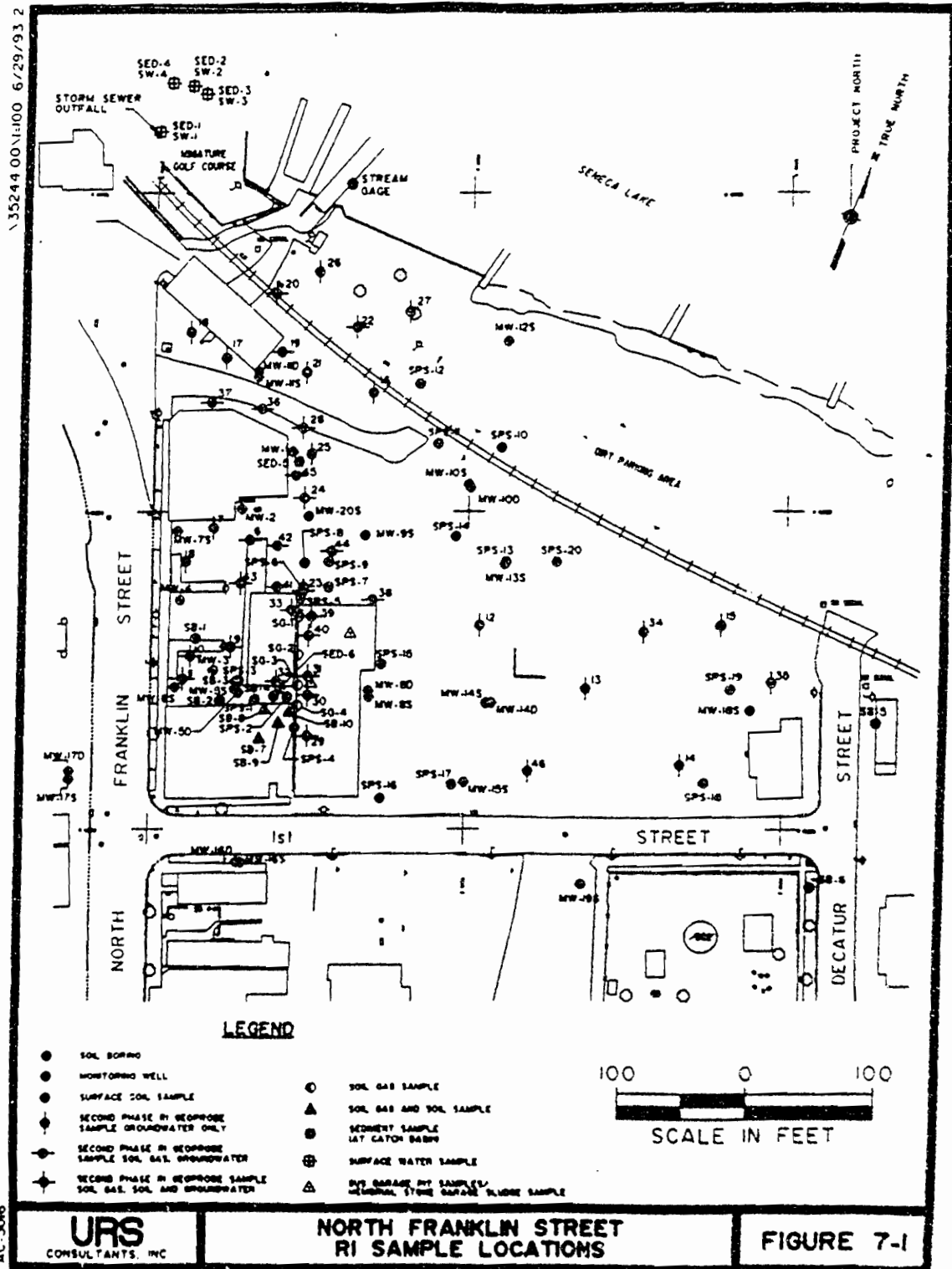
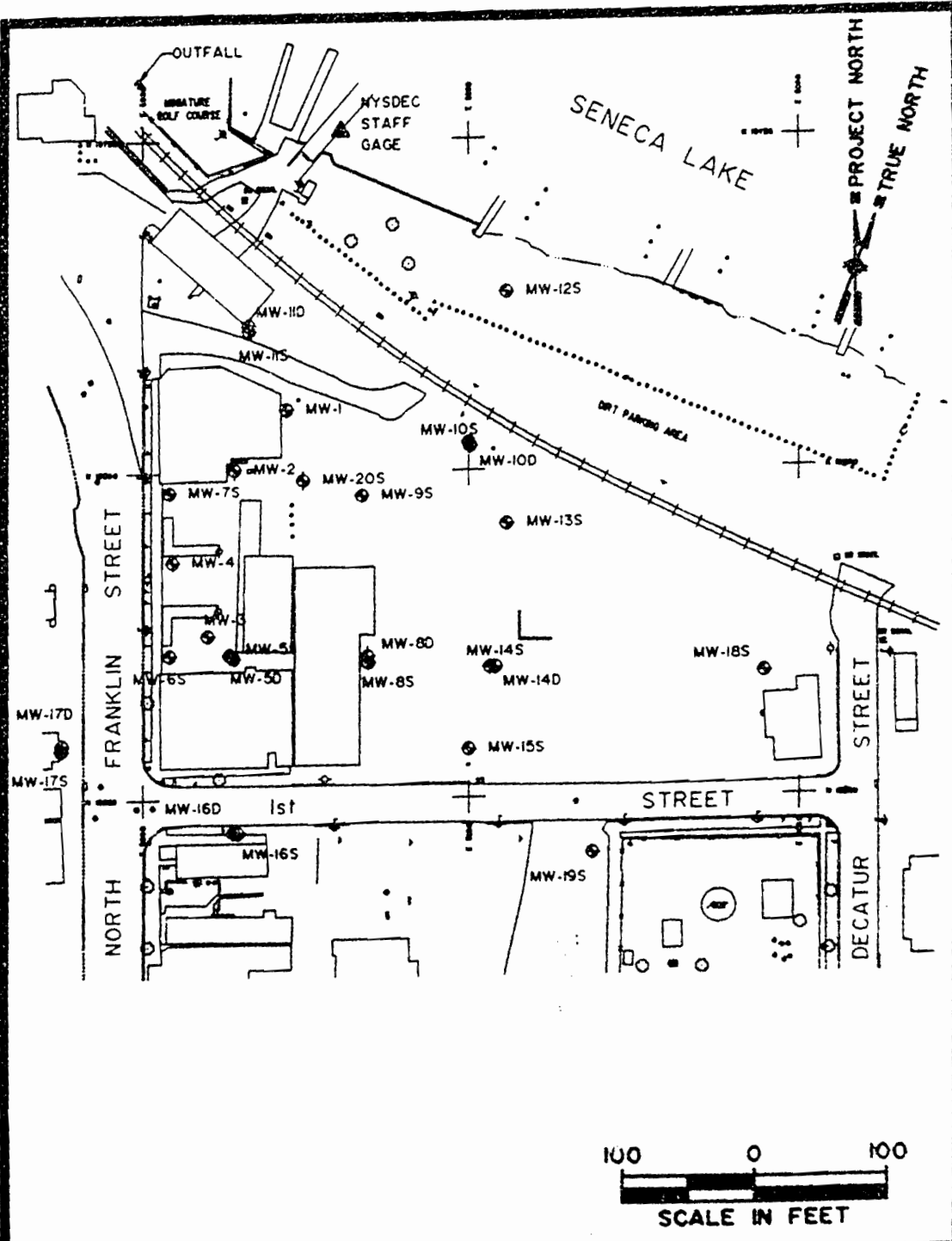




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AC-596

**URS**  
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**MONITORING WELL LOCATIONS**

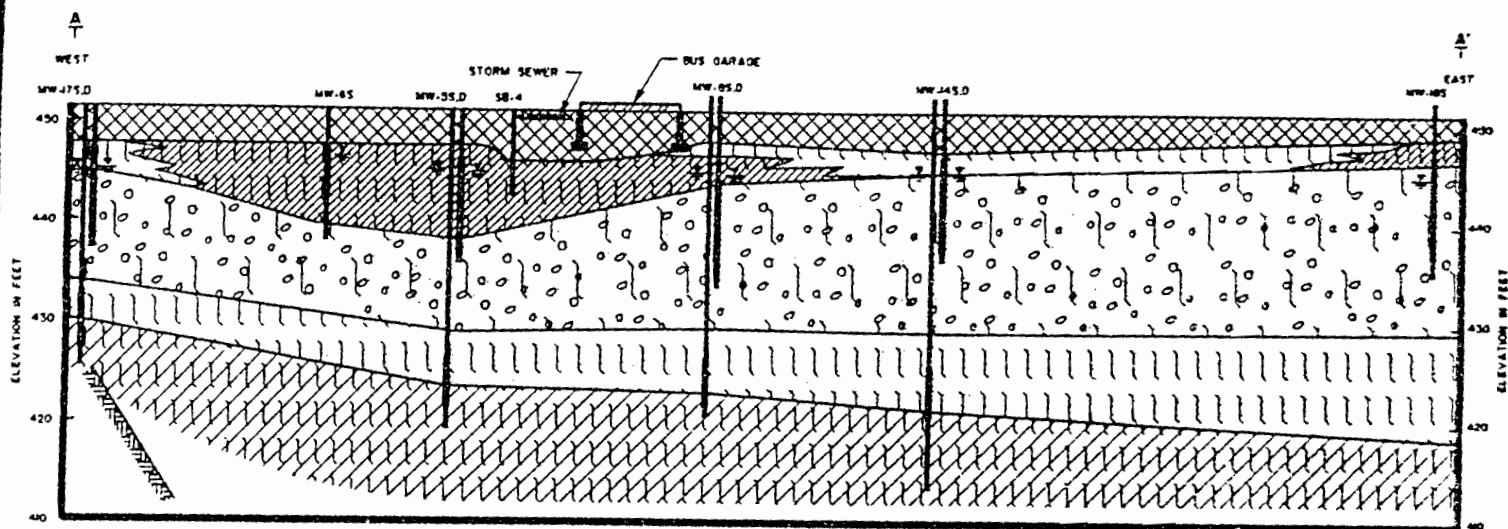
**FIGURE 3-14**

TABLE 3-4  
GROUNDWATER AND SURFACE WATER ELEVATIONS

| WELL ID              | GROUND<br>ELEVATION (ft) | RISER<br>ELEVATION (ft) | GROUNDWATER ELEVATION |         |         |         |        |         |         |
|----------------------|--------------------------|-------------------------|-----------------------|---------|---------|---------|--------|---------|---------|
|                      |                          |                         | DATE                  |         |         |         |        |         |         |
|                      |                          |                         | 12/18/92              | 1/18/93 | 1/25/93 | 1/29/93 | 4/2/93 | 4/13/93 | 7/21/93 |
| MW-1                 | 450.93                   | 450.64                  | 444.89                | 444.80  | 444.58  | 444.46  | 446.24 | 447.59  | 445.09  |
| MW-2                 | 451.13                   | 450.98                  | 445.09                | 445.00  | 444.77  | 444.64  | 446.42 | 447.66  | 445.29  |
| MW-3                 | 451.43                   | 450.71                  | 444.84                | 444.75  | ---     | 444.39  | 446.28 | 447.47  | 444.89  |
| MW-4                 | 450.76                   | 450.17                  | ---                   | 445.15  | 444.88  | 444.77  | 445.37 | 447.77  | 445.25  |
| MW-5S                | 451.62                   | 451.37                  | 445.12                | 445.09  | 444.86  | 444.75  | 446.52 | 447.84  | 445.28  |
| MW-5D                | 451.62                   | 451.35                  | 445.37                | 445.03  | 443.45  | 444.11  | 444.90 | 446.34  | 445.74  |
| MW-6S                | 450.95                   | 450.56                  | 446.83                | 445.01  | 443.60  | 444.28  | 447.78 | 447.96  | 447.23  |
| MW-7S                | 450.68                   | 450.31                  | 444.89                | 444.88  | 444.68  | 444.55  | 446.31 | 447.66  | 445.16  |
| MW-8S                | 451.19                   | 453.44                  | 445.11                | 445.03  | 444.81  | 444.92  | 446.46 | 447.78  | 445.25  |
| MW-8D                | 451.29                   | 453.24                  | 445.20                | 444.81  | 444.57  | 444.69  | 446.38 | 447.69  | 445.19  |
| MW-9S                | 451.53                   | 454.12                  | 445.12                | 444.94  | 444.71  | 444.78  | 446.35 | 447.71  | 445.19  |
| MW-10S               | 451.81                   | 451.45                  | 444.45                | 444.77  | 444.55  | 444.43  | 446.23 | 447.56  | 445.08  |
| MW-10D               | 451.86                   | 451.38                  | 445.04                | 444.87  | 444.57  | 444.60  | 446.25 | 447.53  | 445.03  |
| MW-11S               | 451.00                   | 450.59                  | 444.83                | 444.76  | 444.54  | 444.55  | 446.24 | 447.60  | 445.11  |
| MW-11D               | 450.92                   | 450.64                  | 445.00                | 444.72  | 444.44  | 444.38  | 446.12 | 447.57  | 444.99  |
| MW-12S               | 450.59                   | 450.32                  | 444.60                | 444.45  | 444.22  | 444.34  | 446.03 | 447.36  | 444.92  |
| MW-13S               | 452.15                   | 454.67                  | 445.05                | 444.87  | 444.63  | 444.61  | 446.23 | 447.60  | 445.09  |
| MW-14S               | 451.52                   | 453.72                  | 445.13                | 445.05  | 444.82  | 444.72  | 446.43 | 447.80  | 445.26  |
| MW-14D               | 451.64                   | 453.91                  | 445.14                | 445.03  | 444.78  | 444.79  | 446.46 | 447.83  | 445.26  |
| MW-15S               | 450.69                   | 452.83                  | 445.23                | 445.10  | 444.85  | 444.85  | 446.58 | 447.82  | 445.25  |
| MW-16S               | 451.82                   | 451.73                  | 445.25                | 445.21  | 444.99  | 445.19  | 446.56 | 447.94  | 445.35  |
| MW-16D               | 451.77                   | 451.45                  | 445.61                | 445.51  | 445.11  | 445.51  | 446.72 | 448.13  | 445.74  |
| MW-17S               | 451.85                   | 451.34                  | 445.10                | 445.29  | 445.06  | 445.30  | 446.54 | 448.02  | 445.73  |
| MW-17D               | 451.73                   | 451.09                  | 445.09                | 445.62  | 445.39  | 445.53  | 447.01 | 448.42  | 445.62  |
| MW-18S               | 451.26                   | 453.78                  | 445.10                | 444.98  | 444.72  | 444.86  | 446.39 | 447.72  | 445.13  |
| MW-19S               | 451.60                   | 451.41                  | 445.21                | 445.16  | 444.91  | 445.11  | 446.49 | 447.88  | 445.32  |
| MW-20S               | 451.02                   | 453.94                  | ---                   | ---     | ---     | ---     | 446.39 | 447.69  | 445.18  |
| NYSDEC<br>STAFF GAGE |                          | 449.57                  | 444.51                | 444.31  | 445.15  | 445.07  | 445.99 | 447.35  | 444.89  |



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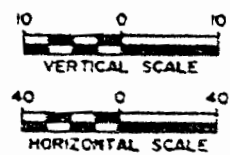
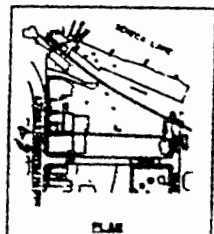


**LEGEND**

- MW-65 - MONITORING WELL NUMBER
- - WATER TABLE (Z/10/52)
- - SCREENED INTERVAL OF MONITORING WELL
- - BOTTOM OF BORING (WIDTH NOT TO SCALE)
- S - SHALLOW OVERBURDEN WELL
- D - DEEP OVERBURDEN WELL
- - GARAGE FOOTING (WIDTH NOT TO SCALE)

**LEGEND**

- [Cross-hatch] FILL (SM/OM/SW/OW)
- [Diagonal line] UPPER CLAYEY SILT (SM/ML)
- [Dotted] SILTY SAND AND GRAVEL (SM/OM/SP/OP)
- [Horizontal line] SILTY SAND/SANDY SILT (SM/ML)
- [Brick-like] LOWER CLAYEY SILT (SM/ML)
- [Brick-like] BEDROCK - SILTSTONE AND SHALE

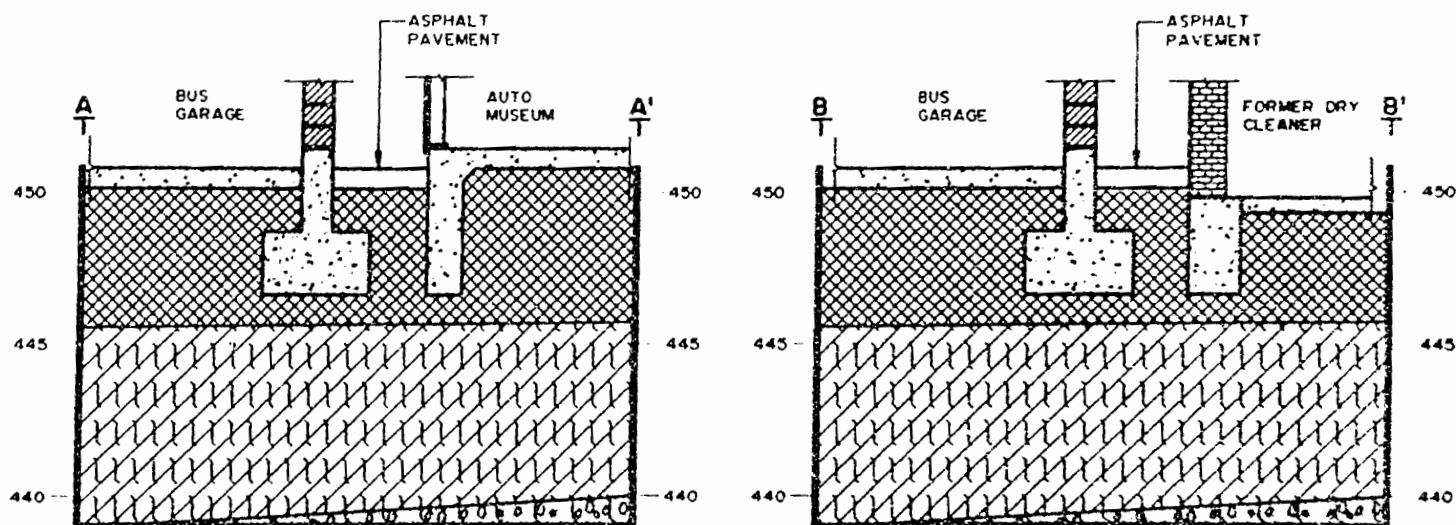


**GEOLOGIC CROSS-SECTION A-A'**

**URS**  
CONSULTANTS, INC.

**FIGURE 3-6**

NOTES:  
1. VERTICAL DATUM BASED ON DATUM AT SAILOR'S MONUMENT (SEE TEXT)  
2. GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARD ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.



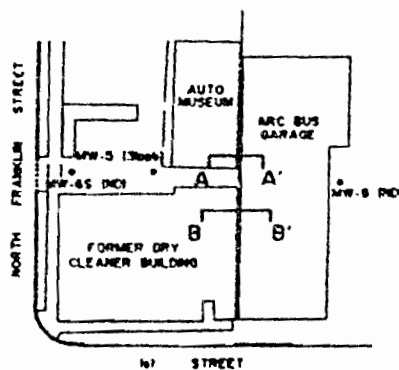
SECTION A-A'

SECTION B-B'

## LEGEND

- FILL (SM/GM/SW/GW)
- UPPER CLAYEY SILT (MH/ML)
- SILTY SAND AND GRAVEL (SM/GM/SP/GP)

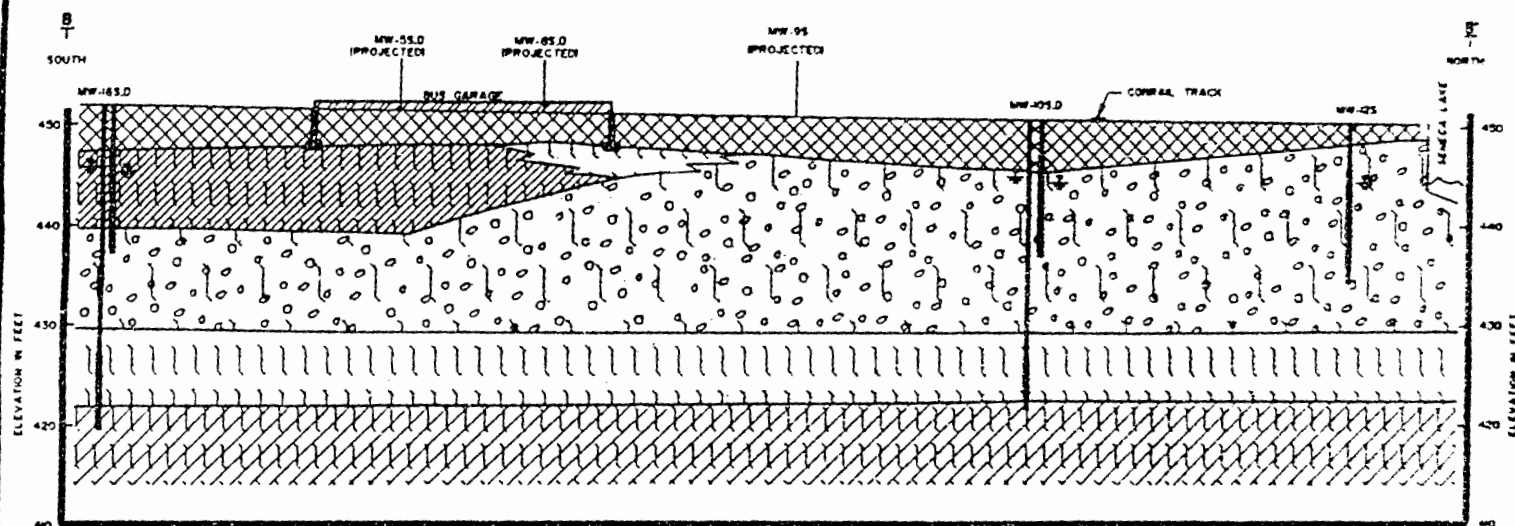
NOTE:  
FOUNDATION DETAILS ARE BASED ON SITE INSPECTION  
AND PROBING WITH A STEEL ROD ALONG THE WALLS  
AS NO DRAWINGS ARE AVAILABLE FOR THE BUILDINGS.



BUILDING FOUNDATION DETAILS

FIGURE 3-7

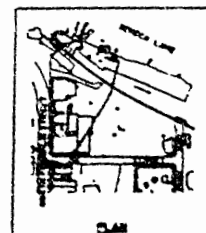
33244-01 1-40 8/16/83 10



# LEGEND

MW-65 — MONITORING WELL NUMBER  
 s — WATER TABLE (12/18/92)  
 — SCREENED INTERVAL OF MONITORING WELL  
 — BOTTOM OF BORING (WIDTH NOT TO SCALE)  
 s — SHALLOW OVERBURDEN WELL  
 d — DEEP OVERBURDEN WELL  
 — GARAGE FOOTING (WIDTH NOT TO SCALE)

— FILL (SM/CM/SH/OW)  
 — UPPER CLAYEY SILT (SM/ML)  
 — SILTY SAND AND GRAVEL (SM/SH/SP/OP)  
 — SILTY SAND/SANDY SILT (SM/ML)  
 — LOWER CLAYEY SILT (SM/ML)



10 0 10  
 VERTICAL SCALE  
 40 0 40  
 HORIZONTAL SCALE

NOTES:  
 \* VERTICAL DATUM BASED ON DATUM AT SAILORS MONUMENT (SEE TEXT)  
 \* GEOLOGIC CONDITIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS ENCOUNTERED AT EACH BORING LOCATION TO THE DEPTH DRILLED. EXTRAPOLATIONS BETWEEN BORINGS HAVE BEEN INTERPRETED USING STANDARD ACCEPTED GEOLOGIC PRACTICES AND PRINCIPLES. ACTUAL CONDITIONS MAY VARY BETWEEN BORINGS FROM THOSE SHOWN.

GEOLOGIC CROSS-SECTION B-B'

URS  
 CONSULTANTS, INC.

FIGURE 3-8



| URS CONSULTANTS, Inc.                            |        |        |      |                 |       |          |                             |                                                                 |             | 62                                             |         | TEST BORING LOG                   |  |
|--------------------------------------------------|--------|--------|------|-----------------|-------|----------|-----------------------------|-----------------------------------------------------------------|-------------|------------------------------------------------|---------|-----------------------------------|--|
|                                                  |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         | BORING NO. OW-1                   |  |
| PROJECT: NORTH FRANKLIN STREET, LATEWIS GLEN, NY |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         | SHEET NO. 1 OF 1                  |  |
| CLIENT: NYS DEPT. OF ENVIRONMENTAL CONSERVATION  |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         | JOB NO.: 0535388.00               |  |
| BORING CONTRACTOR: AMERICAN AUGER & DITCHING     |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         | BORING LOCATION: 50' SE OF MW-205 |  |
| GROUND WATER:                                    |        |        |      |                 |       |          |                             |                                                                 |             | CAS.                                           |         | GROUND ELEVATION:                 |  |
| DATE                                             | TIME   | LEV    | TYPE | TYPE            |       |          |                             |                                                                 |             |                                                |         |                                   |  |
|                                                  |        |        |      | DIA.            |       |          |                             |                                                                 |             |                                                |         |                                   |  |
|                                                  |        |        |      | WT.             |       |          |                             |                                                                 |             |                                                |         |                                   |  |
|                                                  |        |        |      | FALL            |       |          |                             |                                                                 |             |                                                |         |                                   |  |
|                                                  |        |        |      |                 |       |          |                             |                                                                 |             | * POCKET PENETROMETER READING                  |         | REVIEWED BY:                      |  |
| DEPTH<br>FT                                      | STRATA | SAMPLE |      |                 |       | RECOVERY | COLOR                       | CONSISTENCY                                                     | DESCRIPTION | LABS                                           | REMARKS | H<br>N<br>U                       |  |
|                                                  |        | NO.    | TYPE | BLOWS<br>PER 6" | ROD % |          |                             |                                                                 |             |                                                |         |                                   |  |
|                                                  |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         |                                   |  |
| 5                                                |        | 1      | SS   | 4 4<br>8 8      | 60    | Brown    | MEDIUM<br>DENSE TO<br>LOOSE | GRAVELLY SILTY FINE<br>TO MEDIUM SAND.<br>SOME BRICK FRAGMENTS. |             | DRILL CUTTINGS<br>LOGGED 0'-3'<br>MOIST. FILL. | 0.0     |                                   |  |
|                                                  |        | 2      | SS   | 4 5<br>3 3      | 50    | Gray     | Loose                       | CLAYEY FINE SAND. TRACE<br>ORGANIC MATERIAL.                    | SC          | MOIST<br>WET                                   | 0.0     |                                   |  |
|                                                  |        | 3      | SS   | 3 3<br>3 5      | 30    |          |                             | GRAVELLY SILTY MEDIUM<br>TO FINE SAND.                          | SAM.        |                                                | 0.0     |                                   |  |
| 10                                               |        | 4      | SS   | 3 4<br>10 11    | 50    | Brown    | MEDIUM<br>DENSE             |                                                                 |             |                                                | 0.0     |                                   |  |
|                                                  |        | 5      | SS   | 8 8<br>6 6      | 50    |          |                             |                                                                 |             |                                                | 0.0     |                                   |  |
| 15                                               |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         |                                   |  |
| 20                                               |        |        |      |                 |       |          |                             | BORING TERMINATED AT 18.0'                                      |             |                                                |         |                                   |  |
| 25                                               |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         |                                   |  |
| 30                                               |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         |                                   |  |
| 35                                               |        |        |      |                 |       |          |                             |                                                                 |             |                                                |         |                                   |  |

COMMENTS: BORING ADVANCED WITH INGERSOLL - RAND T2W DRILL RIG & 4.25" ID AUGER.  
 2" PVC OBSERVATION WELL INSTALLED WITH 10" SCREEN TO 17.5' BGS.

PROJECT NO. 0535388.00  
 BORING NO. OW-1

| URS CONSULTANTS, Inc.                            |        |        |      |                   |                   |       |                 |                                                                        |                         | 63                                           | TEST BORING LOG |  |
|--------------------------------------------------|--------|--------|------|-------------------|-------------------|-------|-----------------|------------------------------------------------------------------------|-------------------------|----------------------------------------------|-----------------|--|
|                                                  |        |        |      |                   |                   |       |                 |                                                                        |                         |                                              | BORING NO. OW-2 |  |
| PROJECT: NORTH FRANKLIN STREET, WATKINS GLEN, NY |        |        |      |                   |                   |       |                 |                                                                        |                         | SHEET NO. 1 OF 1                             |                 |  |
| CLIENT: NYS DEPT. OF ENVIRONMENTAL CONSERVATION  |        |        |      |                   |                   |       |                 |                                                                        |                         | JOB NO.: 0535388.00                          |                 |  |
| BORING CONTRACTOR: AMERICAN AUGER & DITCHING     |        |        |      |                   |                   |       |                 |                                                                        |                         | BORING LOCATION: 15 FT SE OF MW-205          |                 |  |
| GROUND WATER:                                    |        |        |      |                   |                   |       |                 |                                                                        |                         | GROUND ELEVATION:                            |                 |  |
| DATE                                             | TIME   | LEV    | TYPE | TYPE              | CAS.              | SAMP  | CORE            | TUBE                                                                   | DATE STARTED: 12/1/94   |                                              |                 |  |
|                                                  |        |        |      | DIA.              |                   | 2"    |                 |                                                                        | DATE FINISHED: 12/1/94  |                                              |                 |  |
|                                                  |        |        |      | WT.               |                   | 140#  |                 |                                                                        | DRILLER: ROCKY BAYE     |                                              |                 |  |
|                                                  |        |        |      | FALL              |                   | 30"   |                 |                                                                        | GEOLOGIST: ANDRE LAPRES |                                              |                 |  |
| * POCKET PENETROMETER READING                    |        |        |      |                   |                   |       |                 |                                                                        |                         | REVIEWED BY:                                 |                 |  |
| DEPTH<br>FT                                      | STRATA | SAMPLE |      |                   |                   | COLOR | CONSISTENCY     | DESCRIPTION                                                            | PLACCS<br>UCCS          | REMARKS                                      | H<br>N<br>A     |  |
|                                                  |        | NO.    | TYPE | BLOWS<br>PER 6"   | RECOVERY<br>ROD % |       | HARDNESS        | MATERIAL<br>DESCRIPTION                                                |                         |                                              |                 |  |
| 5                                                |        |        |      |                   |                   | Brown | Loose           | GRAVELLY SAND. SOME<br>BRICK & WOOD FRAGMENTS<br>CONCRETE & ROCK 2'-5' |                         | DENSE CUTTINGS<br>LOGGED 0-5'<br>MONT. FILL. |                 |  |
|                                                  |        | 1      | SS   | 8 5<br>3 1<br>WDH | 10<br>50          |       |                 |                                                                        |                         | WET                                          | 0.0<br>0.0      |  |
| 10                                               |        | 2      | SS   | 8 3<br>3 8        | 20                | Gray  | Loose           | GRAVELLY SILTY MEDIUM<br>TO FINE SAND.                                 | SM.                     | MOIST                                        | 0.0             |  |
|                                                  |        | 3      | SS   | 32 18<br>17 8     | 50                |       |                 |                                                                        |                         | WET                                          | 0.0             |  |
| 15                                               |        |        |      |                   |                   |       |                 |                                                                        |                         |                                              |                 |  |
|                                                  |        | 4      | SS   | 17 13<br>11 8     | 60                | Brown | MEDIUM<br>DENSE |                                                                        |                         |                                              | 0.0             |  |
| 20                                               |        |        |      |                   |                   |       |                 | BORING TERMINATED AT 18.0'                                             |                         |                                              |                 |  |
| 25                                               |        |        |      |                   |                   |       |                 |                                                                        |                         |                                              |                 |  |
| 30                                               |        |        |      |                   |                   |       |                 |                                                                        |                         |                                              |                 |  |
| 35                                               |        |        |      |                   |                   |       |                 |                                                                        |                         |                                              |                 |  |

COMMENTS: BORING ADVANCED WITH INGRESSOR - RANK T2W DRILL RIG & 4.25" ID AUGER.  
 2" PVC OBSERVATION WELL INSTALLED AFTER 10 FT SCREEN TO 18.0 FT BGS

