

September 10, 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 August 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 August 2002.
- Attachment II: August 2002 Biweekly Water Quality Monitoring Data for the BNL Potable Water Wells and BNL Distribution System.
- Attachment III: 2002 Third Quarter Radiological Analyses for the BNL Potable Water Wells.

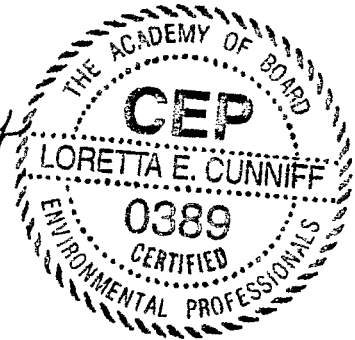
All analytical results have been reviewed and have been found to be within New York State Department of Health Drinking Water Standards (NYSDOH DWS). Collection and analysis of these samples are performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water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

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

Sincerely,

*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 August 2002**

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169

STATION 11515100

SUFFOLK COUNTY

REPORTING PERIOD: **AUGUST 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<br>Daily Totalizer |
|--------------|-------------------------|----------------------------|----------------------|------------------------------|-----------------------------|-----------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                      | Free Cl2<br>Residual<br>mg/l | Lime<br>Sodium<br>Hydroxide | Totalizer |                              |
|              |                         | Gallons                    | Cl2 use<br>per 24hrs |                              |                             |           |                              |
| 1            | 1,043                   | 120+80                     | 26                   | 1.02                         | 7.1                         | 12625260  |                              |
| 2            | 1,222                   | 182                        | 18                   | 1.2                          | 7.4                         | 12626482  |                              |
| 3            | 0                       |                            |                      |                              |                             |           |                              |
| 4            | 0                       |                            |                      |                              |                             |           |                              |
| 5            | 3,129                   | 138                        | 44                   | 0.75                         | 7.4                         | 12629611  |                              |
| 6            | 986                     | 122                        | 16                   | 0.3                          | 7.4                         | 12630597  |                              |
| 7            | 1,074                   | 105                        | 17                   | 0.68                         | 7.4                         | 12631671  |                              |
| 8            | 999                     | 90+110                     | 15                   | 0.88                         | 7.4                         | 12632670  |                              |
| 9            | 969                     | 190                        | 10                   | 0.9                          | 7.4                         | 12633639  |                              |
| 10           | 0                       |                            |                      |                              |                             |           |                              |
| 11           | 0                       |                            |                      |                              |                             |           |                              |
| 12           | 2,672                   | 145                        | 45                   | 0.77                         | 7.3                         | 12636311  |                              |
| 13           | 1,026                   | 130                        | 15                   | 1.1                          | 7.4                         | 12637337  |                              |
| 14           | 1,095                   | 112                        | 18                   | 0.65                         | 7.3                         | 12638432  |                              |
| 15           | 900                     | 100                        | 12                   | 0.78                         | 7.7                         | 12639332  |                              |
| 16           | 1,102                   | 85+115                     | 15                   | 0.86                         | 7.6                         | 12640434  |                              |
| 17           | 0                       |                            |                      |                              |                             |           |                              |
| 18           | 0                       |                            |                      |                              |                             |           |                              |
| 19           | 3,230                   | 162                        | 38                   | 1.2                          | 7.3                         | 12643664  |                              |
| 20           | 1,077                   | 146                        | 16                   | 1                            | 7.6                         | 12644741  |                              |
| 21           | 1,083                   | 130                        | 16                   | 0.84                         | 7.6                         | 12645824  |                              |
| 22           | 929                     | 118                        | 12                   | 1.1                          | 7.5                         | 12646753  |                              |
| 23           | 1,064                   | 103                        | 15                   | 0.81                         | 7.5                         | 12647817  |                              |
| 24           | 0                       |                            |                      |                              |                             |           |                              |
| 25           | 0                       |                            |                      |                              |                             |           |                              |
| 26           | 3,007                   | 60                         | 43                   | 1.02                         | 7.2                         | 12650824  |                              |
| 27           | 1,050                   | 45                         | 15                   | 0.9                          | 7.1                         | 12651874  |                              |
| 28           | 1,044                   | 20+27                      | 15                   | 0.88                         | 7.3                         | 12652918  |                              |
| 29           | 1,038                   | 40+160                     | 7                    | 0.7                          | 7.5                         | 12653956  |                              |
| 30           | 736                     | 190                        | 10                   | 1.43                         | 7.3                         | 12654692  |                              |
| 31           | 771                     | 180                        | 10                   | 1.23                         | 7.5                         | 12655463  |                              |
| TOT          | 31,246                  |                            | 448                  |                              |                             |           |                              |
| AVG.         | 1007.94                 |                            | 14.45                | No. Days:                    | 31                          |           |                              |

Population Served **3,500**

Number of routine samples 4

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

Number of actual routine samples 7

Does a M&AR violation exist? YES \_\_\_\_\_ NO X

If yes, check reason's below.

\_\_\_\_ Actual number of samples fewer than required.

\_\_\_\_ Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

\_\_\_\_ Failure to analyze repeat samples.

Does an MCL violation exist? YES \_\_\_\_\_ NO X

If yes, check reason(s) below.

\_\_\_\_ Two or more positive total coliform samples for systems collecting 40 or more samples (routine, repeat or hiturb) per month.

\_\_\_\_ Positive E. Coli result followed by a positive total coliform repeat sample.

\_\_\_\_ Positive total coliform result followed by a positive E. Coli repeat sample.

