



## FIELD BOREHOLE LOG

BOREHOLE NO.: MW-298

TOTAL DEPTH (FT BGS): 111

### PROJECT INFORMATION

PROJECT: SRI Phase 3

PROJECT NO.: 10058697

SITE LOCATION: DDMT, Main Installation

PROJECT MANAGER: T. Holmes

FIELD STAFF: C. Mokri / A. Morgan

BOREHOLE STARTED: 7/2/2018

BOREHOLE FINISHED: 7/2/2018

### DRILLING INFORMATION

DRILLING CO.: Cascade Drilling, L.P.

DRILLER: Larry Yancy

DRILLING METHOD/RIG: Sonic, S1159

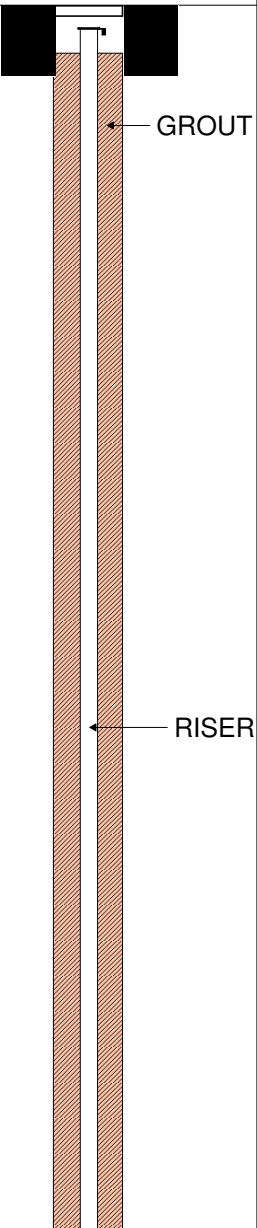
BOREHOLE DIAMETER: 6 in.

GROUND SURFACE ELEVATION (FT NAVD): 297.04

WATER DEPTH/ DATE(FT BTOC): 89.74 on 8/11/18

BOREHOLE USE: Monitoring Well

NOTES: PID readings collected from at least 5 foot intervals beginning at ground surface; all readings were 0 parts per million (ppm). No water used during drilling. Well installed 07/02, pad constructed 07/09 and well developed 07/15/18.

| Depth (ft, bgs) | Soil Symbol | Soil Description   | Well Completion  | Comments |
|-----------------|-------------|--|--|----------|
|                 |             | Fill - Silt with sand, 2.5 YR 4/3, reddish brown, dry  |  |          |
|                 |             | ML - Clayey silt, soft, medium plasticity, 2.5 YR 6/2, pale red, moist                                       |  |          |
|                 |             | No Recovery  |  |          |
| 10              |             | <b>CL</b><br>Silty clay, very soft, 2.5 YR 6/2, pale red, moist  |  |          |
|                 |             | Clay, medium stiff, medium to high plasticity, 2.5 YR 4/4, reddish brown                                     |  |          |
| 20              |             | With trace gravel to 1/4", stiff, medium plasticity, 2.5 YR 5/4, reddish brown                               |  |          |
|                 |             | No gravel, medium stiff, medium to high plasticity, 2.5 YR 4/3, reddish brown, moist                         |  |          |
|                 |             | With trace gravel to 1/8", stiff, high plasticity, 2.5 YR 6/4, light reddish brown                           |  |          |
| 30              |             | With subangular gravel to 1/4", medium plasticity, 2.5 YR 6/4, light reddish brown                           |  |          |
|                 |             | <b>GC</b><br>Clayey gravel, subangular to 1", stiff, medium plasticity, 10 YR 4/6, red, moist                |  |          |
|                 |             | <b>SC</b><br>Clayey sand with angular gravel to 1", medium grained, very dense, 10 YR 5/6, red               |  |          |
| 40              |             | <b>SP/GP</b><br>Sand and gravel with trace clay, coarse grained, loose, 10 YR 5/6, red, moist                |  |          |
|                 |             | <b>SP</b><br>Sand, loose, medium grained, 10 YR 5/6, red, moist  |  |          |
|                 |             | <b>SW</b><br>Sand with subrounded gravel to 1", loose, 2.5 YR 6/6, light red, moist<br>Very moist to wet     |  |          |
| 50              |             | <b>SP</b><br>Sand, medium grained, very loose, 2.5 YR 7/6, light red, dry<br>5 YR 6/8, reddish yellow, moist |  |          |

