Monthly Water Treatment Plant Reports
Reference: Suffolk County Minimum Monitoring Requirements for November 2005

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2005 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 Data for November 2005.
- Attachment II: November 2005 Biweekly and Fourth Quarter Water Quality Monitoring Data for the BNL Distribution System and Potable Water Wells.
- Attachment III: November 2005 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data and Bacteriological Analyses for the BNL Distribution System.
- Attachment IV: 2005 Fourth Quarter Radiological Analyses for the BNL Potable Water Wells.
- Attachment V: Resampling for Iron and Color in the BNL Distribution System.

In the September 2005 water report, dated October 7, 2005, inorganic analysis for the distribution system showed that iron and color exceeded the regulatory limit. In accordance with NYS Sanitary Code Part 5 requirements, in October, two rounds of samples were taken within a two-week period to

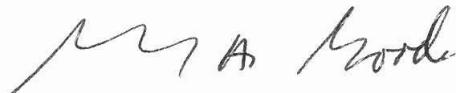


validate the results. Attachment V shows iron and color were in compliance with the regulatory limits.

Collection and analysis of these samples is performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water Supply Monitoring Requirements, and the BNL Potable Water System Sampling Plan. Plant Engineering Division personnel using standard operating procedures collect routine monitoring samples; a contractor laboratory using standard methods of analysis performs the subsequent analyses. The Quality Assurance documentation is available from the Environmental and Waste Management Services Division and Plant Engineering Divisions. Based on this information, we believe the values contained in these reports are representative of the BNL potable water system.

Should there be any questions regarding this report or the analytical or operational data contained herein, please call either J. Higbie at (631) 344-5919, R. Lee at (631) 344-3148, or W. Chaloupka at (631) 344-7136.

Sincerely,



George A. Goode
Environmental & Waste Management Services
Division Manager

GAG/JB:car

Attachments: As noted

cc:	J. Higbie	w/attachments
	L. Ambroszkiewicz, SCDHS	w/attachments
	W. Chaloupka	w/attachments
	J. Granzen	w/attachments
	G. Goode	w/o attachments
	R. Lee	w/attachments
	E. Murphy	w/attachments
	P. Ponturo, SCDHS	w/o attachments
	L. Ross	w/o attachments
	J. Tarpinian	w/o attachments

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ATTACHMENT I

Brookhaven National Laboratory

Potable Water Supply

Monthly Operational Data for November 2005

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: NOVEMBER 2005

LOCATION: Water Treatment Facility

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	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2	Lime	Totalizer
		Gallons	Cl2 use per 24hrs	Residual	Sodium
month	K Gals	85		mg/l	Hydroxide
1	1,169	75	10	0.64	7.4
2	1,443	60	15	0.94	7.6
3	1,275	45	15	0.94	7.6
4	1,226	40+160	5	0.67	7.5
5	0				
6	0				
7	3,229	153	47	0.50	7.6
8	1,080	137	18	0.65	7.6
9	1,169	120+80	17	0.77	7.6
10	1,027	185	15	0.78	7.6
11	0				
12	2,480	150	35	1.20	7.8
13	0				
14	1,845	120	30	1.30	7.6
15	0	110	10	1.40	7.6
16	2,125	100	10	1.00	7.7
17	943	90	10	1.40	7.7
18	846	80+110	10	0.85	7.6
19	0				
20	0				
21	2,214	170	20	0.87	7.6
22	680	165	5	1.50	7.6
23	530	159	6	1.40	7.7
24	0				
25	1,144	159	1	0.77	7.7
26	0				
27	0				
28	1,654	170	20	0.60	7.6
29	722	168	2	0.81	7.6
30	829	160	8	0.80	7.7
31	0				
TOT	27,630		309		
AVG.	921.00		10.30	No. Days:	30

Reported by:



Title: Water Systems Supervisor

Date: 12-5-05

Certification No. NY0031941

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 or 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 turb) 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.

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169 STATION 11515100 SUFFOLK COUNTY REPORTING PERIOD: NOVEMBER 2005

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	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2 Residual	Lime	Totalizer
		Gallons	Cl2 use per 24hrs	Sodium	Daily Totalizer
1	K Gals	0	mg/l	Hydroxide	1648622
2		0	0	NR	1648622
3		0	0	NR	1648622
4		0	0	NR	1648622
5		0			
6		0			
7		0	0	NR	1648622
8		0	0	NR	1648622
9		0	0	NR	1648622
10		0	0	NR	1648622
11		0			
12		0	0	NR	1648622
13		0			
14		0	0	NR	1648622
15		0	0	NR	1648622
16		0	0	NR	1648622
17		0	0	NR	1648622
18		0	0	NR	1648622
19		0			
20		0			
21		0	0	NR	1648622
22		0	0	NR	1648622
23		0	0	NR	1648622
24		0			
25		0	0	NR	1648622
26		0			
27		0			
28		0	0	NR	1648622
29		0	0	NR	1648622
30		0	0	NR	1648622
TOT		0			
AVG.	0.00	0.00	No. Days:	30	

Reported by:

Title: Water Systems Supervisor

Date: 12-5-05

Certification No. NY0031941

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 or 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 turbid) 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.

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169

STATION 11515100

SUFFOLK COUNTY

REPORTING PERIOD: NOVEMBER

2005

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	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2	Lime	Totalizer
	K Gals	Gallons	Cl2 use per 24hrs	Residual	Sodium
1	473	110	5	0.01	5.9
2	290	109	1	0.03	6
3	252	108	1	0.08	6
4	278	95+55	13	0.24	6
5	0				
6	0				
7	1,045	123	27	0.00	6
8	336	112	11	0.17	6
9	336	102	10	0.17	6
10	171	102+48	0	0.00	6
11	0				
12	708	128	22	0.30	6.1
13	0				
14	567	114	14	0.04	6
15	275	114+36	0	0.00	6
16	215	147	3	0.07	6.1
17	0	147	0	0.80	6
18	35	147	0	0.03	6
19	0				
20	0				
21	333	147	0	0.82	6
22	80	144	3	0.24	6
23	198	136	12	0.21	6.1
24	0				
25	294	136	0	0.07	6
26	0				
27	0				
28	74	136	0	0.06	6
29	103	135	1	0.29	6
30	255	117	18	0.20	6
31	0				
TOT	6,318		141		
AVG.	210.60		4.70	No. Days:	30

