Environmental and Waste Management Services

120 E. Fifth Ave., Bldg. 860
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**BROOKHAVEN**
NATIONAL LABORATORY

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

July 9, 2004

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

Dear Ms. Kathleen Newcomer:

**Subject:** **Monthly Water Treatment Plant Reports**
**Reference:** **Suffolk County Minimum Monitoring Requirements for June 2004**

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2004 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 and Bacteriological Analyses for June. |
| Attachment II: | June 2004 Biweekly Water Quality Monitoring Data for the BNL Distribution System and Potable Water Wells. |
| Attachment III: | June 2004 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data for the BNL Distribution System. |

All analytical results have been reviewed and have been found to be within New York State Department of Health Drinking Water Standards (NYSDOH DWS). Collection and analysis of these samples are performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water Supply Monitoring Requirements, and the BNL Potable Water System Sampling Plan. Plant Engineering Division personnel using standard operating procedures collect routine monitoring samples; a contractor laboratory using standard methods of analysis performs the subsequent analyses. The Quality Assurance documentation is available from the Environmental 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.

NSF
REGISTERED TO
ISO 14001: 1996

Should there be any questions regarding this report or the analytical or operational data contained herein, please call either M. Allocco at (631) 344-3166, R. Lee at (631) 344-3148, or W. Chaloupka at (631) 344-7136.

Sincerely,

George A. Goode
Environmental & Waste Management Services
Division Manager

GAG/MA:car
Attachments: As noted

| | | |
|---|---|---|
| cc: | M. Allocco | w/attachments |
| | 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 |

File: EC61ER.04

**ATTACHMENT I**

**Brookhaven National Laboratory**

**Potable Water Supply**

**Monthly Operational Data and Bacteriological Analyses for June 2004**

**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: JUNE 2004 |
|---|---|---|---|

LOCATION: **Water Treatment Facility**

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

Source: Ground Water

Does the system have a chlorination waiver? YES ___ NO X

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 170 | per 24hrs | mg/l | Hydroxide | 13139477 |
| 1 | 928 | 140 | 30 | 0.79 | 7.5 | 13140405 |
| 2 | 1,005 | 130 | 10 | 0.71 | 7.4 | 13141410 |
| 3 | 1,139 | 115 | 15 | 0.82 | 7.4 | 13142549 |
| 4 | 1,050 | 105 | 10 | 0.81 | 7.6 | 13143599 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 2,008 | 82 | 23 | 1.4 | 7.7 | 13145607 |
| 8 | 1,037 | 70 | 12 | .82 | 7.7 | 13146644 |
| 9 | 952 | 60 | 10 | 0.74 | 7.7 | 13147596 |
| 10 | 1,101 | 45 | 15 | 0.82 | 7.6 | 13148697 |
| 11 | 946 | 32 | 13 | 0.65 | 7.6 | 13149643 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 2,093 | 200-172 | 28 | 1.1 | 7.4 | 13151736 |
| 15 | 881 | 162 | 10 | 0.85 | 7.4 | 13152617 |
| 16 | 915 | 150+40 | 12 | 0.98 | 7.3 | 13153532 |
| 17 | 918 | 180 | 10 | 0.72 | 7.4 | 13154450 |
| 18 | 834 | 171 | 9 | 0.66 | 7.4 | 13155284 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 2,070 | 145 | 26 | 0.63 | 7 | 13157354 |
| 22 | 718 | 140 | 5 | 0.52 | 7.6 | 13158072 |
| 23 | 772 | 125 | 15 | 0.85 | 7.7 | 13158844 |
| 24 | 729 | 115 | 10 | 0.91 | 7.7 | 13159573 |
| 25 | 730 | 105 | 10 | 1.2 | 7.6 | 13160303 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 2,092 | 76 | 29 | 0.9 | 7.6 | 13162395 |
| 29 | 777 | 64 | 12 | 1.1 | 7.7 | 13163172 |
| 30 | 795 | 53 | 11 | 0.78 | 7.6 | 13163967 |
| 31 | 0 | | | | | |
| TOT | 24,490 | | 325 | | | |
| AVG. | 816.33 | | 10.83 | No. Days: | 30 | |

