APPENDIX B

TEST PIT LOGS AND DAILY FIELD LOGS
**SOIL BORING NUMBER:** OP-TP-2

- **BOREHOLE DIA.:**  — INCHES
- **WELL DIA.:**  — INCHES
- **SCREEN SET:**  — TO  —
- **SCREEN SIZE:**  —
- **TYPE OF WELL:**  — ANG
- **CITY, STATE:** Rosemount, MN
- **END OF BORING:** 64'
- **LOCATION:** Super Hig.
- **RIG:** Trickle
- **DRILLER:** Jerke
- **PROJECT NUMBER:** 46027052
- **PROJECT NAME:** GOW
- **PROJECT ADDRESS:** —
- **DATE STARTED:** 12/30/62
- **DATE COMPLETED:** 12/30/62
- **TERRACON REPRESENTATIVE:** MT
- **FOREMAN:** —

### SAMPLE LOG:

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>EXAMPLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR M M</td>
<td>Sandy clay</td>
<td>some gravel</td>
<td>some gravel</td>
</tr>
<tr>
<td>BR M M</td>
<td>Sandy clay</td>
<td>some gravel</td>
<td>some gravel</td>
</tr>
<tr>
<td>BR-DM M M</td>
<td>Sandy clay</td>
<td>some gravel, multi color</td>
<td>some gravel, multi color</td>
</tr>
<tr>
<td>BR M M</td>
<td>Sandy clay</td>
<td>little gravel</td>
<td>little gravel</td>
</tr>
</tbody>
</table>

- **DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**KEY:**
- **COLORS:** BR = BROWN, G = GRAY, BL = BLACK, RB = RED, OR = ORANGE, Y = YELLOW
- **GRAIN SIZE:** F = FINE, M = MEDIUM, C = COARSE
- **WATER CONTENT:** DW = DRY, MW = MOIST, WW = WET

**INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**

**NOTES:**
- **GROUND ELEVATION:**
- **RISER ELEVATION:**
### SAMPLE LOG:

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**
- **COLORS:** BR=BROWN G=GRAY BL=BLACK M=RED O=ORANGE Y=Yellow
- **GRAIN SIZE:** F-FINE M-MEDIUM C-COARSE
- **WATER CONTENT:** D-DRY M-MOIST W-WET
- **INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**

**NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**DEPTHS GO BETWEEN TCS AND INDICATE DEPTH AT LINE**

**DEPTH:** 4' 5'

**PIDS (ppm):** 1.1

**SAMPLE TYPE:**
- 0.1 SP
- 1.2 CL
- 2.3 CL

**RECOVERY IN INCHES:**

**SAMPLE INTERVAL:**

**SAMPLE NUMBER:**

**SAMPLE COUNT:**

**DATE COMPLETED:** 12/30/12

**TERRACON REPRESENTATIVE:** MJS

**DATE STARTED:** 12/30/12

**FOREMAN:** Tim

**DRILLER:** Barenku

**RIG:** Trackhoe

**LOCATION:** 2B3

**END OF BORING:** 31

**CITY, STATE:** Rosemont, IL

**PROJECT NUMBER:** 41627052

**PROJECT NAME:** GOW

**CLIENT:** MFG - GOW

**SOIL BORING NUMBER:** OP-183

**BOREHOLE DIA:**

**WELL DIA:**

**SCREEN SET:**

**SCREEN SIZE:**

**TYPE OF WELL:**

**END OF WELL:**

**GNG:**
**Terracon**

**SOIL BORING NUMBER:** O9-TP-4

<table>
<thead>
<tr>
<th>BOREHOLE DIA:</th>
<th>---</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL DIA:</td>
<td>---</td>
</tr>
<tr>
<td>SCREEN SET:</td>
<td>--- TO ---</td>
</tr>
<tr>
<td>SCREEN SIZE:</td>
<td>---</td>
</tr>
<tr>
<td>TYPE OF WELL:</td>
<td>---</td>
</tr>
<tr>
<td>CITY, STATE:</td>
<td>Rosemont, IL</td>
</tr>
<tr>
<td>END OF BORING:</td>
<td>4'</td>
</tr>
<tr>
<td>LOCATION:</td>
<td>---</td>
</tr>
<tr>
<td>RIG:</td>
<td>Truckless</td>
</tr>
<tr>
<td>DRILLER:</td>
<td>Barneke</td>
</tr>
<tr>
<td>FOREMAN:</td>
<td>Tim</td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>EXAMPLE</th>
<th>SOIL TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL-BR</td>
<td>M</td>
<td>Silty clay</td>
<td>Same sand</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>M</td>
<td>Sand</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>BL</td>
<td>M</td>
<td>Sand</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>M</td>
<td>Sand</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>