Reported by: Will L. Claborn

Date: 4 Sept 02

Title: Water Systems Supervisor

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

|                  |                  |                |                                      |
|------------------|------------------|----------------|--------------------------------------|
| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: <b>AUGUST 2001</b> |
|------------------|------------------|----------------|--------------------------------------|

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<br>Daily Totalizer |
|--------------|-------------------------|----------------------------|-------------------|---------------------------|-----------------------|-----------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                   | Free Cl2 Residual<br>mg/l | Lime Sodium Hydroxide | Totalizer |                              |
|              |                         | Gallons                    | Cl2 use per 24hrs |                           |                       |           |                              |
| 1            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 2            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 3            | 0                       |                            |                   |                           |                       |           |                              |
| 4            | 0                       |                            |                   |                           |                       |           |                              |
| 5            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 6            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 7            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 8            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 9            | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 10           | 0                       |                            |                   |                           |                       |           |                              |
| 11           | 0                       |                            |                   |                           |                       |           |                              |
| 12           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 13           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 14           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 15           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 16           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 17           | 0                       |                            |                   |                           |                       |           |                              |
| 18           | 0                       |                            |                   |                           |                       |           |                              |
| 19           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 20           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 21           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 22           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 23           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 24           | 0                       |                            |                   |                           |                       |           |                              |
| 25           | 0                       |                            |                   |                           |                       |           |                              |
| 26           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 27           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 28           | 0                       | 130                        | 0                 | NR                        | NR                    | 1479844   |                              |
| 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: Will L. Cholover

Date: 4 Sept 02

Title: Water Systems Supervisor

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169    STATION 11515100    SUFFOLK COUNTY    REPORTING PERIOD: **AUGUST 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<br>Daily Totalizer |
|--------------|-------------------------|----------------------------|-------------------|---------------------------|-----------------------|--------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                   | Free Cl2 Residual<br>mg/l | Lime Sodium Hydroxide |        |                              |
|              |                         | Gallons                    | Cl2 use per 24hrs |                           | —                     | —      |                              |
| 1            | 292                     | 158                        | 2                 | 0.01                      | 5.6                   | 333701 |                              |
| 2            | 390                     | 150+20                     | 8                 | 0.02                      | 5.8                   | 334091 |                              |
| 3            | 0                       |                            |                   |                           |                       |        |                              |
| 4            | 0                       |                            |                   |                           |                       |        |                              |
| 5            | 892                     | 157                        | 18                | 0.08                      | 5.8                   | 334983 |                              |
| 6            | 425                     | 150                        | 7                 | 0.03                      | 5.8                   | 335408 |                              |
| 7            | 445                     | 145                        | 5                 | 0.03                      | 5.8                   | 335853 |                              |
| 8            | 219                     | 120+80                     | 25                | 0                         | 5.8                   | 336072 |                              |
| 9            | 298                     | 195                        | 5                 | 0.04                      | 5.8                   | 336370 |                              |
| 10           | 0                       |                            |                   |                           |                       |        |                              |
| 11           | 0                       |                            |                   |                           |                       |        |                              |
| 12           | 753                     | 180                        | 15                | 0.02                      | 5.8                   | 337123 |                              |
| 13           | 323                     | 177                        | 3                 | 0.05                      | 5.8                   | 337446 |                              |
| 14           | 311                     | 172                        | 5                 | 0.05                      | 5.7                   | 337757 |                              |
| 15           | 247                     | 170                        | 2                 | 0.06                      | 5.9                   | 338004 |                              |
| 16           | 321                     | 161+39                     | 9                 | 0.03                      | 5.8                   | 338325 |                              |
| 17           | 0                       |                            |                   |                           |                       |        |                              |
| 18           | 0                       |                            |                   |                           |                       |        |                              |
| 19           | 817                     | 188                        | 12                | 0.06                      | 5.9                   | 339142 |                              |
| 20           | 542                     | 180                        | 8                 | 0.07                      | 5.9                   | 339684 |                              |
| 21           | 393                     | 175                        | 5                 | 0.03                      | 5.9                   | 340077 |                              |
| 22           | 243                     | 170                        | 5                 | 0.06                      | 5.9                   | 340320 |                              |
| 23           | 309                     | 165+35                     | 5                 | 0.06                      | 5.9                   | 340629 |                              |
| 24           | 0                       |                            |                   |                           |                       |        |                              |
| 25           | 0                       |                            |                   |                           |                       |        |                              |
| 26           | 1,246                   | 190                        | 10                | 0.14                      | 5.7                   | 341875 |                              |
| 27           | 364                     | 180                        | 10                | 0.03                      | 5.8                   | 342239 |                              |
| 28           | 255                     | 178                        | 2                 | 0.01                      | 5.9                   | 342494 |                              |
| 29           | 401                     | 170+30                     | 8                 | 0.16                      | 5.9                   | 342895 |                              |
| 30           | 385                     | 200                        | 0                 | 0.05                      | 5.9                   | 343280 |                              |
| 31           | 456                     | 190                        | 10                | 0.05                      | 5.9                   | 343736 |                              |
| TOT          | 10,327                  |                            | 179               |                           |                       |        |                              |
| AVG.         | 333.13                  |                            | 5.77              | No. Days:                 | 31                    |        |                              |

Population Served **3,500**

Number of routine samples 4  
 (Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist?    YES     NO

If yes, check reason's below.

Actual number of samples fewer than required.

Failure to analyze for E. Coli if there was a positive result for total coliform from routine, repeat of high turbidity sample.

Failure to analyze repeat samples.