**Population Served 3,500**

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ___ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat 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: Will L Chalenpla

Date: 7 July 04

Title: ASSISTMGR OPERATIONS

Certification No. NY 0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 4**

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

Source: Ground Water

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

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 120 | per 24hrs | mg/l | Hydroxide | 1648622 |
| 1 | 0 | 120 | 0 | NR | NR | 1648622 |
| 2 | 0 | 120 | 0 | NR | NR | 1648622 |
| 3 | 0 | 120 | 0 | NR | NR | 1648622 |
| 4 | 0 | 120 | 0 | NR | NR | 1648622 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 0 | 120 | 0 | NR | NR | 1648622 |
| 8 | 0 | 120 | 0 | NR | NR | 1648622 |
| 9 | 0 | 120 | 0 | NR | NR | 1648622 |
| 10 | 0 | 120-120 | 0 | NR | NR | 1648622 |
| 11 | 0 | 0 | 0 | NR | NR | 1648622 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 0 | 0 | 0 | NR | NR | 1648622 |
| 15 | 0 | 0 | 0 | NR | NR | 1648622 |
| 16 | 0 | 0 | 0 | NR | NR | 1648622 |
| 17 | 0 | 0 | 0 | NR | NR | 1648622 |
| 18 | 0 | 0 | 0 | NR | NR | 1648622 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 0 | 0 | 0 | NR | NR | 1648622 |
| 22 | 0 | 0 | 0 | NR | NR | 1648622 |
| 23 | 0 | 0 | 0 | NR | NR | 1648622 |
| 24 | 0 | 0 | 0 | NR | NR | 1648622 |
| 25 | 0 | 0 | 0 | NR | NR | 1648622 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 0 | 0 | 0 | NR | NR | 1648622 |
| 29 | 0 | 0 | 0 | NR | NR | 1648622 |
| 30 | 0 | 0 | 0 | NR | NR | 1648622 |
| 31 | 0 | | | | | |
| TOT | 0 | | 0 | | | |
| AVG. | 0.00 | | 0.00 | No. Days: | 30 | |

**Population Served** 3,500

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ____ NO 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: William L. Chalenski

Date: 2 JULY 2004

Title: ASSIST. MGR OPERATIONS

Certification No. NY 0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 6**

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

Source: Ground Water

Does the system have a chlorination waiver? YES ___ NO X

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 123 | per 24hrs | mg/l | Hydroxide | 445155 |
| 1 | 304 | 120 | 3 | 0.06 | 6.1 | 445459 |
| 2 | 301 | 117 | 3 | 0.06 | 6.3 | 445760 |
| 3 | 341 | 114+36 | 3 | 0.02 | 6.3 | 446101 |
| 4 | 343 | 150 | 0 | 0.04 | 6 | 446444 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 919 | 106 | 42 | 1.2 | 6.3 | 447363 |
| 8 | 371 | 93 | 15 | 0.3 | 6.2 | 447734 |
| 9 | 409 | 84 | 9 | 0.3 | 6.2 | 448143 |
| 10 | 295 | 81+69 | 3 | 0.4 | 6.2 | 448438 |
| 11 | 276 | 141 | 9 | 0.29 | 6.2 | 448714 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 623 | 114 | 27 | 0.03 | 6.1 | 449337 |
| 15 | 229 | 108 | 6 | 0.01 | 6.2 | 449566 |
| 16 | 210 | 102 | 6 | 0.05 | 6.2 | 449776 |
| 17 | 312 | 96 | 6 | 0.01 | 6.2 | 450088 |
| 18 | 247 | 96+54 | 0 | 0.01 | 62 | 450335 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 615 | 132 | 16 | 0.02 | 6.1 | 450950 |
| 22 | 230 | 123 | 9 | 0.02 | 6.1 | 451180 |
| 23 | 347 | 108 | 15 | 0.03 | 6 | 451527 |
| 24 | 256 | 96 | 12 | 0.06 | 6.1 | 451783 |
| 25 | 243 | 87+63 | 9 | 0 | 6.1 | 452026 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 914 | 99 | 51 | NR | NR | 452940 |
| 29 | 354 | 81 | 9 | 0.02 | 6.1 | 453294 |
| 30 | 458 | 60 | 21 | 0.012 | 6.1 | 453752 |
| 31 | 0 | | | | | |
| TOT | 8,597 | | 276 | | | |
| AVG. | 286.57 | | 9.20 | No. Days: | 30 | |