**OPIE COUNT**

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>BORECOUNTER</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>RECOVERY IN INCHES</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>WELL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CL</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>SL</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Y</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**NOTES:**

- **COLORS:** BR=Brown, G=Gray, BL=Black, R=Red, O=Orange, Y=Yellow
- **GRAIN SIZE:** F=Fine, M=Medium, C=Coarse
- **WATER CONTENT:** D=Dry, M=Moist, W=Wet
- **KEY:** POORLY GRADED SAND W/SILT
- **OXIDIZED ZONES & AMMONIA ODOR:** 4
- **DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**PROJECT NUMBER:** 41027052

**PROJECT NAME:** 60W

**PROJECT ADDRESS:** 2 |

**DATE STARTED:** 12/03/02

**DATE COMPLETED:** 12/30/02

**TERRACON REPRESENTATIVE:** MSR

**PROJECT NUMBER:** 41027052

**PROJECT NAME:** 60W

**PROJECT ADDRESS:** 2
**SOIL BORING NUMBER: NA TP-2**

<table>
<thead>
<tr>
<th>SAMPLE LOG:</th>
</tr>
</thead>
<tbody>
<tr>
<td>YL-BR  F-C  M</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**KEY:**
- **COLORS:** BR=Brown  G=Gray  BL=Black  R=Red  O=Orange  Y=Yellow
- **GRAIN SIZE:** F=Fine  M=Medium  C=Coarse
- **WATER CONTENT:** D=Dry  M=Moist  W=Wet

**NOTES:**
- Did not have a chance to log NA TP-2 before ground elevation, all PID readings taken.

**GROUND ELEVATION:**

**RISER ELEVATION:**

**TERRACON REPRESENTATIVE:** MJB

**RIG:** Backhoe Trackhoe

**DRILLER:** Barreau

**FOREMAN:** Tim

**LOCATION:**

- **COLOR:** M
- **GRAIN:** Silty Sand
- **WATER CONTENT:** Dr-Bl
- **EXAMPLE:** Silty Clay
- **SOIL TYPE:** Silty Clay
- **END OF BORING:**

**TYPE OF WELL:** AG

**CITY, STATE:** Rosemount, Mn

**DATE STARTED:** 12/30/02

**DATE COMPLETED:** 12/30/02

**PROJECT NUMBER:** 91027052

**PROJECT NAME:** GOL

**CLIENT:** MCNA-1000

**SCREEN SET:**

- **SCREEN SIZE:**
- **SCREEN DIA:**
**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>INCHES</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>X = SAMPLE COLLECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td>2</td>
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</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEPTH:** DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

**NOTES:**

- **GROUND ELEVATION:**

**RISER ELEVATION:**

**KEY:**

- **COLORS:** BR = BROWN  G = GRAY  BL = BLACK  R = RED  O = ORANGE  Y = YELLOW
- **GRAIN SIZE:** F = FINE  M = MEDIUM  C = COARSE
- **WATER CONTENT:** D = DRY  M = MOIST  W = WET

**INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**
# Soil Boring Report

**SOIL BORING NUMBER:** BP-TP-1  
**PROJECT NUMBER:** 41027052  
**CLIENT:** TVA  
**PROJECT NAME:**  
**CITY, STATE:** Rosemont, TN  
**TERRACON REPRESENTATIVE:** AJB  
**DATE STARTED:** 12/31/02  
**DATE COMPLETED:** 12/31/02

**LOCATION:** in line

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>WHILE DRILLING</th>
<th>AFTER DRILLING</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRK</td>
<td>MM</td>
<td>Organic material</td>
<td>Clayey sand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BL</td>
<td>MM</td>
<td>Sand</td>
<td>Fine sand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>MM</td>
<td>Sand</td>
<td>Some gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>MM</td>
<td>Sand</td>
<td>Few gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>MM</td>
<td>Sand</td>
<td>End of boring</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**KEY: COLORS:**
- BR = BROWN  
- G = GRAY  
- BL = BLACK  
- R = RED  
- ORANGE  
- Y = YELLOW  

**GRAN SIZE:**
- F = FINE  
- M = MEDIUM  
- C = COARSE  

**WATER CONTENT:**
- D = DRY  
- M = MOIST  
- W = WET

**INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**

**NOTES: GROUND ELEVATION:**

**RISER ELEVATION:**

**UMP000501**
<table>
<thead>
<tr>
<th>Color</th>
<th>Grain</th>
<th>Size</th>
<th>Water Content</th>
<th>Soil Type</th>
<th>While Drilling</th>
<th>After Drilling</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Sand</td>
<td>M</td>
<td></td>
<td>Organic material</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>D</td>
<td>Sand</td>
<td>M</td>
<td></td>
<td>Few gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Sand</td>
<td>M</td>
<td></td>
<td>Some gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Gravel</td>
<td>M</td>
<td></td>
<td>Fine gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Gravel</td>
<td>M</td>
<td></td>
<td>Coarse gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Gravel</td>
<td>M</td>
<td></td>
<td>Coarse gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sample Log:**