PROJECT NO. 0535388.00  
 BORING NO. OW-2

| URS CONSULTANTS, Inc.                            |        |                            |      |                 |                   |       |                 |                                                            |                         | 64                                             | TEST BORING LOG<br>BORING NO. 0W-3 |  |
|--------------------------------------------------|--------|----------------------------|------|-----------------|-------------------|-------|-----------------|------------------------------------------------------------|-------------------------|------------------------------------------------|------------------------------------|--|
| PROJECT: NORTH FRANKLIN STREET, WATKINS GLEN, NY |        |                            |      |                 |                   |       |                 |                                                            |                         | SHEET NO. 1 OF 1                               |                                    |  |
| CLIENT: NYS DEPT OF ENVIRONMENTAL CONSERVATION   |        |                            |      |                 |                   |       |                 |                                                            |                         | JOB NO.: 0535188.00                            |                                    |  |
| BORING CONTRACTOR: AMERICAN AUGER & DITCHING     |        |                            |      |                 |                   |       |                 |                                                            |                         | BORING LOCATION: 30 FT. SE OF MW-205           |                                    |  |
| GROUND WATER:                                    |        |                            |      |                 |                   |       |                 |                                                            |                         | GROUND ELEVATION:                              |                                    |  |
| DATE                                             | TIME   | LEV                        | TYPE | TYPE            | CAS.              | SAMP  | CORE            | TUBE                                                       | DATE STARTED: 12/1/94   |                                                |                                    |  |
|                                                  |        |                            |      | DIA.            |                   |       |                 |                                                            | DATE FINISHED: 12/1/94  |                                                |                                    |  |
|                                                  |        |                            |      | WT.             |                   |       |                 |                                                            | DRILLER: ROCKY RAYE     |                                                |                                    |  |
|                                                  |        |                            |      | FALL            |                   |       |                 |                                                            | GEOLOGIST: ANDRE LAPRES |                                                |                                    |  |
| * POCKET PENETROMETER READINGS                   |        |                            |      |                 |                   |       |                 |                                                            |                         | REVIEWED BY:                                   |                                    |  |
| DEPTH<br>FT                                      | STRATA | SAMPLE                     |      |                 |                   | COLOR | CONSISTENCY     | DESCRIPTION                                                |                         | CLASS                                          | REMARKS                            |  |
|                                                  |        | NO.                        | TYPE | BLOWS<br>PER 6" | RECOVERY<br>ROD % |       | HARDNESS        | MATERIAL<br>DESCRIPTION                                    | USCS                    |                                                |                                    |  |
|                                                  |        |                            |      |                 |                   | BROWN | MEDIUM<br>DENSE | GRAVELLY SILTY SAND.<br>SOME BRICK FRAGMENTS.              |                         | DRILL CUTTINGS<br>LOGGED 0'-3'<br>MOIST. FILL. |                                    |  |
| 5                                                |        | 1                          | SS   | 8 10<br>12 30   | 60                |       |                 |                                                            |                         | 0.0                                            |                                    |  |
|                                                  |        | 2                          | SS   | 8 10<br>10 3    | 60                |       |                 |                                                            |                         | 0.0                                            |                                    |  |
|                                                  |        | 3                          | SS   | 3 3<br>6 7      | 20                | GRAY  | MEDIUM<br>STIFF | CLAYEY FINE SAND.<br>GRAVELLY SILTY MEDIUM<br>TO FINE SAND | SC<br>SM                | MOIST<br>WET                                   |                                    |  |
| 10                                               |        | 4                          | SS   | 12 12<br>10 12  | 50                | BROWN | MEDIUM<br>DENSE |                                                            |                         | 0.0                                            |                                    |  |
| 15                                               |        | 5                          | SS   | 7 5<br>4 4      | 50                |       | LOOSE           |                                                            |                         | 0.0                                            |                                    |  |
| 20                                               |        | BORING TERMINATED AT 18.0' |      |                 |                   |       |                 |                                                            |                         |                                                |                                    |  |
| 25                                               |        |                            |      |                 |                   |       |                 |                                                            |                         |                                                |                                    |  |
| 30                                               |        |                            |      |                 |                   |       |                 |                                                            |                         |                                                |                                    |  |
| 35                                               |        |                            |      |                 |                   |       |                 |                                                            |                         |                                                |                                    |  |

COMMENTS: BORING ADVANCED WITH INDEPENDENT - RENT TRAIL DRILL RIG & 4.25" ID AUGER.  
2" PVC OBSERVATION WELL INSTALLED WITH 10 FT SCREEN TO 14.0 FT RGS

PROJECT NO. 0535188.00  
BORING NO. 0W-3

| URS CONSULTANTS, Inc.                            |        |        |      |                 |       |          |                 |                                        |                            | 65                                |                                              | TEST BORING LOG |  |
|--------------------------------------------------|--------|--------|------|-----------------|-------|----------|-----------------|----------------------------------------|----------------------------|-----------------------------------|----------------------------------------------|-----------------|--|
|                                                  |        |        |      |                 |       |          |                 |                                        |                            |                                   |                                              | BORING NO. OW-4 |  |
| PROJECT: NORTH FRANKLIN STREET, WATKINS GLEN, NY |        |        |      |                 |       |          |                 |                                        |                            | SHEET NO. 1 OF 1                  |                                              |                 |  |
| CLIENT: NYS. DEPT. OF ENVIRONMENTAL CONSERVATION |        |        |      |                 |       |          |                 |                                        |                            | JOB NO.: 0535388.00               |                                              |                 |  |
| BORING CONTRACTOR: AMERICAN AUGER & DITCHING     |        |        |      |                 |       |          |                 |                                        |                            | BORING LOCATION: 20' SW OF MW-205 |                                              |                 |  |
| GROUND WATER:                                    |        |        |      |                 |       |          |                 |                                        |                            | CAS.                              |                                              | SAMP CORE TUBE  |  |
| DATE                                             | TIME   | LEV    | TYPE | TYPE            |       |          |                 |                                        |                            | DATE STARTED: 12/2/94             |                                              |                 |  |
|                                                  |        |        |      | DIA.            |       |          |                 |                                        |                            | DATE FINISHED: 12/2/94            |                                              |                 |  |
|                                                  |        |        |      | WT.             |       |          |                 |                                        |                            | DRILLER: ROCKY BAYE               |                                              |                 |  |
|                                                  |        |        |      | FALL            |       |          |                 |                                        |                            | GEOLOGIST: ANDRE LAPRES           |                                              |                 |  |
|                                                  |        |        |      |                 |       |          |                 |                                        |                            | POCKET PENETROMETER READING       |                                              | REVIEWED BY:    |  |
| DEPTH<br>FT                                      | STRATA | SAMPLE |      |                 |       | RECOVERY | COLOR           | CONSISTENCY                            | DESCRIPTION                | MATERIAL                          | TESTS                                        | REMARKS         |  |
|                                                  |        | NO.    | TYPE | BLOWS<br>PER 6" | ROD 3 |          |                 | HARDNESS                               | DESCRIPTION                |                                   | LOGS                                         |                 |  |
| 5                                                | X      | 1      | SS   | 4 8<br>7 6      | 20    | BROWN    | MEDIUM<br>DENSE | GRAVELLY SILTY SAND.                   |                            |                                   | DRILL CUTTINGS<br>LOGGED 0-3'<br>MOIST. FAL. |                 |  |
|                                                  |        | 2      | SS   | 5 2<br>2 4      | 20    |          |                 |                                        |                            |                                   |                                              |                 |  |
|                                                  |        | 3      | SS   | 4 2<br>2 5      | 20    |          |                 |                                        |                            |                                   |                                              |                 |  |
| 10                                               | S.S.   | 4      | SS   | 2 7<br>6 6      | 40    | GRAY     |                 | GRAVELLY SILTY MEDIUM<br>TO FINE SAND. |                            |                                   | WET<br>WET                                   |                 |  |
|                                                  |        | 5      | SS   | 6 7<br>6 6      | 50    |          |                 |                                        |                            |                                   |                                              |                 |  |
| 15                                               |        |        |      |                 |       |          |                 |                                        |                            |                                   |                                              |                 |  |
| 20                                               |        |        |      |                 |       |          |                 |                                        | BORING TERMINATED AT 18.0' |                                   |                                              |                 |  |
| 25                                               |        |        |      |                 |       |          |                 |                                        |                            |                                   |                                              |                 |  |
| 30                                               |        |        |      |                 |       |          |                 |                                        |                            |                                   |                                              |                 |  |
| 35                                               |        |        |      |                 |       |          |                 |                                        |                            |                                   |                                              |                 |  |

COMMENTS: BORING ADVANCED WITH INTERNAL-FLAME T2W DRILL RIG & 4.25" ID AUGER  
2" PVC OBSERVATION WELL INSTALLED WITH 10 FT SCREEN TO 18.0 FT AGS

PROJECT NO.

BORING NO.

0535388.00

OW-4

# **DRILLING SUMMARY**

Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder

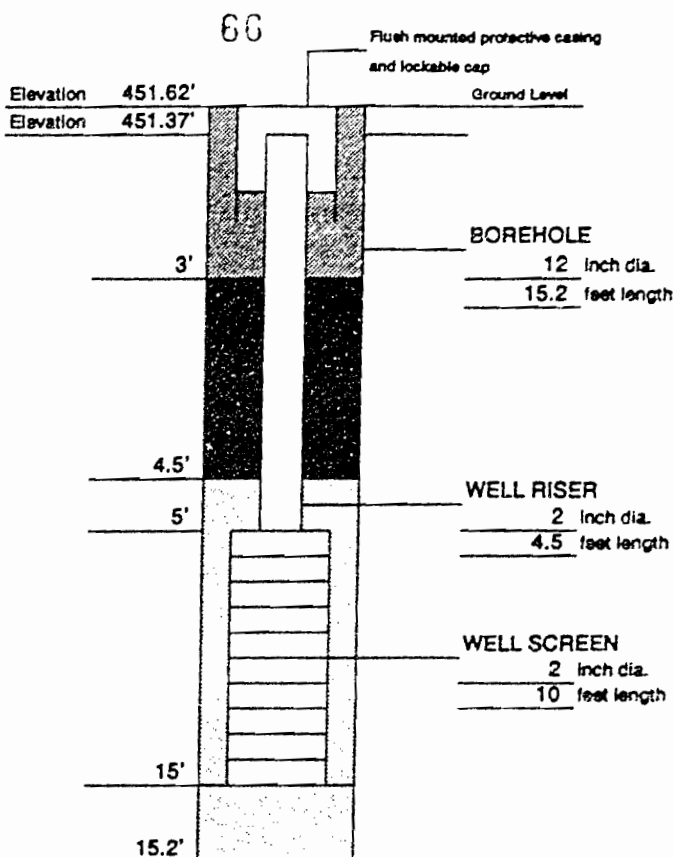
Date:  
12/16/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-3.7      | Fill            |
| 3.7-13     | Clayey Silt     |
| 13-22.5    | Sand and Gravel |

## **WELL DESIGN**

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| CASING MATERIAL      |                 | SCREEN MATERIAL                                     | SEAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-----------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface:             | Stesi           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 3-4.5'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Monitor:             | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| BACKFILL MATERIAL    |                 | FILTER MATERIAL                                     | LEGEND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type:                | none            | Type: 00 Quartz Sand                                | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #333333; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Sandpack </div> |
| Setting:             | none            | Setting: 4.5-15.2'                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Client:              | NYSDEC          | Project: N. Franklin St.                            | Project Number: 35244.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| URS Consultants Inc. |                 | Monitoring Well Construction Details                | Well Number: MW-5S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

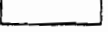
# **DRILLING SUMMARY**

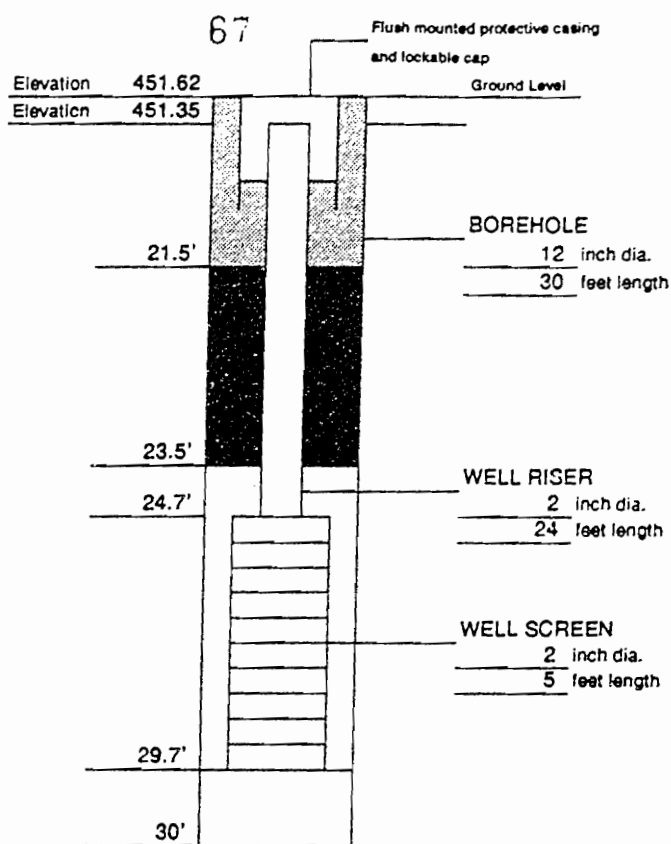
Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/16/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-3.7      | Fill                  |
| 3.7-13     | Clayey Silt           |
| 13-22.5    | Sand and Gravel       |
| 22.5-28    | Silty Sand/Sandy Silt |
| 28-32      | Clayey Silt           |

## **WELL DESIGN**

|                          |                 |                                                     |                                                                                                            |
|--------------------------|-----------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>CASING MATERIAL</b>   |                 | <b>SCREEN MATERIAL</b>                              | <b>SEAL MATERIAL</b>                                                                                       |
| Surface:                 | Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 21.5-23.5'                                                     |
| Monitor:                 | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| <b>BACKFILL MATERIAL</b> |                 | <b>FILTER MATERIAL</b>                              | <b>LEGEND</b>                                                                                              |
| Type:                    | none            | Type: 00 Quartz Sand                                |  Cement/Bentonite Grout |
| Setting:                 | none            | Setting: 23.5-30'                                   |  Bentonite Seal         |
|                          |                 |                                                     |  Sandpack               |
| Client:                  | NYSDEC          | Project: N. Franklin St.                            | Project Number: 35244.00                                                                                   |
| URS Consultants Inc.     |                 | Monitoring Well Construction Details                | Well Number: MW-5D                                                                                         |



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Client

Geologist:  
Steve Frank

Drilling Company:  
Buffalo Drilling Co.

Driller:  
Larry Schroeder

Date:  
12/14/92

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-3.5      | Fill            |
| 3.5-12     | Clayey Silt     |
| 12-16      | Sand and Gravel |

### CASING MATERIAL

|          |                 |
|----------|-----------------|
| Surface: | Steel           |
| Monitor: | Stainless Steel |

```
Type:      none
Setting:   none
```

## SCREEN MATERIAL

Type: Stainless Steel

Slot Size: 0.010 inch prepacked  
with 00 Quartz Sand

Type: 00 Quartz Sand

Setting: 4-10'

flush mounted protective casing  
and lockable cap

|           |         |
|-----------|---------|
| Elevation | 450.95' |
| Elevation | 450.56' |

Ground Level

## BOREHOLE

2 inch dia.  
14 feet length

**WELL RISER**

2 inch dia.  
4 feet length

WELL SCREEN

$\frac{2}{5}$  inch dia.  
feet length

9.5'

14'

### SEAL MATERIAL

Seal #1 Type: Bentonite Pellets  
Setting: 2-4'

Seal #2 Type:  
Setting:

### LEGEND

 Cement/Bentonite Grout  
 Bentonite Seal  
 Sandpack

**Client:** NYSDEC

Project: N. Franklin St.

Project Number: 35244.00

**URS**  
Consultants Inc.

### Monitoring Well Construction Details

Well Number: MW-6S

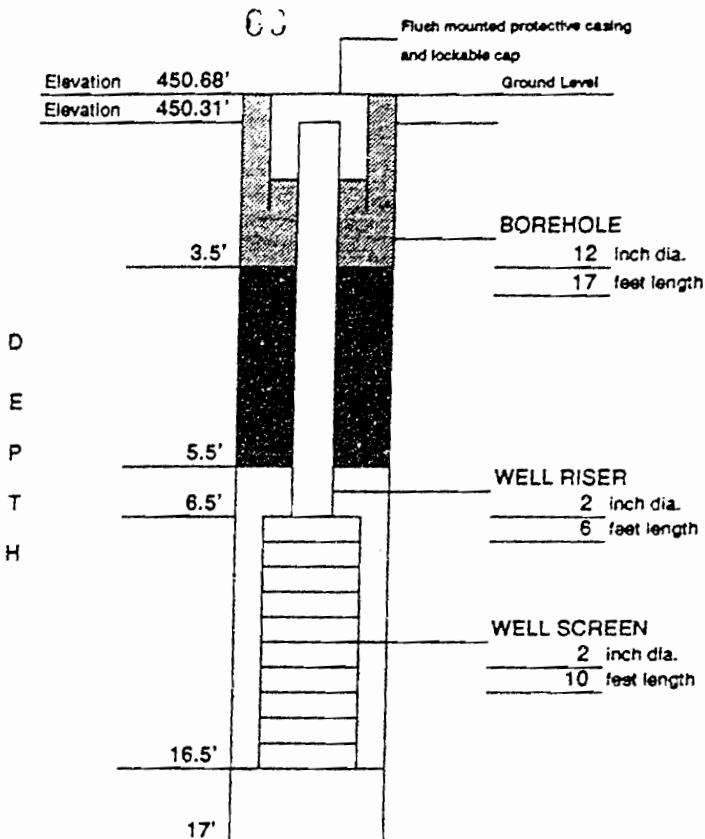
# **DRILLING SUMMARY**

Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/15/92

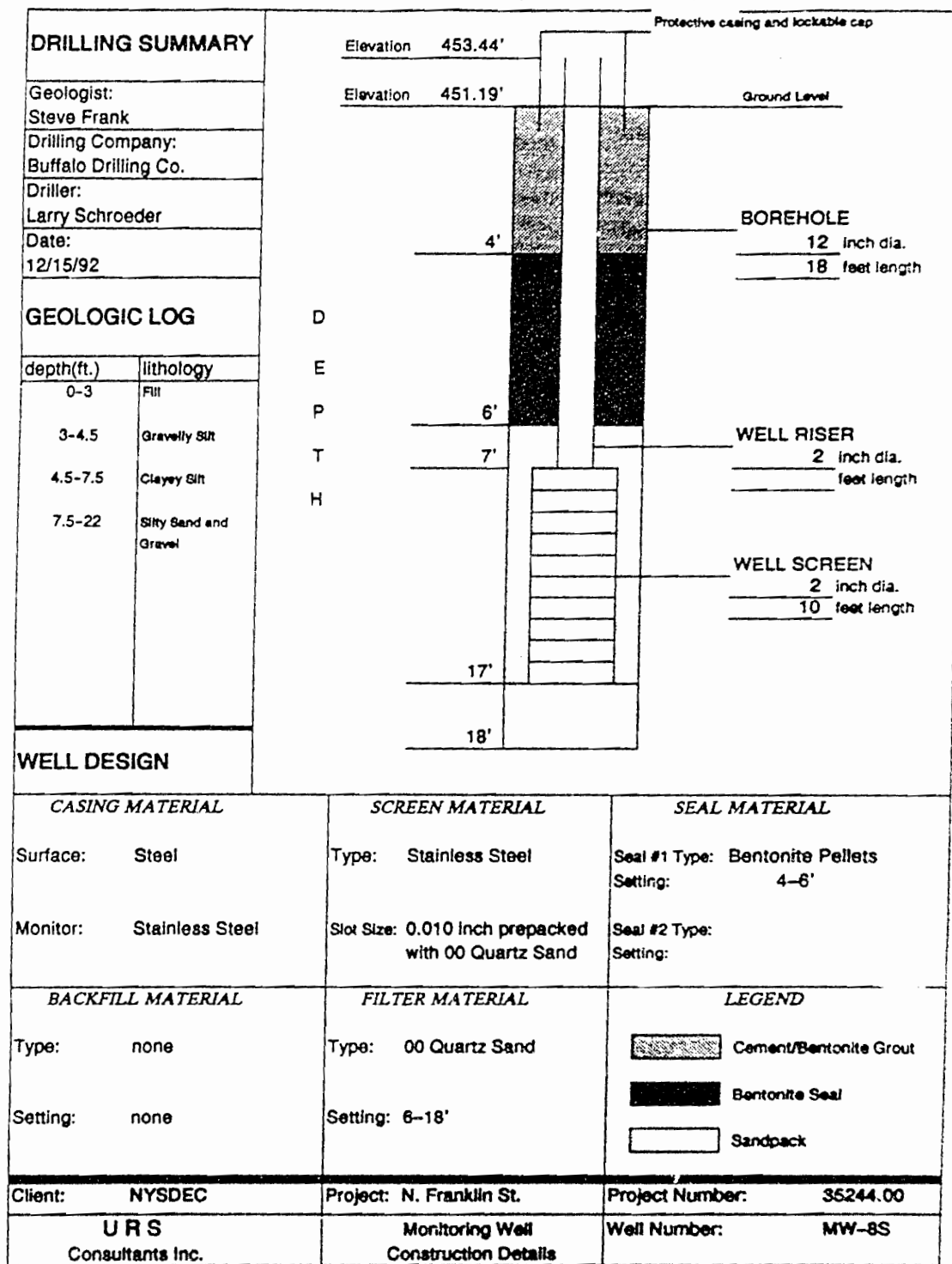
## **GEOLOGIC LOG**

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-4        | Fill            |
| 4-6        | Clayey Silt     |
| 6-17       | Sand and Gravel |

## **WELL DESIGN**



| CASING MATERIAL      |                 | SCREEN MATERIAL                                     | SEAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-----------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface:             | Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 3.5-5.5'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Monitor:             | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| BACKFILL MATERIAL    |                 | FILTER MATERIAL                                     | LEGEND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type:                | none            | Type: 00 Quartz Sand                                | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #333333; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div> Sandpack </div> |
| Setting:             | none            | Setting: 5.5-17'                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Client:              | NYSDEC          | Project: N. Franklin St.                            | Project Number: 35244.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| URS Consultants Inc. |                 | Monitoring Well Construction Details                | Well Number: MW-7S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

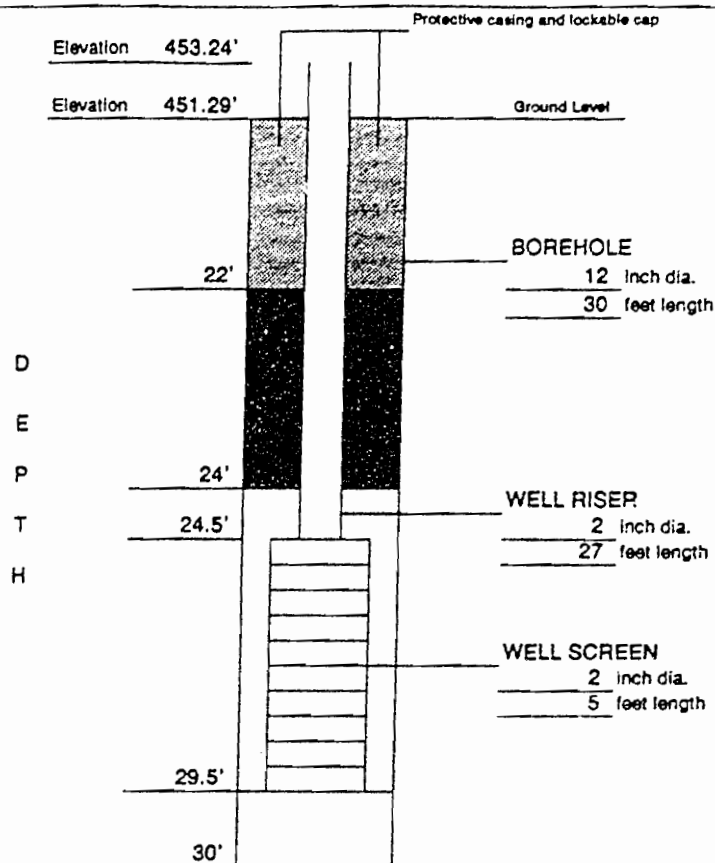


**DRILLING SUMMARY**Geologist:  
Steve FrankDrilling Company:  
Buffalo Drilling Co.Driller:  
Larry SchroederDate:  
12/15/92**GEOLOGIC LOG**

| depth(ft.) | lithology                 |
|------------|---------------------------|
| 0-3        | Fill                      |
| 3-4.5      | Gravelly Silt             |
| 4.5-7.5    | Clayey Silt               |
| 7.5-22     | Silty Sand and Gravel     |
| 22-28      | Silty Sand/<br>Sandy silt |
| 28-30      | Clayey Silt               |

**WELL DESIGN**

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                                                                              |
|-------------------------|-----------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type: Bentonite Pellets<br>Setting: 22-24'                                                         |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                                                                                     |
| Type:                   | none            | Type: 00 Quartz Sand                                   |  Cement/Bentonite Grout |
| Setting:                | none            | Setting: 24-30'                                        |  Bentonite Seal         |
|                         |                 |                                                        |  Sandpack               |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project Number: 35244.00                                                                                   |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number: MW-80                                                                                         |

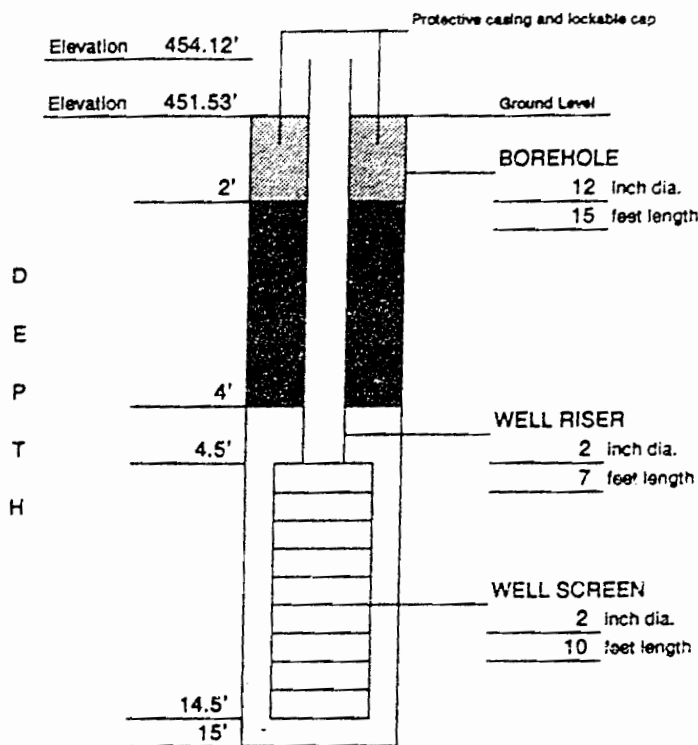


**DRILLING SUMMARY**

Geologist:  
Mindar Hsieh  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/13/92

**GEOLOGIC LOG**

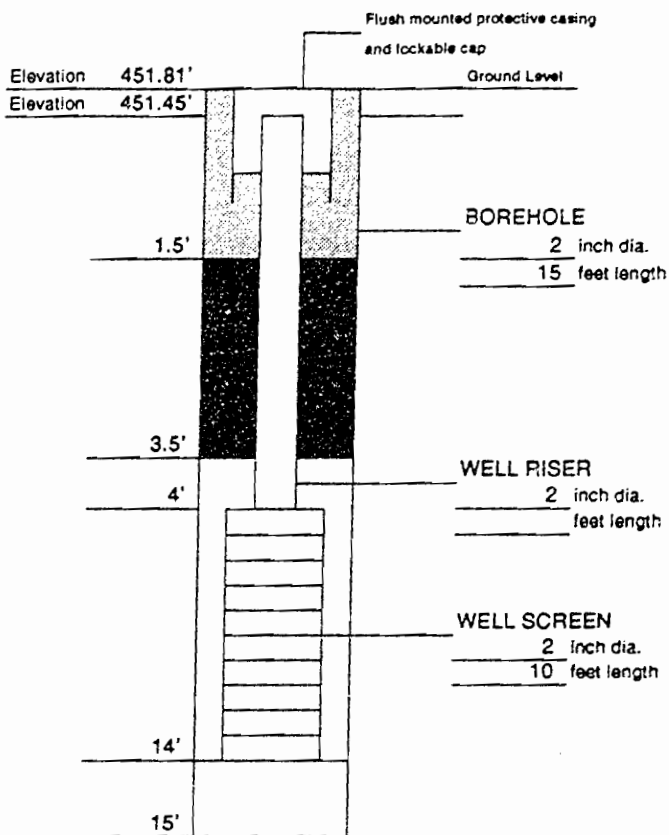
| depth(ft.) | lithology       |
|------------|-----------------|
| 0-6        | Fill            |
| 6-16       | Sand and Gravel |

**WELL DESIGN**

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                   |
|-------------------------|-----------------|--------------------------------------------------------|-------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type Bentonite Pellets<br>Setting: 2-4' |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                       |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                          |
| Type:                   | none            | Type: #2 Q Rok                                         | Cement/Bentonite Grout                          |
| Setting:                | none            | Slot Size: 4-15'                                       | Bentonite Seal                                  |
|                         |                 |                                                        | Sandpack                                        |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project No. 35244.00                            |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number:<br>MW-8S                           |

**DRILLING SUMMARY**Geologist:  
Steve FrankDrilling Company:  
Buffalo Drilling Co.Driller:  
Mike SaeliDate:  
12/10/92**GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-6        | Fill                  |
| 6-22       | Silty Sand and Gravel |

**WELL DESIGN**

| CASING MATERIAL      |                 | SCREEN MATERIAL                                     | SEAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|-----------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface:             | Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 1.5-3.5'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Monitor:             | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| BACKFILL MATERIAL    |                 | FILTER MATERIAL                                     | LEGEND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Type:                | none            | Type: 00 Quartz Sand                                | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div style="margin-left: 5px;">Cement/Bentonite Grout</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black;"></div> <div style="margin-left: 5px;">Bentonite Seal</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: white; border: 1px solid black;"></div> <div style="margin-left: 5px;">Sandpack</div> </div> |
| Setting:             | none            | Setting: 3.5-15'                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Client: NYSDEC       |                 | Project: N. Franklin St.                            | Project Number: 35244.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| URS Consultants Inc. |                 | Monitoring Well Construction Details                | Well Number: MW-10S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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Monitor:

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Setting:

Client:

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**DRILLING SUMMARY**

Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.