Reported by:

*Jd Rey*Date: 12-5-05

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: NOVEMBER 2005

LOCATION: WELL NO. 7

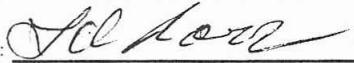
Did an emergency occur in any part of the water system? YES NO

Source: Ground Water

Does the system have a chlorination waiver? YES NO

Day of month	CHLORINATION			pH	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2 use per 24hrs	Lime	Totalizer
		Gallons	Residual	Sodium	Daily Totalizer
1	1,040	120+30	20	0.01	5.9
2	1,270	132	18	0.03	6
3	1,109	112	20	0.08	6
4	1,207	90+60	22	0.24	6
5	0				
6	0				
7	3,126	99	51	0.00	6
8	1,029	81	18	0.17	6
9	1,130	63	18	0.17	6
10	931	54+96	9	0.00	6
11	0				
12	2,390	102	48	0.30	6.1
13	0				
14	2,033	63	39	0.04	6
15	943	48+102	15	0.00	6
16	1,015	123	27	0.07	6.1
17	1,222	103	20	0.80	6
18	920	93	10	0.03	6
19	0				
20	0				
21	2,306	57+93	36	0.82	6
22	667	138	12	0.24	6
23	476	132	6	0.21	6.1
24	0				
25	1,020	126	6	0.07	6
26	0				
27	0				
28	1,823	123	3	0.06	6
29	719	114	9	0.29	6
30	790	96	18	0.20	6
31	0				
TOT	27,166		425		
AVG.	905.53		14.17	No. Days:	30

Reported by:



Title: Water Systems Supervisor

Date: 12-5-05

Certification No. NY0031941

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 or 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.

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169 STATION 11515100 SUFFOLK COUNTY REPORTING PERIOD: NOVEMBER 2005

LOCATION: WELL NO. 10

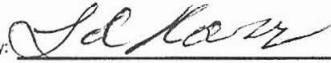
Did an emergency occur in any part of the water system? YES NO

Source: Ground Water

Does the system have a chlorination waiver? YES NO

Day of month	CHLORINATION			pH	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2 use per 24hrs	Lime	Totalizer
	K Gals	Gallons	Residual mg/l	Sodium Hydroxide	Daily Totalizer
1	0	0	0	NR	NR
2	0	0	0	NR	NR
3	0	0	0	NR	NR
4	0	0	0	NR	NR
5	0				
6	0				
7	0	0	0	NR	NR
8	1	0	0	NR	NR
9	0	0	0	NR	NR
10	0	0	0	NR	NR
11	0				
12	0	0	0	NR	NR
13	0				
14	0	0	0	NR	NR
15	0	0	0	NR	NR
16	0	0	0	NR	NR
17	0	0	0	NR	NR
18	0				
19	0				
20	0	0	0	NR	NR
21	0	0	0	NR	NR
22	0	0	0	NR	NR
23	0				
24	0	0	0	NR	NR
25	0				
26	0				
27	0	0	0	NR	NR
28	0	0	0	NR	NR
29	0	0	0	NR	NR
30	0				
31	0				
TOT	1		0		
Avg.	0.03		0.00	No. Days:	30

Reported by:



Title: Water Systems Supervisor

Date: 12-5-09

Certification No. NY0031941

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 or 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.

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169 STATION 11515100 SUFFOLK COUNTY REPORTING PERIOD: NOVEMBER 2005

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	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2 use per 24hrs	Lime	Totalizer
		Gallons	Cl2 Residual	Sodium mg/l	Daily Totalizer Hydroxide
1	0	75	0	NR	NR 722097
2	0	75	0	NR	NR 722097
3	0	75	0	NR	NR 722097
4	0	75	0	NR	NR 722097
5	0				
6	0				
7	0	72	3	NR	NR 722097
8	0	72	0	NR	NR 722097
9	0	72	0	NR	NR 722097
10	0	72	0	NR	NR 722097
11	0				
12	0	72	0	NR	NR 722097
13	0				
14	0	72	0	NR.	NR 722097
15	0	72	0	NR	NR 722097
16	0	72	0	NR	NR 722097
17	0	72	0	NR	NR 722097
18	0	72	0	NR	NR 722097
19	0				
20	0				
21	0	72	0	NR	NR 722097
22	0	72	0	NR	NR 722097
23	0	72	0	NR	NR 722097
24	0				
25	0	72	0	NR	NR 722097
26	0				
27	0				
28	0	72	0	NR	NR 722097
29	79	72	0	NR	NR 722176
30	0	72	0	NR	NR 722176
31	0				
TOT	79		3		
AVG.	2.63		0.10	No. Days:	30

Reported by:



Title: Water Systems Supervisor

Date: 12-5-05

Certification No. NY0031941

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 or 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 turbid) 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.

BROOKHAVEN NATIONAL LABORATORY

WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169 STATION 11515100 SUFFOLK COUNTY REPORTING PERIOD: NOVEMBER 2005

LOCATION: WELL NO. 12

Did an emergency occur in any part of the water system?

YES

NO

Source: Ground Water

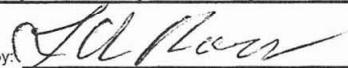
Does the system have a chlorination waiver?