<table>
<thead>
<tr>
<th>Depth</th>
<th>Blow Count</th>
<th>Sample Number</th>
<th>Sample Interval</th>
<th>Recovery</th>
<th>Sample Type</th>
<th>Pid (ppm)</th>
<th>Wet</th>
<th>Sediment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:**
- Colors: BR = Brown, G = Gray, BL = Black, R = Red, O = Orange, Y = Yellow
- Grain Size: F = Fine, M = Medium, C = Coarse
- Water Content: D = Dry, M = Moist, W = Wet

**Notes:**
- Include accurate soil types and descriptions when completing log.

**Ground Elevation:**

**Riser Elevation:**

**Depths Go Between Tics and Indicate Depth at Line**
## Soil Boring Number: BP-TP-3

**Borehole Dia:** — **Inches**  
**Well Dia:** — **Inches**  
**Screen Set:** — To  
**Screen Size:** — **Inches**  
**Type of Well:** — **Inches**  
**End of Boring:** — **Inches**  
**Location:** —  
**Rig:** Trackhoe  
**Driller:** Bore  
**Foreman:** Tim  
**Client:** MPCHA  
**Project Name:** Cow  
**Project Address:**  
**City, State:** Rosemount, MN  
**Date Started:** 12/8/02  
**Date Completed:** 12/8/02  
**Terracon Representative:** MJD

### Soil Type

<table>
<thead>
<tr>
<th>Color</th>
<th>Grain Size</th>
<th>Water Content</th>
<th>Example</th>
<th>Clayey Sand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Br</td>
<td>M D</td>
<td>Sand, silt</td>
<td>Organic Material</td>
<td></td>
</tr>
<tr>
<td>YL</td>
<td>M I</td>
<td>Sand</td>
<td>Fine gravel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>Sand</td>
<td>Some gravel</td>
<td></td>
</tr>
<tr>
<td>Br</td>
<td>C</td>
<td>Sand</td>
<td>Fine gravel</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>C</td>
<td>Sand</td>
<td>Coarse gravel</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>C</td>
<td>Gravel</td>
<td>Coarse gravel</td>
<td></td>
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<tr>
<td>I</td>
<td>C</td>
<td>Gravel</td>
<td>Coarse gravel</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>C</td>
<td>Gravel</td>
<td>Coarse gravel</td>
<td></td>
</tr>
</tbody>
</table>

### Sample Log

- **Depth:** 0' 1' 2' 3' 4' 5' 6' 7' 8' 9'
- **Sample Number:** 12 2 4-8 38 MC 234.5
- **Sample Type:**  
- **Sample Interval:**  
- **Recovery in Inches:**  
- **Sample:**  
- **PDD (ppm) X Sample Collected:**  

**Sample Log:**  
- **Poorly Graded Sand W/Silt:** YL-BR  
- **Oxidized Zones & Ammonia Odor:**  

**NOTES:** Same as TP-2, coarse gravel continues

**Ground Elevation:**  
**Riser Elevation:**  

**Depth Indicated:** Depths go between TICs and indicate depth at line
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>DEPTH</th>
<th>SAMPLE COUNT</th>
<th>SAMPLE INTERVAL</th>
<th>SAMPLE RECOVERY</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>WELL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK-DK</td>
<td>M</td>
<td>1</td>
<td>Silty Clay</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BK-DK</td>
<td>M</td>
<td>1</td>
<td>Silty Clay</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BK</td>
<td>M</td>
<td>1</td>
<td>Silty Clay</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BK</td>
<td>M</td>
<td>1</td>
<td>Silty Clay</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BK</td>
<td>M</td>
<td>1</td>
<td>Silty Clay</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
<th>DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 2 4-8 38 MC 234.5 *</td>
</tr>
</tbody>
</table>

**KEY:**
- BR = BROWN
- G = GRAY
- BL = BLACK
- R = RED
- O = ORANGE
- Y = YELLOW
- F = FINE
- M = MEDIUM
- C = COARSE
- D = DRY
- M = MOIST
- W = WET