Driller:  
Mike Saali

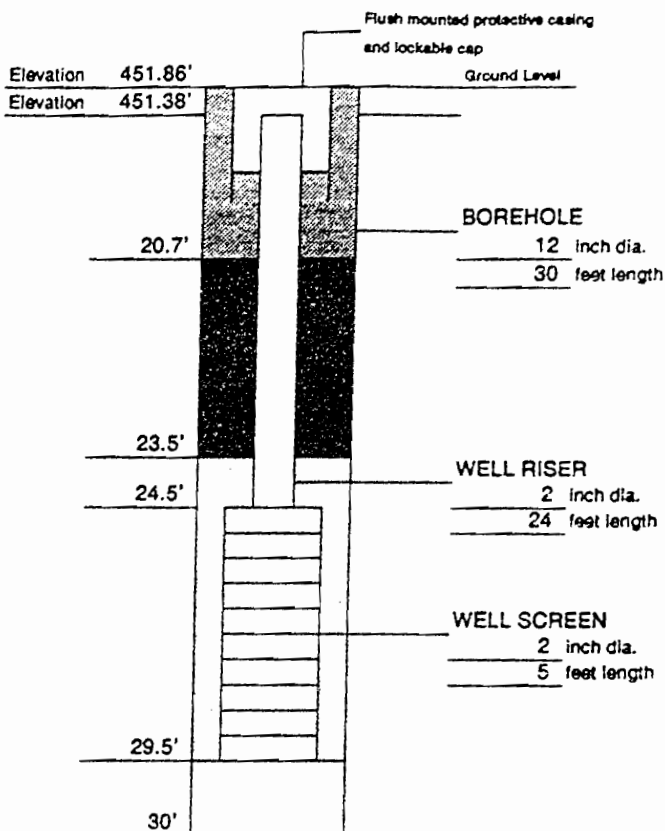
Date:  
12/11/92

**GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-6        | Fill                  |
| 6-22       | Silty Sand and Gravel |
| 22-29      | Silty Sand/Sandy Silt |
| 29-30      | Clayey Silt           |

**WELL DESIGN**

| CASING MATERIAL      |                 | SCREEN MATERIAL                                     | SEAL MATERIAL                                                                                              |
|----------------------|-----------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:             | Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 20.7-23.5'                                                     |
| Monitor:             | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| BACKFILL MATERIAL    |                 | FILTER MATERIAL                                     | LEGEND                                                                                                     |
| Type:                | none            | Type: 00 Quartz Sand                                |  Cement/Bentonite Grout |
| Setting:             | none            | Setting: 23.5-30'                                   |  Bentonite Seal         |
|                      |                 |                                                     |  Sandpack               |
| Client:              | NYSDEC          | Project: N. Franklin St.                            | Project Number: 35244.00                                                                                   |
| URS Consultants Inc. |                 | Monitoring Well Construction Details                | Well Number: MW-100                                                                                        |



| DRILLING SUMMARY                          |                 |
|-------------------------------------------|-----------------|
| Geologist:<br>Joe Pettorino               |                 |
| Drilling Company:<br>Buffalo Drilling Co. |                 |
| Driller:<br>Larry Schroeder               |                 |
| Date:<br>12/11/92                         |                 |
| GEOLOGIC LOG                              |                 |
| depth(ft.)                                | lithology       |
| 0-6                                       | FH              |
| 6-19                                      | Sand and Gravel |
| WELL DESIGN                               |                 |

Elevation 451.00'  
 Elevation 450.59'  
 Ground Level  
 Flush mounted protective casing and lockable cap  
 BOREHOLE  
 12 inch dia.  
 15 feet length  
 WELL RISER  
 2 inch dia.  
 4.3 feet length  
 WELL SCREEN  
 2 inch dia.  
 10 feet length  
 2'  
 4'  
 4.9'  
 14.9'  
 15'

| CASING MATERIAL          | SCREEN MATERIAL                                     | SEAL MATERIAL                                    |
|--------------------------|-----------------------------------------------------|--------------------------------------------------|
| Surface: Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 2-4' |
| Monitor: Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                        |
| BACKFILL MATERIAL        | FILTER MATERIAL                                     | LEGEND                                           |
| Type: none               | Type: 00 Quartz Sand                                | Cement/Bentonite Grout                           |
| Setting: none            | Setting: 4-15'                                      | Bentonite Seal                                   |
|                          |                                                     | Sandpack                                         |
| Client: NYSDEC           | Project: N. Franklin St.                            | Project Number: 35244.00                         |
| URS Consultants Inc.     | Monitoring Well Construction Details                | Well Number: MW-11S                              |

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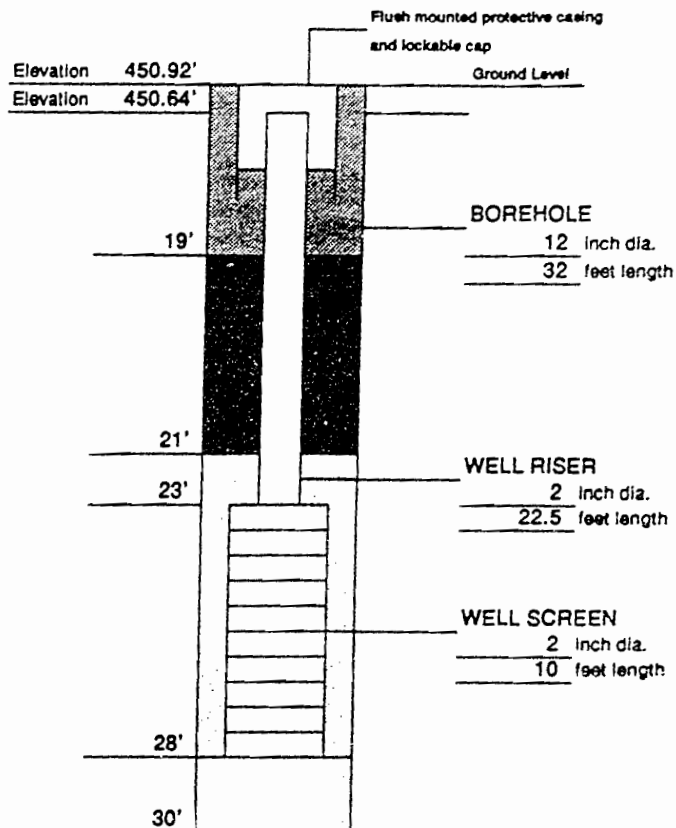
Client

**DRILLING SUMMARY**

Geologist:  
Joe Pettorino  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/11/92

**GEOLOGIC LOG**

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-6        | Fill            |
| 6-19       | Sand and Gravel |
| 19-26      | Silt and Sand   |
| 26-32      | Clayey Silt     |

**WELL DESIGN**

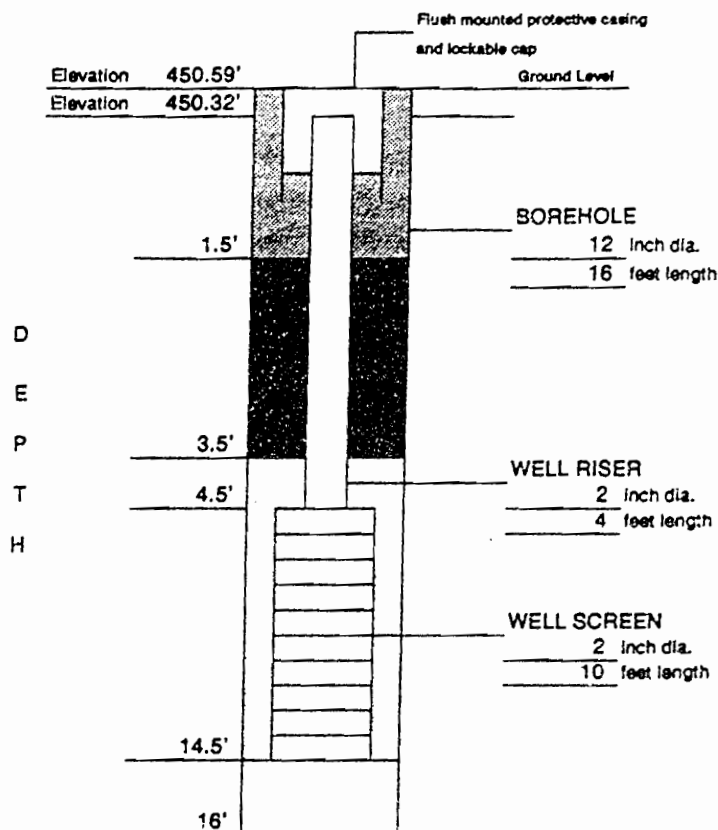
| CASING MATERIAL   |                      | SCREEN MATERIAL                                     | SEAL MATERIAL                                      |
|-------------------|----------------------|-----------------------------------------------------|----------------------------------------------------|
| Surface:          | Steel                | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 19-21' |
| Monitor:          | Stainless Steel      | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                          |
| BACKFILL MATERIAL |                      | FILTER MATERIAL                                     | LEGEND                                             |
| Type:             | none                 | Type: 00 Quartz Sand                                | Cement/Bentonite Grout                             |
| Setting:          | none                 | Setting: 21-32'                                     | Bentonite Seal                                     |
|                   |                      |                                                     | Sandpack                                           |
| Client:           | NYSDEC               | Project: N. Franklin St.                            | Project Number: 35244.00                           |
|                   | URS Consultants Inc. | Monitoring Well Construction Details                | Well Number: MW-11D                                |

**DRILLING SUMMARY**

Geologist:  
Mindar Hsieh  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/13/92

**GEOLOGIC LOG**

| depth(ft.) | lithology     |
|------------|---------------|
| 0-2        | Fill          |
| 2-16       | Gravelly Sand |

**WELL DESIGN**

| CASING MATERIAL   |                      | SCREEN MATERIAL                                     | SEAL MATERIAL                                        |
|-------------------|----------------------|-----------------------------------------------------|------------------------------------------------------|
| Surface:          | Steel                | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 1.5-3.5' |
| Monitor:          | Stainless Steel      | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                            |
| BACKFILL MATERIAL |                      | FILTER MATERIAL                                     | LEGEND                                               |
| Type:             | none                 | Type: 00 Quartz Sand                                | Cement/Bentonite Grout                               |
| Setting:          | none                 | Setting: 3.5-16'                                    | Bentonite Seal                                       |
|                   |                      |                                                     | Sandpack                                             |
| Client:           | NYSDEC               | Project: N. Franklin St.                            | Project Number: 35244.00                             |
|                   | URS Consultants Inc. | Monitoring Well Construction Details                | Well Number: MW-12S                                  |

**DRILLING SUMMARY**

Geologist:

Joe Pettorino

Drilling Company:

Buffalo Drilling Co.

Driller:

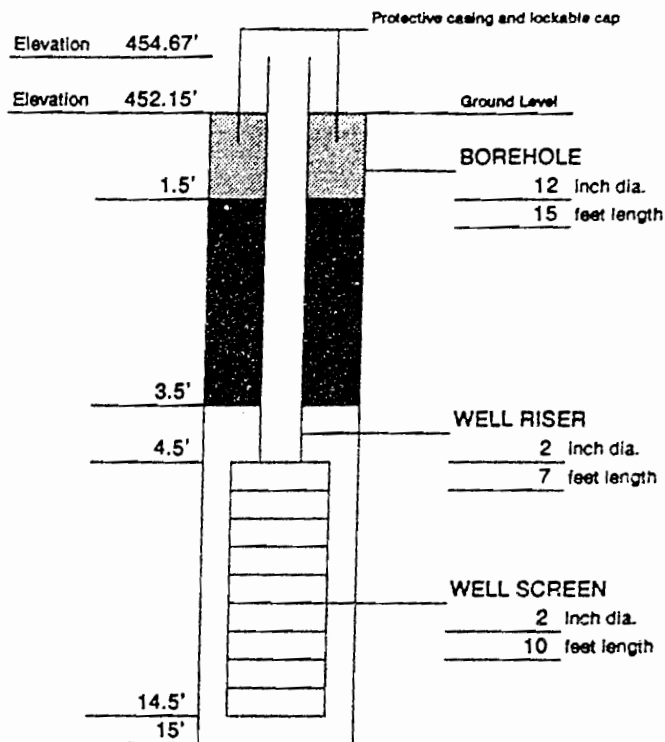
Mike Saell

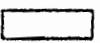
Date:

12/13/92

**GEOLOGIC LOG**

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-4        | Fill            |
| 4-5        | Clayey Silt     |
| 6-16       | Sand and Gravel |

D  
E  
P  
T  
H**WELL DESIGN**

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                                                                              |
|-------------------------|-----------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type Bentonite Pellets<br>Setting: 1.5-3.5'                                                        |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                                                                                     |
| Type:                   | none            | Type: 00 Quartz Sand                                   |  Cement/Bentonite Grout |
| Setting:                | none            | Slot Size: 3.5-15'                                     |  Bentonite Seal         |
|                         |                 |                                                        |  Sandpack               |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project No. 35244.00                                                                                       |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number:<br>MW-13S                                                                                     |

**DRILLING SUMMARY**

Geologist:

Joe Pettorino

Drilling Company:

Buffalo Drilling Co.

Driller:

Larry Schroeder

Date:

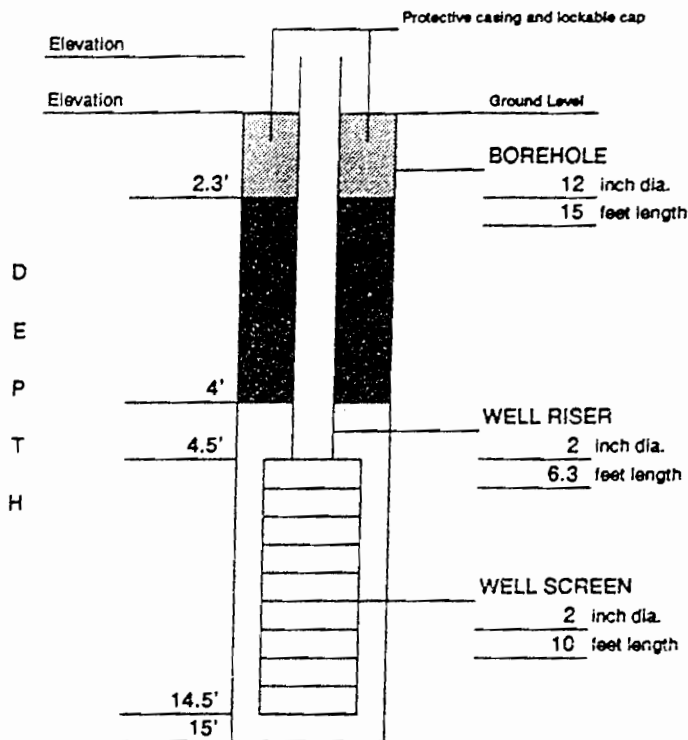
12/09/92

**GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-4        | Fill                  |
| 4-6        | Sandy Silt            |
| 6-22       | Silty Sand and Gravel |

**WELL DESIGN**

| CASING MATERIAL      |                 | SCREEN MATERIAL                                     | SEAL MATERIAL                                                                                              |
|----------------------|-----------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:             | Steel           | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 2.3-4'                                                         |
| Monitor:             | Stainless Steel | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| BACKFILL MATERIAL    |                 | FILTER MATERIAL                                     | LEGEND                                                                                                     |
| Type:                | none            | Type: 00 Quartz Sand                                |  Cement/Bentonite Grout |
| Setting:             | none            | Slot Size: 4-15'                                    |  Bentonite Seal         |
|                      |                 |                                                     |  Sandpack               |
| Client:              | NYSDEC          | Project: N. Franklin St.                            | Project No. 35244.00                                                                                       |
| URS Consultants Inc. |                 | Monitoring Well Construction Details                | Well Number: MW-14S                                                                                        |



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Type:

Setting

Client:

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**DRILLING SUMMARY**

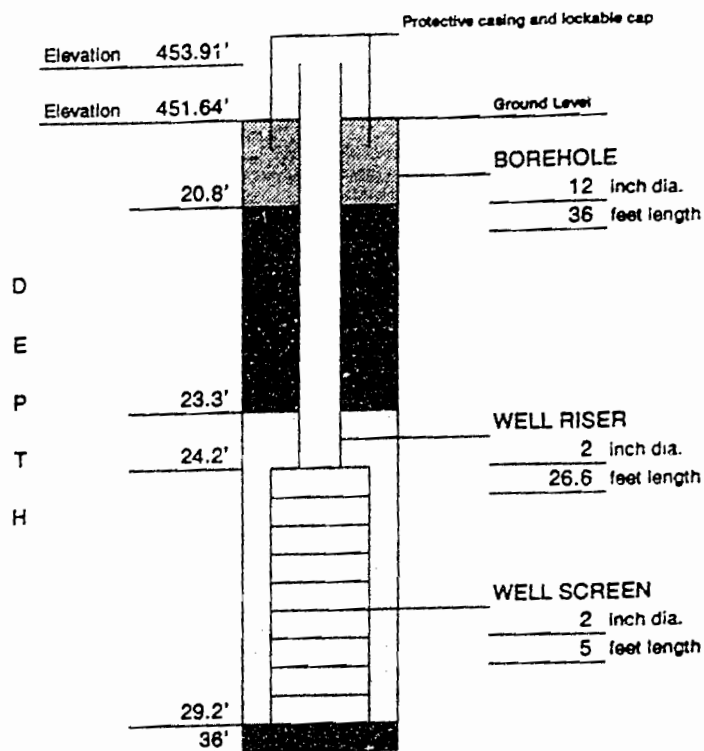
Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/08/92

**GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-4        | Fill                  |
| 4-6        | Sandy Silt            |
| 6-22       | Silty Sand and Gravel |
| 22-30      | Silty Sand/Sandy Silt |
| 30-38      | Clayey Silt           |

**WELL DESIGN**

| <i>CASING MATERIAL</i>   |                   | <i>SCREEN MATERIAL</i>                              | <i>SEAL MATERIAL</i>                                                                                       |
|--------------------------|-------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:                 | Steel             | Type: Stainless Steel                               | Seal #1 Type Bentonite Pellets<br>Setting: 20.8-23.3'                                                      |
| Monitor:                 | Stainless Steel   | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| <i>BACKFILL MATERIAL</i> |                   | <i>FILTER MATERIAL</i>                              | <i>LEGEND</i>                                                                                              |
| Type:                    | Bentonite Pellets | Type: 00 Quartz Sand                                |  Cement/Bentonite Grout |
| Setting:                 | 31-36'            | Slot Size: 23.3-31'                                 |  Bentonite Seal         |
|                          |                   |                                                     |  Sandpack               |
| Client:                  | NYSDEC            | Project: N. Franklin St.                            | Project No. 35244.00                                                                                       |
| URS<br>Consultants Inc.  |                   | Monitoring Well<br>Construction Details             | Well Number:<br>MW-14D                                                                                     |



# **DRILLING SUMMARY**

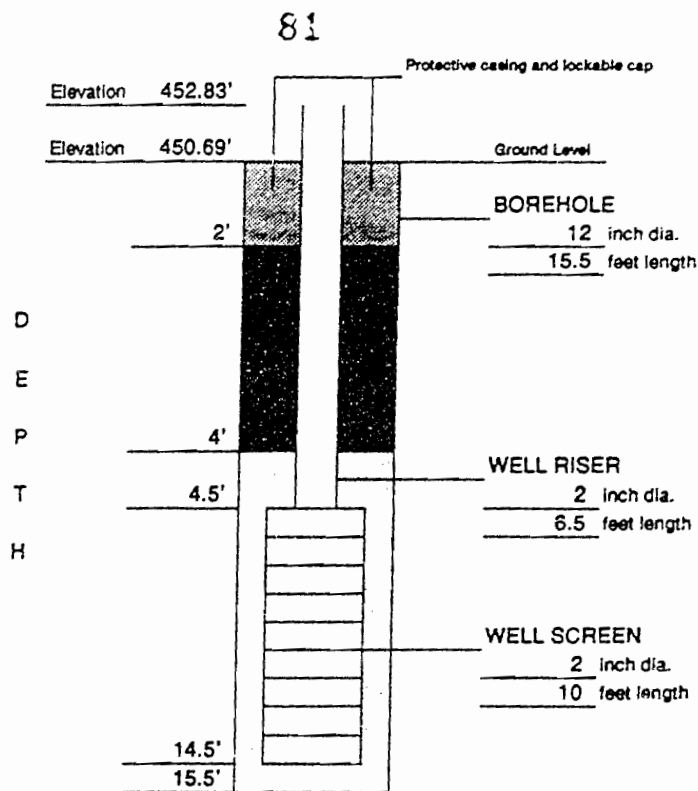
Geologist:  
Joe Pettorino  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/09/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology     |
|------------|---------------|
| 0-2        | Fill          |
| 2-9        | Clayey Silt   |
| 9-16       | Gravelly Sand |

## **WELL DESIGN**

|                          |                 |                                                         |                                                                                                            |
|--------------------------|-----------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>CASING MATERIAL</b>   |                 | <b>SCREEN MATERIAL</b>                                  | <b>SEAL MATERIAL</b>                                                                                       |
| Surface:                 | Steel           | Type: Stainless Steel                                   | Seal #1 Type Bentonite Pellets<br>Setting: 2-4'                                                            |
| Monitor:                 | Stainless Steel | Slot Size: 0.010 Inche prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| <b>BACKFILL MATERIAL</b> |                 | <b>FILTER MATERIAL</b>                                  | <b>LEGEND</b>                                                                                              |
| Type:                    | none            | Type: 00 Quartz Sand                                    |  Cement/Bentonite Grout |
| Setting:                 | none            | Slot Size: 4-15.5'                                      |  Bentonite Seal         |
|                          |                 |                                                         |  Sandpack               |
| Client:                  | NYSDEC          | Project: N. Franklin St.                                | Project No. 35244.00                                                                                       |
| URS<br>Consultants Inc.  |                 | Monitoring Well<br>Construction Details                 | Well Number:<br>MW-15S                                                                                     |



# **DRILL**

Geolo  
Minda  
Drilling  
Buffalo  
Driller:  
Larry S  
Date:  
12/13/92

## **GEOLOGIC LOG**

| depth(ft.) |
|------------|
| 0-4        |
| 4.3-10.3   |
| 10.3-12.2  |

## **WELL DESIGN**

### **CASING MATERIAL**

Surface:

Monitor:

### **BACKFILL MATERIAL**

Type:

Setting:

Client:

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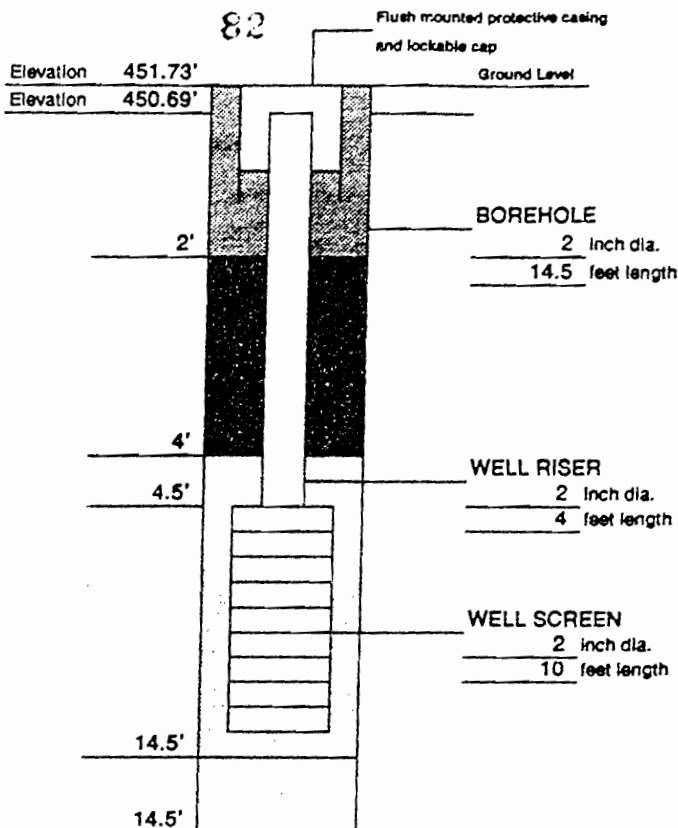
# **DRILLING SUMMARY**

Geologist:  
Mindar Hsieh  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/13/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology   |
|------------|-------------|
| 0-4.3      | Fill        |
| 4.3-10.3   | Clayey Silt |
| 10.3-12    | Clayey Sand |
| 12-22      | Silty Sand  |

## **WELL DESIGN**



D  
E  
P  
T  
H

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                    |
|-------------------------|-----------------|--------------------------------------------------------|--------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type: Bentonite Pellets<br>Setting: 2-4' |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                        |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                           |
| Type:                   | none            | Type: 00 Quartz Sand                                   | Cement/Bentonite Grout                           |
| Setting:                | none            | Setting: 4-14.5                                        | Bentonite Seal                                   |
|                         |                 |                                                        | Sandpack                                         |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project Number: 35244.00                         |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number: MW-16S                              |

# DRILLING SUMMARY

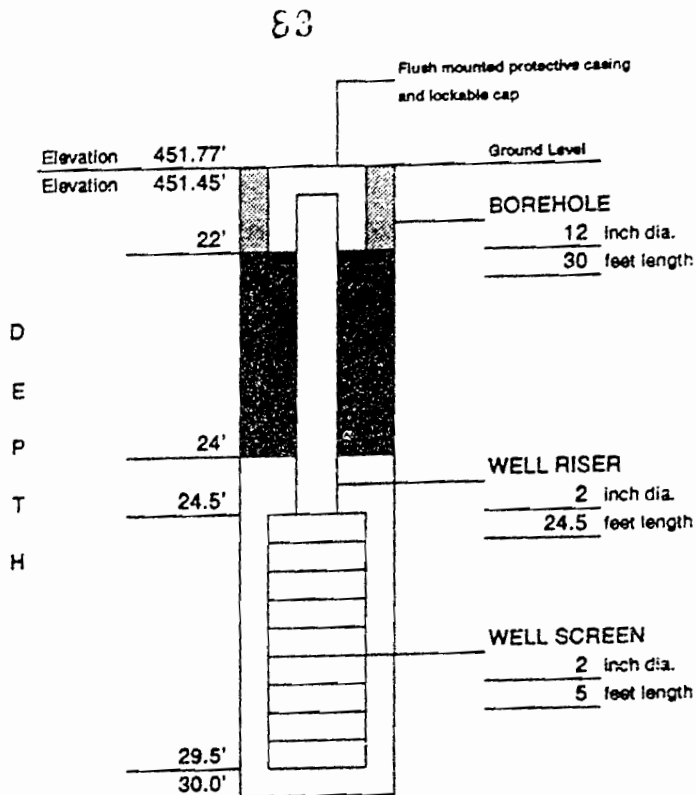
Geologist:  
Mindar Hsieh  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/12/92

## GEOLOGIC LOG

| depth(ft.) | lithology                 |
|------------|---------------------------|
| 0-4.3      | Fill                      |
| 4.3-12     | Clayey Silt               |
| 12-22.2    | Silty Sand                |
| 22.2-30    | Silty Sand/<br>Sandy Silt |
| 30-32      | Clayey Silt               |

## WELL DESIGN

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                                                                              |
|-------------------------|-----------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type Bentonite Pellets<br>Setting: 2-4'                                                            |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                                                                                  |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                                                                                     |
| Type:                   | none            | Type: 00 Quartz Sand                                   |  Cement/Bentonite Grout |
| Setting:                | none            | Slot Size: 4-16.5'                                     |  Bentonite Seal         |
|                         |                 |                                                        |  Sandpack               |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project No. 35244.00                                                                                       |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number:<br>MW-16D                                                                                     |



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Type:

Setting

Client

# **DRILLING SUMMARY**

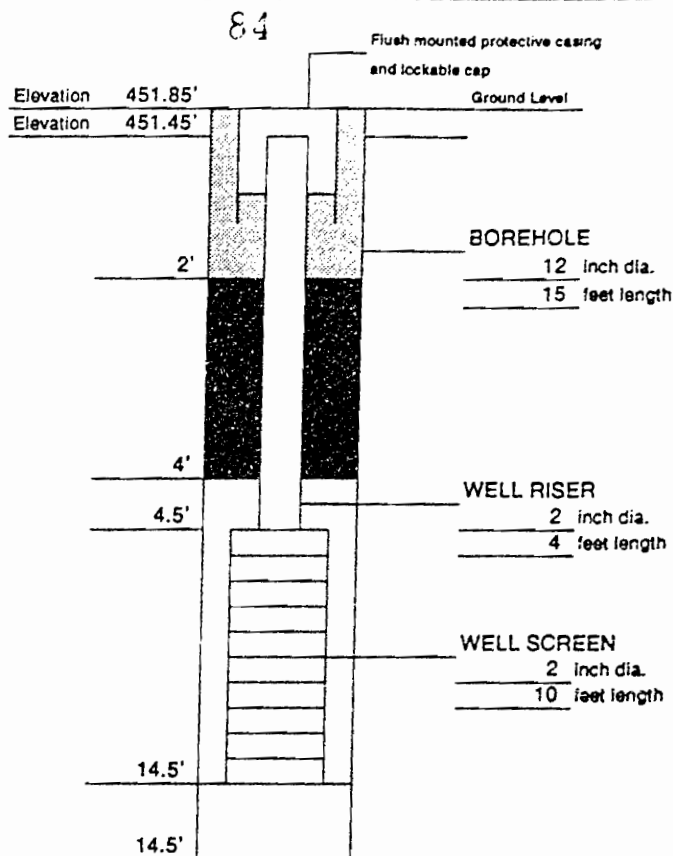
Geologist:  
Mindar Hsieh  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Mike Saoli  
Date:  
12/10/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-4        | Fill                  |
| 4-7        | Sandy Silt            |
| 7-18       | Silty Sand and Gravel |

## **WELL DESIGN**

D  
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P  
T  
H



### **CASING MATERIAL**

Surface: Steel

Monitor: Stainless Steel

### **SCREEN MATERIAL**

Type: Stainless Steel

Slot Size: 0.010 inch prepacked with 00 Quartz Sand

### **SEAL MATERIAL**

Seal #1 Type: Bentonite Pellets  
Setting: 2-4

Seal #2 Type:  
Setting:

### **BACKFILL MATERIAL**

Type: none

Setting: none

### **FILTER MATERIAL**

Type: 00 Quartz Sand

Setting: 4-14.5'

### **LEGEND**

|  |                        |
|--|------------------------|
|  | Cement/Bentonite Grout |
|  | Bentonite Seal         |
|  | Sandpack               |

Client: NYSDEC

Project: N. Franklin St.

Project Number: 35244.00

URS  
Consultants Inc.

Monitoring Well  
Construction Details

Well Number: MW-17S

# DRILLING SUMMARY

Geologist:  
Steve Frank

Drilling Company:  
Buffalo Drilling Co.

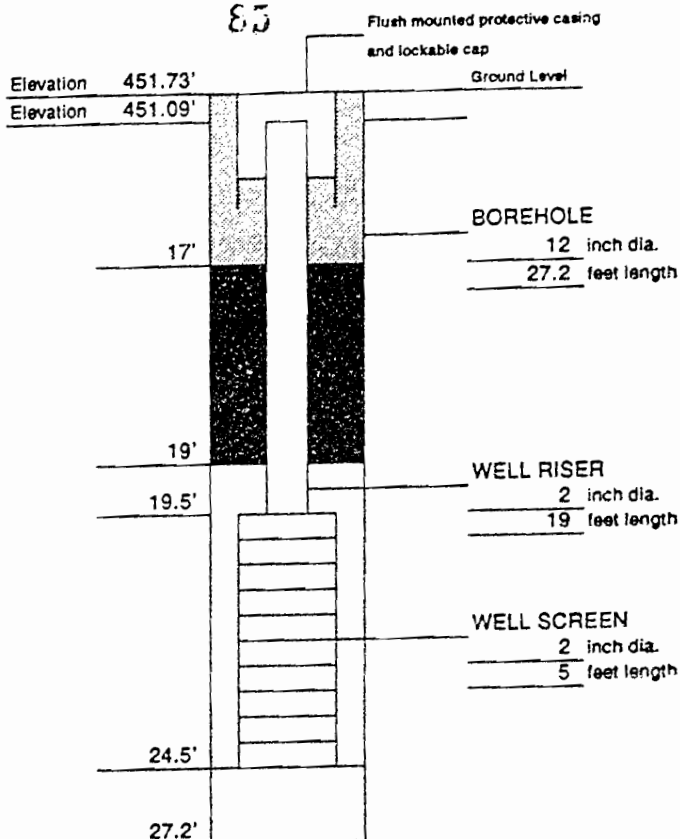
Driller:  
Mike Saali

Date:  
12/09/92

## GEOLOGIC LOG

| depth(ft.) | lithology                   |
|------------|-----------------------------|
| 0-4        | Fill                        |
| 4-7        | Sandy Silt                  |
| 7-18       | Silty Sand and Gravel       |
| 18-22      | Gravelly Silt               |
| 22-26      | Clayey Silt                 |
| 26-BOH     | Shale and Siltstone Bedrock |

## WELL DESIGN



| CASING MATERIAL   |                      | SCREEN MATERIAL                                     | SEAL MATERIAL                                      |
|-------------------|----------------------|-----------------------------------------------------|----------------------------------------------------|
| Surface:          | Steel                | Type: Stainless Steel                               | Seal #1 Type: Bentonite Pellets<br>Setting: 17-19' |
| Monitor:          | Stainless Steel      | Slot Size: 0.010 inch prepacked with 00 Quartz Sand | Seal #2 Type:<br>Setting:                          |
| BACKFILL MATERIAL |                      | FILTER MATERIAL                                     | LEGEND                                             |
| Type:             | Bentonite Pellets    | Type: 00 Quartz Sand                                | Cement/Bentonite Grout                             |
| Setting:          | 25-27.2'             | Setting: 19-25'                                     | Bentonite Seal                                     |
|                   |                      |                                                     | Sandpack                                           |
| Client:           | NYSDEC               | Project: N. Franklin St.                            | Project Number: 35244.00                           |
|                   | URS Consultants Inc. | Monitoring Well Construction Details                | Well Number: MW-17D                                |

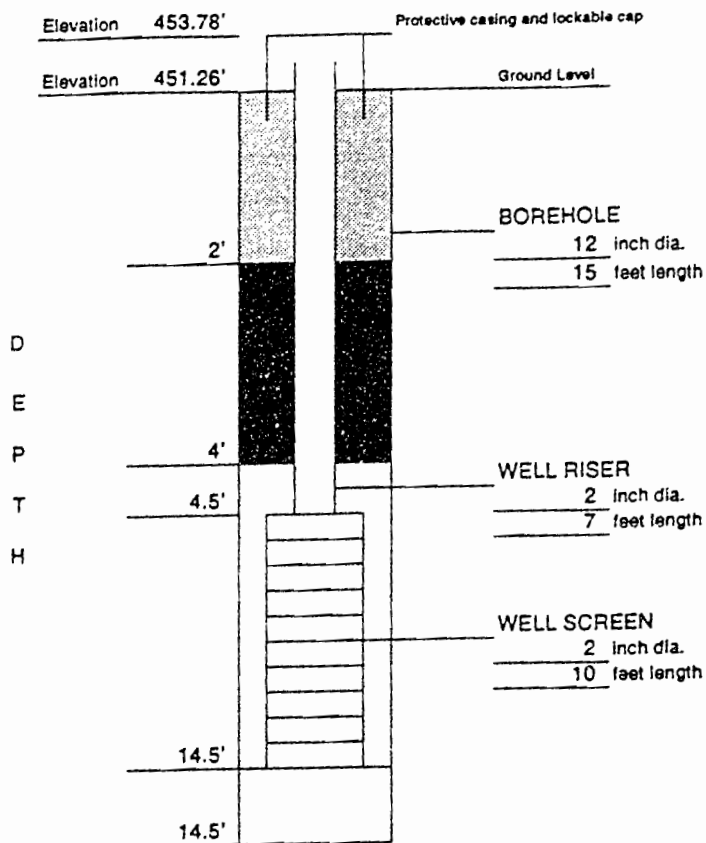
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Setting:  
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**DRILLING SUMMARY**

Geologist:  
Steve Frank  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Larry Schroeder  
Date:  
12/17/92

**GEOLOGIC LOG**

| depth(ft.) | lithology             |
|------------|-----------------------|
| 0-2.5      | Fill                  |
| 2.5-4.2    | Clayey Silt           |
| 4.2-16     | Silty Sand and Gravel |

**WELL DESIGN**

| CASING MATERIAL         |                 | SCREEN MATERIAL                                        | SEAL MATERIAL                                   |
|-------------------------|-----------------|--------------------------------------------------------|-------------------------------------------------|
| Surface:                | Steel           | Type: Stainless Steel                                  | Seal #1 Type: Bentonite Pellets<br>Setting: 2-4 |
| Monitor:                | Stainless Steel | Slot Size: 0.010 inch prepacked<br>with 00 Quartz Sand | Seal #2 Type:<br>Setting:                       |
| BACKFILL MATERIAL       |                 | FILTER MATERIAL                                        | LEGEND                                          |
| Type:                   | none            | Type: 00 Quartz Sand                                   | Cement/Bentonite Grout                          |
| Setting:                | none            | Setting: 4-15'                                         | Bentonite Seal                                  |
|                         |                 |                                                        | Sandpack                                        |
| Client:                 | NYSDEC          | Project: N. Franklin St.                               | Project Number: 35244.00                        |
| URS<br>Consultants Inc. |                 | Monitoring Well<br>Construction Details                | Well Number: MW-18S                             |

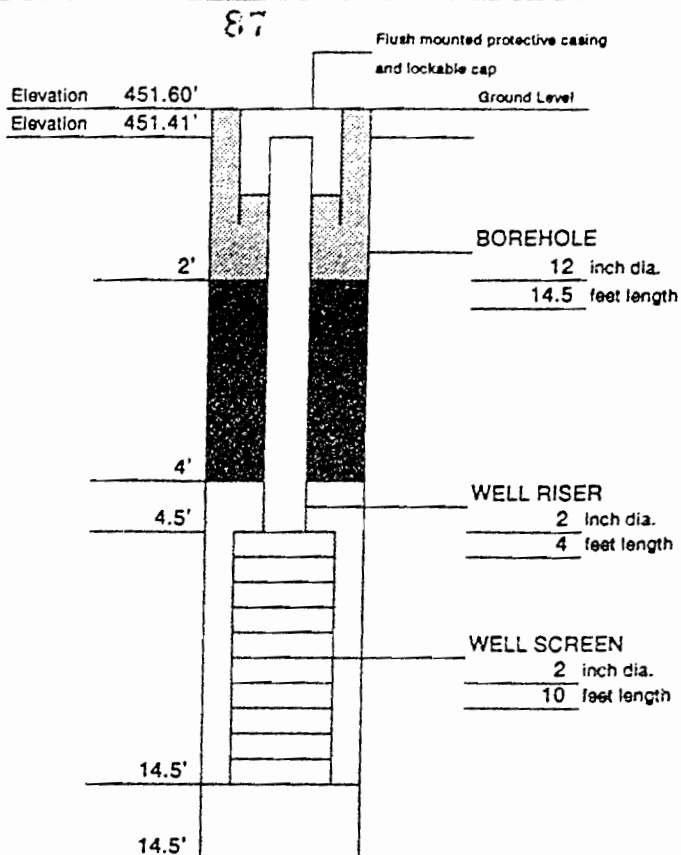
# **DRILLING SUMMARY**

Geologist:  
Joe Pettorino  
Drilling Company:  
Buffalo Drilling Co.  
Driller:  
Mike Saeli  
Date:  
12/16/92

## **GEOLOGIC LOG**

| depth(ft.) | lithology       |
|------------|-----------------|
| 0-2        | Fill            |
| 2-6        | Silty Clay      |
| 6-16       | Sand and Gravel |

## **WELL DESIGN**



### **CASING MATERIAL**

Surface: Steel  
Monitor: Stainless Steel

### **SCREEN MATERIAL**

Type: Stainless Steel  
Slot Size: 0.010 Inch prepacked with 00 Quartz Sand

### **SEAL MATERIAL**

Seal #1 Type: Bentonite Pellets  
Setting: 2-4  
Seal #2 Type:  
Setting:

### **BACKFILL MATERIAL**

Type: none  
Setting: none

### **FILTER MATERIAL**

Type: 00 Quartz Sand  
Setting: 4-14.5'

### **LEGEND**

Cement/Bentonite Grout  
Bentonite Seal  
Sandpack

Client: NYSDEC

Project: N. Franklin St.