YES

NO

Day of month	CHLORINATION			pH	
	Treated Water	Liquid Sodium Hypochlorite	Free Cl2	Lime	Totalizer
		Gallons	Cl2 use per 24hrs	Residual	Sodium
	K Gals	72	mg/l	Hydroxide	786255
1	0	72	0	NR	786255
2	0	72	0	NR	786255
3	0	72	0	NR	786255
4	0	72	0	NR	786255
5	0				
6	0				
7	0	72	0	NR	786255
8	0	72	0	NR	786255
9	0	72	0	NR	786255
10	0	72	0	NR	786255
11	0				
12	0	72	0	NR	786255
13	0				
14	0	72	0	NR	786255
15	0	72	0	NR	786255
16	0	72	0	NR	786255
17	0	72	0	NR	786255
18	0	72	0	NR	786255
19	0				
20	0				
21	0	72	0	NR	786255
22	0	72	0	NR	786255
23	66	66	6	NR	786321
24	0				
25	0	72	0	NR	786321
26	0				
27	0	72	0	NR	786321
28	84	72	0	NR	786405
29	0	72	0	NR	786405
30	0				
31	0				
TOT	150		6		
AVG.	5.00		0.20	No. Days:	30

Reported by:



Title: Water Systems Supervisor

Date: 12-5-05

Certification No. NY0031941

Population Served 3,500

Number of routine samples

(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 or 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.

11/30/2005

Pump Data

MONTHLY GALLONAGE REPORT

NOVEMBER2005.XLS

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	0	473	1,040	0	0	0	1,513
2	0	290	1,270	0	0	0	1,560
3	0	252	1,109	0	0	0	1,361
4	0	278	1,207	0	0	0	1,485
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	0	1,045	3,126	0	0	0	4,171
8	0	336	1,029	1	0	0	1,366
9	0	336	1,130	0	0	0	1,466
10	0	171	931	0	0	0	1,102
11	0	0	0	0	0	0	0
12	0	708	2,390	0	0	0	3,098
13	0	0	0	0	0	0	0
14	0	567	2,033	0	0	0	2,600
15	0	275	943	0	0	0	1,218
16	0	215	1,015	0	0	0	1,230
17	0	0	1,222	0	0	0	1,222
18	0	35	920	0	0	0	955
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
21	0	333	2,306	0	0	0	2,639
22	0	80	667	0	0	0	747
23	0	198	476	0	0	66	740
24	0	0	0	0	0	0	0
25	0	294	1,020	0	0	0	1,314
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	0	74	1,823	0	0	84	1,981
29	0	103	719	0	79	0	901
30	0	255	790	0	0	0	1,045
31	0	0	0	0	0	0	0
Total	0	6,318	27,166	1	79	150	33,714
		Totalizer This Month		Totalizer Last Month		Total(x1,000) Gallons	
	Well 4	1,648,622		1,648,622		0	
	Well 6	592,332		586,014		6,318	
	Well 7	1,829,053		1,801,887		27,166	
	Well 10	771,680		771,679		1	
	Well 11	722,176		722,097		79	
	Well 12	786,405		786,255		150	
AGS Water Supply Meter			555,568			1.00	
Medical Reactor - Well 105						0.00	
Biology Building - Well 9		6,793,050		6,793,050		0.00	

ATTACHMENT II

Brookhaven National Laboratory

Potable Water Supply

**November 2005 Biweekly and Fourth Quarter Water Quality Monitoring Data
for the BNL Distribution System and Potable Water Wells**

Attachment II
Table 1 - Summary of Water Quality Analyses
for the BNL Potable Water System
November 2005

Sample Location	Sample Date	pH (SU)	Temperature (Degrees F)	Conductivity (μmhos)	Alkalinity (mg/L)	Calcium (mg/L)
WTP	11/1/05	7.4	56	149	ANR	ANR
WTP	11/3/05	7.6	54	154	ANR	ANR
WTP	11/8/05	7.6	56	152	ANR	ANR
WTP	11/10/05	7.6	55	155	ANR	ANR
WTP	11/15/05	7.6	55	151	ANR	ANR
WTP	11/17/05	7.7	56	162	ANR	ANR
WTP	11/22/05	7.6	55	154	ANR	ANR
WTP	11/29/05	7.6	57	147	ANR	ANR
Bldg. 49	10/7/05	8.3	69.8	177	16.0	7.29
Bldg. 640	10/7/05	8.1	69.8	182	16.0	6.83
Bldg. 363	10/7/05	7.5	71.6	172	27.0	7.97

ANR- Analysis Not Required

NR- Not Reported

Note: Field parameters are only conducted for facilities that are in operation on the day of measurement.

H2M LABS, INC.

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

LABORATORY RESULTS

Brookhaven National Lab.-BNLM

70 Bell Ave.

Upton, NY 11973

Attn To : Marcia Allococo

Federal ID 5111891

Lab No. : 0510237-002A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Collected : 10/7/2005 9:05:00 AM

Point No : 094-273

Received : 10/7/2005 3:15:00 PM

Location : B-49 Water Tower

Collected By : CLIENT

Copy : Original

Client ID. : 20897-002

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Specific Conductance	177		1	µmhos/cm		E120.1	10/07/2005
pH (FIELD)	8.3		1	pH Units		E150.1	10/07/2005
Temperature	21		1	°C		E170.1	10/07/2005
Alkalinity, Total (As CaCO ₃)	16.0		1	mg/L		M2320 B	10/10/2005 3:11 PM

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

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

D.F. = Dilution Factor

Date Reported : 10/25/2005

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

Lab No. : 0510237-002A

Attn To : Marcia Allococo

Federal ID 5111891

Client ID. : 20897-002

Collected : 10/7/2005 9:05:00 AM Point No : 094-273

Received : 10/7/2005 3:15:00 PM Location : B-49 Water Tower

Collected By : CLIENT

Copy : Original

CC

Sample Information...