**NOTES:**
- BP-TP-4 same, only down to 8'
- Very close to BP-TP-4 pit
SOIL BORING NUMBER: BP-TP-6

<table>
<thead>
<tr>
<th>BOREHOLE DIA:</th>
<th>INCHES</th>
<th>PROJECT NUMBER: 41027052</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL DIA:</td>
<td>INCHES</td>
<td>CLIENT: MECA</td>
</tr>
<tr>
<td>SCREEN SET:</td>
<td>TO</td>
<td>PROJECT NAME: Gow</td>
</tr>
<tr>
<td>SCREEN SIZE:</td>
<td></td>
<td>PROJECT ADDRESS:</td>
</tr>
<tr>
<td>TYPE OF WELL:</td>
<td></td>
<td>CITY, STATE: Roseville, MN</td>
</tr>
<tr>
<td>END OF BORING:</td>
<td>81</td>
<td>DATE STARTED: 12/30/02</td>
</tr>
<tr>
<td>LOCATION:</td>
<td></td>
<td>DATE COMPLETED: 12/30/02</td>
</tr>
<tr>
<td>RIG:</td>
<td>Trackhoe</td>
<td>DRILLER: Borzech</td>
</tr>
<tr>
<td>FOREMAN:</td>
<td>l.m</td>
<td>TERRACON REPRESENTATIVE:</td>
</tr>
</tbody>
</table>

**SOIL TYPE**

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td>Sand</td>
<td>Little gravel</td>
</tr>
<tr>
<td>1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2'</td>
<td>M M</td>
<td></td>
</tr>
<tr>
<td>3'</td>
<td>M M</td>
<td>Few gravel</td>
</tr>
<tr>
<td>4'</td>
<td>M M</td>
<td>Coarse</td>
</tr>
<tr>
<td>5'</td>
<td>M M</td>
<td></td>
</tr>
<tr>
<td>6'</td>
<td>C C</td>
<td></td>
</tr>
<tr>
<td>7'</td>
<td>C C</td>
<td></td>
</tr>
<tr>
<td>8'</td>
<td>C C</td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-Br</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W Silt</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 2 4-8 38 234.5 ✴</td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**

- COLORS: BR = BROWN, G = GRAY, BL = BLACK, RE = RED, O = ORANGE, Y = YELLOW
- GRAIN SIZE: F = FINE, M = MEDIUM, C = COARSE
- WATER CONTENT: D = DRY, M = MOIST, W = WET

**NOTES:**

- GROUND ELEVATION:
- RISER ELEVATION:

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

UMP000505
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>WHILE DRILLING</th>
<th>AFTER DRILLING</th>
<th>BLOW COUNT</th>
<th>INTERVAL</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLK</td>
<td>M</td>
<td></td>
<td>Silty Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EKR</td>
<td>M, M</td>
<td></td>
<td>Sand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BK</td>
<td>M</td>
<td></td>
<td>Silty Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YL-BR</td>
<td>F-C</td>
<td>M</td>
<td>Poorly Graded Sand w/ Silt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**
- BR: BROWN
- GR: GRAY
- BL: BLACK
- R: RED
- O: ORANGE
- Y: YELLOW
- F: FINE
- M: MEDIUM
- C: COARSE
- D: DRY
- M: MOIST
- W: WET

**NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>BLOW COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>CL</td>
</tr>
<tr>
<td>1</td>
<td>SL</td>
</tr>
<tr>
<td>2</td>
<td>SI</td>
</tr>
<tr>
<td>3</td>
<td>SI</td>
</tr>
<tr>
<td>4</td>
<td>SI</td>
</tr>
<tr>
<td>5</td>
<td>SI</td>
</tr>
<tr>
<td>6</td>
<td>SI</td>
</tr>
<tr>
<td>7</td>
<td>SI</td>
</tr>
<tr>
<td>8</td>
<td>SI</td>
</tr>
<tr>
<td>9</td>
<td>SI</td>
</tr>
<tr>
<td>10</td>
<td>SI</td>
</tr>
</tbody>
</table>

**TERRACON REPRESENTATIVE:** MCB

**DATE COMPLETED:** 12/31/02
## Terracon

**SOIL BORING NUMBER:** 86-TP-8

**BOREHOLE DIA:** ~
**WELL DIA:** ~
**SCREEN SET:** ~ TO ~
**SCREEN SIZE:** ~
**TYPE OF WELL:** ~
**END OF BORING:** 5'
**LOCATION:** ~
**RIG:** Trucce
**DRILLER:** Barneke
**FOREMAN:** Tim

**PROJECT NUMBER:** 41027052
**PROJECT NAME:** (CO)
**CLIENT:** MPCA
**PROJECT ADDRESS:**
**CITY, STATE:** Rosemount, Mn
**DATE STARTED:** 12/3/02
**DATE COMPLETED:** 12/3/02
**TERRACON REPRESENTATIVE:** MJB