Project Number: 35244.00

URS  
Consultants Inc.

Monitoring Well  
Construction Details

Well Number: MW-19S

|                                        |                                      |                                                                                                                                                                                      |                                |
|----------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>DRILLING SUMMARY</b>                |                                      | Elevation 453.94'<br>Protective casing and lockable cap<br>Elevation 451.02'<br>Ground Level                                                                                         |                                |
| Geologist: Steve Frank                 |                                      | <p><b>BOREHOLE</b><br/>12 inch dia.<br/>20 feet length</p> <p><b>WELL RISER</b><br/>2 inch dia.<br/>5.5 feet length</p> <p><b>WELL SCREEN</b><br/>2 inch dia.<br/>15 feet length</p> |                                |
| Drilling Company: Buffalo Drilling Co. |                                      |                                                                                                                                                                                      |                                |
| Driller: Larry Schroeder               |                                      |                                                                                                                                                                                      |                                |
| Date: 12/17/92                         |                                      |                                                                                                                                                                                      |                                |
| <b>GEOLOGIC LOG</b>                    |                                      |                                                                                                                                                                                      |                                |
| depth(ft.)                             | lithology                            | D<br>E<br>P<br>T<br>H                                                                                                                                                                | 2.5'<br>4'<br>5'<br>20'<br>20' |
| 0-4                                    | Fill                                 |                                                                                                                                                                                      |                                |
| 4-5                                    | Sand & Silt                          |                                                                                                                                                                                      |                                |
| 5-20                                   | Sand and Gravel                      |                                                                                                                                                                                      |                                |
| <b>WELL DESIGN</b>                     |                                      |                                                                                                                                                                                      |                                |
| <b>CASING MATERIAL</b>                 |                                      | <b>SCREEN MATERIAL</b>                                                                                                                                                               |                                |
| Surface: Steel                         |                                      | Type: Stainless Steel                                                                                                                                                                |                                |
| Monitor: Stainless Steel               |                                      | Slot Size: 0.010 inch prepacked with 00 Quartz Sand                                                                                                                                  |                                |
| <b>SEAL MATERIAL</b>                   |                                      |                                                                                                                                                                                      |                                |
|                                        |                                      | Seal #1 Type: Bentonite Pellets<br>Setting: 2-4                                                                                                                                      |                                |
|                                        |                                      | Seal #2 Type:<br>Setting:                                                                                                                                                            |                                |
| <b>BACKFILL MATERIAL</b>               |                                      | <b>FILTER MATERIAL</b>                                                                                                                                                               |                                |
| Type: none                             |                                      | Type: 00 Quartz Sand                                                                                                                                                                 |                                |
| Setting: none                          |                                      | Setting: 4-15'                                                                                                                                                                       |                                |
|                                        |                                      | <b>LEGEND</b>                                                                                                                                                                        |                                |
|                                        |                                      | Cement/Bentonite Grout<br>Bentonite Seal<br>Sandpack                                                                                                                                 |                                |
| Client: NYSDEC                         | Project: N. Franklin St.             | Project Number: 35244.00                                                                                                                                                             |                                |
| URS Consultants Inc.                   | Monitoring Well Construction Details | Well Number: MW-20S                                                                                                                                                                  |                                |

| DRILLING SUMMARY                                                                        |                                                                                          | <div style="font-size: 24px; margin-bottom: 10px;">83</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Geologist:                                                                              | <i>ANDRE LAPRES</i>                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| Drilling Company:                                                                       | <i>AMERICAN AUGER</i>                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| Driller:                                                                                | <i>Rocky Baye</i>                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| Date:                                                                                   | <i>11/30/94</i>                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| GEOLOGIC LOG                                                                            |                                                                                          | D<br>E<br>P<br>T<br>H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| depth(ft.)                                                                              | lithology                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 0.0-6.0                                                                                 | Fill                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 6.0-7.0                                                                                 | CLAYEY<br>FINE SAND                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 7.0-18.0                                                                                | GRAVELLY<br>SILTY MEDIUM<br>TO FINE SAND                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| * NOTES:                                                                                |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| WELL DESIGN                                                                             |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <b>CASING MATERIAL</b><br><br>Surface: <i>8 INCH FLUSH MOUNT</i><br><br>Monitor:        | <b>SCREEN MATERIAL</b><br><br>Type: <i>SCH 40 PVC</i><br><br>Slot Size: <i>.010 INCH</i> | <b>SEAL MATERIAL</b><br><br>Seal #1 Type: <i>3/4" HOLE AUG</i><br>Setting: <i>BENTONITE</i><br><i>5.0 - 7.0 FT</i><br><br>Seal #2 Type:<br>Setting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>FILTER MATERIAL</b><br><br>Type: <i>#0 SAND</i><br><br>Setting: <i>7.0 - 18.0 FT</i> | <b>ROCK CORING</b><br><br>Cored Interval:<br><br>Core Diameter:<br><br>Reamed Diameter:  | <b>LEGEND</b><br><br><div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div>           Cement/Bentonite Grout         </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #333333; border: 1px solid black; margin-right: 5px;"></div>           Bentonite Seal         </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></div>           Silica Sandpack         </div> |  |
| Client: <i>NYSDEC</i>                                                                   | Project: <i>NORTH FRANKLIN ST.</i>                                                       | Project No.: <i>0535388.00</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| URS<br>Consultants, Inc.                                                                | Monitoring Well<br>Construction Details                                                  | Well Number: <i>0W-1</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |

| DRILLING SUMMARY                           |                                          | 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|--------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Geologist:<br><i>ANDRE LAPRES</i>          |                                          | <p style="text-align: right; margin-right: 50px;">Protective casing and lockable cap</p> <p>• Elevation _____</p> <p>• Elevation _____</p> <p style="text-align: right;">Ground Level</p> <p style="text-align: right;">AUGERHOLE</p> <p style="text-align: right;">10 inch dia.</p> <p style="text-align: right;">18 feet length</p> <p style="text-align: right;">WELL RISER</p> <p style="text-align: right;">2 inch dia.</p> <p style="text-align: right;">8 feet length</p> <p style="text-align: right;">WELL SCREEN</p> <p style="text-align: right;">2 inch dia.</p> <p style="text-align: right;">10 feet length</p> <p style="text-align: right;">5.0</p> <p style="text-align: right;">7.0</p> <p style="text-align: right;">8.0</p> <p style="text-align: right;">18.0</p> <p style="text-align: right;">18.0</p> |  |
| Drilling Company:<br><i>AMERICAN AUGER</i> |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Driller:<br><i>ROCKY BAYE</i>              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Date:<br><i>12/1/94</i>                    |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| GEOLOGIC LOG                               |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| depth(ft.)                                 | lithology                                | <p style="text-align: right;">D</p> <p style="text-align: right;">E</p> <p style="text-align: right;">P</p> <p style="text-align: right;">T</p> <p style="text-align: right;">H</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| 0.0-8.0                                    | FILL                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 8.0-18.0                                   | GRAVELLY<br>SILTY MEDIAN<br>TO FINE SAND |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| * NOTES:                                   |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| WELL DESIGN                                |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| CASING MATERIAL                            |                                          | SCREEN MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Surface: <i>8 INCH FLUSH MOUNT</i>         | Type: <i>SCH 40 PVC</i>                  | SEAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| Monitor:                                   | Slot Size: <i>.010 INCH</i>              | Seal #1 Type: <i>3/8" HOLEPLUG</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| FILTER MATERIAL                            |                                          | ROCK CORING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Type: <i>#0 SAND</i>                       | Cored Interval:                          | LEGEND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Setting: <i>7.0-18.0 FT</i>                | Core Diameter:                           | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Cement/Bentonite Grout </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Reamed Diameter:                           |                                          | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #333333; border: 1px solid black; margin-right: 5px;"></div> Bentonite Seal </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| Client: <i>NYSDEC</i>                      |                                          | Project: <i>WATER FRANKLIN ST.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| URS                                        |                                          | Project No.: <i>0535388.00</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| Consultants, Inc.                          |                                          | Well Number: <i>OW-2</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |

| DRILLING SUMMARY                           |                                          | 91                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                           |
|--------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------|
| Geologist:<br><i>ANDRE LAPRES</i>          |                                          | <p style="text-align: right; font-size: small;">Protective casing and lockable cap</p> <p style="text-align: right; font-size: small;">Ground Level</p> <p style="text-align: right; font-size: small;">AUGERHOLE<br/>10 inch dia.<br/>18 feet length</p> <p style="text-align: right; font-size: small;">WELL RISER<br/>2 inch dia.<br/>8 feet length</p> <p style="text-align: right; font-size: small;">WELL SCREEN<br/>2 inch dia.<br/>10 feet length</p> |  |                                                           |
| Drilling Company:<br><i>AMERICAN AUGER</i> |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| Driller:<br><i>ROCKY BAYE</i>              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| Date:<br><i>12/1/94</i>                    |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| GEOLOGIC LOG                               |                                          | <p style="font-size: small;">D</p> <p style="font-size: small;">E</p> <p style="font-size: small;">P</p> <p style="font-size: small;">T</p> <p style="font-size: small;">H</p>                                                                                                                                                                                                                                                                                |  |                                                           |
| depth(ft.)                                 | lithology                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| 0.0-6.8                                    | FILL                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| 6.8-7.5                                    | CLAYEY<br>FINE SAND                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| 7.5-18.0                                   | GRAVELLY<br>SILTY MEDIUM<br>TO FINE SAND |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| * NOTES:                                   |                                          | <p style="font-size: small;">18.0</p> <p style="font-size: small;">18.0</p>                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                           |
| WELL DESIGN                                |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
| CASING MATERIAL                            | SCREEN MATERIAL                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | SEAL MATERIAL                                             |
| Surface: 8 INCH FLEX R MOUNT               | Type: SCH 40 PVC                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Seal #1 Type: 3/4" HOLE PLUG<br>BENTONITE<br>5.0 - 7.0 FT |
| Monitor:                                   | Slot Size: .010 INCH                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Seal #2 Type:<br>Setting:                                 |
| FILTER MATERIAL                            | ROCK CORING                              | LEGEND                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                           |
| Type: #0 SAND                              | Cored Interval:                          | <div style="display: inline-block; width: 20px; height: 10px; border: 1px solid black; background-color: #cccccc;"></div> Cement/Bentonite Grout                                                                                                                                                                                                                                                                                                              |  |                                                           |
| Setting: 7.0 - 18.0 FT                     | Core Diameter:                           | <div style="display: inline-block; width: 20px; height: 10px; background-color: #333333;"></div> Bentonite Seal                                                                                                                                                                                                                                                                                                                                               |  |                                                           |
|                                            | Reamed Diameter:                         | <div style="display: inline-block; width: 20px; height: 10px; border: 1px solid black;"></div> Silica Sandpack                                                                                                                                                                                                                                                                                                                                                |  |                                                           |
| Client: <i>NYSDEC</i>                      | Project: <i>NORTH FRANKLIN ST.</i>       | Project No.: <i>0535388.00</i>                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                           |
| URS<br>Consultants, Inc.                   | Monitoring Well<br>Construction Details  | Well Number: <i>0W-3</i>                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                           |

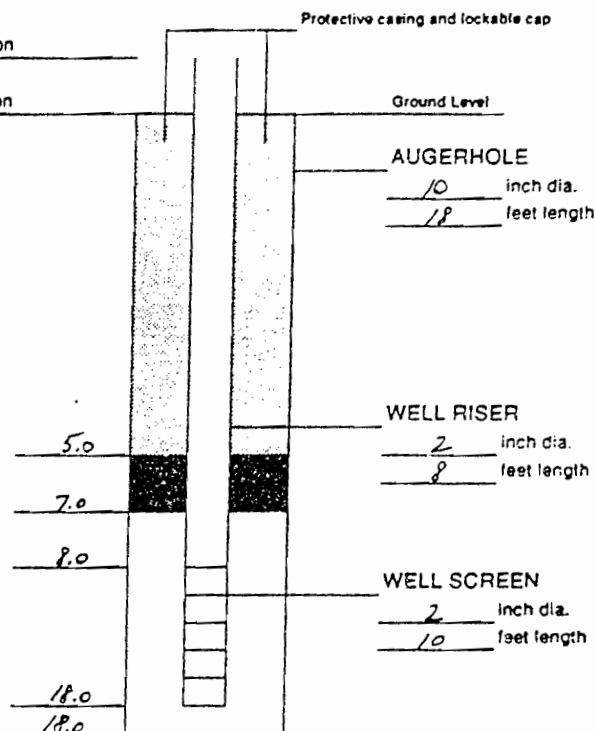
# DRILLING SUMMARY

Geologist:  
*ANDRE LAPRES*  
 Drilling Company:  
*AMERICAN AUGER*  
 Driller:  
*Rocky Baye*  
 Date:  
*12/2/94*

## GEOLOGIC LOG

| depth(ft.) | lithology                                |
|------------|------------------------------------------|
| 0.0-8.0    | FILL                                     |
| 8.0-18.0   | GRAVELLY<br>SILTY MEDIUM<br>TO FINE SAND |

D  
E  
P  
T  
H



\* NOTES:

## WELL DESIGN

| CASING MATERIAL             | SCREEN MATERIAL                         | SEAL MATERIAL                                                            |
|-----------------------------|-----------------------------------------|--------------------------------------------------------------------------|
| Surface: 8 INCH FLUSH MOUNT | Type: SCH 40 PVC                        | Seal #1 Type: $\frac{3}{8}$ " HUEPAC<br>Setting: BENTONITE<br>5.0-7.0 FT |
| Monitor:                    | Slot Size: .010 INCH                    | Seal #2 Type:<br>Setting:                                                |
| FILTER MATERIAL             | ROCK CORING                             | LEGEND                                                                   |
| Type: #0 SAND               | Cored Interval:                         | Cement/Bentonite Grout                                                   |
| Setting: 7.0-18.0 FT        | Core Diameter:                          | Bentonite Seal                                                           |
|                             | Reamed Diameter:                        | Silica Sandpack                                                          |
| Client: <i>NYSDC</i>        | Project: <i>NORTH FRANKLIN ST</i>       | Project No.: <i>053538.00</i>                                            |
| URS<br>Consultants, Inc.    | Monitoring Well<br>Construction Details | Well Number: <i>DW-4</i>                                                 |

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

MW-5D

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION: 10337.81570N 5049.5064E

GROUNDWATER:

DATE TIME LEV TYPE TYPE CAS. SAMP. CORE TUBE

GROUND ELEVATION: 451.62'

12/16/92 445.37 in monitoring well DIA. 2"

DATE STARTED: 12/16/92

WT. 140#

DATE FINISHED: 12/16/92

FALL 30"

DRILLER: Larry Schroeder

GEOLOGIST: Steve Frank

\* POCKET PENETROMETER READING

REVIEWED BY: Duane Lenhardt

| DEPTH<br>FT | STRATA    | SAMPLE |      |                 |                         | DESCRIPTION   |                                       |                                                    |                                                        | CLASS<br>USCS                                                    | REMARKS                                                                                                     |  |
|-------------|-----------|--------|------|-----------------|-------------------------|---------------|---------------------------------------|----------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--|
|             |           | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>/FID (ppm)¹ | COLOR         | CONSISTENCY<br>HARDNESS               | MATERIAL<br>DESCRIPTION                            |                                                        |                                                                  |                                                                                                             |  |
|             | XXXX      | 1*     | SS   | 28              | 30                      | Dark<br>Brown | Very Dense<br><br>Medium Dense        | FILL -<br><br>regraded silty gravel with some sand | GM                                                     | o Moist<br>o Clean Fill                                          |                                                                                                             |  |
|             | XXXX      |        |      | 34              | 16                      |               |                                       |                                                    |                                                        |                                                                  | 50%/7                                                                                                       |  |
|             | XXXX      |        |      | 9               | 10                      |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 3.7         | XXXX      | 2*     | SS   | 12              | 6                       | 70%/0.7       |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 5           | ~ / ~ / ~ | 3*     | SS   | 1               | 1                       | Gray          | Soft<br><br>Medium Stiff<br><br>Stiff | CLAYEY SILT -<br><br>trace fine sand and gravel    | ML/<br>CL                                              | o Very Low Plasticity<br>o Very Moist to Wet<br>o Low Plasticity |                                                                                                             |  |
|             | ~ / ~ / ~ |        |      | 1               | 2                       |               |                                       |                                                    |                                                        |                                                                  | 95%/7                                                                                                       |  |
|             | ~ / ~ / ~ |        |      | 5               | 5                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ | 4      | SS   | 2               | 7                       | 90%/3         |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ |        |      | 4               | 5                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 10          | ~ / ~ / ~ | 5      | SS   | 7               | 6                       | 95%/1.5       |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ | 6      | SS   | 5               | 4                       | 95%/0.4       |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ |        |      | 4               | 6                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 13          | ~ / ~ / ~ |        |      | 2               | 4                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ | 7      | SS   | 6               | 10                      | 60%/0         | Brown                                 | Medium Dense                                       | STRATIFIED SAND AND GRAVEL -<br><br>trace to some silt | GW/<br>SM                                                        | o Wet-Fine Free<br>Water Encountered<br><br>o Variable Texture:<br>Fines more<br>Abundant in Sandy<br>Zones |  |
| 15          | .0 ~ .0 ~ | 8      | SS   | 9               | 6                       | 50%/0         |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ |        |      | 11              | 8                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ | 9      | SS   | 7               | 6                       | 20%/0         |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ |        |      | 6               | 7                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 20          | .0 ~ .0 ~ | 10     | SS   | 4               | 5                       | 10%/0         |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ |        |      | 6               | 9                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ | 11     | SS   | 5               | 6                       | 15%/0         |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | .0 ~ .0 ~ |        |      | 7               | 7                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 22.5        | .0 ~ .0 ~ |        |      | 5               | 3                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ | 12     | SS   | 3               | 3                       | 60%/0         | Gray                                  | Loose                                              | SANDY SILT/SILTY SAND -<br><br>trace clay              | SM/<br>ML                                                        | o Some Peat & Wood                                                                                          |  |
| 25          | ~ / ~ / ~ |        |      | 3               | 3                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ | 13     | SS   | 4               | 5                       | 100%/0        |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ |        |      | 4               | 4                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 28          | ~ / ~ / ~ | 14     | SS   | 6               | 10                      | 100%/0        |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ | 15     | SS   | 2               | 3                       | 100%/0        | Gray                                  | Medium Stiff                                       | CLAYEY SILT -<br><br>trace to some fine sand           | ML/<br>MH                                                        | o Small (<5mm)<br>shells and shell<br>fragments<br>o Laminated                                              |  |
| 30          | ~ / ~ / ~ |        |      | 3               | 3                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             | ~ / ~ / ~ |        |      | 2               | 3                       |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
| 32          | ~ / ~ / ~ | 16     | SS   | 3               | 3                       | 100%/0        |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |
|             |           |        |      |                 |                         |               |                                       | Boring completed at 32 feet                        |                                                        |                                                                  |                                                                                                             |  |
| 35          |           |        |      |                 |                         |               |                                       |                                                    |                                                        |                                                                  |                                                                                                             |  |

## COMMENTS

Boring advanced with 6 1/4" hollow-stem augers; CME SS Drill Rig. Installed monitoring well pair

MW-5D and MW-5S at this location (see well construction log).

\* Screening of soil core.

\* - Environmental samples from 0-5 feet.

PROJECT NO.

35244.00

BORING NO.

MW-5D

| URS CONSULTANTS, Inc.                                           |           |        |                    |                               |                         |             |                         |                             |     | 37                     |                 | TEST BORING LOG          |      |
|-----------------------------------------------------------------|-----------|--------|--------------------|-------------------------------|-------------------------|-------------|-------------------------|-----------------------------|-----|------------------------|-----------------|--------------------------|------|
| PROJECT: N. Franklin St.                                        |           |        |                    |                               |                         |             |                         |                             |     | BORING NO.             |                 | MW-6S                    |      |
| CLIENT: New York State Department of Environmental Conservation |           |        |                    |                               |                         |             |                         |                             |     | SHEET NO. 1 OF 1       |                 | JOB NO. : 35244.00       |      |
| BORING CONTRACTOR: Buffalo Drilling Company                     |           |        |                    |                               |                         |             |                         |                             |     | BORING LOCATION:       |                 | 10340.39303H 3020.28977E |      |
| GROUNDWATER:                                                    |           |        |                    |                               |                         |             |                         |                             |     | CAS.                   | SAMP.           | CORE                     | TUBE |
| DATE                                                            | TIME      | LEV    | TYPE               | TYPE                          |                         |             | SS                      | (split - spoon)             |     | GROUND ELEVATION:      | 450.95'         |                          |      |
| 12/18/92                                                        |           | 446.83 | is monitoring well | DIA.                          |                         |             | 2"                      |                             |     | DATE STARTED:          | 12/14/92        |                          |      |
|                                                                 |           |        |                    | WT.                           |                         |             | 140#                    |                             |     | DATE FINISHED:         | 12/14/92        |                          |      |
|                                                                 |           |        |                    | FALL                          |                         |             | 30"                     |                             |     | DRILLER:               | Larry Schroeder |                          |      |
|                                                                 |           |        |                    | * POCKET PENETROMETER READING |                         |             |                         |                             |     | GEOLOGIST:             | Steve Frank     |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     | REVIEWED BY:           | Duane Lenhardt  |                          |      |
| DEPTH<br>FT                                                     | STRATA    | SAMPLE |                    |                               |                         | DESCRIPTION |                         |                             |     | CLASS<br>USCS          | REMARKS         |                          |      |
|                                                                 |           | NO.    | TYPE               | BLOWS<br>PER 6"               | RECOVERY<br>/PID (ppm)' | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION     |     |                        |                 |                          |      |
|                                                                 | XXXX      |        |                    | 38                            | 16                      | Brown       | Medium Dense            | FILL -                      | GM  | o Moist                |                 |                          |      |
|                                                                 | XXXX      | 1      | SS                 | 9                             | 8                       |             |                         | silty gravel with some sand |     | o Environmental Sample |                 |                          |      |
| 3.5                                                             | XXXX      |        |                    | 5                             | 5                       |             |                         |                             |     | collected at 2-6'      |                 |                          |      |
|                                                                 | /./././.  | 2*     | SS                 | 4                             | 4                       | Gray        | Soft                    | CLAYEY SILT -               | ML/ | o Perched Water at     |                 |                          |      |
| 5                                                               | /./././.  |        |                    | 1                             | 1                       |             |                         | trace sand and gravel       | CL  | Clayey Silt Contact    |                 |                          |      |
|                                                                 | /./././.  | 3*     | SS                 | 2                             | 3                       |             |                         |                             |     | o Very Moist - Wet     |                 |                          |      |
|                                                                 | /./././.  |        |                    | 1                             | 2                       |             |                         |                             |     |                        |                 |                          |      |
|                                                                 | /./././.  | 4      | SS                 | 2                             | 3                       |             |                         |                             |     | o 25 ppm PID           |                 |                          |      |
|                                                                 | /./././.  |        |                    | 1                             | 2                       |             |                         |                             |     | Inside Augers          |                 |                          |      |
| 10                                                              | /./././.  | 5      | SS                 | 2                             | 3                       |             |                         |                             |     | o Low-Med Plasticity   |                 |                          |      |
|                                                                 | /./././.  |        |                    | 1                             | 6                       |             | Very Stiff              |                             |     |                        |                 |                          |      |
| 12                                                              | /./././.  | 6      | SS                 | 12                            | 12                      |             |                         |                             |     |                        |                 |                          |      |
|                                                                 | o.o.o.o.o |        |                    | 6                             | 8                       | Brown       | Medium Dense            | SANDY GRAVEL -              | GM  | o Wet-Free Water       |                 |                          |      |
|                                                                 | o.o.o.o.o | 7      | SS                 | 7                             | 5                       |             |                         | some silt                   |     |                        |                 |                          |      |
| 15                                                              | o.o.o.o.o |        |                    | 8                             | 5                       |             |                         |                             |     |                        |                 |                          |      |
| 16                                                              | o.o.o.o.o | 8      | SS                 | 6                             | 5                       |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         | Boring completed at 16'     |     |                        |                 |                          |      |
| 20                                                              |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
| 25                                                              |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
| 30                                                              |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
|                                                                 |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |
| 35                                                              |           |        |                    |                               |                         |             |                         |                             |     |                        |                 |                          |      |

COMMENTS

Boring advanced with 6 1/4" hollow-stem augers; CMX 55 Drill Rig. Installed monitoring well MW-6S in borehole.

(see well construction log)

\* - Screening of soil core.

\* - Environmental sample from 2-6 feet.

PROJECT NO.

35244.00

BORING NO.

MW-6S

| URS CONSULTANTS, Inc.                                           |          |        |                    |                 |    |                        |          |                         |                                        | 30                            |                                                                                                                                             | TEST BORING LOG             |  |
|-----------------------------------------------------------------|----------|--------|--------------------|-----------------|----|------------------------|----------|-------------------------|----------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|
|                                                                 |          |        |                    |                 |    |                        |          |                         |                                        | BORING NO.                    |                                                                                                                                             | MW-7S                       |  |
| PROJECT: N. Franklin St.                                        |          |        |                    |                 |    |                        |          |                         |                                        | SHEET NO. 1 OF 1              |                                                                                                                                             |                             |  |
| CLIENT: New York State Department of Environmental Conservation |          |        |                    |                 |    |                        |          |                         |                                        | JOB NO. :                     |                                                                                                                                             | 35244.00                    |  |
| BORING CONTRACTOR: Buffalo Drilling Company                     |          |        |                    |                 |    |                        |          |                         |                                        | BORING LOCATION:              |                                                                                                                                             | 10884.75724W 3020.02346E    |  |
| GROUNDWATER:                                                    |          |        |                    |                 |    |                        |          |                         |                                        | CAS.                          |                                                                                                                                             | SAMP. CORE TUBE             |  |
| DATE                                                            | TIME     | LEV    | TYPE               | TYPE            |    | SS                     | (split-) | spoon                   |                                        | DATE STARTED:                 | 12/16/92                                                                                                                                    |                             |  |
| 12/18/92                                                        |          | 444.89 | in monitoring well | DIA.            |    | 2"                     |          |                         |                                        | DATE FINISHED:                | 12/16/92                                                                                                                                    |                             |  |
|                                                                 |          |        |                    | WT.             |    | 140#                   |          |                         |                                        | DRILLER:                      | Mike Saali                                                                                                                                  |                             |  |
|                                                                 |          |        |                    | FALL            |    | 30"                    |          |                         |                                        | GEOLOGIST:                    | Joe Pettorino                                                                                                                               |                             |  |
|                                                                 |          |        |                    |                 |    |                        |          |                         |                                        | * POCKET PENETROMETER READING |                                                                                                                                             | REVIEWED BY: Duane Lenhardt |  |
| DEPTH<br>FT                                                     | STRATA   | SAMPLE |                    |                 |    | RECOVERY<br>/FTD (ypn) | COLOR    | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION                | CLASS<br>USCS                 | REMARKS                                                                                                                                     |                             |  |
|                                                                 |          | NO.    | TYPE               | BLOWS<br>PER 6" |    |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | XXXX     |        |                    | 9               | 24 |                        | Black    | Dense                   | Fill - sand and gravel with trace silt | SW/                           | <ul style="list-style-type: none"> <li>o ~3" Asphalt</li> <li>o HDN broke down</li> <li>o Oily Texture</li> <li>o Moist</li> </ul>          |                             |  |
|                                                                 | XXXX     | 1      | SS                 | 15              | 20 | 50%/#                  | A        |                         |                                        | GW                            |                                                                                                                                             |                             |  |
|                                                                 | XXXX     |        |                    | 9               | 14 |                        | Dark     | Very Dense              |                                        |                               |                                                                                                                                             |                             |  |
| 4                                                               | XXXX     | 2      | SS                 | 37              | 22 | 40%/#                  | Brown    |                         |                                        |                               |                                                                                                                                             |                             |  |
| 5                                                               | ~.~.     |        |                    | 4               | 5  |                        | Gray     | Stiff                   | Clayey Silt - trace sand               | ML/                           | <ul style="list-style-type: none"> <li>o Low Plasticity</li> <li>o Wet</li> <li>o w/Shale Fragments</li> <li>o Coarse-Fine Sands</li> </ul> |                             |  |
| 6                                                               | ~.~.     | 3      | SS                 | 6               | 8  | 60%/#                  |          |                         |                                        | CL                            |                                                                                                                                             |                             |  |
|                                                                 | .0.0.0.0 |        |                    | 8               | 10 |                        | Gray     | Medium Dense            | Gravelly sand - some silt; trace clay  | SM                            |                                                                                                                                             |                             |  |
|                                                                 | .0.0.0.0 | 4      | SS                 | 11              | 17 | 50%/#                  |          |                         |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | ~.~.     |        |                    | 5               | 7  |                        |          |                         |                                        |                               | <ul style="list-style-type: none"> <li>o Few Thin Post Beds</li> <li>o 1/4" orange clay seam</li> <li>o Fine subrounded gravel</li> </ul>   |                             |  |
| 10                                                              | .0.0.0.0 | 5      | SS                 | 7               | 7  | 30%/#                  |          |                         |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | .0.0.0.0 |        |                    | 3               | 2  |                        | Brownish | Loose to medium dense   |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | ~.~.     | 6      | SS                 | 2               | 2  | 70%/#                  | Gray     |                         |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | .0.0.0.0 |        |                    | 1               | 3  |                        |          |                         |                                        |                               | <ul style="list-style-type: none"> <li>o Stratified sand and gravel</li> </ul>                                                              |                             |  |
|                                                                 | .0.0.0.0 | 7      | SS                 | 4               | 3  | 70%/#                  |          |                         |                                        |                               |                                                                                                                                             |                             |  |
| 15                                                              | ~.~.     |        |                    | 4               | 5  |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |
|                                                                 | .0.0.0.0 | 8      | SS                 | 6               | 7  | 40%/#                  |          |                         |                                        |                               |                                                                                                                                             |                             |  |
| 17                                                              | .0.0.0.0 |        |                    |                 |    |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |
| 20                                                              |          |        |                    |                 |    |                        |          |                         | Borehole completed at 17'              |                               |                                                                                                                                             |                             |  |
| 25                                                              |          |        |                    |                 |    |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |
| 30                                                              |          |        |                    |                 |    |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |
| 35                                                              |          |        |                    |                 |    |                        |          |                         |                                        |                               |                                                                                                                                             |                             |  |

# COMMENTS

Boring advanced with 6 1/2" hollow-stem augers; Dietrich D-50 Drill Rig. Installed monitoring well MW-7S in bore hole.