**Population Served** 3,500

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ___ NO 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: Will L Clolinski

Date: 2 July 2004

Title: ASSIST. MGR OPERATIONS

Certification No. NY 0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 7**

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

Source: Ground Water

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

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 90 | per 24hrs | mg/l | Hydroxide | 1406953 |
| 1 | 984 | 76 | 14 | 0.19 | 6.1 | 1407937 |
| 2 | 1,190 | 58 | 18 | 0.06 | 6.3 | 1409127 |
| 3 | 1,316 | 35+115 | 23 | 0.02 | 6.3 | 1410443 |
| 4 | 1,251 | 138 | 12 | 0.04 | 6 | 1411694 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 2,356 | 81 | 57 | 1.2 | 6.3 | 1414050 |
| 8 | 1,282 | 63 | 18 | 0.3 | 6.2 | 1415332 |
| 9 | 1,251 | 42 | 21 | 0.3 | 6.2 | 1416583 |
| 10 | 1,342 | 15+135 | 27 | 0.4 | 6.2 | 1417925 |
| 11 | 1,126 | 135 | 15 | 0.29 | 6.2 | 1419051 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 2,266 | 99 | 36 | 0.03 | 6.1 | 1421317 |
| 15 | 1,053 | 84 | 15 | 0.01 | 6.2 | 1422370 |
| 16 | 1,008 | 69 | 15 | 0.01 | 6.2 | 1423378 |
| 17 | 1,100 | 50 | 19 | 0.01 | 6.2 | 1424478 |
| 18 | 1,047 | 27+123 | 23 | 0.01 | 6.2 | 1425525 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 2,424 | 114 | 36 | 0.02 | 6.1 | 1427949 |
| 22 | 743 | 102 | 12 | 0.02 | 6.1 | 1428692 |
| 23 | 840 | 93 | 9 | 0.03 | 6 | 1429532 |
| 24 | 894 | 78 | 15 | 0.06 | 6.1 | 1430426 |
| 25 | 934 | 66+84 | 12 | 0 | 6.1 | 1431360 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 2,331 | 111 | 39 | 0.018 | 6.1 | 1433691 |
| 29 | 785 | 96 | 15 | 0.02 | 6.1 | 1434476 |
| 30 | 1,053 | 78 | 18 | 0.012 | 6.1 | 1435529 |
| 31 | 0 | | | | | |
| TOT | 28,576 | | 469 | | | |
| AVG. | 952.53 | | 15.63 | No. Days: | 30 | |

**Population Served 3,500**

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat 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: Will L Clalemple