Does an MCL violation exist?    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: Walter L. Cholewicki

Date: 4 Sept 02

Title: Water Systems Supervisor

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

|                  |                  |                |                                      |
|------------------|------------------|----------------|--------------------------------------|
| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: <b>AUGUST 2001</b> |
|------------------|------------------|----------------|--------------------------------------|

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<br>Daily Totalizer |
|--------------|-------------------------|----------------------------|-------------------|---------------------------|-----------------------|-----------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                   | Free Cl2 Residual<br>mg/l | Lime Sodium Hydroxide | Totalizer |                              |
|              |                         | Gallons                    | Cl2 use per 24hrs |                           |                       |           |                              |
| 1            | 1,214                   | 120                        | 18                | 0.01                      | 5.6                   | 824824    |                              |
| 2            | 1,282                   | 85+120                     | 17                | 0.02                      | 5.8                   | 826038    |                              |
| 3            | 0                       |                            |                   |                           |                       |           |                              |
| 4            | 0                       |                            |                   |                           |                       |           |                              |
| 5            | 3,672                   | 152                        | 53                | 0.08                      | 5.8                   | 830992    |                              |
| 6            | 1,025                   | 140                        | 12                | 0.03                      | 5.8                   | 832017    |                              |
| 7            | 1,252                   | 120                        | 20                | 0.03                      | 5.8                   | 833269    |                              |
| 8            | 1,206                   | 105+95                     | 15                | 0                         | 5.8                   | 834475    |                              |
| 9            | 1,106                   | 190                        | 10                | 0.04                      | 5.8                   | 835581    |                              |
| 10           | 0                       |                            |                   |                           |                       |           |                              |
| 11           | 0                       |                            |                   |                           |                       |           |                              |
| 12           | 3,375                   | 150                        | 40                | 0.02                      | 5.8                   | 838956    |                              |
| 13           | 1,292                   | 137                        | 13                | 0.05                      | 5.8                   | 840248    |                              |
| 14           | 1,233                   | 121                        | 16                | 0.05                      | 5.7                   | 841481    |                              |
| 15           | 1,105                   | 109                        | 12                | 0.06                      | 5.9                   | 842586    |                              |
| 16           | 1,246                   | 95+105                     | 14                | 0.03                      | 5.8                   | 843832    |                              |
| 17           | 0                       |                            |                   |                           |                       |           |                              |
| 18           | 0                       |                            |                   |                           |                       |           |                              |
| 19           | 3,761                   | 155                        | 45                | 0.06                      | 5.9                   | 847593    |                              |
| 20           | 1,255                   | 140                        | 15                | 0.07                      | 5.9                   | 848848    |                              |
| 21           | 1,344                   | 125                        | 15                | 0.03                      | 5.9                   | 850192    |                              |
| 22           | 1,174                   | 110                        | 15                | 0.06                      | 5.9                   | 851366    |                              |
| 23           | 1,289                   | 90+110                     | 20                | 0.06                      | 5.9                   | 852655    |                              |
| 24           | 0                       |                            |                   |                           |                       |           |                              |
| 25           | 0                       |                            |                   |                           |                       |           |                              |
| 26           | 3,669                   | 140                        | 60                | 0.14                      | 5.7                   | 856324    |                              |
| 27           | 1,293                   | 127                        | 13                | 0.03                      | 5.8                   | 857617    |                              |
| 28           | 1,245                   | 114                        | 13                | 0.01                      | 5.9                   | 858862    |                              |
| 29           | 1,167                   | 90+110                     | 24                | 0.16                      | 5.9                   | 860029    |                              |
| 30           | 1,144                   | 190                        | 10                | 0.05                      | 5.9                   | 861173    |                              |
| 31           | 697                     | 170                        | 20                | 0.05                      | 5.9                   | 861870    |                              |
| TOT          | 37,046                  |                            | 490               |                           |                       |           |                              |
| AVG.         | 1195.03                 |                            | 15.81             | 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: W. L. Chalmers

Date: 4 Sept 01

Title: Water Systems Supervisor

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

|                  |                  |                |                                      |
|------------------|------------------|----------------|--------------------------------------|
| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: <b>AUGUST 2001</b> |
|------------------|------------------|----------------|--------------------------------------|

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<br>Daily Totalizer<br>764327 |
|--------------|-------------------------|----------------------------|-------------------|---------------------------|-----------------------|-----------|--|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                   | Free Cl2 Residual<br>mg/l | Lime Sodium Hydroxide | Totalizer |  |
|              |                         | Gallons                    | Cl2 use per 24hrs |                           |                       |           |  |
| 1            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 2            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 3            | 0                       |                            |                   |                           |                       |           |  |
| 4            | 0                       |                            |                   |                           |                       |           |  |
| 5            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 6            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 7            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 8            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 9            | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 10           | 0                       |                            |                   |                           |                       |           |  |
| 11           | 0                       |                            |                   |                           |                       |           |  |
| 12           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 13           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 14           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 15           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 16           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 17           | 0                       |                            |                   |                           |                       |           |  |
| 18           | 0                       |                            |                   |                           |                       |           |  |
| 19           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 20           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 21           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 22           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 23           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 24           | 0                       |                            |                   |                           |                       |           |  |
| 25           | 0                       |                            |                   |                           |                       |           |  |
| 26           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 27           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 28           | 0                       | 58                         | 0                 | NR                        | NR                    | 764327    |  |
| 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: W. J. Chelone

Date: 4 Sept 02

Title: Water Systems Supervisor

Certification No. NY0030392



# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

|                  |                  |                |                                      |
|------------------|------------------|----------------|--------------------------------------|
| PROGRAM CODE 169 | STATION 11515100 | SUFFOLK COUNTY | REPORTING PERIOD: <b>AUGUST 2001</b> |
|------------------|------------------|----------------|--------------------------------------|