(see well construction log)

# - No PID readings due to instrument malfunction.

\* - Environmental sample from 2-4'

PROJECT NO.

35244.00

BORING NO.

MW-7S

| URS CONSULTANTS, Inc.                                           |         |        |                    |                 |                         |                |                         |                                     |                 | 30                            |         | TEST BORING LOG             |  |
|-----------------------------------------------------------------|---------|--------|--------------------|-----------------|-------------------------|----------------|-------------------------|-------------------------------------|-----------------|-------------------------------|---------|-----------------------------|--|
|                                                                 |         |        |                    |                 |                         |                |                         |                                     |                 | BORING NO.                    |         | MW-8D                       |  |
| PROJECT: N. Franklin St.                                        |         |        |                    |                 |                         |                |                         |                                     |                 | SHEET NO. 1 OF 1              |         |                             |  |
| CLIENT: New York State Department of Environmental Conservation |         |        |                    |                 |                         |                |                         |                                     |                 | JOB NO. :                     |         | 35244.00                    |  |
| BORING CONTRACTOR: Buffalo Drilling Company                     |         |        |                    |                 |                         |                |                         |                                     |                 | BORING LOCATION:              |         | 10358.84074N 3172.61607E    |  |
| GROUNDWATER:                                                    |         |        |                    |                 |                         |                |                         |                                     |                 | CAS.                          |         | SAMP. CORE TUBE             |  |
| DATE                                                            | TIME    | LEV    | TYPE               | TYPE            | SS                      | (split- spoon) | GROUND ELEVATION:       |                                     | 451.29          |                               |         |                             |  |
| 12/18/92                                                        |         | 443.20 | in monitoring well | DIA.            | 2"                      |                | DATE STARTED:           |                                     | 12/15/92        |                               |         |                             |  |
|                                                                 |         |        |                    | WT.             | 140#                    |                | DATE FINISHED:          |                                     | 12/15/92        |                               |         |                             |  |
|                                                                 |         |        |                    | FALL            | 30"                     |                | DRILLER:                |                                     | Larry Schroeder |                               |         |                             |  |
|                                                                 |         |        |                    |                 |                         |                |                         |                                     |                 | GEOLOGIST:                    |         | Steve Frank                 |  |
|                                                                 |         |        |                    |                 |                         |                |                         |                                     |                 | * POCKET PENETROMETER READING |         | REVIEWED BY: Duane Lenhardt |  |
| DEPTH<br>FT                                                     | STRATA  | SAMPLE |                    |                 |                         | DESCRIPTION    |                         |                                     |                 | CLASS                         | REMARKS |                             |  |
|                                                                 |         | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>/PID (ppm)¹ | COLOR          | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION             | USCS            |                               |         |                             |  |
|                                                                 | XXXX    |        |                    | 57              | 30                      | Dark           | Dense                   | FILL                                | GM/             | o Dry                         |         |                             |  |
|                                                                 | XXXX    | 1*     | SS                 | 5               | 25                      | Brown &        |                         | silt and gravel with some sand      | ML              | o Moist                       |         |                             |  |
| 3                                                               | XXXX    |        |                    | 16              | 20                      | Black          |                         | and asphalt                         |                 |                               |         |                             |  |
|                                                                 | o~o~o~o | 2*     | SS                 | 17              | 10                      | Brownish       | Dense                   | Gravelly Silt - trace; some sand    | ML              | o Moist                       |         |                             |  |
| 4.5                                                             | ~o~o~o  |        |                    | 3               | 3                       | Gray           |                         |                                     |                 | o Moist                       |         |                             |  |
|                                                                 | ~o~o~o  | 3*     | SS                 | 3               | 4                       | Gray           | Medium Stiff            | Clayey Silt - trace fine sand and   | ML              | o Moist                       |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 3               | 5                       |                | to Stiff                | gravel                              |                 |                               |         |                             |  |
| 7.5                                                             | ~o~o~o  | 4      | SS                 | 12              | 16                      |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 13              | 3                       | Gray           | Loose                   | Silty Sand and Gravel               | SM/             | o Wet                         |         |                             |  |
| 10                                                              | ~o~o~o  | 5      | SS                 | 2               | 4                       |                |                         |                                     | GM              | o Fine to Coarse              |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 5               | 6                       |                | Medium Dense            |                                     |                 | Angular to Subround           |         |                             |  |
|                                                                 | ~o~o~o  | 6      | SS                 | 7               | 8                       |                |                         |                                     |                 | Gravel                        |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 10              | 13                      |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  | 7      | SS                 | 12              | 10                      |                |                         |                                     |                 |                               |         |                             |  |
| 15                                                              | ~o~o~o  |        |                    | 12              | 6                       |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  | 8      | SS                 | 7               | 8                       |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 9               | 7                       |                |                         | - increase in Stratified Gravel     | GW              |                               |         |                             |  |
|                                                                 | ~o~o~o  | 9      | SS                 | 5               | 6                       |                |                         | lenses with depth                   |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 10              | 7                       |                |                         |                                     |                 |                               |         |                             |  |
| 20                                                              | ~o~o~o  | 10     | SS                 | 8               | 4                       |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 5               | 6                       |                | Loose                   |                                     | GW/             |                               |         |                             |  |
| 22                                                              | ~o~o~o  | 11     | SS                 | 4               | 4                       |                |                         |                                     | GM              |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 4               | 3                       | Gray           | Very Loose              | Silty Sand/Sandy Silt - trace fine  | SM/             |                               |         |                             |  |
|                                                                 | ~o~o~o  | 12     | SS                 | 1               | 3                       |                |                         | gravel; trace clay                  | ML              |                               |         |                             |  |
| 25                                                              | ~o~o~o  |        |                    | 1               | 2                       |                | Loose                   |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  | 13     | SS                 | 4               | 4                       |                |                         |                                     |                 |                               |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 2               | 5                       |                | Medium Dense            |                                     |                 |                               |         |                             |  |
| 28                                                              | ~o~o~o  | 14     | SS                 | 6               | 8                       |                |                         |                                     |                 | o Finely Laminated            |         |                             |  |
|                                                                 | ~o~o~o  |        |                    | 12              | 4                       | Gray           | Stiff                   | CLAYEY SILT-                        | ML/             | o Small (<5mm)                |         |                             |  |
| 30                                                              | ~o~o~o  | 15     | SS                 | 6               | 7                       |                |                         | some very thin sandy silt interbeds | MH              | Shell Fragments               |         |                             |  |
|                                                                 |         |        |                    |                 |                         |                |                         | Boring completed at 30 feet         |                 |                               |         |                             |  |
| 35                                                              |         |        |                    |                 |                         |                |                         |                                     |                 |                               |         |                             |  |

COMMENTS Boring advanced with 6 1/4" hollow-stem auger; CME SS Drill Rig. Installed monitoring well pair MW-8D and MW-8S installed at this location (see well construction log)

- ¹ - Environmental sample from 0-6"  
¹ - Screening of soil core.

PROJECT NO.  
BORING NO.

35244.00  
MW-8D

| URS CONSULTANTS, Inc.                                           |        |        |                    |                 |                       |                  |                          |                                                  |           | 40                                                                                          | TEST BORING LOG  |                          |                             |
|-----------------------------------------------------------------|--------|--------|--------------------|-----------------|-----------------------|------------------|--------------------------|--------------------------------------------------|-----------|---------------------------------------------------------------------------------------------|------------------|--------------------------|-----------------------------|
|                                                                 |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             | BORING NO. MW-9S |                          |                             |
| PROJECT: N. Franklin St.                                        |        |        |                    |                 |                       |                  |                          |                                                  |           | SHEET NO. 1 OF 1                                                                            |                  |                          |                             |
| CLIENT: New York State Department of Environmental Conservation |        |        |                    |                 |                       |                  |                          |                                                  |           | JOB NO.: 35244.10.30000                                                                     |                  |                          |                             |
| BORING CONTRACTOR: Buffalo Drilling Company                     |        |        |                    |                 |                       |                  |                          |                                                  |           | BORING LOCATION: 10481.12111N 5168.32913E                                                   |                  |                          |                             |
| GROUNDWATER:                                                    |        |        |                    |                 |                       |                  |                          |                                                  |           | CAS.                                                                                        | SAMP.            | CORE TUBE                | GROUND ELEVATION: 451.53'   |
| DATE                                                            | TIME   | LEV    | TYPE               | TYPE            |                       |                  |                          |                                                  |           |                                                                                             |                  | DATE STARTED: 12/13/92   |                             |
| 12/18/92                                                        |        | 445.12 | in monitoring well | DIA.            |                       |                  | 2"                       |                                                  |           |                                                                                             |                  | DATE FINISHED: 12/13/92  |                             |
|                                                                 |        |        |                    | WT.             |                       |                  | 140#                     |                                                  |           |                                                                                             |                  | DRILLER: Larry Schroeder |                             |
|                                                                 |        |        |                    | FALL            |                       |                  | 30"                      |                                                  |           |                                                                                             |                  | GEOLOGIST: Mindar Hsieh  |                             |
|                                                                 |        |        |                    |                 |                       |                  |                          |                                                  |           | * POCKET PENETROMETER READING                                                               |                  |                          | REVIEWED BY: Duane Lenhardt |
| DEPTH<br>FT                                                     | STRATA | SAMPLE |                    |                 |                       | DESCRIPTION      |                          |                                                  |           | CLASS<br>USCS                                                                               | REMARKS          |                          |                             |
|                                                                 | XXXX   | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm)' | COLOR            | CONSISTENCY<br>HARDNESS  | MATERIAL<br>DESCRIPTION                          |           |                                                                                             |                  |                          |                             |
|                                                                 | XXXX   | 1      | SS                 | 23 24           | 80%/0                 | Brown/<br>Yellow | Dense to<br>Very Dense   | FILL -<br>silty sand, some gravel, trace<br>clay | SM/<br>SW | o HNT: no detection<br>o 0-6" Wet<br>o Difficult Augering<br>1.5-6'<br>o Spoon Refusal 4-6' |                  |                          |                             |
|                                                                 | XXXX   | 2      | SS                 | 12 50/1"        | 15%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 5                                                               | XXXX   |        |                    | 50/1"           |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 6                                                               | XXXX   | 3      | SS                 |                 | 0                     |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ |        |                    | 8 9             |                       | Gray             | Medium Dense<br>to Dense | GRAVELLY SAND -<br>trace silt and clay           | SM        | o Medium-Coarse Sand<br>o Coarse Fragments<br>up to 1 1/4"<br>o Mixed Lithology             |                  |                          |                             |
|                                                                 | .0~.0~ | 4      | SS                 | 17 15           | 50%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ |        |                    | 7 8             |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 10                                                              | .0~.0~ | 5      | SS                 | 10 7            | 40%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ |        |                    | 12 22           |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ | 6      | SS                 | 13 14           | 40%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ |        |                    | 5 11            |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 | .0~.0~ | 7      | SS                 | 6 6             | 20%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 15                                                              | .0~.0~ |        |                    | 7 6             |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 16                                                              | .0~.0~ | 8      | SS                 | 5 5             | 20%/0                 |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 |        |        |                    |                 |                       |                  |                          | Borehole completed at 16.0'.                     |           |                                                                                             |                  |                          |                             |
| 20                                                              |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 25                                                              |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 30                                                              |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
|                                                                 |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |
| 35                                                              |        |        |                    |                 |                       |                  |                          |                                                  |           |                                                                                             |                  |                          |                             |

**COMMENTS**

Boring advanced with 6 1/4" hollow stem augers; CME 55 Drill Rig. Installed monitoring well MW-9S at this location.  
(see well construction log)

- \* - Screening of soil core.
- \* - Environmental sample from 0-4'.

PROJECT NO.  
BORING NO.

35244.10.30000  
MW-9S

## URS CONSULTANTS, Inc.

41

## TEST BORING LOG

BORING NO.

MW-10D

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION: 10518.56431N 72572.92323E

GROUNDWATER:

CAS.

SAMP.

CORE/TUBE

GROUND ELEVATION: 451.86ft.

DATE

TIME

LEV

TYPE

TYPE

SS

(split-spoon)

DATE STARTED:

12/11/92

12/12/92

645.04

is monitoring well

DIA.

2"

DATE FINISHED:

12/11/92

WT.

140#

DRILLER:

Mike Saeki

FALL

30"

GEOLOGIST:

Steve Frank

\* POCKET PENETROMETER READING

REVIEWED BY:

Duane Lenhardt

| DEPTH<br>FT | STRATA | SAMPLE |      |                 |                      | DESCRIPTION |                          |                                             |     | CLASS<br>USCS | REMARKS                                       |
|-------------|--------|--------|------|-----------------|----------------------|-------------|--------------------------|---------------------------------------------|-----|---------------|-----------------------------------------------|
|             |        | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>PID(ypm) | COLOR       | CONSISTENCY<br>HARDNESS  | MATERIAL<br>DESCRIPTION                     |     |               |                                               |
|             | XXXX   |        |      | 54              | 16                   | Dark        | Dense                    | FILL -                                      | SM/ |               | o Moist                                       |
|             | XXXX   | 1*     | SS   | 17              | 34                   | Brown &     |                          | silty sand and gravel road subgrade         | GM  |               |                                               |
|             | XXXX   |        |      | 5               | 7                    | Black       | Medium Dense             |                                             |     |               | o Environmental Sample<br>collected 0-6'      |
|             | XXXX   | 2*     | SS   | 7               | 9                    |             |                          |                                             |     |               | o Few Brick Fragments                         |
| 5           | XXXX   |        |      | 10              | 12                   | Brown       |                          |                                             |     |               |                                               |
| 6           | XXXX   | 3*     | SS   | 12              | 11                   |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 |        |      | 10              | 9                    | Brown       | Medium Dense             | SILTY SAND AND GRAVEL                       | GM/ |               | o Wet                                         |
|             | ~.0~.0 | 4      | SS   | 9               | 10                   |             |                          |                                             | GM  |               | o Fine-Coarse Sand                            |
|             | ~.0~.0 |        |      | 7               | 8                    |             |                          |                                             |     |               | o Mostly Fine-Med.<br>Subangular Gravel       |
| 10          | ~.0~.0 | 5      | SS   | 16              | 15                   |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 |        |      | 7               | 22                   |             | Very Dense               | - Well Sorted Medium Sand<br>to fine gravel | SW  |               |                                               |
|             | ~.0~.0 | 6      | SS   | 33              | 31                   |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 |        |      | 8               | 13                   |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 | 7      | SS   | 34              | 19                   |             |                          | - Variable Texture                          | GM/ |               |                                               |
| 15          | ~.0~.0 |        |      | 9               | 10                   |             | Medium Dense             |                                             | SM/ |               |                                               |
|             | ~.0~.0 | 8      | SS   | 10              | 14                   |             |                          |                                             | SM  |               |                                               |
|             | ~.0~.0 |        |      | 6               | 9                    |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 | 9      | SS   | 9               | 9                    |             |                          |                                             |     |               | o Coarse Gravel<br>fragment in end of sampler |
|             | ~.0~.0 |        |      | 8               | 9                    |             |                          |                                             |     |               |                                               |
| 20          | ~.0~.0 | 10     | SS   | 10              | 10                   |             |                          |                                             |     |               |                                               |
|             | ~.0~.0 |        |      | 7               | 7                    |             |                          |                                             |     |               |                                               |
| 22          | ~.0~.0 | 11     | SS   | 10              | 12                   |             |                          |                                             |     |               |                                               |
|             | ~.~.~  |        |      | 3               | 6                    | Gray        | Medium Dense<br>to Loose | SILTY SAND/SANDY SILT -                     | SM/ |               |                                               |
|             | ~.~.~  | 12     | SS   | 13              | 15                   |             |                          |                                             | ML  |               |                                               |
| 25          | ~.~.~  |        |      | 3               | 4                    |             |                          |                                             |     |               |                                               |
|             | ~.~.~  | 13     | SS   | 4               | 6                    |             |                          |                                             |     |               |                                               |
|             | ~.~.~  |        |      | WH              | 2                    |             |                          | trace clay                                  |     |               | o Wood Fragments<br>and Post                  |
|             | ~.~.~  | 14     | SS   | 2               | 3                    |             |                          | grades to                                   |     |               |                                               |
| 29          | ~.~.~  |        |      | WH              | 2                    |             |                          |                                             |     |               |                                               |
| 30          | ~.~.~  | 15     | SS   | 2               | 2                    | Gray        | Soft                     | CLAYEY SILT                                 | ML  |               | o Sticky-Low plasticity                       |
|             |        |        |      |                 |                      |             |                          | Boring completed at 30'                     |     |               |                                               |
|             |        |        |      |                 |                      |             |                          |                                             |     |               |                                               |
|             |        |        |      |                 |                      |             |                          |                                             |     |               |                                               |
| 35          |        |        |      |                 |                      |             |                          |                                             |     |               |                                               |

## COMMENTS

Boring advanced with 6 1/2" hollow-stem augers; Diodrich D-50 Drift Rig. Installed monitoring well MW-10D and MW-10S at this location.

(see well construction log)

\* Environmental Sample 0-6'

# - No PID readings due to instrument malfunction

PROJECT NO.

35244.00

BORING NO.

MW-10D

## URS CONSULTANTS, Inc.

42

## TEST BORING LOG

BORING NO.

MW-11D

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION:

10610.12174N 5081.60644E

GROUNDWATER:

CAS.

SAMP.

CORE

TUBE

GROUND ELEVATION: 450.92'

DATE

TIME

LEV

TYPE

TYPE

SS

Sclby

DATE STARTED:

12/10/92

12/18/92

443.00

is monitoring well

DIA.

2"

3"

DATE FINISHED:

12/10/92

WT.

140#

DRILLER:

Larry Schroeder

FALL

30"

GEOLOGIST:

Joe Pettorino

REVIEWED BY:

Duane Lenhardt

DEPTH

STRATA

SAMPLE

NO.

TYPE

BLOWS

RECOVERY

COLOR

CONSISTENCY

HARDNESS

MATERIAL

DESCRIPTION

CLASS

USCS

REMARKS

## URS CONSULTANTS, Inc.

43

## TEST BORING LOG

BORING NO.

MW-12S

PROJECT: N. Franklin St.

CLIENT: New York State Department of Environmental Conservation

BORING CONTRACTOR: Buffalo Drilling Company

GROUNDWATER: ~7 ft.

DATE: 12/18/92

TIME: 644.60

LEV: in monitoring well

TYPE: DIA.

WT: 140#

FALL: 30"

\* POCKET PENETROMETER READING

SHEET NO. 1 OF 1

JOB NO.: 35244.00

BORING LOCATION:

GROUND ELEVATION: 450.59

DATE STARTED: 12/13/92

DATE FINISHED: 12/13/92

DRILLER: Mike Saeki

GEOLOGIST: Joe Pettorino

REVIEWED BY: Duane Lenhard

| DEPTH<br>FT | STRATA   | SAMPLE |      |                 |                       | DESCRIPTION |                         |                                                              | CLASS<br>USCS | REMARKS                                  |                                    |
|-------------|----------|--------|------|-----------------|-----------------------|-------------|-------------------------|--------------------------------------------------------------|---------------|------------------------------------------|------------------------------------|
|             |          | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm)' | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION                                      |               |                                          |                                    |
|             | XXXX     |        |      | 5               | 9                     | Dark        | Medium Dense            | FILL -                                                       | SM            |                                          |                                    |
|             | XXXX     | 1*     | SS   | 9               | 7                     | Brown       | Medium Dense            | 6" topsoil to sandy fill w/ silt & gravel                    |               |                                          |                                    |
|             | ..O..O.. |        |      | 9               | 8                     | Brown       | Medium Dense            | GRAVELLY SAND -<br>trace silt<br><br>- Gravelly seams to 16' | SW            | o Environmental Sample<br>collected 0-4" |                                    |
|             | ..O..O.. | 2*     | SS   | 18              | 31                    |             |                         |                                                              |               | o Fine-Coarse Sand                       |                                    |
| 5           | ..O..O.. |        |      | 9               | 12                    |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. | 3      | SS   | 9               | 8                     |             |                         |                                                              |               | SW/<br>GW                                | o Fine-Medium<br>Subangular Gravel |
|             | ..O..O.. |        |      | 12              | 6                     |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. | 4      | SS   | 5               | 3                     |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. |        |      | 2               | 2                     |             |                         |                                                              |               |                                          |                                    |
| 10          | ..O..O.. | 5      | SS   | 3               | 2                     |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. |        |      | 8               | 12                    |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. | 6      | SS   | 11              | 11                    |             |                         |                                                              |               | SW                                       |                                    |
|             | ..O..O.. |        |      | 7               | 6                     |             |                         |                                                              |               |                                          |                                    |
|             | ..O..O.. | 7      | SS   | 5               | 5                     |             |                         |                                                              |               |                                          |                                    |
| 15          | ..O..O.. |        |      | 3               | 3                     |             |                         |                                                              |               |                                          |                                    |
| 16          | ..O..O.. | 8      | SS   | 4               | 4                     |             |                         |                                                              |               | o 1/8" Peat Seam                         |                                    |
|             |          |        |      |                 |                       |             |                         | Borehole completed at 15'                                    |               |                                          |                                    |
| 20          |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
| 25          |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
| 30          |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
|             |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |
| 35          |          |        |      |                 |                       |             |                         |                                                              |               |                                          |                                    |

## COMMENTS

Boring advanced with 6 1/4" hollow-stem augers; Diedrich D-50 Drill Rig. Installed monitoring well MW-12S in bore hole.  
(see well construction log)

\* - Environmental sample 0-4'

! - Screening of soil core.

PROJECT NO.

35244.00

BORING NO.

MW-12S

| URS CONSULTANTS, Inc.                                           |             |        |                    |                 |                      |             |                         |                         |                                    | A-4                           |                        | TEST BORING LOG          |      |
|-----------------------------------------------------------------|-------------|--------|--------------------|-----------------|----------------------|-------------|-------------------------|-------------------------|------------------------------------|-------------------------------|------------------------|--------------------------|------|
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    | BORING NO.                    |                        | MW-13S                   |      |
| PROJECT: N. Franklin St.                                        |             |        |                    |                 |                      |             |                         |                         |                                    | SHEET NO. 1 OF 1              |                        |                          |      |
| CLIENT: New York State Department of Environmental Conservation |             |        |                    |                 |                      |             |                         |                         |                                    | JOB NO. :                     |                        | 35244.00                 |      |
| BORING CONTRACTOR: Buffalo Drilling Company                     |             |        |                    |                 |                      |             |                         |                         |                                    | BORING LOCATION:              |                        | 10438.16435N 5278.81286E |      |
| GROUNDWATER:                                                    |             |        |                    |                 |                      |             |                         |                         |                                    | CAS.                          | SAMP.                  | CORE                     | TUBE |
| DATE                                                            | TIME        | LEV    | TYPE               | TYPE            |                      |             |                         | SS                      | (split-spoon)                      | GROUND ELEVATION: 452.15      |                        |                          |      |
| 12/18/92                                                        |             | 445.05 | in monitoring well | DIA.            |                      |             |                         | 2"                      |                                    | DATE STARTED: 12/13/92        |                        |                          |      |
|                                                                 |             |        |                    | WT.             |                      |             |                         | 140#                    |                                    | DATE FINISHED: 12/13/92       |                        |                          |      |
|                                                                 |             |        |                    | FALL            |                      |             |                         | 30"                     |                                    | DRILLER: Mike Sacli           |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    | GEOLOGIST: Joe Pettorino      |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    | REVIEWED BY: Duane Lenhardt   |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    | * POCKET PENETROMETER READING |                        |                          |      |
| DEPTH<br>FT                                                     | STRATA      | SAMPLE |                    |                 |                      | DESCRIPTION |                         |                         |                                    | CLASS                         | REMARKS                |                          |      |
|                                                                 |             | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm) | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION | USCS                               |                               |                        |                          |      |
|                                                                 | XXXX        |        |                    | 20              | 47                   |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 | XXXX        | 1      | SS                 | 10              | 25                   | 80%/#       | Brown                   | Very Dense              | FILL -                             | GW/                           | o Moist                |                          |      |
|                                                                 | XXXX        |        |                    | 14              | 17                   |             |                         | Medium Dense            | sand and gravel w/ trace silt.     | SW                            | o Environmental Sample |                          |      |
| 4                                                               | XXXX        | 2*     | SS                 | 14              | 15                   | 40%/#       |                         |                         | brick and asphalt becoming sandier |                               | o Moist                |                          |      |
| 5                                                               | \~\~\~      |        |                    | 2               | 4                    |             | Brown                   | Medium Stiff            | with depth                         |                               | o Orange Mottles       |                          |      |
| 6                                                               | \~\~\~      | 3*     | SS                 | 4               | 6                    | 60%/#       |                         |                         | CLAYEY SILT                        | ML                            |                        |                          |      |
|                                                                 | ...o...o... |        |                    | 6               | 9                    |             | Brown                   | Medium Dense            | STRATIFIED SAND AND GRAVEL -       | SW/                           | o Fine-Coarse          |                          |      |
|                                                                 | ...o...o... | 4      | SS                 | 10              | 11                   | 40%/#       |                         |                         | trace silt                         | GW                            | o Sand and Gravel      |                          |      |
|                                                                 | ~o...~o...  |        |                    | 6               | 8                    |             |                         |                         |                                    |                               | o Numerous Shale       |                          |      |
| 10                                                              | ...o...o... | 5      | SS                 | 8               | 11                   | 40%/#       |                         |                         |                                    |                               | o Fragments            |                          |      |
|                                                                 | ...o...o... |        |                    | 6               | 14                   |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 | ~o...~o...  | 6      | SS                 | 7               | 8                    | 30%/#       |                         |                         |                                    |                               | o Some Rounded Gravel  |                          |      |
|                                                                 | ...o...o... |        |                    | 4               | 10                   |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 | ...o...o... | 7      | SS                 | 15              | 21                   | 40%/#       |                         |                         |                                    |                               | o Shale Fragments      |                          |      |
| 15                                                              | ~o...~o...  |        |                    | 9               | 16                   |             |                         |                         |                                    |                               |                        |                          |      |
| 16                                                              | ...o...o... | 8      | SS                 | 14              | 16                   | 40%/#       |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         | Borehole complete at 16'           |                               |                        |                          |      |
| 20                                                              |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
| 25                                                              |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
| 30                                                              |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
|                                                                 |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |
| 35                                                              |             |        |                    |                 |                      |             |                         |                         |                                    |                               |                        |                          |      |

COMMENTS      Boring advanced with 6 1/4" hollow-stem augers; Diedrich D-50 Drill Rig. Installed monitoring well MW-13S in borehole.  
 (see well construction log)

\* - Environmental sample 2-6'

# - No PID reading due to instrument malfunction

PROJECT NO.      35244.00

BORING NO.      MW-13S

| URS CONSULTANTS, Inc.                                           |          |        |                    |                 |                       |             |                         |                                  |        | 45                            |         | TEST BORING LOG             |  |
|-----------------------------------------------------------------|----------|--------|--------------------|-----------------|-----------------------|-------------|-------------------------|----------------------------------|--------|-------------------------------|---------|-----------------------------|--|
| PROJECT: N. Franklin St.                                        |          |        |                    |                 |                       |             |                         |                                  |        | BORING NO.                    |         | MW-14D                      |  |
| CLIENT: New York State Department of Environmental Conservation |          |        |                    |                 |                       |             |                         |                                  |        | SHEET NO. 1 OF 1              |         | JOB NO.: 35244.00           |  |
| BORING CONTRACTOR: Buffalo Drilling Company                     |          |        |                    |                 |                       |             |                         |                                  |        | BORING LOCATION:              |         | 10349.70283N 5270.1798WE    |  |
| GROUNDWATER:                                                    |          |        |                    |                 |                       |             |                         |                                  |        | CAS.                          |         | SAMP. CORE TUBE             |  |
| DATE                                                            | TIME     | LEV    | TYPE               | TYPE            |                       |             | SS                      |                                  | Shelby | GROUND ELEVATION: 451.64'     |         |                             |  |
| 12/18/92                                                        |          | 445.14 | in monitoring well | DIA.            |                       |             | 2"                      |                                  | 3"     | DATE STARTED: 12/08/92        |         |                             |  |
|                                                                 |          |        |                    | WT.             |                       |             | 140#                    |                                  |        | DATE FINISHED: 12/08/92       |         |                             |  |
|                                                                 |          |        |                    | FALL            |                       |             | 30"                     |                                  |        | DRILLER: Larry Schroeder      |         |                             |  |
|                                                                 |          |        |                    |                 |                       |             |                         |                                  |        | GEOLOGIST: Steve Frank        |         |                             |  |
|                                                                 |          |        |                    |                 |                       |             |                         |                                  |        | * POCKET PENETROMETER READING |         | REVIEWED BY: Duane Lenhardt |  |
| DEPTH<br>FT                                                     | STRATA   | SAMPLE |                    |                 |                       | DESCRIPTION |                         |                                  |        | CLASS                         | REMARKS |                             |  |
|                                                                 |          | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm)¹ | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION          | USCS   |                               |         |                             |  |
|                                                                 | XXXX     |        |                    | 15              | 55                    | Dark        | Very Dense              | FILL -                           | ML     | o Environmental Sample        |         |                             |  |
|                                                                 | XXXX     | 1*     | SS                 | 45              | 35                    | Brown       |                         | sandy silt matrix w/ some gravel |        | collected 1-4'                |         |                             |  |
|                                                                 | XXXX     |        |                    | 9               | 10                    | & Black     | Medium Dense            | brick and concrete fragments     |        |                               |         |                             |  |
| 4                                                               | XXXX     | 2*     | SS                 | 11              | 11                    |             |                         |                                  |        |                               |         |                             |  |
| 5                                                               | ~.~.     |        |                    | 8               | 6                     | Brown       | Medium Dense            | SANDY SILT                       | ML     | o Mottled                     |         |                             |  |
| 6                                                               | ~.~.     | 3      | SS                 | 7               | 11                    | & Gray      |                         | trace clay                       |        | o Moist, Friable              |         |                             |  |
|                                                                 | ..O..    |        |                    | 4               | 5                     | Brown       | Loose                   | SILTY SAND AND GRAVEL            | GM/    |                               |         |                             |  |
|                                                                 | ..O..    | 4      | SS                 | 3               | 4                     |             |                         |                                  | SM     | o Fine to Medium              |         |                             |  |
|                                                                 | ..O..    |        |                    | 5               | 2                     |             |                         |                                  |        | Gravel-Seabound               |         |                             |  |
| 10                                                              | ..O..    | 5      | SS                 | 8               | 7                     |             |                         |                                  |        | to Angular                    |         |                             |  |
|                                                                 | ..O..    |        |                    | 10              | 14                    |             | Medium Dense            |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    | 6      | SS                 | 12              | 9                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    |        |                    | 8               | 13                    |             |                         | GRAVELLY SAND -                  | SW/    |                               |         |                             |  |
|                                                                 | ..O..    | 7      | SS                 | 13              | 16                    |             |                         | trace to some silt               | SM     |                               |         |                             |  |
| 15                                                              | ..O..    |        |                    | 10              | 7                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    | 8      | SS                 | 6               | 4                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    |        |                    | 8               | 9                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    | 9      | SS                 | 18              | 28                    |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    |        |                    | 8               | 9                     |             |                         |                                  |        |                               |         |                             |  |
| 20                                                              | ..O..    | 10     | SS                 | 17              | 26                    |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..O..    |        |                    | 10              | 13                    |             | Dense                   |                                  |        |                               |         |                             |  |
| 22                                                              | ..O..    | 11     | SS                 | 19              | 21                    |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..~..    |        |                    | 7               | 6                     | Gray        | Loose                   | SILTY SAND/SANDY SILT -          | SM/    |                               |         |                             |  |
|                                                                 | ..~..    | 12     | SS                 | 4               | 3                     |             |                         | trace clay                       | ML     |                               |         |                             |  |
| 25                                                              | ..~..    |        |                    | 3               | 3                     |             |                         |                                  |        | o Few Wood Fragments          |         |                             |  |
|                                                                 | ..~..    | 13     | SS                 | 6               | 8                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..~..    |        |                    | 3               | 4                     |             | Medium Dense            |                                  |        |                               |         |                             |  |
|                                                                 | ..~..    | 14     | SS                 | 8               | 8                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ..~..    |        |                    | 5               | 5                     |             | Loose                   |                                  |        |                               |         |                             |  |
| 30                                                              | ..~..    | 15     | SS                 | 5               | 7                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ~./~./~. |        |                    | WR              | 3                     | Gray        | Stiff to                | CLAYEY SILT -                    | ML/    | o Sticky w/ Low               |         |                             |  |
|                                                                 | ~./~./~. | 16     | SS                 | 6               | 8                     |             | Medium Stiff            | trace to some sand, trace gravel | MC     | Plasticity                    |         |                             |  |
|                                                                 | ~./~./~. |        |                    | WR              | 5                     |             |                         |                                  |        |                               |         |                             |  |
|                                                                 | ~./~./~. | 17     | SS                 | 5               | 7                     |             |                         |                                  |        | o Small (<5mm)                |         |                             |  |
| 35                                                              | ~./~./~. |        |                    | WH              | 3                     |             |                         |                                  |        | Shells and Shell              |         |                             |  |
|                                                                 | ~./~./~. | 18     | ST                 | 4               | 4                     |             |                         |                                  |        | Fragments                     |         |                             |  |

Borehole completed w/ Shelby Tube ST-1 34-38"

COMMENTS Boring advanced with 6 1/2" hollow-stem augers; CMH 55 Drill Rig. Installed monitoring well pair

MW-14D and MW-14S at this location (see well construction log).