### SAMPLE LOG:

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>YL-BR</td>
<td>M</td>
<td>1</td>
<td>Silty clay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>Clayey sand</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>1</td>
<td>1</td>
<td>Sand</td>
<td>END</td>
</tr>
</tbody>
</table>

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>RECOVERY IN INCHES</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>WELL DIRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1'</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>9'</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**KEY: COLORS:** BR=BROWN  G=GRAY  BL=BLACK  R=RED  O=ORANGE  Y=YELLOW  
**GRAIN SIZE:** F=FINE  M=MEDIUM  C=COARSE  
**WATER CONTENT:** D=DRY  M=MOIST  W=WET

**NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**UMP000507**
<table>
<thead>
<tr>
<th>Sample Log</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yl-BR</strong></td>
</tr>
<tr>
<td><strong>Depth</strong></td>
</tr>
<tr>
<td>0'</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

**KEY:**
- **Colors:** BR=Brown, G=Gray, BL=Black, R=Red, O=Orange, Y=Yellow
- **Grain Size:** F=Fine, M=Medium, C=Coarse
- **Water Content:** D=Dry, M=Moist, W=Wet

**NOTES:**
- Include accurate soil types and descriptions when completing log.
- Ground Elevation:
- Riser Elevation:

**UMP0000508**
SOIL BORING NUMBER: 3P-TP-10

**Location:** on side of hill

<table>
<thead>
<tr>
<th>Depth</th>
<th>Blow Count</th>
<th>Sample Number</th>
<th>Sample Interval</th>
<th>Recovery In Inches</th>
<th>Sample Type</th>
<th>PID (ppm) X</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CL</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CL</td>
</tr>
<tr>
<td>2</td>
<td>CL</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CL</td>
</tr>
<tr>
<td>3</td>
<td>SC</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SC</td>
</tr>
</tbody>
</table>

**Sample Log:**

- Poorly Graded Sand w/ silt
- Oxidized Zones & Ammonia Odor

**Notes:**
- Include accurate soil types and descriptions when completing log.

**Ground Elevation:**
- 234.5

**Riser Elevation:**
- 12 2 48 38 MC
## Terracon

### Soil Boring Number: BP-TP-15

- **Borehole Dia:** __
- **Well Dia:** __
- **Screen Set:** __ to __
- **Screen Size:** __
- **Type of Well:** __
- **City, State:** Rosemont, IL
- **End of Boring:** 3'
- **Date Started:** 3/31/02
- **Date Completed:** 8/1/02
- **Location:** __
- **Rig:** Trueken
- **Driller:** Bornke
- **Foreman:** Tim
- **Client:** MPCA
- **Project Name:** GOW
- **Project Number:** 41027052
- **Project Address:** __

### Sample Log:

<table>
<thead>
<tr>
<th>Color</th>
<th>Grain Size</th>
<th>Water Content</th>
<th>Soil Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK</td>
<td>M</td>
<td></td>
<td>Clayey Sand</td>
<td>Silty clay</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth</th>
<th>CL</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3'</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

### Key:
- **Colors:** BR=BROWN, G=GRAY, BL=BLACK, R=RED, O=ORANGE, Y=yellow
- **Grain Size:** F=Fine, M=Medium, C=Coarse
- **Water Content:** D=Dry, M=Moist, W=Wet

### Notes:
- No TDS reading taken

---

**Additional Information**

- Depths go between tics and indicate depth at line.
- Include accurate soil types and descriptions when completing log.
- GROUND ELEVATION:
- RISER ELEVATION:

**UMP000510**
**SOIL BORING NUMBER:** MS-TP-1

**PROJECT NUMBER:** 41020052

**CLIENT:** MCA

**PROJECT NAME:** Gow

**CITY, STATE:** Rosemont, MN

**DATE STARTED:** 1/15/03

**DATE COMPLETED:** 1/15/03

**TERRACON REPRESENTATIVE:** MJG

**RIG:** Tracktor

**DRILLER:** Boreks

**FOREMAN:** Tim

**LOCATION:** V & machine shop

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>SAMPLE RECOVERY IN INCHES</th>
<th>SAMPLE TYPE</th>
<th>P/D (ppm)</th>
<th>X</th>
<th>COLLECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'</td>
<td>GC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AL</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>AL</td>
<td></td>
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<td></td>
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<tr>
<td>6</td>
<td>XXSC</td>
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<td></td>
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</tr>
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</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-AR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>12</td>
<td>2</td>
<td>68</td>
<td>38</td>
</tr>
</tbody>
</table>