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<br>Daily Totalizer |
|--------------|-------------------------|----------------------------|----------------------|------------------------------|-----------------------------|--------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite |                      | Free Cl2<br>Residual<br>mg/l | Lime<br>Sodium<br>Hydroxide |        |                              |
|              |                         | Gallons                    | Cl2 use<br>per 24hrs |                              |                             |        |                              |
| 1            | 354                     | 126                        | 4                    | 0.99                         | 7.3                         | 455319 |                              |
| 2            | 1                       | 126                        | 0                    | 0.8                          | 7                           | 455320 |                              |
| 3            | 0                       |                            |                      |                              |                             |        |                              |
| 4            | 0                       |                            |                      |                              |                             |        |                              |
| 5            | 345                     | 128                        | 0                    | 0.88                         | 7.1                         | 455665 |                              |
| 6            | 68                      | 128                        | 0                    | 0.63                         | 6.4                         | 455733 |                              |
| 7            | 8                       | 128                        | 0                    | 0.67                         | 7.1                         | 455741 |                              |
| 8            | 1                       | 128+72                     | 0                    | 0.58                         | 7.2                         | 455742 |                              |
| 9            | 1                       | 200                        | 0                    | 0.63                         | 7.3                         | 455743 |                              |
| 10           | 0                       |                            |                      |                              |                             |        |                              |
| 11           | 0                       |                            |                      |                              |                             |        |                              |
| 12           | 1,077                   | 200                        | 0                    | NR                           | NR                          | 456820 |                              |
| 13           | 141                     | 200                        | 0                    | 1.2                          | 7.3                         | 456961 |                              |
| 14           | 367                     | 198                        | 2                    | 0.63                         | 7.6                         | 457328 |                              |
| 15           | 236                     | 197                        | 1                    | 0.57                         | 7.4                         | 457564 |                              |
| 16           | 235                     | 197                        | 0                    | 0.5                          | 7.4                         | 457799 |                              |
| 17           | 0                       |                            |                      |                              |                             |        |                              |
| 18           | 0                       |                            |                      |                              |                             |        |                              |
| 19           | 263                     | 195                        | 2                    | NR                           | NR                          | 458062 |                              |
| 20           | 235                     | 195                        | 0                    | 0.52                         | 7                           | 458297 |                              |
| 21           | 159                     | 192                        | 5                    | 0.5                          | 7.2                         | 458456 |                              |
| 22           | 195                     | 192                        | 0                    | 0.51                         | 7                           | 458651 |                              |
| 23           | 2                       | 192                        | 0                    | NR                           | NR                          | 458653 |                              |
| 24           | 0                       |                            |                      |                              |                             |        |                              |
| 25           | 0                       |                            |                      |                              |                             |        |                              |
| 26           | 0                       | 192                        | 0                    | 0.27                         | 7.2                         | 458653 |                              |
| 27           | 1                       | 192                        | 0                    | 0.3                          | 7.2                         | 458654 |                              |
| 28           | 4                       | 192                        | 0                    | NR                           | NR                          | 458658 |                              |
| 29           | 0                       | 192                        | 0                    | NR                           | NR                          | 458658 |                              |
| 30           | 5                       | 192                        | 0                    | NR                           | NR                          | 458663 |                              |
| 31           | 0                       | 192                        | 0                    | NR                           | NR                          | 458663 |                              |
| TOT          | 3,698                   |                            | 14                   |                              |                             |        |                              |
| AVG.         | 119.29                  |                            | 0.45                 | No. Days:                    | 31                          |        |                              |

Population Served **3,500**

Number of routine samples 4  
 (Must collect a minimum of 5 routine samples the month following a repeat sample collection)