¹ Environmental sample at 1-4'

² Screening of soil core.

PROJECT NO.

35244.00

BORING NO.

MW-14D

# URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

MW-155

PROJECT: N. Franklin St.

CLIENT: New York State Department of Environmental Conservation

BORING CONTRACTOR: Buffalo Drilling Company

SHEET NO. 1 OF 1

JOB NO.: 35244.00

BORING LOCATION: 10287.14422N 5249.77460E

GROUNDWATER: CAS. SAMP. CORE TUBE GROUND ELEVATION: 450.69'

DATE TIME LEV TYPE TYPE SS (split-spoon) DATE STARTED: 12/09/92

12/18/92 445.23 in monitoring well DIA. 2" DATE FINISHED: 12/09/92

WT. 140# DRILLER: Larry Schroeder

FALL 30" GEOLOGIST: Joe Pettorino

\* POCKET PENETROMETER READING REVIEWED BY: Duane Lenhardt

| DEPTH<br>FT | STRATA      | SAMPLE |      |                 |                       | DESCRIPTION |                          |                                        | CLASS<br>USCS | REMARKS                                   |
|-------------|-------------|--------|------|-----------------|-----------------------|-------------|--------------------------|----------------------------------------|---------------|-------------------------------------------|
|             |             | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>PID(gpm)¹ | COLOR       | CONSISTENCY<br>HARDNESS  | MATERIAL<br>DESCRIPTION                |               |                                           |
|             | XXXX        |        |      | 100/3"          |                       | Brown       | Very Dense               | FILL - sand and gravel                 | SW/<br>GW     | o Roadfill                                |
| 2           | XXXX        | 1      | SS   |                 | 20%/0                 | & Gray      |                          |                                        |               |                                           |
|             | ~ / ~ / ~   |        |      | 2 1             |                       | Gray        | Soft                     | CLAYEY SILT                            | ML/<br>CL     | o Slight Odor                             |
|             | ~ / ~ / ~   | 2      | SS   | 1 2             | 30%/3                 |             |                          |                                        |               |                                           |
| 5           | ~ / ~ / ~   |        |      | 2 2             |                       |             |                          |                                        |               | o Moist                                   |
|             | ~ / ~ / ~   | 3      | SS   | 2 3             | 60%/0                 |             | Medium Stiff             |                                        |               | o Dark Color Stained                      |
|             | ~ / ~ / ~   |        |      | 4 3             |                       |             |                          |                                        |               | o Few Reddish Mottles                     |
|             | ~ / ~ / ~   | 4*     | SS   | 4 5             | 50%/0                 |             |                          |                                        |               | o Environmental Sample<br>collected 6-10" |
| 9           | ~ / ~ / ~   |        |      | 7 9             |                       |             |                          |                                        |               |                                           |
| 10          | o . ~ o . ~ | 5*     | SS   | 7 7             | 50%/0                 | Gray        | Loose to<br>Medium Dense | GRAVELLY SAND -<br>trace silt and clay | SW            | o Wet                                     |
|             | o . ~ o . ~ |        |      | 4 4             |                       |             |                          |                                        |               | o Coarse-Fine Sand                        |
|             | o . ~ o . ~ | 6      | SS   | 4 4             | 30%/0                 |             |                          |                                        |               | o Medium-Fine Gravel                      |
|             | o . ~ o . ~ |        |      | 5 7             |                       |             |                          |                                        |               | o Mostly Subangular<br>to subround        |
|             | o . ~ o . ~ | 7      | SS   | 5 6             | 20%/0                 |             |                          |                                        |               |                                           |
| 15          | o . ~ o . ~ |        |      | 4 4             |                       |             |                          |                                        |               |                                           |
| 16          | o . ~ o . ~ | 8      | SS   | 5 5             | 15%/0                 |             |                          |                                        |               |                                           |
|             |             |        |      |                 |                       |             |                          | Boring completed at 16 feet            |               |                                           |
| 20          |             |        |      |                 |                       |             |                          |                                        |               |                                           |
|             |             |        |      |                 |                       |             |                          |                                        |               |                                           |
| 25          |             |        |      |                 |                       |             |                          |                                        |               |                                           |
|             |             |        |      |                 |                       |             |                          |                                        |               |                                           |
| 30          |             |        |      |                 |                       |             |                          |                                        |               |                                           |
|             |             |        |      |                 |                       |             |                          |                                        |               |                                           |
| 35          |             |        |      |                 |                       |             |                          |                                        |               |                                           |

### COMMENTS

Boring advanced with 6 1/4" hollow-stem augers; CME 55 Drill Rig. Installed monitoring well MW-155 in bore hole.

(see well construction log)

\* Environmental sample 6-10"

¹ - Screening of soil core

PROJECT NO.

35244.00

BORING NO.

MW-155

| URS CONSULTANTS, Inc.                                           |         |        |                    |                 |                      |                               |                                    |                                               |               | 47                                                                                   |                | TEST BORING LOG             |  |
|-----------------------------------------------------------------|---------|--------|--------------------|-----------------|----------------------|-------------------------------|------------------------------------|-----------------------------------------------|---------------|--------------------------------------------------------------------------------------|----------------|-----------------------------|--|
|                                                                 |         |        |                    |                 |                      |                               |                                    |                                               |               | BORING NO.                                                                           |                | MW-16D                      |  |
| PROJECT: N. Franklin St.                                        |         |        |                    |                 |                      |                               |                                    |                                               |               | SHEET NO. 1 OF 1                                                                     |                |                             |  |
| CLIENT: New York State Department of Environmental Conservation |         |        |                    |                 |                      |                               |                                    |                                               |               | JOB NO. :                                                                            |                | 35244.00                    |  |
| BORING CONTRACTOR: Buffalo Drilling Company                     |         |        |                    |                 |                      |                               |                                    |                                               |               | BORING LOCATION:                                                                     |                | 10234.33473N 5069.2644E     |  |
| GROUNDWATER:                                                    |         |        |                    |                 |                      |                               |                                    |                                               |               | CAS.                                                                                 |                | SAMP. CORE TUBE             |  |
| DATE                                                            | TIME    | LEV    | TYPE               | TYPE            |                      |                               |                                    |                                               |               |                                                                                      | DATE STARTED:  | 12/12/92                    |  |
| 12/18/92                                                        |         | 445.61 | in monitoring well | DIA.            |                      |                               |                                    | 2"                                            |               | 3"                                                                                   | DATE FINISHED: | 12/13/92                    |  |
|                                                                 |         |        |                    | WT.             |                      |                               |                                    | 140#                                          |               |                                                                                      | DRILLER:       | Larry Schroeder             |  |
|                                                                 |         |        |                    | FALL            |                      |                               |                                    | 30"                                           |               |                                                                                      | GEOLOGIST:     | Mindar Hsieh                |  |
|                                                                 |         |        |                    |                 |                      |                               |                                    |                                               |               | * POCKET PENETROMETER READING                                                        |                | REVIEWED BY: Duane Lenhardt |  |
| DEPTH<br>FT                                                     | STRATA  | SAMPLE |                    |                 |                      | DESCRIPTION                   |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 |         | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm) | COLOR                         | CONSISTENCY<br>HARDNESS            | MATERIAL<br>DESCRIPTION                       | CLASS<br>USCS | REMARKS                                                                              |                |                             |  |
|                                                                 | XXXX    | 1*     | SS                 | 31 22           | 50%/H                | Yellow/<br>Brown              | Dense/<br>Medium Dense<br>to Loose | FILL -<br>silty sand, some gravel, trace clay | SM            | o Moist<br>o Very Moist                                                              |                |                             |  |
| 4.3                                                             | XXXX    | 2*     | SS                 | 12 6            | 20%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 5                                                               | ~./~./~ |        |                    | 2 2             |                      | Yellow/<br>Dark               | Medium Stiff                       | CLAYEY SILT -<br>trace sand and gravel        | ML/<br>CL     | o Very Moist<br>o Medium Plasticity<br>o Separated<br>o Coarse Fragments<br>up to 1" |                |                             |  |
|                                                                 | ~./~./~ | 3*     | SS                 | 2 3             | 95%/H                | Brown                         | Stiff                              |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | 3 6             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ | 4*     | SS                 | 6 6             | 50%/H                |                               | Medium Stiff                       |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | 3 3             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 10                                                              | ~./~./~ | 5      | SS                 | 3 4             | 75%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | WR WH           |                      | Gray                          | Very Loose/<br>Soft                | CLAYEY SAND -<br>becoming clay with depth     | SC/<br>CL     | o Organic Matter                                                                     |                |                             |  |
| 12                                                              | ~./~./~ | 6      | SS                 | 2 2             | 80%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  |        |                    | 6 6             |                      | Yellow/<br>Brown to<br>Yellow | Medium Dense                       | SILTY SAND & GRAVEL                           | SM/<br>GM     | o Mixed Lithology<br>o Coarse Fragments<br>4-1" TYP                                  |                |                             |  |
|                                                                 | 0.~0.~  | 7      | SS                 | 6 7             | 20%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 15                                                              | 0.~0.~  |        |                    | 9 6             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  | 8      | SS                 | 5 6             | 60%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  |        |                    | 8 6             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  | 9      | SS                 | 7 15            | 50%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  |        |                    | 2 6             |                      |                               | Loose                              |                                               |               |                                                                                      |                |                             |  |
| 20                                                              | 0.~0.~  | 10     | SS                 | 4 4             | 20%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | 0.~0.~  |        |                    | 3 4             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 22.2                                                            | 0.~0.~  | 11     | SS                 | 3 2             | 20%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | 1 1             |                      | Gray                          | Very Loose                         | SILTY SAND/SANDY SILT<br>trace to some clay   | SM/<br>ML     | o Wood Debris<br>o Some Sandier Seams<br>Interbedded                                 |                |                             |  |
|                                                                 | ~./~./~ | 12     | SS                 | 1 2             | 100%/H               |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 25                                                              | ~./~./~ |        |                    |                 |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ | 1      | ST                 |                 | 95%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | WH 1            |                      |                               | Loose                              |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ | 13     | SS                 | 3 4             | 100%/H               |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    | 1 2             |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 30                                                              | ~./~./~ | 14     | SS                 | 3 4             | 90%/H                |                               |                                    |                                               |               |                                                                                      |                |                             |  |
|                                                                 | ~./~./~ |        |                    |                 |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |
| 32                                                              | ~./~./~ | 2      | ST                 |                 | 90%/H                | Gray                          |                                    | CLAYEY SILT -<br>some fine sand               | ML/<br>MH     | o Shell Fragments<br>o Low-Med. Plasticity                                           |                |                             |  |
|                                                                 |         |        |                    |                 |                      |                               |                                    | Bottom of borehole @ 32.0'.                   |               |                                                                                      |                |                             |  |
| 35                                                              |         |        |                    |                 |                      |                               |                                    |                                               |               |                                                                                      |                |                             |  |

# COMMENTS

Boring advanced with 6 1/2" hollow stem auger: CME 35 Drill Rig. Installed monitoring well pair MW-16D and MW-16S at this location (see well construction log).

\* - No PID readings due to instrument malfunction.

\* - Environmental sample from 0-8 feet.

PROJECT NO.

35244.00

BORING NO.

MW-16D

| URS CONSULTANTS, Inc.                                           |        |        |                    |                 |                     |             |                         |                                      |      | 43                            |         | TEST BORING LOG         |      |
|-----------------------------------------------------------------|--------|--------|--------------------|-----------------|---------------------|-------------|-------------------------|--------------------------------------|------|-------------------------------|---------|-------------------------|------|
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      | BORING NO.                    |         | MW-17D                  |      |
| PROJECT: N. Franklin St.                                        |        |        |                    |                 |                     |             |                         |                                      |      | SHEET NO. 1 OF 1              |         |                         |      |
| CLIENT: New York State Department of Environmental Conservation |        |        |                    |                 |                     |             |                         |                                      |      | JOB NO. :                     |         | 35244.00                |      |
| BORING CONTRACTOR: Buffalo Drilling Company                     |        |        |                    |                 |                     |             |                         |                                      |      | BORING LOCATION:              |         | 10291.54327N 4936.5625E |      |
| GROUNDWATER:                                                    |        |        |                    |                 |                     |             |                         |                                      |      | CAS.                          | SAMP.   | CORE                    | TUBE |
| DATE                                                            | TIME   | LEV    | TYPE               | TYPE            |                     | SS          | (split-apart)           |                                      |      | GROUND ELEVATION: 451.73'     |         |                         |      |
| 12/18/92                                                        |        | 645.09 | in monitoring well | DIA.            |                     | 2"          |                         |                                      |      | DATE STARTED: 12/09/92        |         |                         |      |
|                                                                 |        |        |                    | WT.             |                     | 140#        |                         |                                      |      | DATE FINISHED: 12/09/92       |         |                         |      |
|                                                                 |        |        |                    | FALL            |                     | 30"         |                         |                                      |      | DRILLER: Mike Saeli           |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      | GEOLOGIST: Steve Frank        |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      | REVIEWED BY: Duane Lenhardt   |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      | * POCKET PENETROMETER READING |         |                         |      |
| DEPTH<br>FT                                                     | STRATA | SAMPLE |                    |                 |                     | DESCRIPTION |                         |                                      |      | CLASS                         | REMARKS |                         |      |
|                                                                 |        | NO.    | TYPE               | BLOWS<br>PER 6" | RECOVERY<br>P.D.(%) | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION              | USCS |                               |         |                         |      |
|                                                                 | XXXX   |        |                    | 4               | 5                   | Dark        | Medium Dense            | FILL -                               | ML   | o Very Moist                  |         |                         |      |
|                                                                 | XXXX   | 1      | SS                 | 9               | 2                   | Brown       |                         | silty fill with some sand and traces |      |                               |         |                         |      |
|                                                                 | XXXX   |        |                    | 2               | 2                   | & Black     | Very Loose              | of gravel and clay                   |      |                               |         |                         |      |
| 4                                                               | XXXX   | 2      | SS                 | 2               | 2                   |             |                         |                                      |      |                               |         |                         |      |
| 5                                                               | ~.~.~  |        |                    | 3               | 4                   | Brown       | Loose                   | SANDY SILT -                         | ML   | o Very Moist                  |         |                         |      |
|                                                                 | ~.~.~  | 3      | SS                 | 4               | 8                   |             |                         | trace clay                           |      | o Rootlets and                |         |                         |      |
| 7                                                               | ~.~.~  |        |                    | WH              | 2                   |             |                         |                                      |      | Wood Fragments                |         |                         |      |
|                                                                 | ~.~.~  | 4      | SS                 | 3               | 5                   | Brown       | Medium Dense            | SILTY SAND AND GRAVEL -              | SM/  | o Wet                         |         |                         |      |
|                                                                 | ~.~.~  |        |                    | 6               | 9                   |             |                         | trace clay                           | GM   | o Mostly Angular Shale        |         |                         |      |
| 10                                                              | ~.~.~  | 5      | SS                 | 9               | 9                   |             |                         |                                      |      | Fragments Compose             |         |                         |      |
|                                                                 | ~.~.~  |        |                    | 4               | 5                   |             |                         |                                      |      | Gravel                        |         |                         |      |
|                                                                 | ~.~.~  | 6      | SS                 | 6               | 6                   |             |                         |                                      |      |                               |         |                         |      |
|                                                                 | ~.~.~  |        |                    | 5               | 5                   |             |                         |                                      |      |                               |         |                         |      |
|                                                                 | ~.~.~  | 7      | SS                 | 7               | 5                   |             |                         |                                      |      |                               |         |                         |      |
| 15                                                              | ~.~.~  |        |                    | 4               | 5                   | Gray        | Loose                   |                                      |      |                               |         |                         |      |
|                                                                 | ~.~.~  | 8      | SS                 | 4               | 5                   |             |                         |                                      |      |                               |         |                         |      |
|                                                                 | ~.~.~  |        |                    | 6               | 6                   |             | Medium Dense            |                                      |      | o Large Piece of              |         |                         |      |
| 18                                                              | ~.~.~  | 9      | SS                 | 10              | 14                  |             |                         |                                      |      | Wood in Spoon                 |         |                         |      |
|                                                                 | o~o~o  |        |                    | 15              | 18                  | Gray        | Dense                   | GRAVELLY SILT -                      | ML   |                               |         |                         |      |
| 20                                                              | o~o~o  | 10     | SS                 | 21              | 15                  |             |                         | some sand                            |      | o Wood Fragments              |         |                         |      |
|                                                                 | o~o~o  |        |                    | 12              | 9                   |             | Medium Dense            | trace clay                           |      | and Some Post                 |         |                         |      |
| 22                                                              | o~o~o  | 11     | SS                 | 10              | 14                  |             |                         |                                      |      |                               |         |                         |      |
|                                                                 | ~.~.~  |        |                    | 4               | 5                   | Dark        | Stiff                   | CLAYEY SILT -                        | ML   | o Sticky Fines w/             |         |                         |      |
|                                                                 | ~.~.~  | 12     | SS                 | 7               | 9                   | Gray        |                         | trace to some gravel                 |      | Very Low Plasticity           |         |                         |      |
| 25                                                              | ~.~.~  |        |                    | 3               | 4                   |             |                         |                                      |      | o Few Gray Mottles            |         |                         |      |
| 26                                                              | ~.~.~  | 13     | SS                 | 8               | 12                  |             |                         |                                      |      |                               |         |                         |      |
|                                                                 | ///    | 14     | SS                 | 100/4"          | 100%/0              | Gray        | Very Dense              | WEATHERED SHALE AND SANDSTONE        |      |                               |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         | Borehole completed at 27.2'.         |      |                               |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         | Auger refusal.                       |      |                               |         |                         |      |
| 30                                                              |        |        |                    |                 |                     |             |                         |                                      |      |                               |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      |                               |         |                         |      |
|                                                                 |        |        |                    |                 |                     |             |                         |                                      |      |                               |         |                         |      |
| 35                                                              |        |        |                    |                 |                     |             |                         |                                      |      |                               |         |                         |      |

COMMENTS Boring advanced with 6 1/4" hollow-stem augers; Dietrich D-30 Drill Rig. Installed monitoring well pair

MW-17D and MW-17S at this location (see well construction log).

1 - Screening of soil core.

2 - Environmental sample 0-6 feet.

PROJECT NO.

35244.00

BORING NO.

MW-17D

| URS CONSULTANTS, Inc.                                           |           |        |                    |                |                      |               |                         |                                     |       | 40                                               |                 | TEST BORING LOG          |      |
|-----------------------------------------------------------------|-----------|--------|--------------------|----------------|----------------------|---------------|-------------------------|-------------------------------------|-------|--------------------------------------------------|-----------------|--------------------------|------|
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       | BORING NO.                                       |                 | MW-18S                   |      |
| PROJECT: N. Franklin St.                                        |           |        |                    |                |                      |               |                         |                                     |       | SHEET NO. 1 OF 1                                 |                 |                          |      |
| CLIENT: New York State Department of Environmental Conservation |           |        |                    |                |                      |               |                         |                                     |       | JOB NO. :                                        |                 | 35244.00                 |      |
| BORING CONTRACTOR: Buffalo Drilling Company                     |           |        |                    |                |                      |               |                         |                                     |       | BORING LOCATION:                                 |                 | 10343.80280N 5473.81678E |      |
| GROUNDWATER:                                                    |           |        |                    |                |                      |               |                         |                                     |       | CAS.                                             | SAMP.           | CORE                     | TUBE |
| DATE                                                            | TIME      | LEV    | TYPE               | TYPE           |                      |               | SS                      | (split-apart)                       |       | GROUND ELEVATION:                                | 451.26'         |                          |      |
| 12/18/92                                                        |           | 445.10 | in monitoring well | DIA.           |                      |               | 2"                      |                                     |       | DATE STARTED:                                    | 12/17/92        |                          |      |
|                                                                 |           |        |                    | WT.            |                      |               | 140#                    |                                     |       | DATE FINISHED:                                   | 12/17/92        |                          |      |
|                                                                 |           |        |                    | FALL           |                      |               | 30"                     |                                     |       | DRILLER:                                         | Larry Schroeder |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       | GEOLOGIST:                                       | Steve Frank     |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       | REVIEWED BY:                                     | Duane Lenhardt  |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       | * POCKET PENETROMETER READING                    |                 |                          |      |
| DEPTH<br>FT                                                     | STRATA    | SAMPLE |                    |                |                      | DESCRIPTION   |                         |                                     |       | CLASS<br>USCS                                    | REMARKS         |                          |      |
|                                                                 |           | NO.    | TYPE               | BLWS<br>PER 6" | RECOVERY<br>FID(ppm) | COLOR         | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION             |       |                                                  |                 |                          |      |
|                                                                 | XXXX      |        |                    | 35             | 20                   | Brown & Black | Medium Dense            | FILL - sandy gravel with trace silt | GW    | o Moist                                          |                 |                          |      |
|                                                                 | XXXX      | 1      | SS                 | 10             | 10                   |               |                         |                                     |       |                                                  |                 |                          |      |
| 2.5                                                             | XXXX      |        |                    | 2              | 2                    |               |                         |                                     |       |                                                  |                 |                          |      |
| 4.2                                                             | ~ / ~ / ~ | 2      | SS                 | 3              | 4                    | Dk. Gray      | Medium Stiff            | CLAYEY SILT - trace gravel          | ML    | o Very Moist                                     |                 |                          |      |
| 5                                                               | ~ . ~ . ~ |        |                    | 4              | 12                   | Gray          | Medium Dense to Loose   | SILTY SAND AND GRAVEL - trace clay  | GM/SM | o Very Moist                                     |                 |                          |      |
|                                                                 | ~ . ~ . ~ | 3      | SS                 | 5              | 4                    |               |                         |                                     |       | o Fino-Coarse Sand and Gravel, Mostly Subangular |                 |                          |      |
|                                                                 | ~ . ~ . ~ |        |                    | 6              | 2                    |               |                         |                                     |       | o Wet                                            |                 |                          |      |
|                                                                 | ~ . ~ . ~ | 4      | SS                 | 4              | 2                    |               |                         |                                     |       | o Variable Texture -                             |                 |                          |      |
|                                                                 | ~ . ~ . ~ |        |                    | 5              | 8                    |               |                         |                                     |       | Well Sorted Sediments                            |                 |                          |      |
| 10                                                              | ~ . ~ . ~ | 5      | SS                 | 5              | 5                    |               |                         | - increasing gravel content         | GW/OM | Interbedded w/ Poorly Sorted Sediments           |                 |                          |      |
|                                                                 | ~ . ~ . ~ |        |                    | 4              | 6                    | Brown         |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 | ~ . ~ . ~ | 6      | SS                 | 8              | 8                    |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 | ~ . ~ . ~ |        |                    | 6              | 5                    |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 | ~ . ~ . ~ | 7      | SS                 | 4              | 2                    |               |                         |                                     |       |                                                  |                 |                          |      |
| 15                                                              | ~ . ~ . ~ |        |                    | 4              | 5                    |               |                         |                                     |       |                                                  |                 |                          |      |
| 16                                                              | ~ . ~ . ~ | 8      | SS                 | 6              | 3                    |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
| 20                                                              |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
| 25                                                              |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
| 30                                                              |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
|                                                                 |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |
| 35                                                              |           |        |                    |                |                      |               |                         |                                     |       |                                                  |                 |                          |      |

COMMENTS Boring advanced with 6 1/4" hollow-stem auger; Dietrich D-50 Drill Rig. Installed monitoring well MW-18S in borehole. (see well construction log)

1 - Screening of soil core.

2 - Environmental sample from 0-6 feet.

PROJECT NO.  
BORING NO.

35244.00  
MW-18S

|                                                                 |      |        |                    |      |  |                                            |                 |      |      |                             |  |
|-----------------------------------------------------------------|------|--------|--------------------|------|--|--------------------------------------------|-----------------|------|------|-----------------------------|--|
| <b>URS CONSULTANTS, Inc.</b>                                    |      |        |                    |      |  | 50                                         | TEST BORING LOG |      |      |                             |  |
|                                                                 |      |        |                    |      |  | BORING NO. MW-19S                          |                 |      |      |                             |  |
| PROJECT: N. Franklin St.                                        |      |        |                    |      |  | SHEET NO. 1 OF 1                           |                 |      |      |                             |  |
| CLIENT: New York State Department of Environmental Conservation |      |        |                    |      |  | JOB NO.: 35244.00                          |                 |      |      |                             |  |
| BORING CONTRACTOR: Buffalo Drilling Company                     |      |        |                    |      |  | BORING LOCATION: 10204 SAGEBRY 5345.66603E |                 |      |      |                             |  |
| GROUNDWATER:                                                    |      |        |                    |      |  | CAS.                                       | SAMP.           | CORE | TUBE | GROUND ELEVATION: 451.60'   |  |
| DATE                                                            | TIME | LEV    | TYPE               | TYPE |  | SS                                         | (split-spoon)   |      |      | DATE STARTED: 12/16/92      |  |
| 12/18/92                                                        |      | 445.21 | in monitoring well | DIA. |  | 2"                                         |                 |      |      | DATE FINISHED: 12/16/92     |  |
|                                                                 |      |        |                    | WT.  |  | 140#                                       |                 |      |      | DRILLER: Mike Saeki         |  |
|                                                                 |      |        |                    | FALL |  | 30"                                        |                 |      |      | GEOLOGIST: Joe Pettorino    |  |
|                                                                 |      |        |                    |      |  | * POCKET PENETROMETER READING              |                 |      |      | REVIEWED BY: Duane Lenhardt |  |

| DEPTH<br>FT | STRATA | SAMPLE        |      |                 |    | RECOVERY<br>PID(ppm) | COLOR        | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION      | CLASS<br>USCS | REMARKS                                   |
|-------------|--------|---------------|------|-----------------|----|----------------------|--------------|-------------------------|------------------------------|---------------|-------------------------------------------|
|             |        | NO.           | TYPE | BLOWS<br>PER 6" |    |                      |              |                         |                              |               |                                           |
| 2           | XXXX   | Not Taken     |      |                 |    |                      | Black & Gray |                         | FILL - asphalt and gravel    |               | o Asphalt Parking Lot<br>o Gravel Subbase |
|             | XXXX   | Thick Asphalt |      |                 |    |                      |              |                         |                              |               |                                           |
|             | 1~1~1  |               |      | 3               | 5  |                      | Light        | Stiff                   | SILTY CLAY                   | ML/CL         |                                           |
|             | 1~1~1  | 1*            | SS   | 5               | 8  | 70%/H                | Brown        |                         |                              |               | o Some Rust Color Mottles                 |
| 5           | 1~1~1  |               |      | 2               | 2  |                      |              | Medium Stiff            |                              |               | o Moist                                   |
| 6           | 1~1~1  | 2             | SS   | 4               | 7  | 80%/H                |              |                         |                              |               | o Wet                                     |
|             | 0~0~0  |               |      | 6               | 10 |                      | Brown        | Medium Dense            | SAND AND GRAVEL - trace silt | SW/OW         |                                           |
|             | 0~0~0  | 3             | SS   | 8               | 9  | 50%/H                |              |                         |                              |               | o Med.-Coarse Sand                        |
|             | 0~0~0  |               |      | 4               | 7  |                      |              |                         |                              |               | o Fine-Med. Subround Gravel               |
| 10          | 0~0~0  | 4             | SS   | 7               | 7  | 30%/H                |              |                         |                              |               |                                           |
|             | 0~0~0  |               |      | 7               | 12 |                      |              |                         |                              |               |                                           |
|             | 0~0~0  | 5             | SS   | 13              | 9  | 0%/H                 |              |                         |                              |               |                                           |
|             | 0~0~0  |               |      | 9               | 8  |                      |              |                         |                              |               |                                           |
|             | 0~0~0  | 6             | SS   | 6               | 18 | 20%/H                |              |                         |                              |               |                                           |
| 15          | 0~0~0  |               |      | 4               | 14 |                      |              |                         |                              |               |                                           |
| 16          | 0~0~0  | 7             | SS   | 9               | 22 | 5%/H                 |              |                         |                              |               |                                           |
|             |        |               |      |                 |    |                      |              |                         | Borehole completed at 16'    |               |                                           |
| 20          |        |               |      |                 |    |                      |              |                         |                              |               |                                           |
| 25          |        |               |      |                 |    |                      |              |                         |                              |               |                                           |
| 30          |        |               |      |                 |    |                      |              |                         |                              |               |                                           |
| 35          |        |               |      |                 |    |                      |              |                         |                              |               |                                           |

**COMMENTS**

Boring advanced with 6 1/2" hollow-stem augers; Dietrich D-50 Drill Rig. Installed monitoring well MW-19S in borehole.

(see well construction log)

# - No PID readings due to instrument malfunction.

\* - Environmental sample taken from 2-4 feet.

PROJECT NO.

35244.00

BORING NO.

MW-19S

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

MW-20S

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION:

GROUNDWATER:

GROUND ELEVATION: 451.02'

DATE

TIME

LEV

TYPE

TYPE

CAS.

SAMP

CORE

TUBE

DATE STARTED: 3/29/93

DATE FINISHED: 3/29/93

DRILLER: Wally Greizer

GEOLOGIST: Bob Kruezer

REVIEWED BY:

\* POCKET PENETROMETER READING

| DEPTH<br>FT | STRATA | SAMPLE |      |                 |                      | DESCRIPTION |                         |                           |  | CLASS<br>USCS | REMARKS               |
|-------------|--------|--------|------|-----------------|----------------------|-------------|-------------------------|---------------------------|--|---------------|-----------------------|
|             |        | NO.    | TYPE | BLOWS<br>PEL 6" | RECOVERY<br>PID(ppm) | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION   |  |               |                       |
|             | XXXX   |        |      | 9               | 16                   | Brown &     | DENSE                   | FILL -                    |  | SM/           | o Moist               |
|             | XXXX   | 1      | SS   | 27              | 73                   | Gray        |                         | sand and gravel           |  | GM            | o Moist to very moist |
|             | XXXX   |        |      | 3               | 8                    |             | Medium Dense            | some silt                 |  |               |                       |
| 4.3         | XXXX   | 2*     | SS   | 11              | 10                   |             |                         | wood & brick frag         |  |               | o Wet                 |
| 5           | XXXX   |        |      | 5               | 2                    |             |                         |                           |  |               |                       |
|             | /~~/   | 3      | SS   | 2               | 2                    | Gray        | Loose                   | FINE SAND AND SILT        |  | ML/           |                       |
| 6.5         | /~~/   |        |      | 3               | 4                    |             |                         | trace clay                |  | SM            |                       |
|             | /~~/   | 4      | SS   | 8               | 2                    |             |                         |                           |  |               |                       |
|             | .0~.0~ |        |      | 7               | 10                   | Brown &     | Medium Dense            | SAND AND GRAVEL           |  | SM/           | o Med Sand to         |
| 10          | .0~.0~ | 5      | SS   | 12              | 15                   | Gray        |                         | tr. to some silt          |  | GM            | Fine gravel           |
|             | .0~.0~ |        |      | 3               | 12                   |             |                         |                           |  |               |                       |
|             | .0~.0~ | 6      | SS   | 18              | 15                   |             |                         |                           |  |               | o Fine Sand to        |
|             | .0~.0~ |        |      | 1               | 3                    |             |                         |                           |  |               | medium gravel         |
|             | .0~.0~ | 7      | SS   | 3               | 10                   |             | Loose                   |                           |  |               |                       |
| 15          | .0~.0~ |        |      | 5               | 7                    |             |                         |                           |  |               |                       |
|             | .0~.0~ | 8      | SS   | 12              | 20                   |             | Medium Dense            |                           |  |               |                       |
|             | .0~.0~ |        |      | WH              | WH                   |             |                         |                           |  |               |                       |
|             | .0~.0~ | 9      | SS   | 2               | 5                    |             | Loose                   |                           |  |               |                       |
|             | .0~.0~ |        |      | 10              | 21                   |             |                         |                           |  |               |                       |
| 20          | .0~.0~ | 10     | SS   | 33              | 43                   |             | Very Dense              |                           |  |               |                       |
|             | .0~.0~ |        |      | 14              | 23                   |             |                         |                           |  |               |                       |
|             | .0~.0~ | 11     | SS   | 49              | 53                   |             |                         |                           |  |               |                       |
|             |        |        |      |                 |                      |             |                         | Borehole completed at 22' |  |               |                       |
| 25          |        |        |      |                 |                      |             |                         |                           |  |               |                       |
|             |        |        |      |                 |                      |             |                         |                           |  |               |                       |
|             |        |        |      |                 |                      |             |                         |                           |  |               |                       |
| 30          |        |        |      |                 |                      |             |                         |                           |  |               |                       |
|             |        |        |      |                 |                      |             |                         |                           |  |               |                       |
|             |        |        |      |                 |                      |             |                         |                           |  |               |                       |
| 35          |        |        |      |                 |                      |             |                         |                           |  |               |                       |

## COMMENTS

Boring advanced with 6 1/4" hollow-stem augers; Dietrich D-30 Drill Rig. Installed monitoring well MW-20S in borehole.