**KEY:** COLORS: B=Brown G=Gray S=Black R=Red O=Orange Y=Yellow

**GRAIN SIZE:** F=Fine M=MEDIUM C=COARSE

**WATER CONTENT:** D=Dry M=Moist W=Wet

**NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE.**

**INCLUDE ACCURATE SOIL TYPES AND DESCRIBITIONS WHEN COMPLETING LOG.**
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>INTERVAL RECOVERY</th>
<th>SAMPLE TYPE</th>
<th>PDS (ppm)</th>
<th>PID SAMPLE COLLECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL</td>
<td>M</td>
<td></td>
<td>Clayey Gravel</td>
<td></td>
<td></td>
<td>GC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L&lt;1</td>
</tr>
<tr>
<td>BA-BK</td>
<td>M</td>
<td></td>
<td>Silty Sand</td>
<td>might be Fill</td>
<td>3</td>
<td>GC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>G2</td>
<td>M</td>
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<td></td>
<td></td>
<td>4</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

- Include accurate soil types and descriptions when completing log.

**KEY:**
- COLORS: BR=BROWN, GR=GRAY, BL=BLACK, R=RED, O=ORANGE, Y=Yellow
- GRAIN SIZE: F=FINE, M=MEDIUM, D=DARK
- WATER CONTENT: D=Dry, M=Moist, W=Wet

**NOTES:**

- Depths go between tics and indicate depth at line.

**GROUND ELEVATION:**

**RISER ELEVATION:**
**SOIL BORING NUMBER:** PSB-54-L

**BOREHOLE DIA:** - INCHES
**WELL DIA:** - INCHES
**SCREEN SET:** - TO 
**SCREEN SIZE:** -
**TYPE OF WELL:** - AG / NG
**END OF BORING:** 5'
**LOCATION:** -
**RIG:** Frankincense

**COLOR** | **GRAIN SIZE** | **WATER CONTENT** | **SOIL TYPE** | **EXAMPLE** | **WHILE DRILLING** | **AFTER DRILLING** |
--- | --- | --- | --- | --- | --- | --- |
OK | E | M | Silty clay silt | Some sand + clay |

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
</table>
1 | 2 | 3 | 4 | 5 |
12 | 2 | 4-8 | 38 | MG | 234.5 |

**KEY:**
- G = BROWN
- GRAY
- BL = BLACK
- RED
- ORANGE
- Y = YELLOW
- S = SILT
- M = MEDIUM
- C = COARSE
- W = WET
- D = DRY
- MOIST
- P = PILING

**NOTES:**

**DEPTHS:**

- DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

**BLOW COUNT**

**SAMPLE NUMBER**

**SAMPLE INTERVAL**

**RECOVERY**

**SAMPLE TYPE**

**PID (ppm) 3 x SAMPLES COLLECTED**

**WELL COST**

**GROUND ELEVATION:**

**RISER ELEVATION:**

**CLIENT:** MPICA
**PROJECT NAME:** GOW
**CITY, STATE:** Ramsey, MN
**DATE STARTED:** 1/17/03
**DATE COMPLETED:** 1/13/03
**TERRACON REPRESENTATIVE:** MJS

**FOREMAN:** Tim
**SOIL BORING NUMBER:** PSB-TP-2

**PROJECT NUMBER:** 41027052

**PROJECT NAME:** GOW

**CITY, STATE:** Rosemount

**DATE STARTED:** 1/13/03

**DATE COMPLETED:** 1/13/03

**RIG:** Trackhack

**DRILLER:** Steven

**FOREMAN:** Tim

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>USE MORE THAN ONE LINE IF NECESSARY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>C</td>
<td>M</td>
<td>Silty sand</td>
<td>Well graded</td>
<td></td>
</tr>
<tr>
<td>24-2</td>
<td></td>
<td></td>
<td></td>
<td>Sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1</td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>M</td>
<td>Silt + some sand + clay</td>
</tr>
</tbody>
</table>

**DEPTH**

- 0' 1' 2'
- 3' 4' 5'
- 6'

**WELL LOG**

- **DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**
- **KEY: COLORS: BR=BROWN GR=GRAY BL=BLACK R=RED O=ORANGE Y=Yellow**
- **GRAIN SIZE: FINE M=MEDIUM C=COARSE**
- **WATER CONTENT: D=DRY M=MOIST W=WET**

**NOTES:**

- **GROUND ELEVATION:**
- **RISER ELEVATION:**
<table>
<thead>
<tr>
<th>Depth (Ft)</th>
<th>Blow Count</th>
<th>Sample Number</th>
<th>Recovery In Inches</th>
<th>Sample Type</th>
<th>Sample Interval</th>
<th>Screen Set</th>
<th>Well Dia.</th>
<th>Screen</th>
<th>W.H.</th>
<th>Project Name</th>
<th>M.C.</th>
<th>Project Number</th>
<th>Well Borelog</th>
<th>Well Log</th>
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</tr>
</tbody>
</table>

**NOTES:**
- Include accurate soil types and descriptions when completing log.
- Depth go between boring interval and indicate at line.
- Use additional information as necessary.