Number of actual routine samples 7

Does a M&AR violation exist? YES  NO

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: W. J. Cholera

Date: 4 Sept 02

Title: Water Systems Supervisor

Certification No. NY0030392

# BROOKHAVEN NATIONAL LABORATORY

## WATER SYSTEMS OPERATION REPORT

PUBLIC WATER SUPPLY PROTECTION

PROGRAM CODE 169

STATION 11515100

SUFFOLK COUNTY

REPORTING PERIOD: **AUGUST 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<br>Daily Totalizer |
|--------------|-------------------------|---------------------------------------|----------------------------------|------------------------------|-----------------------------|--------|------------------------------|
|              | Treated Water<br>K Gals | Liquid Sodium Hypochlorite<br>Gallons | Free Cl2<br>Cl2 use<br>per 24hrs | Free Cl2<br>Residual<br>mg/l | Lime<br>Sodium<br>Hydroxide |        |                              |
| 1            | 0                       | 195                                   | 0                                | NR                           | NR                          | 578001 |                              |
| 2            | 0                       | 195                                   | 0                                | NR                           | NR                          | 578001 |                              |
| 3            | 0                       |                                       |                                  |                              |                             |        |                              |
| 4            | 0                       |                                       |                                  |                              |                             |        |                              |
| 5            | 1                       | 195                                   | 0                                | 0.73                         | 6.9                         | 578002 |                              |
| 6            | 378                     | 195                                   | 0                                | 0.57                         | 6.6                         | 578380 |                              |
| 7            | 5                       | 195                                   | 0                                | 1                            | 7.2                         | 578385 |                              |
| 8            | 1                       | 195+5                                 | 0                                | 0.99                         | 7.3                         | 578386 |                              |
| 9            | 1                       | 200                                   | 0                                | 0.97                         | 7.2                         | 578387 |                              |
| 10           | 0                       |                                       |                                  |                              |                             |        |                              |
| 11           | 0                       |                                       |                                  |                              |                             |        |                              |
| 12           | 0                       | 200                                   | 0                                | NR                           | NR                          | 578387 |                              |
| 13           | 0                       | 200                                   | 0                                | 1.2                          | 7.3                         | 578387 |                              |
| 14           | 3                       | 200                                   | 0                                | NR                           | NR                          | 578390 |                              |
| 15           | 215                     | 197                                   | 3                                | NR                           | NR                          | 578605 |                              |
| 16           | 33                      | 197                                   | 0                                | NR                           | NR                          | 578638 |                              |
| 17           | 0                       |                                       |                                  |                              |                             |        |                              |
| 18           | 0                       |                                       |                                  |                              |                             |        |                              |
| 19           | 1                       | 197                                   | 0                                | NR                           | NR                          | 578639 |                              |
| 20           | 5                       | 195                                   | 2                                | 0.96                         | 7.2                         | 578644 |                              |
| 21           | 5                       | 195                                   | 0                                | NR                           | NR                          | 578649 |                              |
| 22           | 110                     | 195                                   | 0                                | 0.77                         | 7.2                         | 578759 |                              |
| 23           | 2                       | 195                                   | 0                                | NR                           | NR                          | 578761 |                              |
| 24           | 0                       |                                       |                                  |                              |                             |        |                              |
| 25           | 0                       |                                       |                                  |                              |                             |        |                              |
| 26           | 126                     | 192                                   | 3                                | 0.88                         | 7.7                         | 578887 |                              |
| 27           | 2                       | 191                                   | 1                                | 0.97                         | 7.7                         | 578889 |                              |
| 28           | 5                       | 190                                   | 1                                | NR                           | NR                          | 578894 |                              |
| 29           | 0                       | 190                                   | 0                                | 0.66                         | 7.3                         | 578894 |                              |
| 30           | 20                      | 190                                   | 0                                | NR                           | NR                          | 578914 |                              |
| 31           | 0                       | 190                                   | 0                                | NR                           | NR                          | 578914 |                              |
| TOT          | 913                     |                                       | 10                               |                              |                             |        |                              |
| AVG.         | 29.45                   |                                       | 0.32                             | 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: W. L. Clark

Date: 4 Sept 01

Title: Water Systems Supervisor

Certification No. NY0030392

| Date                       | Well 4  | Well 6 | Well 7                  | Well10 | Well11                  | Well12 | Daily Total              |
|----------------------------|---------|--------|-------------------------|--------|-------------------------|--------|--------------------------|
| 1                          | 0       | 292    | 1,214                   | 0      | 354                     | 0      | 1,860                    |
| 2                          | 0       | 390    | 1,282                   | 0      | 1                       | 0      | 1,673                    |
| 3                          | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 4                          | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 5                          | 0       | 892    | 3,672                   | 0      | 345                     | 1      | 4,910                    |
| 6                          | 0       | 425    | 1,025                   | 0      | 68                      | 378    | 1,896                    |
| 7                          | 0       | 445    | 1,252                   | 0      | 8                       | 5      | 1,710                    |
| 8                          | 0       | 219    | 1,206                   | 0      | 1                       | 1      | 1,427                    |
| 9                          | 0       | 298    | 1,106                   | 0      | 1                       | 1      | 1,406                    |
| 10                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 11                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 12                         | 0       | 753    | 3,375                   | 0      | 1,077                   | 0      | 5,205                    |
| 13                         | 0       | 323    | 1,292                   | 0      | 141                     | 0      | 1,756                    |
| 14                         | 0       | 311    | 1,233                   | 0      | 367                     | 3      | 1,914                    |
| 15                         | 0       | 247    | 1,105                   | 0      | 236                     | 215    | 1,803                    |
| 16                         | 0       | 321    | 1,246                   | 0      | 235                     | 33     | 1,835                    |
| 17                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 18                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 19                         | 0       | 817    | 3,761                   | 0      | 263                     | 1      | 4,842                    |
| 20                         | 0       | 542    | 1,255                   | 0      | 235                     | 5      | 2,037                    |
| 21                         | 0       | 393    | 1,344                   | 0      | 159                     | 5      | 1,901                    |
| 22                         | 0       | 243    | 1,174                   | 0      | 195                     | 110    | 1,722                    |
| 23                         | 0       | 309    | 1,289                   | 0      | 2                       | 2      | 1,602                    |
| 24                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 25                         | 0       | 0      | 0                       | 0      | 0                       | 0      | 0                        |
| 26                         | 0       | 1,246  | 3,669                   | 0      | 0                       | 126    | 5,041                    |
| 27                         | 0       | 364    | 1,293                   | 0      | 1                       | 2      | 1,660                    |
| 28                         | 0       | 255    | 1,245                   | 0      | 4                       | 5      | 1,509                    |
| 29                         | 0       | 401    | 1,167                   | 0      | 0                       | 0      | 1,568                    |
| 30                         | 0       | 385    | 1,144                   | 0      | 5                       | 20     | 1,554                    |
| 31                         | 0       | 456    | 697                     | 0      | 0                       | 0      | 1,153                    |
| Total                      | 0       | 10,327 | 37,046                  | 0      | 3,698                   | 913    | 51,984                   |
|                            |         |        | Totalizer<br>This Month |        | Totalizer<br>Last Month |        | Total(x1,000)<br>Gallons |
|                            | Well 4  |        | 1,479,844               |        | 1,479,844               |        | 0                        |
|                            | Well 6  |        | 343,736                 |        | 333,409                 |        | 10,327                   |
|                            | Well 7  |        | 861,870                 |        | 824,824                 |        | 37,046                   |
|                            | Well 10 |        | 764,327                 |        | 764,327                 |        | 0                        |
|                            | Well 11 |        | 458,663                 |        | 454,965                 |        | 3,698                    |
|                            | Well 12 |        | 578,914                 |        | 578,001                 |        | 913                      |
| AGS Water Supply Meter     |         |        | 409,224                 |        | 409,188                 |        | 36.00                    |
| Medical Reactor - Well 105 |         |        | 0                       |        | 0                       |        | 0.00                     |
| Biology Building - Well 9  |         |        | 6,598,880               |        | 6,581,340               |        | 17.54                    |