Type : Potable Water

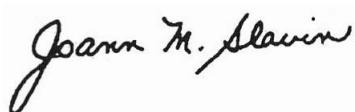
Origin : Distribution

Routine

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Calcium	7290		1	µg/L		E200.7	10/17/2005 10:51 AM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 10/25/2005



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 : Marcia Alocco

Federal ID 5111891

Lab No. : 0510237-001A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Collected : 10/7/2005 9:05:00 AM

Point No : 094-273

Received : 10/7/2005 3:15:00 PM

Location : B-49 Water Tower

Client ID. : 20897-001

Collected By : CLIENT

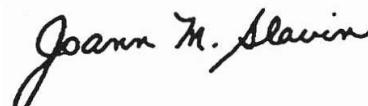
Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	10/08/2005 12:30 PM
E_Coliform	Absent		1		Absent	M9223	10/08/2005 12:30 PM
Total Residual Chlorine	0.7		1	mg/L		M4500-Cl G	10/07/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 10/25/2005



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 : Marcia Allococo

Lab No. : 0510237-004A

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

Federal ID 5111891 Client ID. : 20897-005

Collected : 10/7/2005 8:55:00 AM Point No : 076-408

Received : 10/7/2005 3:15:00 PM Location : B-640 Water Tower

Collected By : CLIENT

Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Specific Conductance	182		1	µmhos/cm		E120.1	10/07/2005
PH (FIELD)	8.1		1	pH Units		E150.1	10/07/2005
Temperature	21		1	°C		E170.1	10/07/2005
Alkalinity, Total (As CaCO3)	15.0		1	mg/L		M2320 B	10/10/2005 3:16 PM

10/10/05

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 10/25/2005

Joann M. Slavin

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 : Marcia Allocchio

Federal ID 5111891

Collected : 10/7/2005 8:55:00 AM

Received : 10/7/2005 3:15:00 PM

Collected By : CLIENT

Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510237-004A

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

Client ID. : 20897-005

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Calcium	6630	1		µg/L	E200.7	10/17/2005 11:19 AM	

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

Result(s) flagged with *

Exceed Regulatory Limit(s)

D.F. = Dilution Factor

Date Reported : 10/25/2005

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 : Marcia Allocco

Lab No. : 0510237-003A

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

Federal ID 5111891 Client ID. : 20897-004

Collected : 10/7/2005 8:55:00 AM Point No : 076-408

Received : 10/7/2005 3:15:00 PM Location : B-640 Water Tower

Collected By : CLIENT

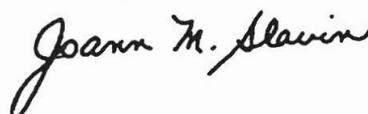
Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative	1			Negative	M9223	10/08/2005 12:30 PM
E_Coliform	Absent	1			Absent	M9223	10/08/2005 12:30 PM
Total Residual Chlorine	1.2		1	mg/L		M4500-Cl G	10/07/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted
D.F. = Dilution Factor

Date Reported : 10/25/2005



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 : Marcia Allocco

Federal ID 5111891

Collected : 10/7/2005 9:25:00 AM

Point No : 103-19

Received : 10/7/2005 3:15:00 PM

Location : 363 - Apt. Laundry

Collected By : CLIENT

Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510237-006A

Sample Information...

Type : Potable Water

Origin : Distribution

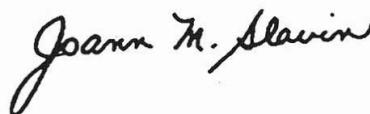
Routine

Client ID. : 20897-008

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Specific Conductance	172		1	µmhos/cm		E120.1	10/07/2005
PH (FIELD)	7.5		1	pH Units		E150.1	10/07/2005
Temperature	22		1	°C		E170.1	10/07/2005
Alkalinity, Total (As CaCO ₃)	27.0		1	mg/L		M2320 B	10/10/2005 3:21 PM

Result(s) reported meet(s) Regulatory Limit(s)
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted
D.F. = Dilution Factor

Date Reported : 10/25/2005



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 : Marcia Allococo

Federal ID 5111891

Collected : 10/7/2005 9:25:00 AM

Point No : 103-19

Received : 10/7/2005 3:15:00 PM

Location :

Collected By : CLIENT

Bldg 363 Apt. Laundry

Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510237-006A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Client ID. : 20897-008

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Calcium	7970		1	µg/L		E200.7	10/17/2005 11:26 AM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 10/25/2005

Jean M. Slavin
Laboratory Manager

BNLM166 A30

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 : Marcia Allocco

Federal ID 5111891

Collected : 10/7/2005 9:25:00 AM

Received : 10/7/2005 3:15:00 PM

Collected By : CLIENT

Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510237-005A

Sample Information...

Type : Potable Water

Origin : Distribution

Routine

Client ID. : 20897-007

Point No : 103-19

Location : Bldg 363 Apt. Laundry

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	10/08/2005 12:30 PM
E_Coliform	Absent		1		Absent	M9223	10/08/2005 12:30 PM
Total Residual Chlorine	0.6		1	mg/L		M4500-Cl G	10/07/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 10/25/2005

Joann M. Slavin
Laboratory Manager

BNLMI66 A29

ATTACHMENT III

Brookhaven National Laboratory

Potable Water Supply

November 2005 Stage 1 Disinfectants & Disinfection Byproduct Rule

Monitoring Data and Bacteriological Analyses for the BNL Distribution System

Attachment III

November 2005 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data
Table II - Maximum Residual Disinfectant Level (MRDL) Compliance

Location	Total Residual Chlorine (mg/L)											
	Dec. 04	Jan. 05	Feb. 05	Mar. 05	Apr. 05	May 05	June 05	July 05	Aug. 05	Sept. 05	Oct. 05	Nov. 05
Bldg. 49 Water Tower	0.5	0.7	2.0	0.9	0.7	0.9	0.9	0.7	0.9	0.5	0.7	0.9
Bldg. 640 Water Tower	0.5	0.6	0.6	0.9	0.8	0.9	1.5	0.5	0.8	0.7	1.2	0.4
Bldg. 363 Apt. Laundry	0.4	0.6	0.7	0.9	0.7	0.7	0.7	0.6	0.5	0.3	0.6	1.0
Bldg. 1005 RHIC	0.4	0.5	0.6	1.1	0.7	1.0	1.2	0.5	0.8	0.7	0.5	0.6
Bldg. 930 LINAC	NS	0.6	NS	1.0	NS	0.8	NS	0.8	NS	0.8	NS	0.8
Bldg. 725 NSLS	0.5	NS	0.7	NS	1	NS	1.3	NS	0.8	NS	0.8	NS
Bldg. 490 Outpatient Clinic	NS	0.7	NS	0.5	NS	1.0	NS	0.5	NS	0.6	NS	0.5
Bldg. 490 Block 11	NS	0.6	NS	0.4	NS	0.3	NS	0.5	NS	0.3	NS	0.9
Bldg. 490 Block 1 ACF	0.5	NS	0.5	NS	0.3	NS	0.6	NS	0.7	NS	0.5	NS
Bldg. 490 Block 4 MRC	0.5	NS	0.7	NS	0.8	NS	1.1	NS	0.7	NS	1.0	NS
Monthly Average	0.5	0.6	0.8	0.8	0.7	0.8	1.0	0.6	0.7	0.6	0.8	0.7