**SOIL LOG:**
- Color:
- Grain Size:
- Water Content:
- Clayey Sand:
- Soil Type:
- Example:
- Location:
- Type of Well:
- Screen Size:
- WELL Dia.:
- BOREHOLE Dia.:
- RIG:
- Date Started:
- Date Completed:
- Foreman:
- Operm:
- Client:
- M.C.:
- PROJECT Number:
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>WHILE DRILLING</th>
<th>AFTER DRILLING</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR</td>
<td>M</td>
<td>M</td>
<td>Clayey Sand</td>
<td>Few gravel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bi</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>I</td>
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<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR-Bl</td>
<td>I</td>
<td>I</td>
<td>Little gravel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bl</td>
<td>I</td>
<td>1</td>
<td>Little gravel</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
<th>12</th>
<th>2</th>
<th>4-6</th>
<th>38</th>
<th>MC</th>
<th>234.5</th>
</tr>
</thead>
</table>

**Notes:**

- **Key:**
  - Colors: BR = Brown, G = Gray, Bl = Black, R = Red, O = Orange, Y = Yellow
  - Grain Size: F = Fine, M = Medium, C = Coarse
  - Water Content: D = Dry, M = Moist, W = Wet

- **Additional Information:**
  - Use more than one line if necessary

- **Ground Elevation:**
  - Depth:
    - 12
    - 2
    - 4-6
    - 38 MC
    - 234.5

- **Riser Elevation:**

- **Terracon Representative:** Tim

- **Date Completed:** 1/2/03

- **Location:**
  - RIG: Trackhoe
  - DRILLER: Basheke
  - FOREMAN: Tim

- **End of Boring:** 7'
<table>
<thead>
<tr>
<th>Location</th>
<th>Color</th>
<th>Grain Size</th>
<th>Water Content</th>
<th>Soil Type</th>
<th>Example Clayey Sand</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>Clayy silt</td>
<td>M</td>
<td></td>
<td>Few gravel, fine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12'</td>
<td>Sand</td>
<td>M</td>
<td></td>
<td>looks native</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sample Log:**

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>Poorly Graded Sand W/Silt</th>
<th>Oxidized Zones &amp; Ammonia Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Key:**
- Colors: BR = Brown
- Gray: BL = Black
- Red: OR = Orange
- Yellow: YL = Yellow

- Grain Size: F = Fine, M = Medium, C = Coarse
- Water Content: D = Dry, M = Moist, W = Wet

**Notes:**
- Day along the side of hill, from 16th Avenue down all fill material.
**SOIL BORING NUMBER:** WTP-TP-2

**BOREHOLE DIA.:** __________ INCHES

**WELL DIA.:** __________ INCHES

**SCREEN SET:** __________ TO __________

**SCREEN SIZE:** __________

**TYPE OF WELL:** __________

**AGING:**

**CITY, STATE:** Rosemont, IL

**TERRACON REPRESENTATIVE:** MJW

**END OF BORING:** 21

**DATE STARTED:** 1/20/03

**DATE COMPLETED:** 1/2/03

**LOCATION:** __________

**RIG:** Tractor

**DRILLER:** Arneke

**FOREMAN:** Tim

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR M</td>
<td>M</td>
<td>M</td>
<td>Sandy Clay</td>
<td>Farmland</td>
<td>0'</td>
</tr>
<tr>
<td>BR M</td>
<td>M</td>
<td>M</td>
<td>Sandy Clay</td>
<td>Farmland</td>
<td>2'</td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

**YL-BR**  F-C  | **POORLY GRADED SAND W/ SILT**  | **OXIDIZED ZONES & AMMONIA ODOR**

**DEPTHS:** GO BETWEEN "CCS" AND INDICATE DEPTH AT "LINE"

**12**: 2

**4-8**: 38

**MC**: 234.5

**KEY:** COLORS: BR=Brown  G=Gray  BL=Black  R=Red  O=Orange  Y=Yellow

**GRAIN SIZE:** F=Fine  M=Medium  C=Coarse

**WATER CONTENT:** D=Dry  M=Moist  W=Wet

**NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE CLAYEY SAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR</td>
<td>M M</td>
<td>Sandy silt</td>
<td>Few gravel</td>
<td>Fill</td>
</tr>
<tr>
<td>YL BR</td>
<td>M M</td>
<td>Sand</td>
<td>Looks nice</td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE LOG:**