Date 2 July 2004

Title: **ASSIST MGR OPERATIONS**

Certification No. NY 0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 10**

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

Source: Ground Water

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

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 38 | per 24hrs | mg/l | Hydroxide | 769432 |
| 1 | 0 | 38 | 0 | NR | NR | 769432 |
| 2 | 0 | 38 | 0 | NR | NR | 769432 |
| 3 | 0 | 38 | 0 | NR | NR | 769432 |
| 4 | 0 | 38 | 0 | NR | NR | 769432 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 64 | 38 | 0 | NR | NR | 769496 |
| 8 | 0 | 38 | 0 | NR | NR | 769496 |
| 9 | 0 | 38 | 0 | NR | NR | 769496 |
| 10 | 0 | 38 | 0 | NR | NR | 769496 |
| 11 | 0 | 38 | 0 | NR | NR | 769496 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 0 | 38 | 0 | NR | NR | 769496 |
| 15 | 0 | 38 | 0 | NR | NR | 769496 |
| 16 | 0 | 38 | 0 | NR | NR | 769496 |
| 17 | 0 | 38 | 0 | NR | NR | 769496 |
| 18 | 0 | 38 | 0 | NR | NR | 769496 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 0 | 38 | 0 | NR | NR | 769496 |
| 22 | 0 | 38 | 0 | NR | NR | 769496 |
| 23 | 0 | 38 | 0 | NR | NR | 769496 |
| 24 | 0 | 38 | 0 | NR | NR | 769496 |
| 25 | 0 | 38 | 0 | NR | NR | 769496 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 0 | 38 | 0 | NR | NR | 769496 |
| 29 | 0 | 38 | 0 | NR | NR | 769496 |
| 30 | 0 | 38 | 0 | NR | NR | 769496 |
| 31 | 0 | | | | | |
| TOT | 64 | | 0 | | | |
| AVG. | 2.13 | | 0.00 | No. Days: | 30 | |

**Population Served 3,500**

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ____ NO 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: Will L. Clolemyle

Date: 2 July 2004

Title: ASSIST MGR OPERATIONS

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 11**

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

Source: Ground Water

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

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 120 | per 24hrs | mg/l | Hydroxide | 601346 |
| 1 | 0 | 120 | 0 | 0.5 | 6.1 | 601346 |
| 2 | 4 | 120 | 0 | NR | NR | 601350 |
| 3 | 0 | 120 | 0 | 0.4 | 6 | 601350 |
| 4 | 4 | 120 | 0 | NR | NR | 601354 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 34 | 120 | 0 | NR | NR | 601388 |
| 8 | 0 | 120 | 0 | NR | NR | 601388 |
| 9 | 4 | 120 | 0 | NR | NR | 601392 |
| 10 | 0 | 120-54 | 0 | NR | NR | 601392 |
| 11 | 0 | 66 | 0 | NR | NR | 601392 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 1 | 66 | 0 | NR | NR | 601393 |
| 15 | 0 | 66 | 0 | 0.52 | 7 | 601393 |
| 16 | 3 | 66 | 0 | NR | NR | 601396 |
| 17 | 0 | 66 | 0 | 0.3 | 6.8 | 601396 |
| 18 | 1 | 66 | 0 | NR | NR | 601397 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 0 | 66 | 0 | NR | NR | 601397 |
| 22 | 0 | 63 | 3 | 0.89 | 7.7 | 601397 |
| 23 | 2 | 63 | 0 | NR | NR | 601399 |
| 24 | 0 | 63 | 0 | 0.34 | 7.9 | 601399 |
| 25 | 2 | 63 | 0 | NR | NR | 601401 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 0 | 63 | 0 | NR | NR | 601401 |
| 29 | 2 | 63 | 0 | 0.44 | 8 | 601403 |
| 30 | 0 | 63 | 0 | NR | NR | 601403 |
| 31 | 0 | | | | | |
| TOT | 57 | | 3 | | | |
| AVG. | 1.90 | | 0.10 | No. Days: | 30 | |

**Population Served** 3,500

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ____ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat 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: [illegible]

Date: 2 July 2004

Title: ASSIST MGR OPERATIONS

Certification No. NY 0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: JUNE 2004 |
|---|---|---|---|