(see well construction log for details).

\* - Screening of soil core.

\* - Environmental sample taken @ 3'-4'.

PROJECT NO.

35244.00

BORING NO.

MW-20S

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

SB-1

PROJECT: N. Franklin St.

CLIENT: New York State Department of Environmental Conservation

BORING CONTRACTOR: Buffalo Drilling Company

GROUNDWATER:

DATE TIME LEV TYPE

CAS. SAMP. CORE TUBE

SS (split-spoon)

DIA. 2"

WT. 140#

FALL 30"

\* POCKET PENETROMETER READING

GROUND ELEVATION:

DATE STARTED:

DATE FINISHED:

DRILLER:

GEOLOGIST:

REVIEWED BY:

## COMMENTS

Four consecutive split-spoon samples driven (no augers); Dietrich D-30 Drill Rig.

\* - Environmental sample from 0-3.3'.

# - No PID readings due to instrument malfunction

PROJECT NO.

BORING NO.

35244.00

SB-1

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

SB-2

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION: 10351.44442N 5055.3

GROUNDWATER:

GROUND ELEVATION: 451.53'

| DATE | TIME | LEV | TYPE | TYPE | CAS. | SAMP. | CORE | TUBE |
|------|------|-----|------|------|------|-------|------|------|
|      |      |     |      | DIA. |      | 2"    |      |      |
|      |      |     |      | WT.  |      | 140#  |      |      |
|      |      |     |      | FALL |      | 30"   |      |      |

DATE STARTED: 12/17/92

DATE FINISHED: 12/17/92

DRILLER: Larry Schroeder

GEOLOGIST: Steve Frank

\* POCKET PENETROMETER READING

REVIEWED BY:

| DEPTH<br>FT | STRATA    | SAMPLE |      |                 |                       | DESCRIPTION |                         |                                         |                           | CLASS<br>USCS | REMARKS                                    |
|-------------|-----------|--------|------|-----------------|-----------------------|-------------|-------------------------|-----------------------------------------|---------------------------|---------------|--------------------------------------------|
|             |           | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>FTD(gpm)' | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION                 |                           |               |                                            |
|             | XXXX      |        |      |                 |                       | Brown       |                         | FILL -                                  |                           | OM            |                                            |
|             | XXXX      |        |      |                 |                       |             |                         | stony gravel fill w/ some silt          |                           |               |                                            |
|             | XXXX      |        |      | 9               | 12                    |             | Medium Dense            |                                         |                           |               |                                            |
| 3.5         | XXXX      | 1*     | SS   | 10              | 5                     | 70%/1.5     |                         |                                         |                           |               | o Moist                                    |
| 5           | ~ / ~ / ~ |        |      |                 |                       | Gray        |                         | CLAYEY SILT/SILTY CLAY                  |                           | ML/<br>CL     | o Environmental Sample<br>collected 2-4'   |
|             | ~ / ~ / ~ |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             | ~ / ~ / ~ |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             | ~ / ~ / ~ |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
| 10          | ~ / ~ / ~ |        |      |                 |                       |             |                         |                                         |                           |               | o Environmental Sample<br>collected 12-14' |
|             | ~ / ~ / ~ |        |      | 1               | 2                     |             | Medium Silty            |                                         |                           |               | o Wet @ 13'                                |
|             | ~ / ~ / ~ | 2      | SS   | 2               | 2                     | 100%/0      |                         |                                         |                           |               | o ~6" Sand/Silt/Peat                       |
| 13          | ~ / ~ / ~ |        |      | 3               | 4                     |             |                         |                                         |                           |               | o 13'                                      |
| 14          | ..o..o..  | 3*     | SS   | 7               | 13                    | 80%/0.2     | Brown                   | Medium Dense                            | SANDY GRAVEL - trace silt | GW            |                                            |
| 15          |           |        |      |                 |                       |             |                         | Boring completed at 14'                 |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         | Borehole sealed w/ bentonite pellets    |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         | 10-14' and cement bentonite grout 0-10' |                           |               |                                            |
| 20          |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
| 25          |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
| 30          |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
|             |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |
| 35          |           |        |      |                 |                       |             |                         |                                         |                           |               |                                            |

## COMMENTS

Boring advanced with 4 1/2" bottom-stem augers; Dietrich D-50 Drill Rig.

\* - Environmental samples at 2-4' and 12-14'.

! - Screening of soil core.

PROJECT NO.

35244.00

BORING NO.

SB-2

CONTINUED

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

SB-3

PROJECT: N Franklin St.

CLIENT: New York State Department of Environmental Conservation

BORING CONTRACTOR: Buffalo Drilling Company

GROUNDWATER:

CAS. SAMP. CORE TUBE

SHEET NO. 1 OF 1

JOB NO. : 35244.00

BORING LOCATION: 10343.18447N 5067.7599E

GROUND ELEVATION: 451.65'

DATE STARTED: 12/17/92

DATE FINISHED: 12/17/92

DRILLER: Larry Schroeder

GEOLOGIST: Steve Frank

REVIEWED BY: Duane Lenhardt

| DEPTH<br>FT | STRATA | SAMPLE |      |                 |                      | DESCRIPTION |                         |                                                                                 | CLASS<br>USCS | REMARKS                                                                                                                                                              |
|-------------|--------|--------|------|-----------------|----------------------|-------------|-------------------------|---------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |        | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm) | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION                                                         |               |                                                                                                                                                                      |
|             | XXXX   |        |      | 27              | 11                   | Brown       | Dense                   | FILL -                                                                          | SM            | <ul style="list-style-type: none"> <li>o No HN<sub>2</sub> readings</li> <li>o Moist</li> <li>o Very Moist</li> <li>o Environmental Sample collected 2-4'</li> </ul> |
|             | XXXX   | 1      | SS   | 25              | 35                   |             |                         | sandy fill w/ some silt & gravel, brick & wood, some white discoloration 3-3.5' |               |                                                                                                                                                                      |
|             | XXXX   |        |      | 25              | 18                   | Dk. Brown   |                         |                                                                                 |               |                                                                                                                                                                      |
| 3.5         | XXXX   |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 4           | /~/~   | 2*     | SS   | 4               | 3                    | Gray        | Medium Stiff            | CLAYEY SILT                                                                     | ML            |                                                                                                                                                                      |
| 5           |        |        |      |                 |                      |             |                         | Borehole completed at 4' and sealed with bentonite pellets                      |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 10          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 15          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 20          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 25          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 30          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
|             |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |
| 35          |        |        |      |                 |                      |             |                         |                                                                                 |               |                                                                                                                                                                      |

## COMMENTS

Sampling completed with 3" split spoon sampler; Diedrich D-50 Drill Rig.

\* Environmental sample from 2-4'.

# - No PID readings due to instrument malfunction.

PROJECT NO.

35244.00

BORING NO.

SB-3

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# TEST BORING LOG

BORE NO.

SB-4

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO. : 35244.00

**BORING CONTRACTOR:** Buffalo Drilling Company

**BORING LOCATION:** Adjacent to dry cleaners south corner

**GROUNDWATER:**

GROUND ELEVATION: ~451.5

| DATE | TIME | LEV | TYPE |
|------|------|-----|------|
|------|------|-----|------|

DATE STARTED: 12/16/92

|      |      |          |         |
|------|------|----------|---------|
| DATE | TIME | LOCATION | REMARKS |
|      |      |          |         |

DATE FINISHED: 12/16/92

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

DRILLER: Larry Schroeder

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

GEOLOGIST: Steve Frank

• POCKET PENETROMETER READING

REVIEWED BY: Duane Lenhardt

[illegible]

### COMMENTS

Sampling completed with a 2" split spoon driven by a tripod mounted hammer.

1 - Screening of soil core.

\* - Environmental samples at 2-ft. and 6-ft.

**PROJECT NO.**

**15244.00**

**BORING NO.**

98-4

**COMPLET**

# URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

SB-5

PROJECT: N. Franklin St.

CLIENT: New York State Department of Environmental Conservation

BORING CONTRACTOR: Buffalo Drilling Company

SHEET NO. 1 OF 1

JOB NO.: 35244.00

BORING LOCATION: 10234.39280N 5571.55420E

GROUNDWATER:

CAS. SAMP. CORE TUBE

GROUND ELEVATION: 451.19'

DATE TIME LEV TYPE

TYPE SS (split-spoon)

DATE STARTED: 12/16/92

DIA.

2"

DATE FINISHED: 12/16/92

WT.

140#

DRILLER: Mike Saeli

FALL

30"

GEOLOGIST: Joe Pettorino

\* POCKET PENETROMETER READING

REVIEWED BY: Duane Lenhardt

| DEPTH<br>FT | STRATA   | SAMPLE |      |                 |                       | DESCRIPTION |                          |                                         | CLASS<br>USCS | REMARKS                    |
|-------------|----------|--------|------|-----------------|-----------------------|-------------|--------------------------|-----------------------------------------|---------------|----------------------------|
|             |          | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>PID(ppm)* | COLOR       | CONSISTENCY<br>HARDNESS  | MATERIAL<br>DESCRIPTION                 |               |                            |
|             | XXXX     |        |      | 4               | 4                     | Dark        | Loose                    | TOPSOIL -                               | OL            | o Moist                    |
| 2           | XXXX     | 1      | SS   | 4               | 4                     | Gray        |                          | silty with trace sand and gravel        |               | o 4" thick silt seam at 2' |
|             | .0.0.0.0 |        |      | 7               | 12                    |             |                          |                                         |               | o Environmental Sample     |
|             | 0.~0.~   | 2*     | SS   | 14              | 16                    | Brown       | Medium Dense<br>to Dense | SAND AND GRAVEL -<br>trace to some silt | SW/<br>GW     | SB-SS from 2-6'            |
| 5           | .0.0.0.0 |        |      | 12              | 22                    |             |                          |                                         |               | o Environmental Sample     |
|             | ~.0~.0   | 3*     | SS   | 21              | 19                    |             |                          |                                         |               | SB-SD from 6-10'           |
|             | .0.0.0.0 |        |      | 7               | 14                    |             |                          |                                         |               | o Wet                      |
|             | 0.~0.~   | 4*     | SS   | 19              | 17                    |             |                          |                                         | SP/<br>GP     | o Coarse Sand              |
|             | .0.0.0.0 |        |      | 11              | 12                    |             |                          |                                         |               | o Fine-Medium Sand         |
| 10          | .0.0.0.0 | 5*     | SS   | 17              | 9                     |             |                          |                                         |               | Subsided Gravel            |
|             |          |        |      |                 |                       |             |                          | Boring completed at 10'                 |               |                            |
| 15          |          |        |      |                 |                       |             |                          |                                         |               |                            |
| 20          |          |        |      |                 |                       |             |                          |                                         |               |                            |
| 25          |          |        |      |                 |                       |             |                          |                                         |               |                            |
| 30          |          |        |      |                 |                       |             |                          |                                         |               |                            |
| 35          |          |        |      |                 |                       |             |                          |                                         |               |                            |

### COMMENTS

Boring advanced with 4 1/2" hollow-stem augers; Dietrich D-50 Drill Rig borehole sealed with cement-bentonite grout.

\* - Environmental samples from 2-6' and 6-10'.

! - Screening of soil core.

PROJECT NO.

35244.00

BORING NO.

SB-5

## URS CONSULTANTS, Inc.

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## TEST BORING LOG

BORING NO.

SB-6

PROJECT: N. Franklin St.

SHEET NO. 1 OF 1

CLIENT: New York State Department of Environmental Conservation

JOB NO.: 35244.00

BORING CONTRACTOR: Buffalo Drilling Company

BORING LOCATION: 10204.20316N 3523.2433E

GROUNDWATER:

CAS. SAMP. CORE TUBE

GROUND ELEVATION: 450.97'

DATE TIME LEV TYPE TYPE

SS (split-spoon)

DATE STARTED: 12/16/92

DATE TIME LEV TYPE TYPE

DIA. 2"

DATE FINISHED: 12/16/92

DATE TIME LEV TYPE TYPE

WT. 140#

DRILLER: Mike Saeli

DATE TIME LEV TYPE TYPE

FALL 30"

GEOLOGIST: Joe Pettorino

\* POCKET PENETROMETER READING

REVIEWED BY: Duane Lenhardt

| DEPTH<br>FT | STRATA    | SAMPLE |      |                 |                      | DESCRIPTION |                         |                                        | CLASS<br>USCS | REMARKS                 |
|-------------|-----------|--------|------|-----------------|----------------------|-------------|-------------------------|----------------------------------------|---------------|-------------------------|
|             |           | NO.    | TYPE | BLOWS<br>PER 6" | RECOVERY<br>MD(gpm)¹ | COLOR       | CONSISTENCY<br>HARDNESS | MATERIAL<br>DESCRIPTION                |               |                         |
|             | XXXX      |        |      | 10              | 10                   | Dark        | Medium Dense            | FILL -                                 | SW/           | o Asphalt Paving        |
|             | XXXX      | 1      | SS   | 9               | 54                   | Brown       |                         | sand and gravel, trace silt to asphalt | GW            | o Fill interpreted from |
|             | XXXX      |        |      | 10              | 12                   |             |                         |                                        |               | Blow Counts             |
| 4           | XXXX      | 2      | SS   | 18              | 32                   |             |                         |                                        |               | o Orange Mortar         |
| 5           | ~ / ~ / ~ |        |      | 7               | 4                    | Brown       | Stiff                   | CLAYEY SILT -                          | ML/CL         | o Environmental Sample  |
|             | ~ / ~ / ~ | 3*     | SS   | 5               | 5                    |             |                         | grades to                              |               | SB-6S from 4'-8'        |
|             | ~ / ~ / ~ |        |      | 3               | 5                    | Gray        |                         | SANDY SILT -                           | ML            | o Wet at 8'             |
|             | ~ / ~ / ~ | 4*     | SS   | 5               | 5                    |             |                         | trace clay                             |               | o Environmental Sample  |
|             | ~ / ~ / ~ |        |      | 8               | 8                    |             |                         |                                        |               | SB-6D from 8'-10'       |
| 10          | o.o.o.o.  | 5*     | SS   | 10              | 10                   | Brown       | Medium Dense            | SAND AND GRAVEL                        | SP/GP         |                         |
|             |           |        |      |                 |                      |             |                         | Boring completed at 10'                |               |                         |
| 15          |           |        |      |                 |                      |             |                         |                                        |               |                         |
| 20          |           |        |      |                 |                      |             |                         |                                        |               |                         |
| 25          |           |        |      |                 |                      |             |                         |                                        |               |                         |
| 30          |           |        |      |                 |                      |             |                         |                                        |               |                         |
| 35          |           |        |      |                 |                      |             |                         |                                        |               |                         |

## COMMENTS

Boring advanced with 4 1/2" hollow-stem augers; Dietrich D-50 Drill Rig borehole sealed with cement-bentonite grout.

\* - Environmental samples from 4'-8' and 8'-10'.

¹ - Recovery of soil core.

PROJECT NO.

35244.00

BORING NO.

SB-6



## 53

1 BORING NO.

SB-8

SHEET NO. 1 OF 1

JOB NO. : 35244.00

BORING LOCATION:

GROUND ELEVATION: 450.58'

DATE STARTED: 3/30/93

DATE FINISHED: 3/30/93

DRILLER: Mike Gerstung

GEOLOGIST: Steve Frank

REVIEWED BY:

\* POCKET PENETROMETER READING

[illegible]

### COMMENTS

Samples collected with 2 inch split spoon head driven with a sledge hammer.

\* - Environmental samples from 1-3'.

1 - Screening of soil core.

**PROJECT NO.**

**35244.00**

**BORING NO.**

38-1

## 60

1 BORING NO.

SB-9

SHEET NO. 1 OF 1

35244.00

PROJECT: N. Franklin St.

PROJECT: N. Franklin St.  
CLIENT: New York State Department of Environmental Conservation

BOHRING CONTRACTOR: Buffalo Drilling Company

**BORING LOCATION:**

**GROUNDWATER:**

CAS.

**SAMP.**

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| CORE | TU |
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GROUND ELEVATION: 450.01'

DATE \_\_\_\_\_

**TIME**

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| LEV |  |
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**TYPE**

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| TYPE |  |
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SS

(split-spoon)

DATE STARTED: 3/30/93

DATE FINISHED: 3/30/93

DRILLER: Mike Gerstung

GEOLOGIST: Steve Frank

REVIEWED BY:

• POCKET PENETROMETER READING

[illegible]

**COMMENTS**

Samples collected with 2 inch split spoon hand driven with a sledge hammer.

\* - Environmental samples from 0-2'.

1 - Screening of soil core.

**PROJECT NO.**

35244.00

**BORING NO.**

**3B-9**

## 61

## BORING NO.

SB-10

PROJECT: N. Franklin St.

PROJECT: N. Franklin St.  
CLIENT: New York State Department of Environmental Conservation

SHEET NO. 1 OF 1

|           |          |
|-----------|----------|
| JOB NO. : | 35244.00 |
|-----------|----------|

BORING CONTRACTOR: Buffalo Drilling Company

**BORING LOCATION:**

**GROUNDWATER:**

CAS.

COR

(split-spoon)

GROUND ELEVATION: 450.44'

| DATE | TIME | LEV | TYPE |
|------|------|-----|------|
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| TYPE |  |
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(split-

DATE STARTED: 3/30/93

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| DATE | TIME | LOCATION | REMARKS |
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DATE FINISHED: 3/30/93

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| DRILLER: | Mike Gerstung |
|----------|---------------|

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| FALL |  |
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1

**GEOLOGIST:** Steve Frank

• POCKET PENETROMETER READING

REVIEWED BY:

### COMMENTS

Samples collected with 2 inch split spoon hand driven with a sledge hammer.

\* - Environmental samples from 0-4'.

1 - Screening of soil core.

**PROJECT NO.**

**35344.00**

**BORING NO.**

32-10

GZA  
GeoEnvironmental  
of New York

Engineering and  
Science

33

January 14, 1992  
File: 6023.00



URS Consultants, Inc.  
282 Delaware Avenue  
Buffalo, New York 14202

Attention: Mr. Dharma Iyer

Re: Geotechnical Laboratory Testing Services

Dear Mr. Iyer:

GZA GeoEnvironmental of New York (GZA), in accordance with your purchase order no. BU-93-60483, has laboratory tested samples collected by URS Consultants, Inc. (URS) and delivered to GZA's Buffalo office.

Enclosed are copies of the geotechnical laboratory testing data summary sheets, associated data plots, specific laboratory test procedures and a legend for the summary sheet. After you have reviewed these data please do not hesitate to contact us with any questions.

We appreciate the opportunity to provide these services to you on this project and look forward to a continued association.

Very truly yours,

GZA GEOENVIRONMENTAL OF NEW YORK

A handwritten signature in cursive script, reading "Robert A. Redenbach".

Robert A. Redenbach  
Senior Engineering Technician

A handwritten signature in cursive script, reading "Donald R. McMahon".

Donald R. McMahon, P.E.  
Associate Principal

Enclosures

344 Nagel Drive  
Buffalo, New York  
14224  
Telephone: 602-3100  
FAX: 602-31029

# GEOTECHNICAL LABORATORY TEST PROCEDURES

North Franklin Street Site  
Watkins Glen, New York  
File No. 6023.00

1. The following tests were performed with the noted ASTM test designation:

| TEST                      | ASTM DESIGNATION            |
|---------------------------|-----------------------------|
| Moisture Content          | D 2216-90                   |
| Liquid and Plastic Limits | D 4318-84 (method A)        |
| Grain Size Analysis       | D 422-63 (see Items 2 & 2a) |
| Permeability Test         | D 5084-90 (see Item 3)      |

2. Test Procedures for Combined Sieve and Hydrometer Analysis

When both sieve and hydrometer analyses are required a combined mechanical analysis is performed. This procedure is, in part, similar to ASTM's D 2217-66 (wet preparation of soil sample for grain-size analysis and determination of soil constants-B).

A representative portion of the minus No. 4 material was mixed with a defloculant agent and distilled water mixture so as to form a thin homogeneous slurry. The fines suspended in this slurry were then decanted over a No. 200 sieve into an empty hydrometer jar, and the mixing-decanting process repeated until most of the fines had been removed. Coarser fractions remaining after the decantation were then oven dried and sieved through a nest of sieves (Nos. 10, 20, 40, 60, 100, and 200). Any material passing the No. 200 sieve was added to the hydrometer jar containing the finer fraction.

Hydrometer analysis of these fines was performed in the conventional manner.

- 2a. Test Procedure for Combined Sieve and Hydrometer Analysis and Liquid and Plastic Limits (limited amount of test sample)

This procedure is, in part, similar to ASTM's D 2217-66 (wet preparation of soil sample for grain-size analysis and determination of soil constants-B).

Samples of limited quantity were tested for grain size analysis and also liquid and plastic limits in the following manner.

The as received total sample weight was corrected for moisture content and then separated over the No. 40 sieve. The material passing the No. 40 sieve was then tested for liquid and plastic limits. The material retained was then oven dried and sieved through a nest of sieves.

The material remaining from the liquid and plastic limits testing was then tested for combined sieve and hydrometer analysis in the following manner.

A representative portion of the minus No. 40 material was mixed with a defloculant agent and distilled water mixture so as to form a thin homogeneous slurry. The fines suspended in this slurry were then decanted over a No. 200 sieve into an empty hydrometer jar, and the mixing-decanting process repeated until most of the fines had been removed. Coarser fractions remaining after the decantation were then oven dried and sieved through a nest of sieves (Nos. 60, 100, and 200). Any material passing the No. 200 sieve was added to the hydrometer jar containing the finer fraction.

Hydrometer analysis of these fines was performed in the conventional manner.

3. Test Procedures for Permeability Test

Permeability tests were performed on full diameter samples (2.8-inches diameter and 2.0-inches length), taken from Shelby tube samples. After trimming, the specimen's weight was determined, and its dimensions verified. Water contents were determined from an initial weight prior to testing and an oven dry weight after testing.

After verification of the unit weight, the test samples were placed on a previously de-aired, modified triaxial cell base and porous stone. A membrane was added and the samples sealed top and bottom by 'O' rings.

The samples were back pressured under a small effective stress to create complete saturation of the samples. The chamber pressure was then increased such that the desired consolidation effective stress was obtained. This effective consolidation stress was allowed to act for about 24 hours. During the consolidation phase, readings of volume change versus time were recorded.

After consolidation, the response of the soil samples were checked by increasing the cell pressure and monitoring the pore pressure. Where required, additional back pressure was applied so as to achieve a pore pressure response equal to or greater than 95 percent. When the desired saturation was achieved, the samples were attached to the permeability apparatus and tested in accordance with ASTM procedure D 5084-90, "Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter". During the test, measurements of in-flow and out-flow vs. time were recorded with the permeability value reported being the average of several consistent values obtained during the test.

**GEOTECHNICAL LABORATORY TESTING DATA SUMMARY**

PROJECT NAME: NORTH FRANKLIN STREET SITE - WATKINS GLEN, N.Y.  
PROJECT NO. 6023.00 PROJECT ENGINEER: D. IYER

MATERIAL SOURCE: PROJECT SITE  
DATE ASSIGNED: 12/22/92

WORK ORDER NO. 1814

| IDENTIFICATION |               |            | WATER CONTENT                                       | ATTERBERG LIMITS |      |    | GRAIN SIZE ANALYSIS |            | MOISTURE-DENSITY RELATIONSHIP (Modified) |                      | PERMEABILITY TEST    |              |                 |                 |                 | LABORATORY LOG AND SOIL DESCRIPTION                                                                  |
|----------------|---------------|------------|-----------------------------------------------------|------------------|------|----|---------------------|------------|------------------------------------------|----------------------|----------------------|--------------|-----------------|-----------------|-----------------|------------------------------------------------------------------------------------------------------|
| EXPLOR. NUMBER | SAMPLE NUMBER | DEPTH ft.  | %                                                   | LL %             | PL % | PI | SIEVE -200 %        | HYD. -2µ % | MAX. DRY DENSITY pcf                     | OPT. WATER CONTENT % | PERMEABILITY cm/sec. | TYPE OF TEST | $\bar{a}_v$ psf | DRY UNIT WT pcf | WATER CONTENT % |                                                                                                      |
| MW-50          | SS-6          | 10.0-12.0  | 34.7                                                | 34               | 21   | 13 | 91                  | 17         |                                          |                      |                      |              |                 |                 |                 | Very Dark Gray Lean Clay (CL).                                                                       |
| MW-100         | SS-11         | 20.0-22.0  |                                                     |                  |      |    | 18                  | 3          |                                          |                      |                      |              |                 |                 |                 | Light Olive Brown Silty Sand with Gravel (SM).                                                       |
| MW-100         | SS-12         | 22.0-24.0  | 20.8                                                | NONPLASTIC       |      |    | 28                  | 7          |                                          |                      |                      |              |                 |                 |                 | Dark Gray Silty Sand (SM).                                                                           |
| MW-110         | ST-1          | 30.0-32.0  | Average Total Unit Weight (0.0 - 2.20') = 125.0 PCF |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 | Very Dark Gray Elastic Silt with Sand (MH), inclusions of sea shells ranging in size 0.06-0.13 inch. |
| MW-110         | ST-1          | 30.0-30.2  | save 2.1                                            |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 30.2-30.4  |                                                     |                  |      |    | 83                  | 13         |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 30.4-30.6  |                                                     |                  |      |    |                     |            |                                          |                      | 1.7xEE-06            | X            | 1800            | 75.6            | 45.4            |                                                                                                      |
| MW-110         | ST-1          | 30.6-30.8  | 52.4                                                | 57               | 34   | 23 |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 30.8-31.0  | save 2.2                                            |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 31.0-31.5  | save 2.3                                            |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 31.5-31.9  | save 2.4                                            |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-110         | ST-1          | 31.9-32.0  | 41.8                                                |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |
| MW-140         | SS-4          | 6.0-8.0    |                                                     |                  |      |    | 25                  | 5          |                                          |                      |                      |              |                 |                 |                 | Olive Brown Silty, Clayey Sand with Gravel (SC-SM).                                                  |
| MW-140         | ST-1          | 36.0-38.0  | Average Total Unit Weight (0.0 - 1.83') = 122.0 PCF |                  |      |    |                     |            |                                          |                      |                      |              |                 |                 |                 | Very Dark Gray Sandy Elastic Silt (MH), inclusions of sea shells ranging in size 0.06-0.13 inch.     |
| MW-140         | ST-1          | 36.0-36.15 | 42.9                                                | 56               | 31   | 25 |                     |            |                                          |                      |                      |              |                 |                 |                 |                                                                                                      |

**GEOTECHNICAL LABORATORY TESTING DATA SUMMARY**

PROJECT NAME: NORTH FRANKLIN STREET SITE - WATKINS GLEN, N.Y.  
PROJECT NO. 6023.00

MATERIAL SOURCE: PROJECT SITE  
DATE ASSIGNED: 12/22/92

WORK ORDER NO. 1814

| IDENTIFICATION |               |             | WATER CONTENT                                       | ATTERBERG LIMITS |      |    | GRAIN SIZE ANALYSIS |                 | MOISTURE-DENSITY RELATIONSHIP (Modified) |                      | PERMEABILITY TEST    |              |                        |                 |                 | LABORATORY LOG AND SOIL DESCRIPTION                          |
|----------------|---------------|-------------|-----------------------------------------------------|------------------|------|----|---------------------|-----------------|------------------------------------------|----------------------|----------------------|--------------|------------------------|-----------------|-----------------|--------------------------------------------------------------|
| EXPLOR. NUMBER | SAMPLE NUMBER | DEPTH ft.   | %                                                   | LL %             | PL % | PI | SIEVE -200 %        | HYD. -2 $\mu$ % | MAX. DRY DENSITY pcf                     | OPT. WATER CONTENT % | PERMEABILITY cm/sec. | TYPE OF TEST | $\frac{c_v}{\sigma_v}$ | DRY UNIT WT pcf | WATER CONTENT % |                                                              |
| MW-140         | ST-1          | 36.15-36.35 |                                                     |                  |      |    |                     |                 |                                          |                      | 1.1xEE-07            | K            | 2160                   | 81.2            | 38.8            | 36.55' grades to Dark Gray Silty Sand (SM)                   |
| MW-140         | ST-1          | 36.35-36.55 |                                                     |                  |      |    | 57                  | 10              |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-140         | ST-1          | 36.55-36.65 | 26.2                                                |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-140         | ST-1          | 36.65-36.9  | save 1.1                                            |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-140         | ST-1          | 37.0-37.83  | save 1.2                                            |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | SS-3          | 4.0-6.0     | 37.9                                                | 47               | 28   | 19 | 96                  | 22              |                                          |                      |                      |              |                        |                 |                 | Dark Grayish Brown Lean Clay (CL).                           |
| MW-160         | SS-8          | 14.0-16.0   |                                                     |                  |      |    | 11                  | 2               |                                          |                      |                      |              |                        |                 |                 | Olive Brown Poorly Graded Sand with Silt and Gravel (SP-SM). |
| MW-160         | ST-1          | 24.0-26.0   | Average Total Unit Weight (0.0 - 2.31') = 103.0 PCF |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 | 24.6' grades to Very Dark Gray Silty Sand (SM)               |
| MW-160         | ST-1          | 24.0-24.5   | save 3.1                                            |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | ST-1          | 24.5-24.6   | 27.1                                                |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | ST-1          | 24.6-24.8   |                                                     |                  |      |    | 55                  | 8               |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | ST-1          | 24.8-25.0   |                                                     |                  |      |    |                     |                 |                                          |                      | 1.4xEE-06            | K            | 1440                   | 68.7            | 49.5            |                                                              |
| MW-160         | ST-1          | 25.0-25.2   | 34.4                                                | NONPLASTIC       |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | ST-1          | 25.2-25.52  | save 3.2                                            |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |
| MW-160         | ST-1          | 25.52-26.17 | save 3.3                                            |                  |      |    |                     |                 |                                          |                      |                      |              |                        |                 |                 |                                                              |

**GEOTECHNICAL LABORATORY TESTING DATA SUMMARY**

PROJECT NAME: NORTH FRANKLIN STREET SITE - WATKINS GLEN, N.Y.  
PROJECT NO. 6023.00 PROJECT ENGINEER: D. IYER

MATERIAL SOURCE: PROJECT SITE  
DATE ASSIGNED: 12/22/92

WORK ORDER NO. 1814

| IDENTIFICATION |               |             | WATER CONTENT | ATTERBERG LIMITS |      |    | GRAIN SIZE ANALYSIS                   |                 | MOISTURE-DENSITY RELATIONSHIP (Modified) |                      | PERMEABILITY TEST    |              |                      |                 |                 | LABORATORY LOG AND SOIL DESCRIPTION                                                              |
|----------------|---------------|-------------|---------------|------------------|------|----|---------------------------------------|-----------------|------------------------------------------|----------------------|----------------------|--------------|----------------------|-----------------|-----------------|--------------------------------------------------------------------------------------------------|
| EXPLOR. NUMBER | SAMPLE NUMBER | DEPTH ft.   | %             | LL %             | PL % | PI | SIEVE -200 %                          | HYD. -2 $\mu$ % | MAX. DRY DENSITY pcf                     | OPT. WATER CONTENT % | PERMEABILITY cm/sec. | TYPE OF TEST | $\bar{\sigma}_c$ psf | DRY UNIT WT pcf | WATER CONTENT % |                                                                                                  |
| MU-160         | ST-2          | 30.0-32.0   |               | Average Total    |      |    | Unit Weight (0.0 - 2.21') = 114.0 PCF |                 |                                          |                      |                      |              |                      |                 |                 | Very Dark Gray Elastic Silt (MH),<br>Inclusions of sea shells ranging in<br>size 0.06-0.13 inch. |
| MU-160         | ST-2          | 30.0-30.25  | save 4.1      |                  |      |    |                                       |                 |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |
| MU-160         | ST-2          | 30.25-30.5  | 48.9          |                  |      |    | 95                                    | 16              |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |
| MU-160         | ST-2          | 30.5-30.7   |               |                  |      |    |                                       |                 |                                          |                      | 2.6xEE-07            | K            | 1800                 | 72.7            | 47.8            |                                                                                                  |
| MU-160         | ST-2          | 30.7-30.9   | 46.0          | 53               | 32   | 21 |                                       |                 |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |
| MU-160         | ST-2          | 31.02-31.52 | save 4.2      |                  |      |    |                                       |                 |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |
| MU-160         | ST-2          | 31.52-32.1  | save 4.3      |                  |      |    |                                       |                 |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |
|                |               |             |               |                  |      |    |                                       |                 |                                          |                      |                      |              |                      |                 |                 |                                                                                                  |