NA - Not Applicable

NS- Not Scheduled for sampling

Running Annual Average (mg/L) **0.7** (Total Residual Chlorine)
MRDL (mg/L) **4.0**

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 : Marcia Allocco

Lab No. : 0511139-001

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

Federal ID : 5111891 Client ID. : 21961-001

Collected : 11/4/2005 9:30:00 AM Point No: 094-273

Received : 11/4/2005 3:15:00 PM Location: B-49 Water Tower

Collected By CLIENT

Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.9		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 1 of 8

Joann M. Slavin
Laboratory Manager

BNLM169 A10

H2M LABS, INC.

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

LABORATORY RESULTS

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

Lab No. : 0511139-003

Sample Information...

Type : Potable Water
Origin: Distribution

Federal ID : 5111891 Client ID. : 21961-002

Collected : 11/4/2005 9:10:00 AM Point No: 076-408

Received : 11/4/2005 3:15:00 PM Location: B-640 Water Tower

Collected By CLIENT

Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.4		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 3 of 8

Joann M. Slavin
Laboratory Manager

BNLM169 A12

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 : Marcia Alocco

Lab No. : 0511139-005

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

Federal ID : 5111891 Client ID. : 21961-004

Collected : 11/4/2005 9:45:00 AM Point No: 109-19

Received : 11/4/2005 3:15:00 PM Location: B-363 Apt.Laundry

Collected By CLIENT

Copy : Original

CC

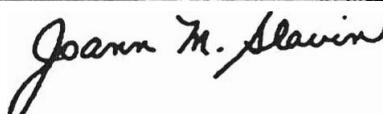
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	1.0		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 5 of 8

Laboratory Manager



BNLM169 A14

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 : Marcia Allocco

Federal ID : 5111891

Collected : 11/4/2005 9:00:00 AM Point No: 045-12

Received : 11/4/2005 3:15:00 PM Location: B-1005 RHIC

Collected By CLIENT

Copy : Original

CC

Lab No. : 0511139-004

Sample Information...

Type : Potable Water

Origin: Distribution

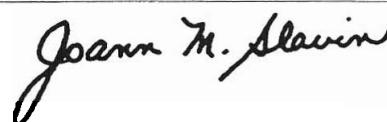
Client ID. : 21961-003

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.6		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s)
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 4 of 8



Laboratory Manager

BNLMI69 A13

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 : Marcia Allococo

Lab No. : 0511139-006

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

Federal ID : 5111891

Client ID. : 21961-005

Collected : 11/4/2005 8:45:00 AM Point No: 054-187

Received : 11/4/2005 3:15:00 PM Location: B-930 LINAC

Collected By CLIENT

Copy : Original

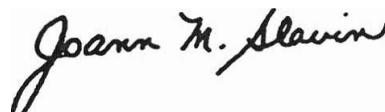
CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.8		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 6 of 8



Laboratory Manager

BNL M169 A15

H2M LABS, INC.

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

LABORATORY RESULTS

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

Lab No. : 0511139-007

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

Federal ID : 5111891

Client ID. : 21961-006

Collected : 11/4/2005 10:15:00 AM Point No: 084-70

Received : 11/4/2005 3:15:00 PM Location: B-490 Outpatient Clinic

Collected By CLIENT

Copy : Original

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.5		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 7 of 8

Joann M. Slavin
Laboratory Manager

BNLM169 A16

H2M LABS, INC.

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

LABORATORY RESULTS

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

Federal ID : 5111891

Collected : 11/4/2005 10:40:00 AM Point No: 084-67

Received : 11/4/2005 3:15:00 PM Location: B-490 Block 11

Collected By CLIENT

Copy : Original

CC

Lab No. : 0511139-008

Sample Information...

Type : Potable Water

Origin: Distribution

Client ID. : 21961-007

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Total Coliform	Negative		1		Negative	M9223	11/05/2005 12:45 PM
E_Coliform	Absent		1		Absent	M9223	11/05/2005 12:45 PM
Total Residual Chlorine	0.9		1	mg/L		M4500-Cl G	11/04/2005

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 8 of 8

Joann M. Alavio
Laboratory Manager

BNLM169 A17

ATTACHMENT IV
Brookhaven National Laboratory
Potable Water Supply
2005 Fourth Quarter Radiological Analyses
for the BNL Potable Water Wells

ATTACHMENT IV

Table 3
Summary of 2005 Fourth Quarter Radiological Analyses for the
BNL Potable Water Wells

Well ID	Sample Date	Gross Alpha (pCi/L)	Gross Beta (pCi/L)	Tritium (pCi/L)	Sr-90 (pCi/L)
Well #6	10/25/05	< 1.55	< 0.9	< 394	< 0.46
Well # 7	10/25/05	< 1.72	< 1.03	< 378	< 0.43
Well #11	10/25/05	< 1.57	< 0.87	< 393	< 0.50
Well #12	10/25/05	< 1.37	< 1.81	< 352	< 0.47
Well # 12 (Duplicate)	10/25/05	< 1.63	< 0.92	< 378	< 0.49

NA – Not Analyzed

NS – Not Sampled/Shutdown

* - The reported concentration is estimated at less than the method detection limit but greater than the instrument detection limit.

148724

ASL Prefix No.