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 : S. SCARPITTA  
 Federal ID : 5111891  
 Copies To : Tony Rass

Received : 08/08/02 3:00 PM  
 Collected By : JK00  
 Sample Type : Potable Water

Date Reported : 8/14/02

| Lab Number                       | Location                       | Collected         | Units<br>Method<br>Limits | Total Coliform                | E. Coliform                 | Total Residual Chlorine   |
|----------------------------------|--------------------------------|-------------------|---------------------------|-------------------------------|-----------------------------|---------------------------|
|                                  |                                |                   |                           | M9223<br>Negative             | M9223<br>Absent             | mg/L<br>M4500-Cl G<br>N/A |
| 0208298-001A<br>Routine<br>Dist. | 14854-001<br>B-49 Water Tower  | 08/08/02 8:45 AM  | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.4<br>8/8/02             |
| 0208298-002A<br>Routine<br>Dist. | 14854-002<br>B-640 Water Tower | 08/08/02 9:00 AM  | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.6<br>8/8/02             |
| 0208298-003A<br>Routine<br>Dist. | 14854-003<br>B-1005 Rfic       | 08/08/02 9:20 AM  | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.7<br>8/8/02             |
| 0208298-004A<br>Routine<br>Dist. | 14854-004<br>B-383 Apt Laundry | 08/08/02 10:00 AM | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.6<br>8/8/02             |
| 0208298-005A<br>Routine<br>Dist. | 14854-005<br>B-725 Nels        | 08/08/02 9:30 AM  | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.8<br>8/8/02             |
| 0208298-006A<br>Routine<br>Dist. | 14854-006<br>B-490 Block 1 Afc | 08/08/02 10:45 AM | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.7<br>8/8/02             |
| 0208298-007A<br>Routine<br>Dist. | 14854-007<br>B-450 Block 4 Nrc | 08/08/02 10:20 AM | Analysis<br>Time          | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.6<br>8/8/02             |

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

*Joann M. Slavin*

Laboratory Manager

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

Received : 08/08/02 3:00 PM  
Collected By : JK00  
Sample Type : Potable Water

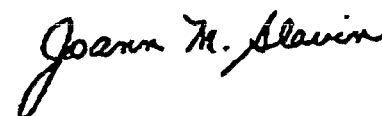
Federal ID : 5111891

Copies To : Tony Ross

Date Reported : 8/14/02

| Lab Number   | Location  | Collected         | Units    | Total Coliform                | E Coliform                  | Total Residual Chlorine |
|--------------|-----------|-------------------|----------|-------------------------------|-----------------------------|-------------------------|
|              |           |                   |          | Method                        | Method                      | mg/L                    |
|              |           |                   | Limits   |                               |                             |                         |
| 0208298-008A | 14854-008 | 08/08/02 10:20 AM |          | M9223<br>Negative             | M9223<br>Absent             | M4500-Cl G<br>N/A       |
| Routine      | Duplicate |                   | Analysis | Negative<br>8/8/02 4:30:00 PM | Absent<br>8/8/02 4:30:00 PM | 0.6<br>8/8/02           |
| Dist.        |           |                   | Time     |                               |                             |                         |

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



Laboratory Manager

**ATTACHMENT II**

**Brookhaven National Laboratory  
Potable Water Supply**

**August 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**  
**August 2002**

| Sample Location | Sample Date | pH (SU) | Temperature (Degrees F) | Conductivity (µmhos) | Alkalinity (mg/L) | Calcium (mg/L) |
|-----------------|-------------|---------|-------------------------|----------------------|-------------------|----------------|
| WTP             | 8/1/02      | 7.1     | 58                      | 151                  | NR                | NR             |
| WTP             | 8/6/02      | 7.4     | 57                      | 142                  | NR                | NR             |
| WTP             | 8/8/02      | 7.4     | 55                      | 140                  | NR                | NR             |
| WTP             | 8/13/02     | 7.4     | 55                      | 142                  | NR                | NR             |
| WTP             | 8/15/02     | 7.7     | 58                      | 143                  | NR                | NR             |
| WTP             | 8/20/02     | 7.6     | 57                      | 145                  | NR                | NR             |
| WTP             | 8/22/02     | 7.5     | 55                      | 136                  | NR                | NR             |
| WTP             | 8/27/02     | 7.1     | 56                      | 138                  | NR                | NR             |
| WTP             | 8/29/02     | 7.5     | 58                      | 143                  | NR                | NR             |
| Well 11         | 8/1/02      | 7.3     | 55                      | 190                  | NR                | NR             |
| Well 11         | 8/6/02      | 6.4     | 55                      | 203                  | NR                | NR             |
| Well 11         | 8/8/02      | 7.2     | 55                      | 158                  | NR                | NR             |
| Well 11         | 8/13/02     | 7.3     | 55                      | 185                  | NR                | NR             |
| Well 11         | 8/15/02     | 7.4     | 55                      | 181                  | NR                | NR             |
| Well 11         | 8/20/02     | 7.0     | 55                      | 203                  | NR                | NR             |
| Well 11         | 8/22/02     | 7.0     | 55                      | 155                  | NR                | NR             |
| Well 11         | 8/27/02     | 7.2     | 55                      | 144                  | NR                | NR             |
| Well 11         | 8/29/02     | 6.7     | 56                      | 275                  | NR                | NR             |
| Well 12         | 8/1/02      | NR      | NR                      | NR                   | NR                | NR             |
| Well 12         | 8/6/02      | 6.6     | 56                      | 200                  | NR                | NR             |
| Well 12         | 8/8/02      | 7.3     | 56                      | 210                  | NR                | NR             |
| Well 12         | 8/13/02     | 7.3     | 55                      | 195                  | NR                | NR             |
| Well 12         | 8/15/02     | NR      | NR                      | NR                   | NR                | NR             |
| Well 12         | 8/20/02     | 7.2     | 55                      | 154                  | NR                | NR             |
| Well 12         | 8/22/02     | 7.2     | 55                      | 162                  | NR                | NR             |
| Well 12         | 8/27/02     | 7.7     | 55                      | 137                  | NR                | NR             |
| Well 12         | 8/29/02     | 7.3     | 55                      | 147                  | NR                | NR             |