% = WATER CONTENT IN PERCENT

LL % = LIQUID LIMIT IN PERCENT

PL %        =        PLASTIC LIMIT IN PERCENT

PI = PLASTICITY INDEX

SIEVE -200 % = PERCENT FINES, MATERIAL FINER THAN NO. 200 SIEVE  
(0.074 MM)

HYD. -2 $\mu$  %        =        PERCENT FINER THAN 2 MICRONS

MAX. DRY DENSITY pcf = MAXIMUM DRY DENSITY IN POUNDS PER CUBIC FOOT

OPT. WATER CONTENT % = OPTIMUM WATER CONTENT IN PERCENT

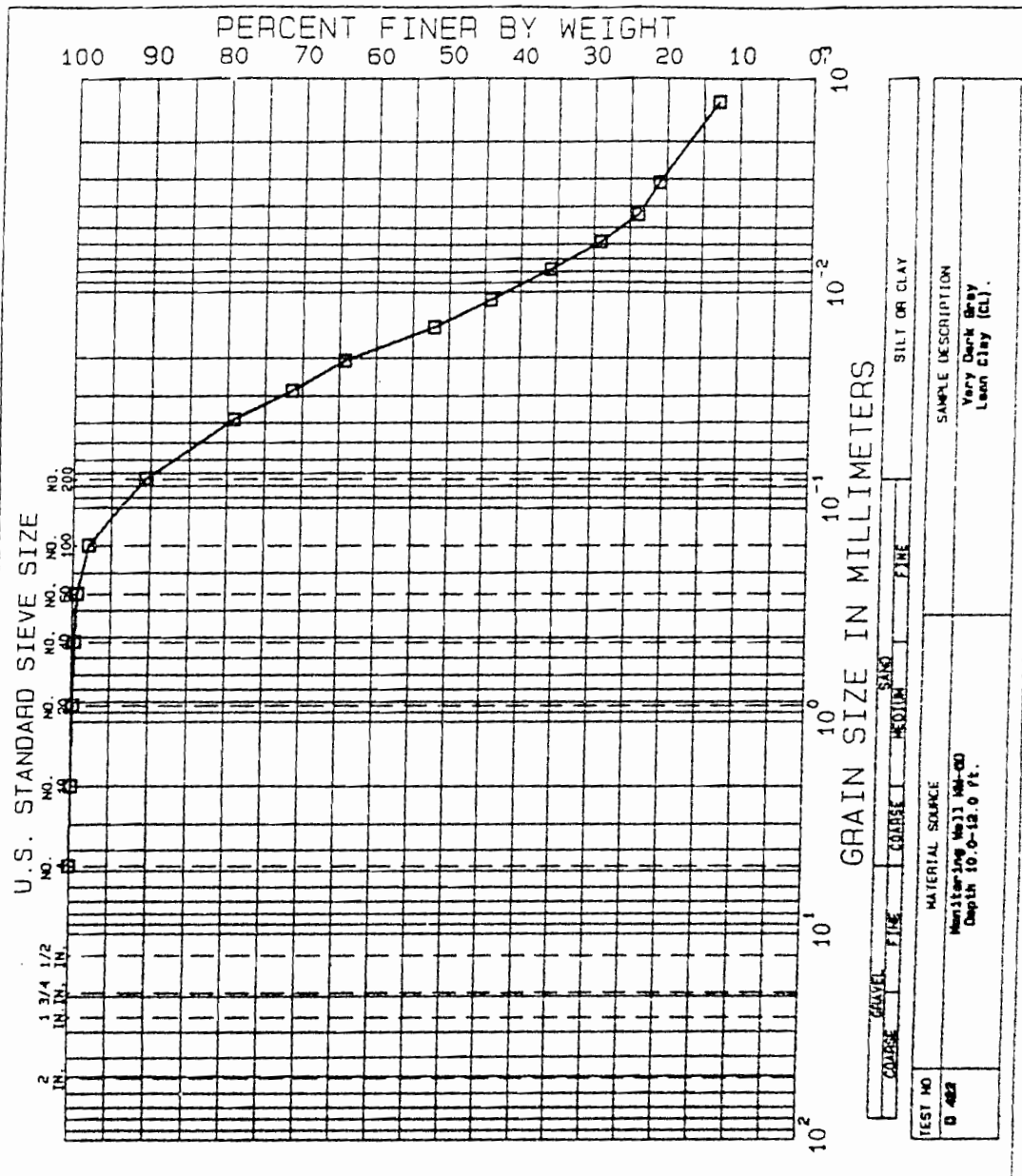
PERMEABILITY cm/sec. = PERMEABILITY MEASURED IN CENTIMETERS PER SECOND

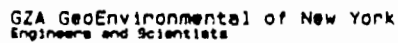
|              |                     |   |                                 |
|--------------|---------------------|---|---------------------------------|
| TYPE OF TEST | $K_{\frac{1}{2}}$   | = | RECONSTITUTED (REMOLDED) SAMPLE |
|              | $K_{\frac{1}{2}^0}$ | = | UNDISTURBED SAMPLE              |

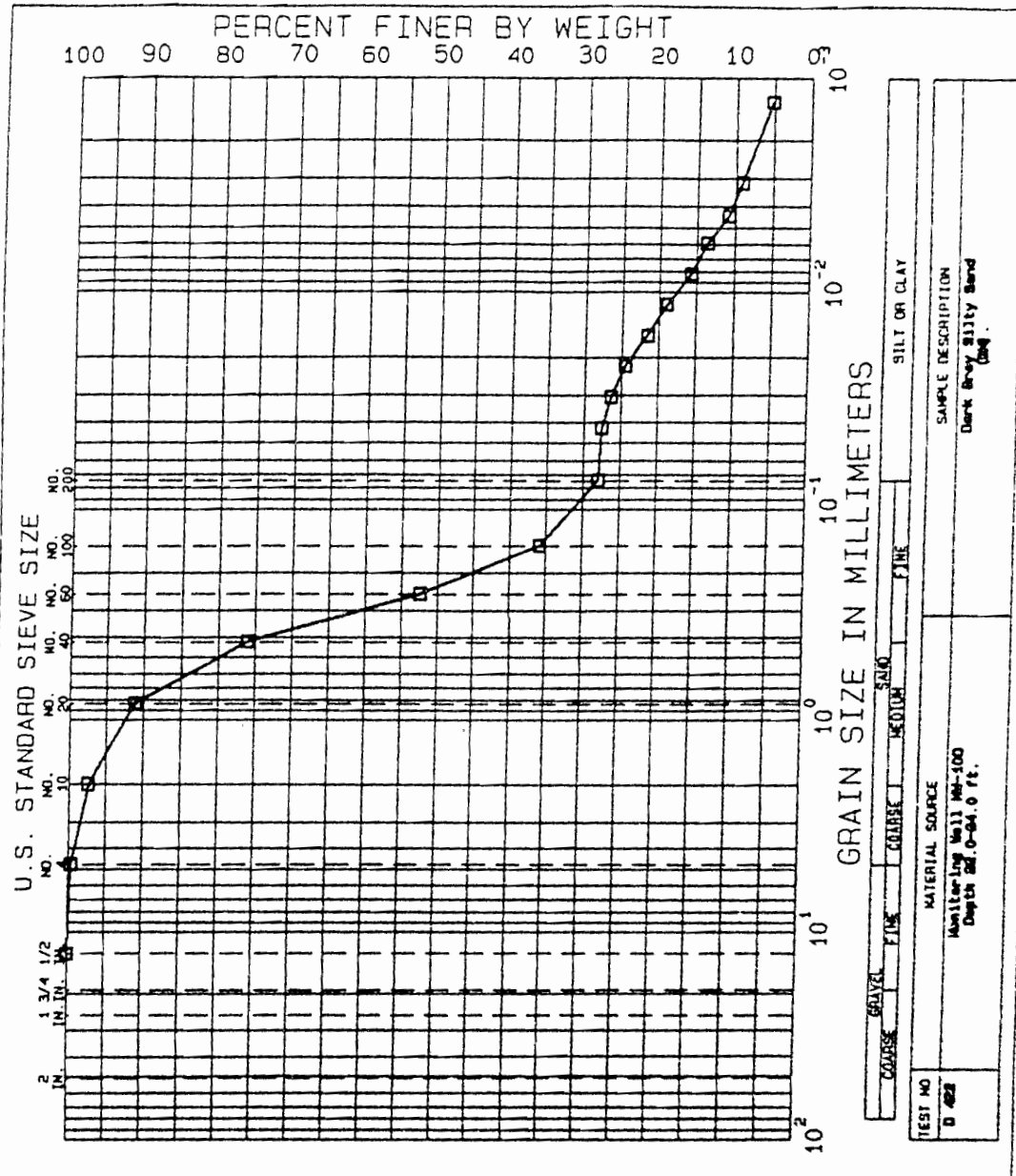
$\bar{\sigma}_c$  psf = EFFECTIVE CONFINING PRESSURE DURING PERMEABILITY TEST IN POUNDS PER SQUARE FOOT

DRY UNIT WT. pcf      =      DRY DENSITY OF TEST SAMPLE IN POUNDS PER CUBIC FOOT

WATER CONTENT % = WATER CONTENT OF TEST SAMPLE IN PERCENT





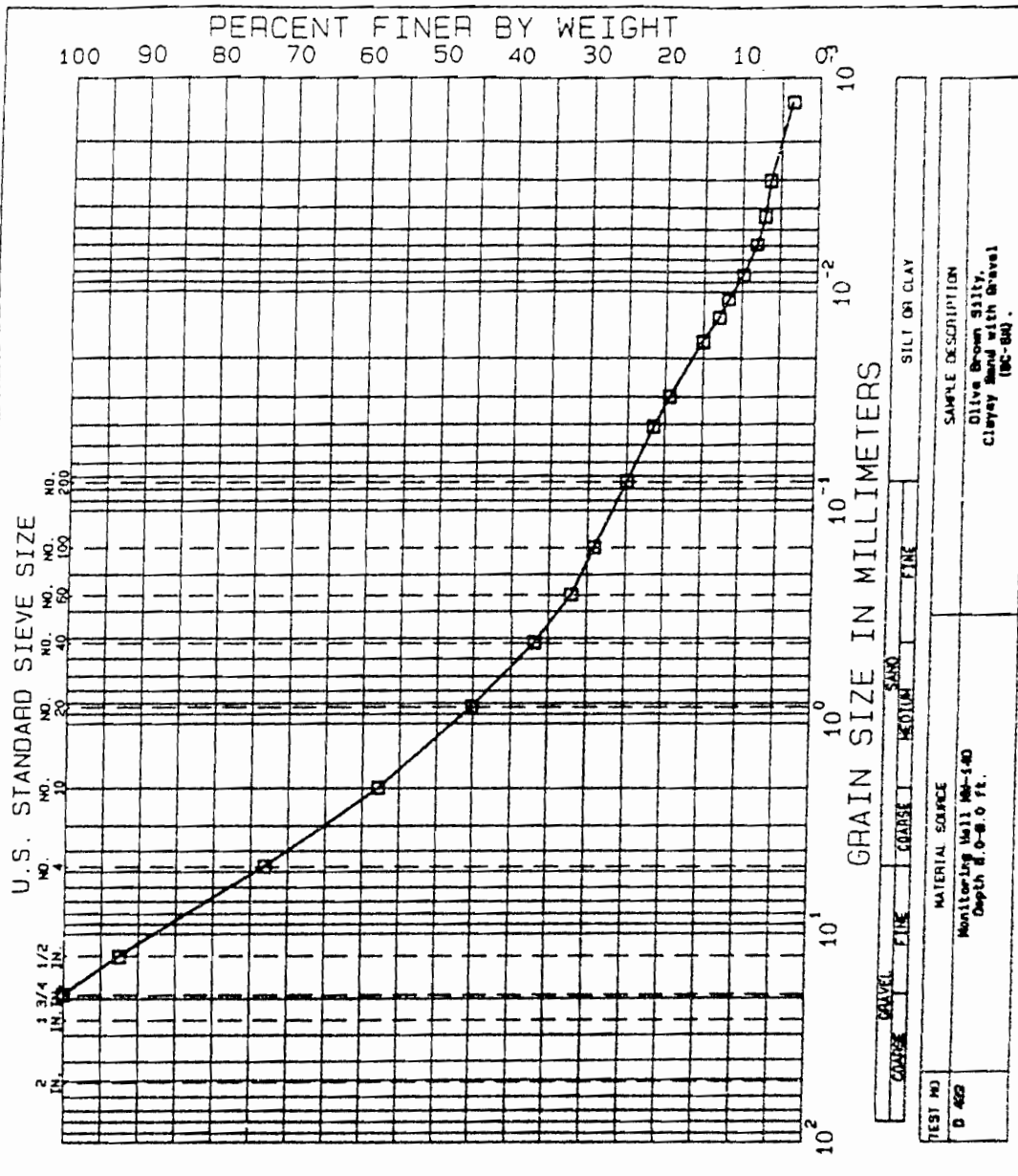


NORTH FRANKLIN STREET SITE  
WATKINS GLEN, NEW YORK  
GRADATION TESTS

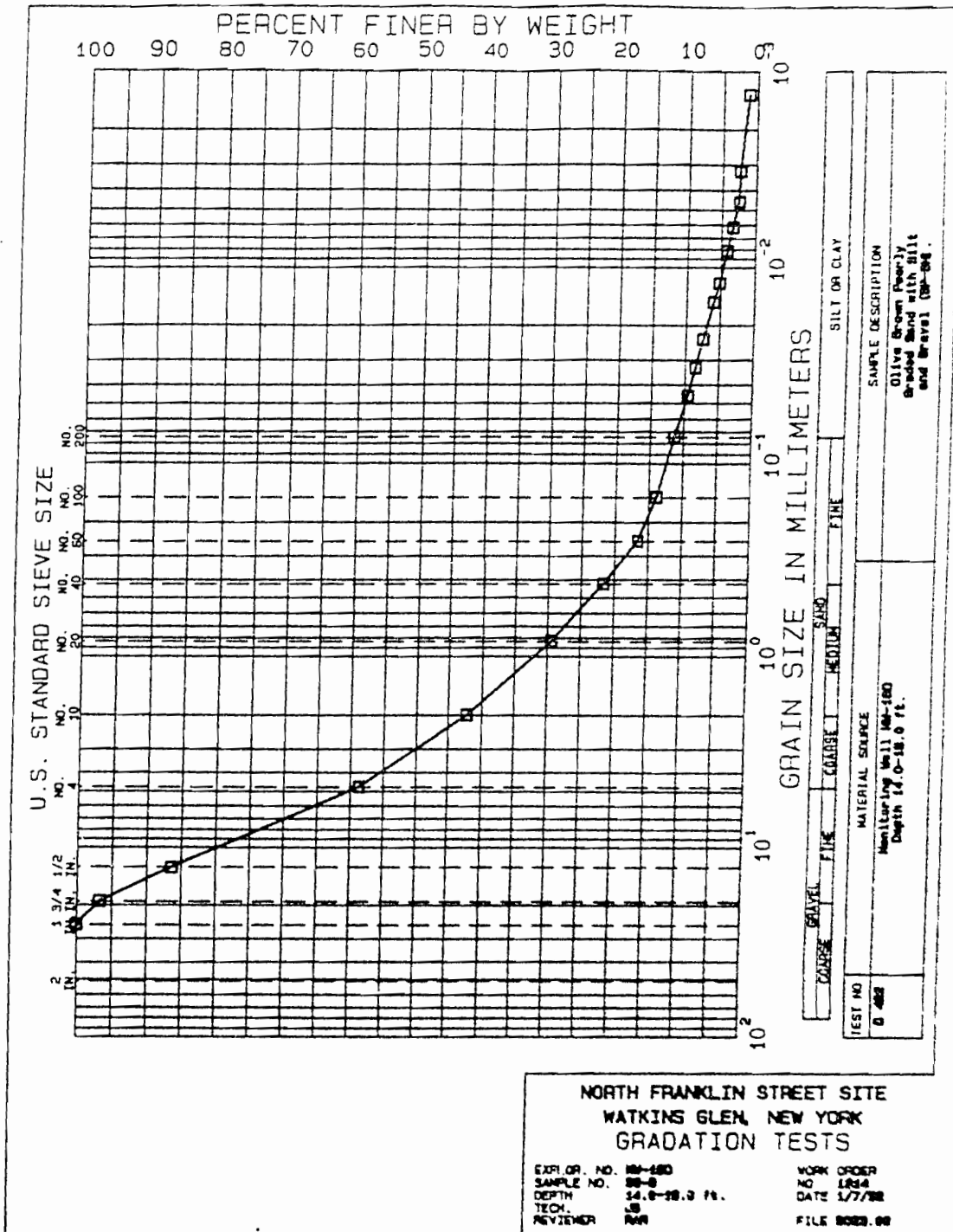
EXPLOR. NO. NW-280  
SAMPLE NO. 88-18  
DEPTH 82.0-84.0 ft.  
TECH. JS  
REVISOR RAR

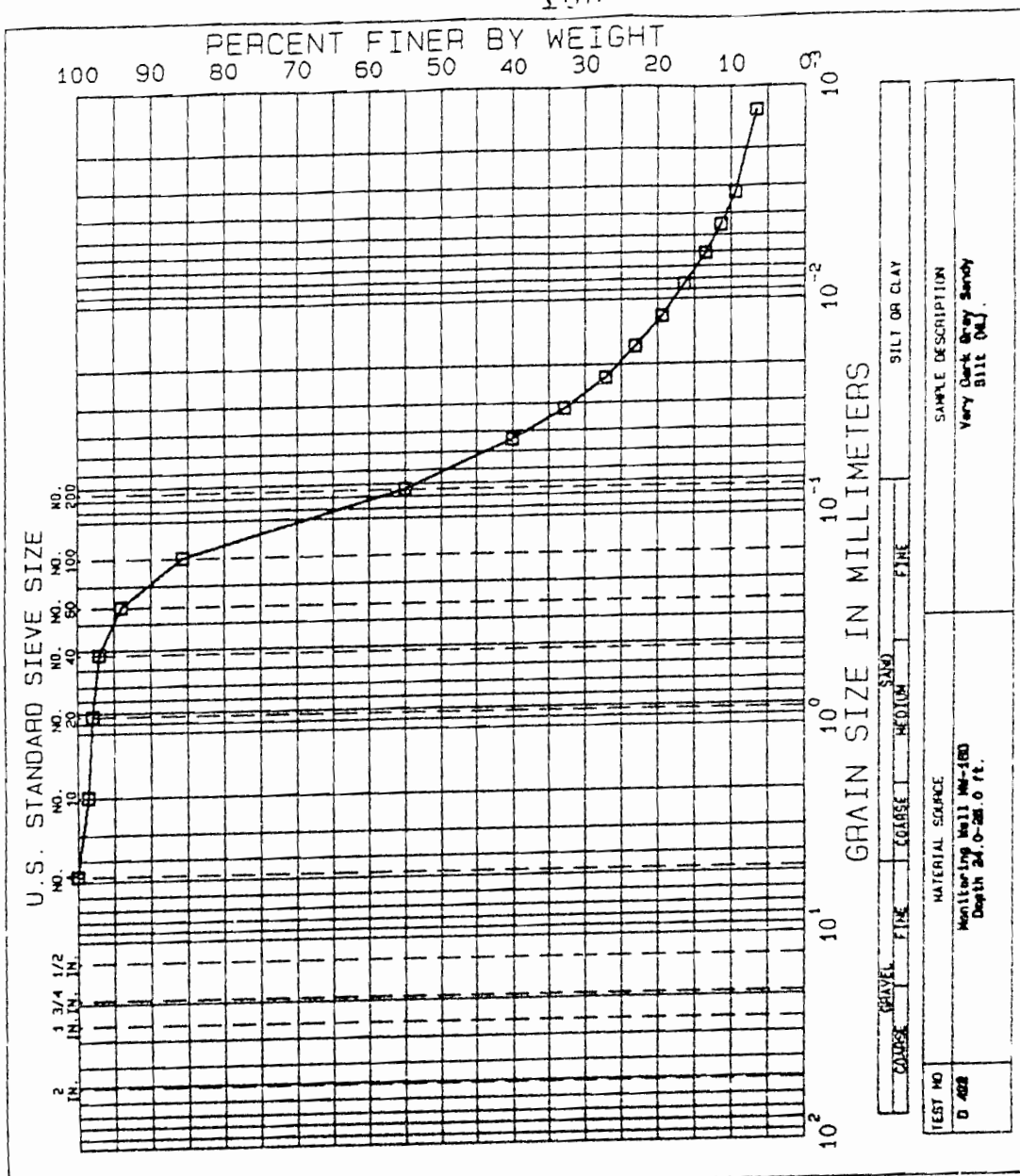
WORK ORDER  
NO. 1884  
DATE 1/12/88  
FILE 8882.08

100

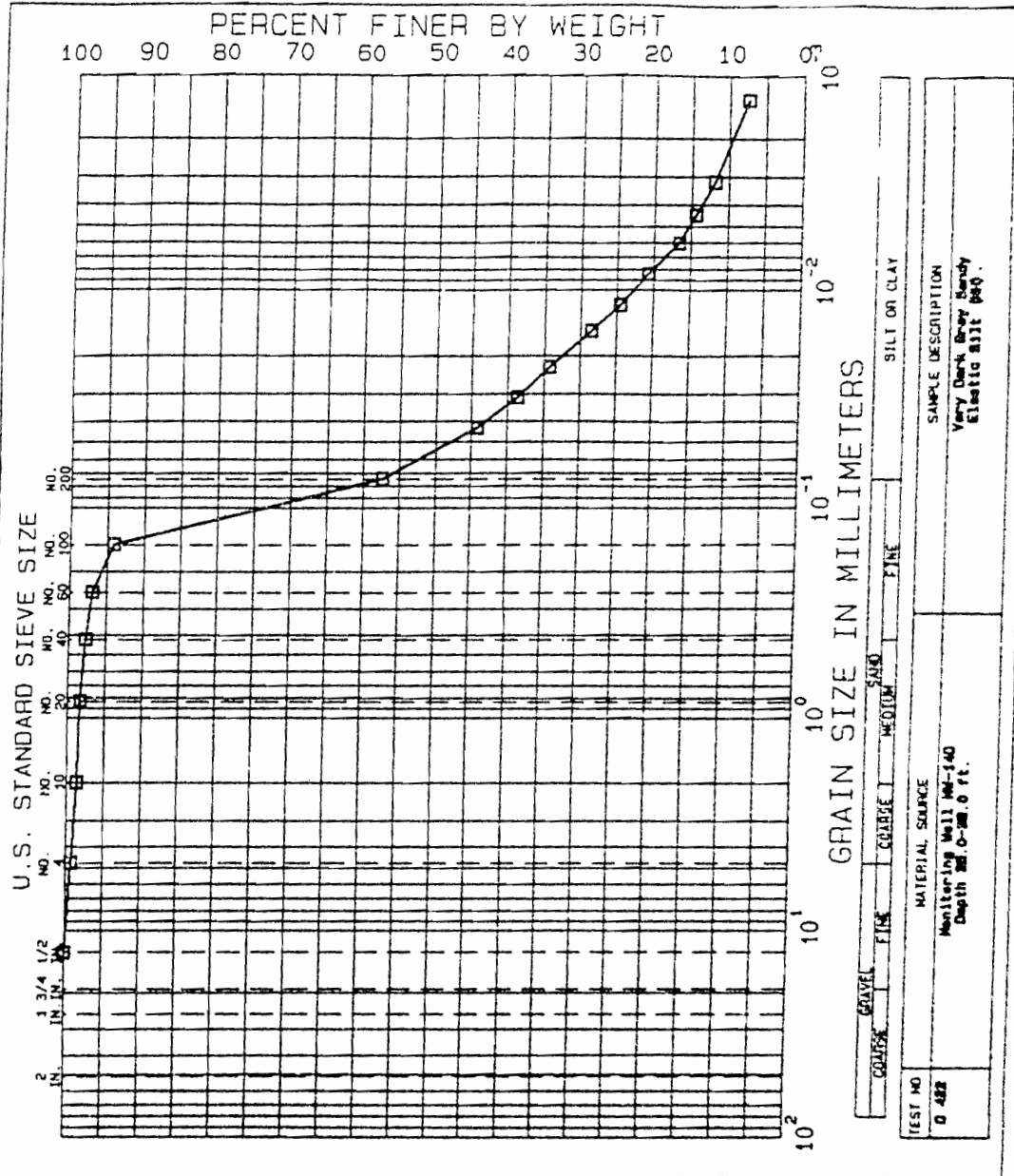


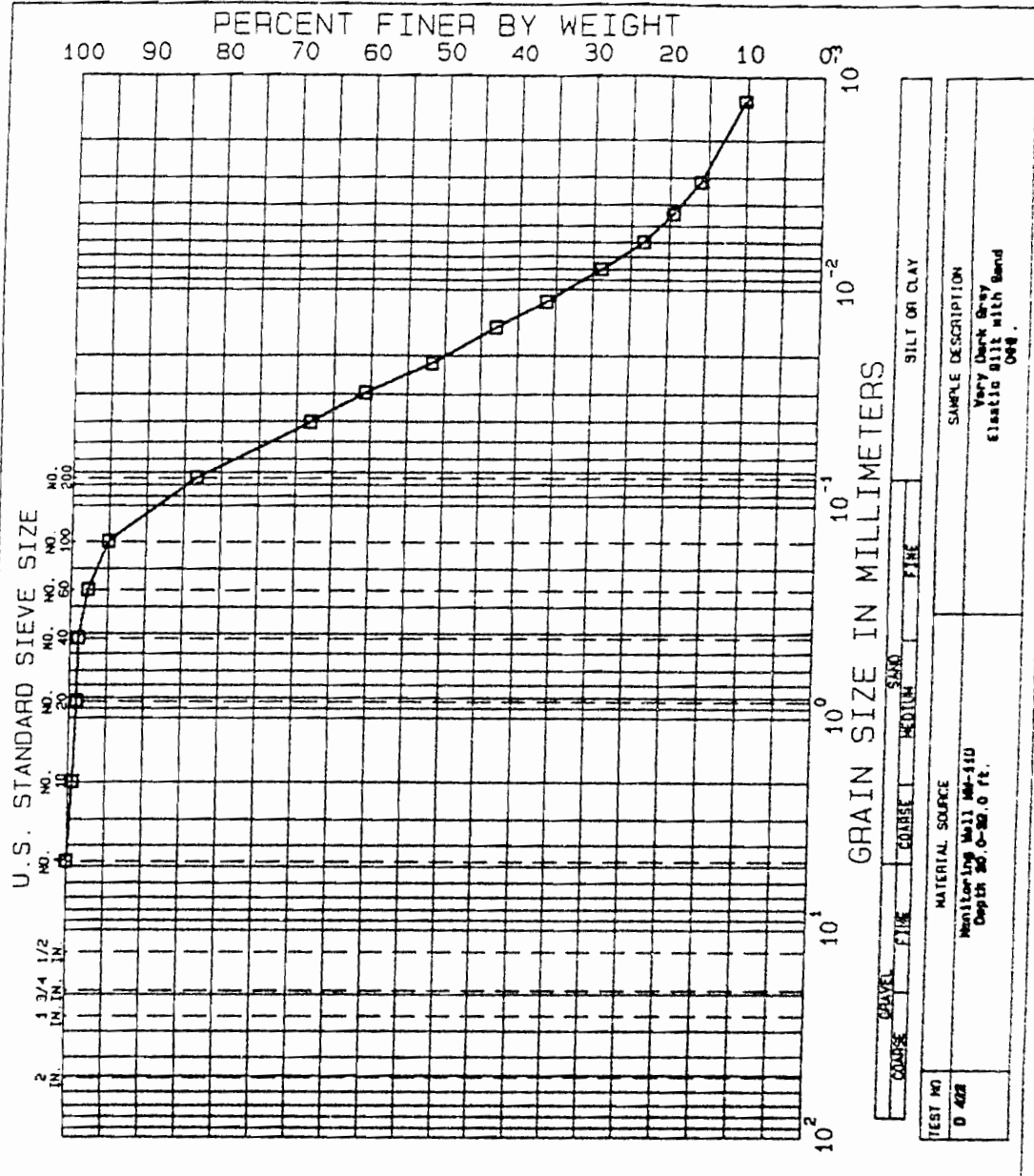
GZA GeoEnvironmental of New York  
Engineers and Scientists





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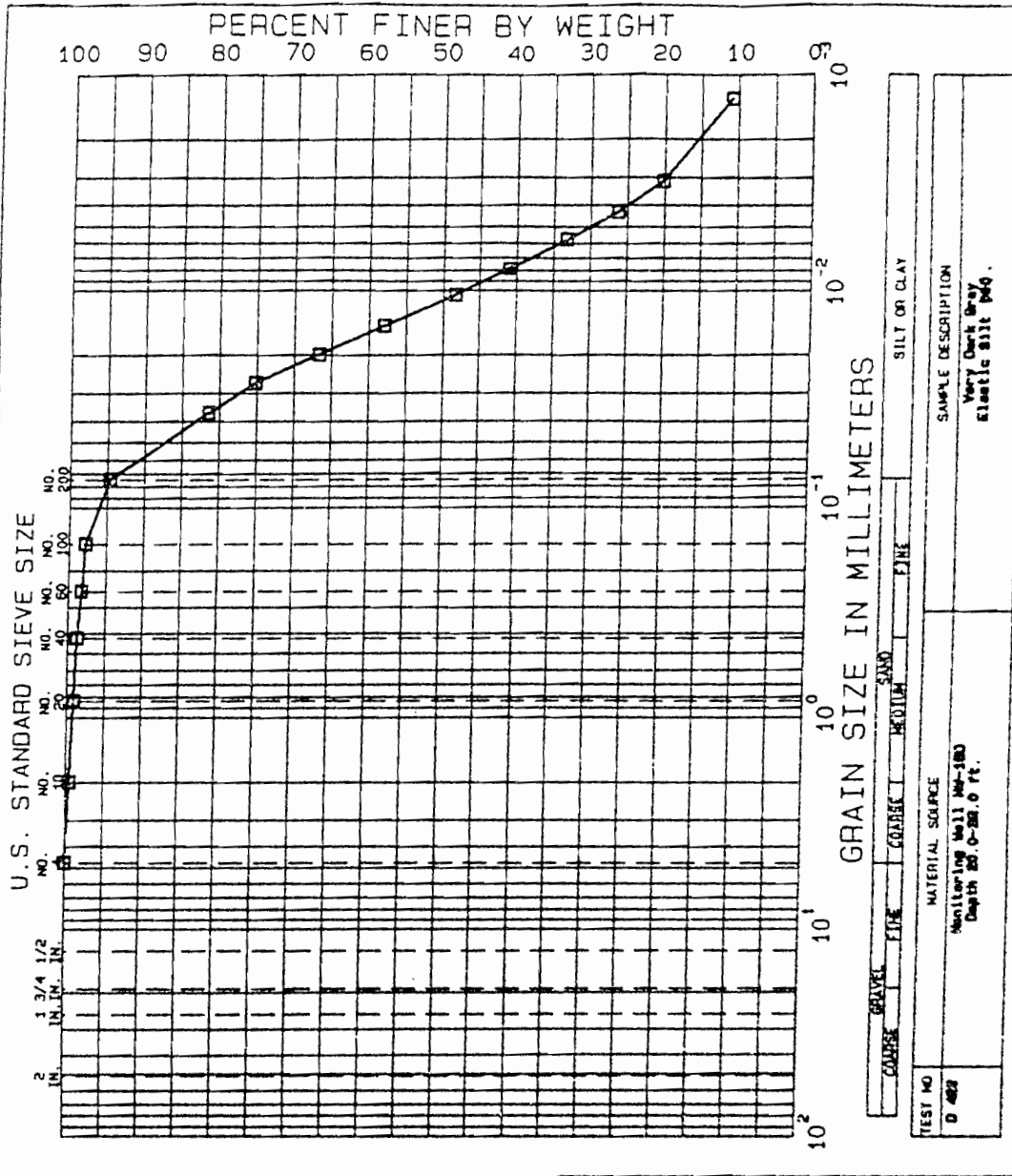




NORTH FRANKLIN STREET SITE  
WATKINS GLEN, NEW YORK  
GRADATION TESTS

EXPLOR. NO. MM-110  
 SAMPLE NO. ST-2  
 DEPTH 30.0-32.0 ft.  
 TECH. JB  
 REVIEWER RAB

WORK ORDER  
 NO 1844  
 DATE 1/7/82  
 FILE 8082.00



NORTH FRANKLIN STREET SITE  
WATKINS GLEN, NEW YORK  
GRADATION TESTS

EXPLOR. NO. 104-280  
SAMPLE NO. ST-8  
DEPTH 30.0-32.0 FT.  
TECH. JB  
REVIEWER PRR

WORK ORDER  
NO. 1914  
DATE 1/7/82  
FILE 8022.00