Page 1 of 1



Carrier/Waybill # _____
P.O. # _____

Chain of Custody No

22057

Requires EDD

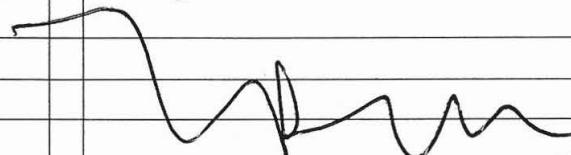
DQL _____

SAMPLING CHAIN OF CUSTODY

Analysis Requested By		Sampling Contractor		Analytical Laboratory	
Name: B. Lee	Life: No. 20222 Ext. 3148	Name: EWMSD	Contact:	Name: GEL	
Acct. No: 19741	Dept: ES	Phone:		Address:	
Email Reports To: B. Lee		Email/Fax: 8metz		City: St: Zip:	
1		Sampler: 8metz		Contact:	
2				Phone:	
				Email/Fax:	
Project Name: ES F-Well 5		Project Manager: B. Lee		Field Engineer:	

Comments:

LID	Type	Sample Information					Additional Sample Information												
		LID	UID	Smp Coll	Site ID/Bldg/Life #	Depth/RWP	Date	Time	Matrix	Name/Description	Cont.Vol/Units	Cont.Type	# of Cont	Preservative	Alpha/Beta	Tritium	Gamma	Srontium	PCBs
01	L	001eG			well 12	92-137	10/25/05	1330	w	well 12	4L	P	1	HNO3	X	XX			
	L	001eG	↓	↓				↓	w		250ml	A6	1		—	X			
02	L	002eG	↓	↓	well 11	93-142		1338	w	well 11	4L	P	1	HNO3	X	XX			
	L	002eG	↓	↓				↓	w		250ml	A6	1		—	X			
03	L	003eG	well 6			98-150		1350	w	well 6	4L	P	1	HNO3	X	XX			
	L	003eG	↓	↓				↓	w		250ml	A6	1		—	X			
04	L	004eG	well 7			99-150		1345	w	well 7	4L	P	1	HNO3	X	XX			
	L	004eG	↓	↓				↓	w		250ml	A6	1		—	X			
05	L	005eG	BD-1	0				—	w	BD-1	4L	P	1	HNO3	X	XX			
	L	005eG	↓	0				—	w	↓	250ml	A6	1		—	X			



1 Relinquished By/Date/Time Print: R. Metz 10/25/05	2 Relinquished By/Date/Time Print: Bent Tufay 10/26/05	3 Relinquished By/Date/Time Print: _____
Signature: _____	Signature: _____	Signature: _____
1 Received By/Date/Time Print: _____	2 Received By/Date/Time Print: _____	3 Received By/Date/Time Print: _____
Signature: _____	Signature: _____	Signature: _____

Contractor Lab Sample Disposal
<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal by Lab
<input type="checkbox"/> Archive For _____ Months
Data Package: <input type="checkbox"/> Full <input checked="" type="checkbox"/> Summary
Turn-Around Time Required:
<input type="checkbox"/> Rush (1 Day) <input type="checkbox"/> 14 Days <input checked="" type="checkbox"/> 30 Days
<input type="checkbox"/> 7 Days <input type="checkbox"/> Other ()

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Brookhaven National Laboratory
 Address : Building 51
 Upton, New York 11973—5000

Report Date: November 23, 2005

Contact: Mr. John Burke

Project: Hazardous & Radiochemical Analytical

Service – Sum	Project:	BRKL00401
Client Sample ID:	Client ID:	BRKL004
Sample ID:	COC:	22057
Matrix:	Samp Recv.:	
Collect Date:	Client Desc.:	Well 6
Receive Date:		
Collector:		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec Analysis												
<i>Gammaspec, Gamma, Liquid (Standard List)</i>												
Americium-241	U	-3.69	+/-10.1	11.7	20.0	pCi/L		MJH1	11/17/05	1936	475915	1
Beryllium-7	U	0.815	+/-11.6	20.1	200	pCi/L						
Cesium-134	U	0.312	+/-1.15	2.01	10.0	pCi/L						
Cesium-137	U	-0.0664	+/-1.21	2.06	12.0	pCi/L						
Cobalt-57	U	0.0587	+/-1.10	1.81	10.0	pCi/L						
Cobalt-60	U	0.375	+/-1.16	2.14	22.0	pCi/L						
Europium-152	U	-0.749	+/-3.21	5.50	40.0	pCi/L						
Europium-154	U	-0.708	+/-3.05	5.34	20.0	pCi/L						
Europium-155	U	0.799	+/-4.54	7.55	30.0	pCi/L						
Manganese-54	U	-0.0791	+/-1.10	1.86	10.0	pCi/L						
Sodium-22	U	-0.239	+/-1.10	1.93	10.0	pCi/L						
Zinc-65	U	-2.78	+/-2.51	4.07	20.0	pCi/L						
Rad Gas Flow Proportional Counting												
<i>GPPC, Gross A/B, liquid</i>												
Alpha	U	-0.136	+/-0.361	0.900	2.00	pCi/L		ATH2	11/13/05	2048	478196	2
Beta	U	1.31	+/-0.828	1.55	4.00	pCi/L						
<i>GPPC, Sr90, liquid</i>												
Strontium-90	U	0.149	+/-0.218	0.461	0.800	pCi/L		EXW1	11/14/05	2333	478195	3
Rad Liquid Scintillation Analysis												
<i>LSC, Tritium Dist, Liquid</i>												
Tritium	U	128	+/-232	394	1000	pCi/L		MXP1	11/22/05	1050	479673	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
Strontium-90	GFPC, Sr90, liquid			98	(25%–125%)

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Brookhaven National Laboratory
 Address : Building 51
 Upton, New York 11973—5000