NR - Analysis Not Required or Not Reported

WTP - Water Treatment Plant

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

**ATTACHMENT III**

**Brookhaven National Laboratory  
Potable Water Supply**

**2002 Third 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<br/>BNL Potable Water Wells<br/>2002 Third Quarter Monitoring Results</b> |                              |                             |                          |                        |
|--|------------------------------|-----------------------------|--------------------------|------------------------|
| <b>Well ID</b>   | <b>Gross Alpha<br/>pCi/L</b> | <b>Gross Beta<br/>pCi/L</b> | <b>Tritium<br/>pCi/L</b> | <b>Sr-90<br/>pCi/L</b> |
| Well # 6   | < 0.41                       | < 1.59                      | < 304                    | < 0.8                  |
| Well # 7   | < 0.41                       | < 1.59                      | < 304                    | < 0.8                  |
| Well # 11  | < 0.41                       | < 1.59                      | < 304                    | < 0.8                  |
| Well #7<br>(Duplicate)   | < 0.41                       | < 1.59                      | < 304                    | < 0.8                  |





ASL Prefix No. **22072606**

Page 1 of 1

**BROOKHAVEN**  
NATIONAL LABORATORY

Carrier/Waybill # \_\_\_\_\_  
P.O. # \_\_\_\_\_

**15155** *xx*

Chain of Custody No. \_\_\_\_\_

Requires EDD  DQL \_\_\_\_\_

**SAMPLING CHAIN OF CUSTODY**

|   |                                 |                                  |  |                       |  |
|---|---------------------------------|----------------------------------|--|-----------------------|--|
| Analysis Requested By                   |                                 | Sampling Contractor              |  | Analytical Laboratory |  |
| Name: <b>B Lee</b>                      | Name: <b>ESD Field Sampling</b> | Name: <b>GEL</b>                 |  |                       |  |
| Life: No: <b>20222</b> Ext: <b>3148</b> | Contact:                        | Address:                         |  |                       |  |
| Acct. No: <b>07085</b> Dept: <b>E</b>   | Phone:                          | City: _____ St: _____ Zip: _____ |  |                       |  |
| Email Reports To:                       | Email/Fax:                      | Contact:                         |  |                       |  |
| 1 <b>B Lee</b>                          | Sampler: <b>L Lettewi</b>       | Phone:                           |  |                       |  |
| 2 _____                                 | Project Name: <b>F wells</b>    | Email/Fax:                       |  |                       |  |
| Project Manager: <b>B Lee</b>           | Field Engineer: _____           |                                  |  |                       |  |

Comments: **64309%**

| Analysis Requested |         |       |           |          |     |                        |      |        |  |
|--------------------|---------|-------|-----------|----------|-----|------------------------|------|--------|--|
| Alpha/Beta         | Tritium | Gamma | Strontium | 5242     | 624 | Nuclide-specific Alpha | PCBs | Metals |  |
|                    |         |       | <b>X</b>  | <b>X</b> |     |                        |      |        |  |
|                    |         |       | <b>X</b>  | <b>X</b> |     |                        |      |        |  |
|                    |         |       | <b>X</b>  | <b>X</b> |     |                        |      |        |  |
|                    |         |       | <b>X</b>  | <b>X</b> |     |                        |      |        |  |

**(EPA 905)**

| Type |     |     |     | Sample Information  |           |         |      | Additional Sample Information |                    |                |           |            |              |
|------|-----|-----|-----|---------------------|-----------|---------|------|-------------------------------|--------------------|----------------|-----------|------------|--------------|
| LID  | UID | Srp | Col | Site ID/Bldg/Life # | Depth/RWP | Date    | Time | Matrix                        | Name/Description   | Cont.Vol/Units | Cont.Type | cf of Cont | Preservative |
| 001  | 002 | E   | G   | well 11             | 93-142    | 7/26/02 | 1000 | W                             | Potable wells<br>↓ | 4L             | P         | 1          | HNO3         |
| 002  | 003 | E   | G   | well 6              | 98-150    | 7/26/02 | 0942 | W                             |                    | 4L             | P         | 1          | HNO3         |
| 003  | 004 | E   | G   | well 7              | 99-150    | 7/26/02 | 0932 | W                             |                    | 4L             | P         | 1          | HNO3         |
| 004  | 005 | E   | G   | BD-1                | 0         | 7/26/02 | -    | W                             |                    | 4L             | P         | 1          | HNO3         |
|      |     |     |     | ↑ Well #7           |           |         |      |                               |                    |                |           |            |              |

|                                 |                             |                             |
|---------------------------------|-----------------------------|-----------------------------|
| 1 Relinquished By/Date/Time     | 2 Relinquished By/Date/Time | 3 Relinquished By/Date/Time |
| Print _____                     | Print _____                 | Print _____                 |
| Signature _____                 | Signature _____             | Signature _____             |
| 1 Received By/Date/Time         | 2 Received By/Date/Time     | 3 Received By/Date/Time     |
| Print <b>J. Hanley 7/27/02</b>  | Print _____                 | Print _____                 |
| Signature <b>J. Hanley 0830</b> | 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 : OER  
 Building 51  
 Upton, New York 11973-5000  
 Contact: Ms. Susan Young  
 Project: Brookhaven ERD Contract