LOCATION: **WELL NO. 12**

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

Source: Ground Water

Does the system have a chlorination waiver? YES ___ NO X

| | CHLORINATION | | | | pH | |
|---|---|---|---|---|---|---|
| | Treated | Liquid Sodium Hypochlorite | | Free Cl2 | __ Lime | Totalizer |
| Day of | Water | Gallons | Cl2 use | Residual | __ Sodium | Daily Totalizer |
| month | K Gals | 135 | per 24hrs | mg/l | Hydroxide | 684397 |
| 1 | 0 | 135 | 0 | 0.3 | 7.2 | 684397 |
| 2 | 122 | 135 | 0 | NR | NR | 684519 |
| 3 | 0 | 135 | 0 | 0.7 | 7.2 | 684519 |
| 4 | 2 | 135 | 0 | NR | NR | 684521 |
| 5 | 0 | | | | | |
| 6 | 0 | | | | | |
| 7 | 25 | 132 | 3 | NR | NR | 684546 |
| 8 | 0 | 132 | 0 | NR | NR | 684546 |
| 9 | 11 | 132 | 0 | NR | NR | 684557 |
| 10 | 0 | 132 | 0 | NR | NR | 684557 |
| 11 | 2 | 132 | 0 | NR | NR | 684559 |
| 12 | 0 | | | | | |
| 13 | 0 | | | | | |
| 14 | 0 | 132 | 0 | NR | NR | 684559 |
| 15 | 0 | 132 | 0 | 0.64 | 7.2 | 684559 |
| 16 | 2 | 132 | 0 | NR | NR | 684561 |
| 17 | 0 | 132 | 0 | 0.35 | 7.1 | 684561 |
| 18 | 2 | 132 | 0 | NR | NR | 684563 |
| 19 | 0 | | | | | |
| 20 | 0 | | | | | |
| 21 | 0 | 132 | 0 | NR | NR | 684563 |
| 22 | 0 | 132 | 0 | 0.28 | 7.5 | 684563 |
| 23 | 3 | 132 | 0 | NR | NR | 684566 |
| 24 | 0 | 132 | 0 | 0.33 | 7.3 | 684566 |
| 25 | 0 | 132 | 0 | NR | NR | 684566 |
| 26 | 0 | | | | | |
| 27 | 0 | | | | | |
| 28 | 0 | 132 | 0 | NR | NR | 684566 |
| 29 | 3 | 132 | 0 | 0.5 | 7.9 | 684569 |
| 30 | 0 | 132 | 0 | NR | NR | 684569 |
| 31 | 0 | | | | | |
| TOT | 172 | | 3 | | | |
| AVG. | 5.73 | | 0.10 | No. Days: | 30 | |

**Population Served 3,500**

**Number of routine samples** 4

(Must collect a minimum of 5 routine samples the month following a repeat sample collection)

**Number of actual routine samples** 7

**Does a M&AR violation exist?** YES ___ NO X

If yes, check reason's below.

____ Actual number of samples fewer than required.

____ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat 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: Will L Clolunk