Report Date: November 23, 2005

Contact: Mr. John Burke

Project: **Hazardous & Radiochemical Analytical**

Service – Sum	Project:	BRKL00401
Client Sample ID:	Client ID:	BRKL004
Sample ID:	COC:	22057
Matrix:	Samp Recv.:	
Collect Date:	Client Desc.:	Well 7
Receive Date:		
Collector:		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec Analysis												
<i>Gammaspec, Gamma, Liquid (Standard List)</i>												
Americium-241	U	3.75	+/-8.57	14.2	20.0	pCi/L		MJH1	11/17/05	1929	475915	1
Beryllium-7	U	-1.87	+/-10.9	19.0	200	pCi/L						
Cesium-134	U	0.0278	+/-1.17	2.02	10.0	pCi/L						
Cesium-137	U	0.303	+/-1.07	1.89	12.0	pCi/L						
Cobalt-57	U	-0.221	+/-1.05	1.81	10.0	pCi/L						
Cobalt-60	U	1.09	+/-1.17	2.06	22.0	pCi/L						
Europium-152	U	-2.03	+/-3.46	5.56	40.0	pCi/L						
Europium-154	U	-0.933	+/-3.02	5.23	20.0	pCi/L						
Europium-155	U	-1.04	+/-4.22	7.34	30.0	pCi/L						
Manganese-54	U	-0.619	+/-1.03	1.68	10.0	pCi/L						
Sodium-22	U	-0.349	+/-1.09	1.88	10.0	pCi/L						
Zinc-65	U	0.614	+/-2.61	4.16	20.0	pCi/L						
Rad Gas Flew Proportional Counting												
<i>GPPC, Gross A/B, liquid</i>												
Alpha	U	-0.0149	+/-0.528	1.03	2.00	pCi/L		ATH2	11/13/05	2050	478196	2
Beta	U	1.03	+/-0.890	1.72	4.00	pCi/L						
<i>GPPC, Sr90, liquid</i>												
Strontium-90	U	0.166	+/-0.206	0.429	0.800	pCi/L		EXW1	11/14/05	2333	478195	3
Rad Liquid Scintillation Analysis												
<i>LSC, Tritium Dist, Liquid</i>												
Tritium	U	-113	+/-211	378	1000	pCi/L		MXP1	11/22/05	1122	479673	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
Strontium-90	GFPC, Sr90, liquid			98	(25%–125%)

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Brookhaven National Laboratory
 Address : Building 51
 Upton, New York 11973—5000

Report Date: November 23, 2005

Contact: Mr. John Burke

Project: **Hazardous & Radiochemical Analytical**

Service – Sum		Project:	BRKL00401
Client Sample ID:	22057-002	Client ID:	BRKL004
Sample ID:	148724002	COC:	22057
Matrix:	Water	Samp Recv.:	
Collect Date:	25-OCT-05 13:38	Client Desc.:	Well 11
Receive Date:	26-OCT-05 10:00		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec Analysis												
<i>Gammaspec, Gamma, Liquid (Standard List)</i>												
Americium-241	U	7.21	+/-6.13	10.4	20.0	pCi/L		MJH1	11/17/05	1728	475915	1
Beryllium-7	U	-2.26	+/-10.8	18.7	200	pCi/L						
Cesium-134	U	-0.285	+/-1.12	1.88	10.0	pCi/L						
Cesium-137	U	0.602	+/-1.12	1.98	12.0	pCi/L						
Cobalt-57	U	-0.0344	+/-0.944	1.63	10.0	pCi/L						
Cobalt-60	U	0.480	+/-1.10	2.02	22.0	pCi/L						
Europium-152	U	0.307	+/-3.13	5.20	40.0	pCi/L						
Europium-154	U	-0.228	+/-3.06	5.38	20.0	pCi/L						
Europium-155	U	1.32	+/-3.88	6.80	30.0	pCi/L						
Manganese-54	U	-0.246	+/-1.01	1.69	10.0	pCi/L						
Sodium-22	U	0.0855	+/-1.08	1.94	10.0	pCi/L						
Zinc-65	U	-0.473	+/-2.15	3.76	20.0	pCi/L						
Rad Gas Flow Proportional Counting												
<i>GFPc, Gross A/B, liquid</i>												
Alpha	U	-0.257	+/-0.312	0.867	2.00	pCi/L		ATH2	11/13/05	2048	478196	2
Beta	U	1.10	+/-0.821	1.57	4.00	pCi/L						
<i>GFPc, Sr90, liquid</i>												
Strontium-90	U	0.0344	+/-0.219	0.497	0.800	pCi/L		EXW1	11/14/05	2333	478195	3
Rad Liquid Scintillation Analysis												
<i>LSC, Tritium Dist, Liquid</i>												
Tritium	U	-5.26	+/-224	393	1000	pCi/L		MXP1	11/22/05	1018	479673	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Strontium-90	GFPC, Sr90, liquid			91	(25%–125%)

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Brookhaven National Laboratory
 Address : Building 51
 Upton, New York 11973—5000

Report Date: November 23, 2005

Contact: Mr. John Burke

Project: Hazardous & 1

Service - Sum	Project:	BRKL00401
Client Sample ID:	Client ID:	BRKL004
Sample ID:	COC:	22057
Matrix:	Samp Recv.:	
Collect Date:	Client Desc.:	Well 12
Receive Date:		
Collector:		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec Analysis												
<i>Gammaspac, Gamma, Liquid (Standard List)</i>												
Americium-241	U	0.448	+/-1.98	3.32	20.0	pCi/L		MJH1	11/21/05	1715	475915	1
Beryllium-7	U	1.66	+/-12.1	21.3	200	pCi/L						
Cesium-134	U	-0.0173	+/-1.28	2.17	10.0	pCi/L						
Cesium-137	U	-0.073	+/-1.22	2.09	12.0	pCi/L						
Cobalt-57	U	0.434	+/-0.876	1.42	10.0	pCi/L						
Cobalt-60	U	0.602	+/-1.24	2.26	22.0	pCi/L						
Europium-152	U	-2.14	+/-3.14	5.06	40.0	pCi/L						
Europium-154	U	-0.164	+/-3.62	6.28	20.0	pCi/L						
Europium-155	U	2.24	+/-3.31	5.44	30.0	pCi/L						
Manganese-54	U	0.646	+/-1.23	2.16	10.0	pCi/L						
Sodium-22	U	-0.0635	+/-1.31	2.26	10.0	pCi/L						
Zinc-65	U	-0.94	+/-3.07	4.52	20.0	pCi/L						
Rad Gas Flow Proportional Counting												
<i>GFPC, Gross A/B, liquid</i>												
Alpha	U	-0.203	+/-0.600	1.37	2.00	pCi/L		ATH2	11/13/05	2048	478196	2
Beta	U	1.46	+/-0.955	1.81	4.00	pCi/L						
<i>GFPC, Sr90, liquid</i>												
Strontium-90	U	-0.0126	+/-0.201	0.471	0.800	pCi/L		EXW1	11/14/05	2333	478195	3
Rad Liquid Scintillation Analysis												
<i>LSC, Tritium Dist, Liquid</i>												
Tritium	U	73.9	+/-205	352	1000	pCi/L		MXP1	11/22/05	0947	479673	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
Strontium-90	GFPC, Sr90, liquid			91	(25%–125%)