Report Date: August 23, 2002

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|                   |                 |               |                |
|-------------------|-----------------|---------------|----------------|
| Client Sample ID: | 15155-002       | Project:      | BRKL02000      |
| Sample ID:        | 64309001        | Client ID:    | BRKL003        |
| Matrix:           | Water           | COC:          | 22072606/15155 |
| Collect Date:     | 26-JUL-02 10:00 | Samp Recv.:   | 22072606/15155 |
| Receive Date:     | 27-JUL-02 08:30 | Client Desc.: | Well 11        |
| Collector:        | Client          |               |                |

| Parameter                  | Qualifier | Result | DL       | RL    | Units | DF    | Analyst | Date     | Time | Batch  | Method |
|----------------------------|-----------|--------|----------|-------|-------|-------|---------|----------|------|--------|--------|
| <b>Rad Gas Flow</b>        |           |        |          |       |       |       |         |          |      |        |        |
| <i>GFPC, Sr-90, liquid</i> |           |        |          |       |       |       |         |          |      |        |        |
| Strontium-90               | U         | 0.0841 | +/-0.200 | 0.437 | 0.800 | pCi/L | AB2     | 08/06/02 | 2155 | 189772 | 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*



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 Upton, New York 11973--5000  
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 Project: Brookhaven ERD Contract

Report Date: August 23, 2002

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Client Sample ID: 15155-003  
 Sample ID: 64309002  
 Matrix: Water  
 Collect Date: 26-JUL-02 09:42  
 Receive Date: 27-JUL-02 08:30  
 Collector: Client

Project: BRKL02000  
 Client ID: BRKL003  
 COC: 22072606/15155  
 Samp Recv.: 22072606/15155  
 Client Desc.: Well 6

| Parameter                          | Qualifier | Result | DL       | RL    | Units | DF    | AnalystDate | Time     | Batch | Method   |
|------------------------------------|-----------|--------|----------|-------|-------|-------|-------------|----------|-------|----------|
| <b>Rad Gas Flow</b>                |           |        |          |       |       |       |             |          |       |          |
| GFPC, Sr90, liquid<br>Strontium-90 | U         | 0.306  | +/-0.280 | 0.587 | 0.800 | pCi/L | AB2         | 08/06/02 | 2155  | 189772 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.

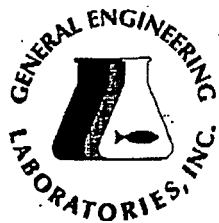
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

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

*N. Nisone*

*Rotable Well # 6*



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 Contact: Ms. Susan Young  
 Project: Brookhaven ERD Contract

Report Date: August 23, 2002

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Client Sample ID: 15155-004  
 Sample ID: 64309003  
 Matrix: Water  
 Collect Date: 26-JUL-02 09:32  
 Receive Date: 27-JUL-02 08:30  
 Collector: Client

Project: BRKL02000  
 Client ID: BRKL003  
 COC: 22072606/15155  
 Samp Recv.: 22072606/15155  
 Client Desc.: Well 7

| Parameter                 | Qualifier | Result | DL       | RL    | Units | DF    | AnalystDate | Time     | Batch | Method   |
|---------------------------|-----------|--------|----------|-------|-------|-------|-------------|----------|-------|----------|
| <b>Rad Gas Flow</b>       |           |        |          |       |       |       |             |          |       |          |
| <i>GFPC, Sr90, liquid</i> |           |        |          |       |       |       |             |          |       |          |
| Sr-90                     | U         | 0.157  | +/-0.257 | 0.555 | 0.800 | pCi/L | AB2         | 08/06/02 | 2148  | 189772 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 :

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- 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.

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Reviewed by

Potable Well #7



# GENERAL ENGINEERING LABORATORIES

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 Address : OER  
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 Upton, New York 11973--5000  
 Contact: Ms. Susan Young  
 Project: Brookhaven ERD Contract

Report Date: August 23, 2002

Page 1 of 1

Client Sample ID: 15155-005  
 Sample ID: 64309004  
 Matrix: Water  
 Collect Date: 26-JUL-02 12:00  
 Receive Date: 27-JUL-02 08:30  
 Collector: Client

Project: BRKL02000  
 Client ID: BRKL003  
 COC: 22072606/15155  
 Samp Recv.: 22072606/15155  
 Client Desc.: BD-1

| Parameter                 | Qualifier | Result | DL       | RL    | Units | DF    | AnalystDate | Time     | Batch | Method   |
|---------------------------|-----------|--------|----------|-------|-------|-------|-------------|----------|-------|----------|
| Rad Gas Flow              |           |        |          |       |       |       |             |          |       |          |
| <i>GFPC, Sr90, liquid</i> |           |        |          |       |       |       |             |          |       |          |
| Strontium-90              | U         | 0.177  | +/-0.248 | 0.532 | 0.800 | pCi/L | AB2         | 08/06/02 | 2148  | 189772 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.

Potable Well #  
(duplicate)

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

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Reviewed by