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| Depth | Soil Symbol  | Soil Description  | Well Completion | Comments |
|-------|--------------|---|-----------------|----------|
|       |              | With trace subrounded gravel, 5 YR 6/4, pink                              |                 |          |
|       | <b>SW</b>    | Sand, very loose, 5 YR 6/8, reddish yellow, moist                         |                 |          |
|       | <b>SP</b>    | Sand, fine to medium grained, very loose, 5 YR 7/6, reddish yellow, wet   |                 |          |
|       | <b>SP/GP</b> | Sand and subrounded gravel to 1", fine to medium grained, very loose, wet |                 |          |
| 60    | <b>SP</b>    | Sand with gravel rounded to 1.5", very loose, 5 YR 7/4, pink, dry         |                 |          |
|       |              | With 3" cemented layer, 5 YR 3/3, dark reddish brown, moist               |                 |          |
|       |              | Fine to medium grained, very loose, 5 YR 7/6, reddish yellow              |                 |          |
|       | <b>SW</b>    | Sand, very loose, 5 YR 7/6, reddish yellow, moist                         |                 |          |
|       | <b>SP</b>    | Sand, fine grained, very loose, 5 YR 7/6, reddish yellow, moist           |                 |          |
| 70    | <b>SW/GW</b> | Sand and rounded gravel to 1/2", very loose, 5 YR 5/8, yellowish red, wet |                 |          |
|       |              | 5 YR 7/6, reddish yellow  |                 |          |
|       | <b>GW</b>    | Gravel with sand, subrounded gravel to 2", very loose, wet                |                 |          |
|       | <b>SP</b>    | Sand, fine grained, very loose, 5 YR 7/6, reddish yellow, wet             |                 |          |
|       |              | Medium grained, loose   |                 |          |
|       |              | With trace rounded gravel to 1"   |                 |          |
| 80    |              | Fine grained, no gravel, 5 YR 7/4, pink                                   |                 |          |
|       |              | Very loose, 5 YR 6/8, reddish yellow                                      |                 |          |
|       |              |   |                 |          |
|       |              |   |                 |          |
| 90    |              |   |                 |          |
|       |              |   |                 |          |
|       |              | Coarse grained with rounded gravel to 1", 5 YR 6/6, reddish yellow        |                 |          |
|       | <b>SP/GP</b> | Sand and gravel, coarse sand, very loose, wet                             |                 |          |
|       | <b>SP</b>    | Sand, fine grained, very loose, 5 YR 8/4, pink, wet                       |                 |          |
|       |              | Medium grained, loose, 5 YR 6/6, reddish yellow                           |                 |          |
| 100   |              |   |                 |          |

89.74 ft. btoc

BENTONITE

SAND PACK

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| Depth | Soil Symbol  | Soil Description  | Well Completion       | Comments |
|-------|--------------|---|-----------------------|----------|
| 110   |              | With trace gravel, very loose, 5 YR 6/3, light reddish brown                      | <br>SCREEN<br>END CAP |          |
|       | <b>SP/GP</b> | Sand/gravel, subrounded gravel 1", very loose, wet                                |                       |          |
|       | <b>SW/GW</b> | SW/GW - Sand and gravel, subrounded gravel to 1", very loose, 5 YR 7/4, pink, wet |                       |          |
| 120   |              | End of Log  |                       |          |
| 130   |              |   |                       |          |
| 140   |              |   |                       |          |
| 150   |              |   |                       |          |

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