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Brookhaven National Laboratory
 Address : Building 51
 Upton, New York 11973—5000

Report Date: November 23, 2005

Contact: Mr. John Burke

Project: **Hazardous & Radiochemical Analytical**

Service - Sum	Project:	BRKL00401
Client Sample ID:	Client ID:	BRKL004
Sample ID:	COC:	22057
Matrix:	Samp Recv.:	
Collect Date:	Client Desc.:	BD-1
Receive Date:		
Collector:		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Gamma Spec Analysis												
<i>Gammaspec, Gamma, Liquid (Standard List)</i>												
Americium-241	U	-0.267	+/-6.59	10.4	20.0	pCi/L		MJH1	11/17/05	1929	475915	1
Beryllium-7	U	-6.58	+/-11.9	19.5	200	pCi/L						
Cesium-134	U	-1.0	+/-1.21	1.99	10.0	pCi/L						
Cesium-137	U	1.10	+/-1.20	2.21	12.0	pCi/L						
Cobalt-57	U	-0.185	+/-0.995	1.67	10.0	pCi/L						
Cobalt-60	U	-0.459	+/-1.24	2.12	22.0	pCi/L						
Europium-152	U	-1.79	+/-3.42	5.76	40.0	pCi/L						
Europium-154	U	-1.4	+/-3.36	5.76	20.0	pCi/L						
Europium-155	U	-0.922	+/-3.98	6.73	30.0	pCi/L						
Manganese-54	U	0.424	+/-1.17	2.08	10.0	pCi/L						
Sodium-22	U	-0.505	+/-1.21	2.07	10.0	pCi/L						
Zinc-65	U	2.25	+/-2.92	4.84	20.0	pCi/L						
Rad Gas Flow Proportional Counting												
<i>GFPC, Gross A/B, liquid</i>												
Alpha	U	0.473	+/-0.544	0.924	2.00	pCi/L		ATH2	11/13/05	2050	478196	2
Beta	J	1.78	+/-0.893	1.63	4.00	pCi/L						
<i>GFPC, Sr90, liquid</i>												
Strontium-90	U	0.0908	+/-0.223	0.489	0.800	pCi/L		EXW1	11/14/05	2333	478195	3
Rad Liquid Scintillation Analysis												
<i>LSC, Tritium Dist, Liquid</i>												
Tritium	U	62.5	+/-219	378	1000	pCi/L		MXP1	11/22/05	1154	479673	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
Strontium-90	GFPC, Sr90, liquid			93	(25%–125%)

Well # 12 Duplicate

ATTACHMENT V

Brookhaven National Laboratory

Potable Water Supply

**Resampling for Iron and Color
in the BNL Distribution System**

H2M LABS, INC.

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

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

Federal ID : 5111891
Collected : 10/11/2005 10:15:00 AM Point No: 085-294
Received : 10/11/2005 3:20:00 PM Location: B-185 Personnel
Collected By CLIENT
Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510303-001

Sample Information...

Type : Potable Water

Origin: Distribution

Client ID. : 20898-001

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Iron	70.2		1	µg/L	300	E200.7	10/17/2005 11:33 AM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted
D.F. = Dilution Factor

Date Reported : 11/3/2005

Joann M. Slavin
Laboratory Manager

BNL M167 A14

H2M LABS, INC.

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

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

Federal ID : 5111891

Collected : 10/11/2005 10:15:00 AM Point No: 085-294

Received : 10/11/2005 3:20:00 PM Location: B-185 Personnel

Collected By CLIENT

Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510303-002

Sample Information...

Type : Potable Water

Origin: Distribution

Client ID. : 20898-001

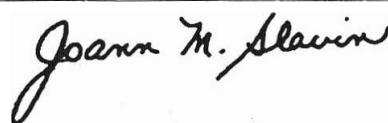
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Color	< 5		1	units	15	E110.2	10/12/2005 8:08 AM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/3/2005

Page 1 of 1

Laboratory Manager



BNLM167 A15

H2M LABS, INC.

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

LABORATORY RESULTS

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

Lab No. : 0510607-001

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

Federal ID : 5111891 Client ID. : 20900-001

Collected : 10/21/2005 10:10:00 AM Point No: 085-294

Received : 10/21/2005 3:00:00 PM Location: B-185 Personnel

Collected By CLIENT

Copy : Original

CC

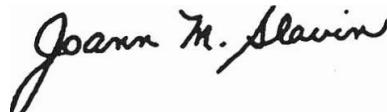
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Iron	46.3		1	µg/L	300	E200.7	11/09/2005 11:42 AM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Page 1 of 1

Laboratory Manager



BNLM168 A14

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 : Bob Lee

Federal ID : 5111891
Collected : 10/21/2005 10:10:00 AM Point No: 085-294
Received : 10/21/2005 3:00:00 PM Location: B-185 Personnel
Collected By CLIENT
Copy : Original

CC

LABORATORY RESULTS

Lab No. : 0510607-002

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

Client ID. : 20900-001

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Method Number	Analyzed
Color	< 5		1	units	15	E110.2	10/22/2005 1:02 PM

Result(s) reported meet(s) Regulatory Limit(s).
Result(s) flagged with * Exceed Regulatory Limit(s). Limit noted.
D.F. = Dilution Factor

Date Reported : 11/11/2005

Joann M. Slavin
Laboratory Manager

BNLMI68 A15