Date: 2 July 2004

Title: ASSIST MGR OPERATIONS

Certification No. NY 0030392

7/1/2004
Pump Data

# MONTHLY GALLONAGE REPORT
JUNR2004.XLS

| Date | Well 4 | Well 6 | Well 7 | Well10 | Well11 | Well12 | Daily Total |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 304 | 984 | 0 | 0 | 0 | 1,288 |
| 2 | 0 | 301 | 1,190 | 0 | 4 | 122 | 1,617 |
| 3 | 0 | 341 | 1,316 | 0 | 0 | 0 | 1,657 |
| 4 | 0 | 343 | 1,251 | 0 | 4 | 2 | 1,600 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 919 | 2,356 | 64 | 34 | 25 | 3,398 |
| 8 | 0 | 371 | 1,282 | 0 | 0 | 0 | 1,653 |
| 9 | 0 | 409 | 1,251 | 0 | 4 | 11 | 1,675 |
| 10 | 0 | 295 | 1,342 | 0 | 0 | 0 | 1,637 |
| 11 | 0 | 276 | 1,126 | 0 | 0 | 2 | 1,404 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 0 | 623 | 2,266 | 0 | 1 | 0 | 2,890 |
| 15 | 0 | 229 | 1,053 | 0 | 0 | 0 | 1,282 |
| 16 | 0 | 210 | 1,008 | 0 | 3 | 2 | 1,223 |
| 17 | 0 | 312 | 1,100 | 0 | 0 | 0 | 1,412 |
| 18 | 0 | 247 | 1,047 | 0 | 1 | 2 | 1,297 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | 0 | 615 | 2,424 | 0 | 0 | 0 | 3,039 |
| 22 | 0 | 230 | 743 | 0 | 0 | 0 | 973 |
| 23 | 0 | 347 | 840 | 0 | 2 | 3 | 1,192 |
| 24 | 0 | 256 | 894 | 0 | 0 | 0 | 1,150 |
| 25 | 0 | 243 | 934 | 0 | 2 | 0 | 1,179 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 | 0 | 914 | 2,331 | 0 | 0 | 0 | 3,245 |
| 29 | 0 | 354 | 785 | 0 | 2 | 3 | 1,144 |
| 30 | 0 | 458 | 1,053 | 0 | 0 | 0 | 1,511 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 8,597 | 28,576 | 64 | 57 | 172 | 37,466 |

| | Totalizer This Month | Totalizer Last Month | Total(x1,000) Gallons |
|---|---|---|---|
| Well 4 | 1,648,622 | 1,648,622 | 0 |
| Well 6 | 453,752 | 445,155 | 8,597 |
| Well 7 | 1,435,529 | 1,406,953 | 28,576 |
| Well 10 | 769,496 | 769,432 | 64 |
| Well 11 | 601,403 | 601,346 | 57 |
| Well 12 | 684,569 | 684,397 | 172 |
| AGS Water Supply Meter | 504,592 | 504,226 | 366.00 |
| Medical Reactor - Well 105 | | | 0.00 |
| Biology Building - Well 9 | 6,792,770 | 6,792,770 | 0.00 |

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : 0406203-001

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

Federal ID 5111891
Client ID. : 19105-001
Collected 6/4/2004 9:00:00 AM
Point No 094-273
Received 6/4/2004 3:40:00 PM
Location: B-49 Water Tower
Collected By CLIENT
Copy : Original
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.8 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A39

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : **0406203-002**

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

Federal ID 5111891
Client ID. : 19105-002
Collected 6/4/2004 9:35:00 AM
Point No 076-408
Received 6/4/2004 3:40:00 PM
Location: B-640 Water Tower
Collected By CLIENT
Copy : **Original**
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.6 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNL.M149 A40

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : **0406203-003**

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

Federal ID 5111891
Client ID. : 19105-003
Collected 6/4/2004 9:25:00 AM
Point No 109-19
Received 6/4/2004 3:40:00 PM
Location: B-363 Apt.Laundry
Collected By CLIENT
Copy : **Original**
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.4 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A41

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : 0406203-004

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

Federal ID 5111891
Collected 6/4/2004 8:50:00 AM
Received 6/4/2004 3:40:00 PM
Collected By CLIENT
Copy : Original
CC

Point No 045-12
Location: B-1005 RHIC

Client ID. : 19105-004

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.5 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A42

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : 0406203-005

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

Federal ID 5111891
Client ID. : 19105-005
Collected 6/4/2004 9:15:00 AM
Point No 075-602
Received 6/4/2004 3:40:00 PM
Location: B-725 NSLS
Collected By CLIENT
Copy : Original
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.8 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A43

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : 0406203-006

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

Federal ID 5111891
Client ID. : 19105-006
Collected 6/4/2004 10:20:00 AM Point No 084-69
Received 6/4/2004 3:40:00 PM Location: B-490 Block 1 ACF
Collected By CLIENT
Copy : Original
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.6 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Date Reported : 6/26/2004

Joann M. Slavin
Laboratory Manager



BNLM149 A44

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : **0406203-007**

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

Federal ID 5111891
Client ID. : 19105-007
Collected 6/4/2004 10:15:00 AM Point No 084-68
Received 6/4/2004 3:40:00 PM Location: B-490 Block 4 MRC
Collected By CLIENT
Copy : Original
CC

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.6 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A45

# H2M LABS, INC.

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

## LABORATORY RESULTS

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

Lab No. : 0406203-013

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

Federal ID 5111891
Collected 6/4/2004 9:15:00 AM
Received 6/4/2004 3:40:00 PM
Collected By CLIENT
Copy : Original
CC

Client ID. : 19105-013
Point No 075-602
Location: B-725 NSLS - Duplicate

| Parameter(s) | Results | Units | Limit | Method Number | Analyzed |
|---|---|---|---|---|---|
| Total Coliform | Negative | | Negative | M9223 | 06/04/2004 5:00 PM |
| E_Coliform | Absent | | Absent | M9223 | 06/04/2004 5:00 PM |
| Total Residual Chlorine | 0.8 | mg/L | | M4500-Cl G | 06/04/2004 |

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

Joann M. Slavin
Laboratory Manager

Date Reported : 6/26/2004



BNLM149 A66

**ATTACHMENT II**

**Brookhaven National Laboratory**

**Potable Water Supply**

**June 2004 Biweekly Water Quality Monitoring Data**

**for the BNL Distribution System and Potable Water Wells**

**Attachment III**

**June 2004 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data**
**Table II - Maximum Residual Disinfectant Level (MRDL) Compliance**

| | Total Residual Chlorine (mg/L) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Location** | **July 03** | **Aug. 03** | **Sept. 03** | **Oct. 03** | **Nov. 03** | **Dec. 03** | **Jan. 04** | **Feb. 04** | **Mar. 04** | **Apr. 04** | **May 04** | **June 04** |
| Bldg. 49 Water Tower | 1.2 | 0.9 | 1.4 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 1.1 | 1.0 | 1.0 | 0.8 |
| Bldg. 640 Water Tower | 0.8 | 0.9 | 0.9 | 0.5 | 0.9 | 0.8 | 0.9 | 0.6 | 1.1 | 0.6 | 1.0 | 0.6 |
| Bldg. 363 Apt. Laundry | 0.5 | 1.0 | 0.8 | 0.6 | 0.5 | 0.9 | 0.4 | 0.5 | 0.9 | 0.3 | 0.8 | 0.4 |
| Bldg. 1005 RHIC | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 1.0 | 0.4 | 0.7 | 0.5 | 0.4 | 0.6 | 0.5 |
| Bldg. 930 LINAC | 1.1 | NS | 1.3 | NS | 0.9 | NS | 0.8 | NS | 1.1 | NS | 0.9 | NS |
| Bldg. 725 NSLS | NS | 1.1 | NS | 0.7 | NS | 0.6 | NS | 0.5 | NS | 1.7 | NS | 0.8 |
| Bldg. 490 Outpatient Clinic | 1.1 | NS | 1.3 | NS | 0.6 | NS | 0.8 | NS | 1.0 | NS | 1.0 | NS |
| Bldg. 490 Block 11 | 0.7 | NS | 1.2 | NS | 0.4 | NS | 0.8 | NS | 1.0 | NS | 1.0 | NS |
| Bldg. 490 Block 1 ACF | NS | 0.9 | NS | 0.7 | NS | 0.8 | NS | 0.5 | NS | 1.0 | NS | 0.6 |
| Bldg. 490 Block 4 MRC | NS | 1.1 | NS | 0.7 | NS | 1.0 | NS | 0.5 | NS | 1.1 | NS | 0.6 |
| **Monthly Average** | 0.9 | 1.0 | 1.1 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 | 1.0 | 0.9 | 0.9 | 0.6 |

NS- Not Scheduled for sampling

**Running Annual Average (mg/L)** **0.8** (Total Residual Chlorine)
**MRDL (mg/L)** **4.0**