- **TL-BR**: F C M
- **POORLY GRADED SAND W SILT**
- **OXIDIZED ZONES & AMMONIA ODOR**

**DEPTH:**

- **0**
- **1**
- **2**

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**KEY:**
- ** COLORS:** BR-BROWN G-GRAY BL-BLACK R-RED O-ORANGE Y-YELLOW
- ** GRAIN SIZE:** F-FINE M-MEDIUM C-COARSE
- ** WATER CONTENT:** D-DRY M-MOIST W-WET

**NOTES:** No PDC comments

**GROUND ELEVATION:**

**RISER ELEVATION:**
<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>EXAMPLE</th>
<th>SOIL TYPE</th>
<th>DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD</td>
<td>M</td>
<td>M</td>
<td>Sandy silt</td>
<td>Fur 5cm</td>
<td>0.1 ML</td>
</tr>
<tr>
<td>BL</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>N-DK</td>
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**SAMPLE LOG:**

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<th>M</th>
<th>POORLY GRADED SAND W/ SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
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</table>

**KEY:**
- COLORS: BR - BROWN, G - GRAY, BL - BLACK, R - RED, O - ORANGE, Y - YELLOW
- GRAIN SIZE: F - FINE, M - MEDIUM, C - COARSE
- WATER CONTENT: D - DRY, M - MOIST

**NOTES:**
- GROUND ELEVATION:
- RISER ELEVATION:

**DEPTH:** Go between 'tics and indicate depth at line

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>GO BETWEEN 'TICS AND INDEED DEPTH AT LINE</th>
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</thead>
<tbody>
<tr>
<td>12</td>
<td>2</td>
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<tr>
<td>4-8</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>MC 234.5 *</td>
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<tr>
<td>LOCATION</td>
<td>COLOR</td>
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<tr>
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<td>BR</td>
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<tr>
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<td>BK</td>
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<td>BR-BK</td>
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<td>BK</td>
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<tr>
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<td>BR-BK</td>
</tr>
<tr>
<td></td>
<td>YD-YR</td>
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</table>

**SOIL BORING NUMBER:** 010217052

**PROJECT NUMBER:** 010217052

**PROJECT NAME:** Bow

**CITY, STATE:** Raleigh

**END OF BORING:** 15'

**DATE STARTED:** 11/26/93

**DATE COMPLETED:** 11/26/93

**RIG:** Trackhoe

**DRILLER:** Brian

**FOREMAN:** Jim

**SOIL TYPE:** Poorly Graded Sand with Silt

**OXIDIZED ZONES & AMMONIA ODOR:**

**GROUNDS ELEVATION:**

**RISER ELEVATION:**

**KEY:**
- BR = Brown
- G = Gray
- B = Black
- M = Medium
- C = Coarse
- Y = Yellow
- O = Orange
- W = Wet
- D = Dry
- M = Moist

**NOTES:**
- Same as #7 TP - 10
**SOIL BORING NUMBER:** 41027052

**BOREHOLE DIA.:** __ INCHES

**WELL DIA.:** __ INCHES

**SCREEN SET:** __ TO __

**SCREEN SIZE:** __

**TYPE OF WELL:** __

**END OF BORING:** 3'

**LOCATION:** near west stack

**RIG:** Tractor

**DRILLER:** Barrie

**FOREMAN:** Tim

**CLIENT:** MPA

**PROJECT NAME:** Gox

**PROJECT ADDRESS:**

**CITY, STATE:** Reston, VA

**DATE STARTED:** 1/2/03

**DATE COMPLETED:** 1/2/03

**WELL LOG:**

<table>
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<tr>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>SAMPLE RECOVERY</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4-6</td>
<td>38</td>
<td>MC</td>
<td>234.5</td>
</tr>
</tbody>
</table>

**ADDITIONAL INFORMATION:** Use more than one line if necessary.

(Books, current, debits some soil)

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**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE</th>
<th>DEPTH</th>
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<tbody>
<tr>
<td>YL-BR</td>
<td>F-C M</td>
<td></td>
<td>POORLY GRADED SAND W/SILT</td>
<td>OXIDIZED ZONES &amp; AMMONIA ODOR</td>
<td>3</td>
</tr>
</tbody>
</table>

**KEY:**
- COLORS: BR = BROWN
- GRAY = GRAY
- BL = BLACK
- R = RED
- G = GREEN
- W = WHITE
- Y = YELLOW
- B = BLUE
- M = MEDIUM
- C = COARSE
- F = FINE
- W/WET = WET
- D = DRY
- M/MOIST = MOIST

**NOTES:**
- This dig was a trash pit.

---

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**

**GROUND ELEVATION:**

**RISER ELEVATION:**

---

**UMP000522**
SOIL BORING NUMBER: WWTP-TP-17

BOREHOLE DIA: _____ INCHES
WELL DIA: _____ INCHES
SCREEN SET: _____ TO _____
SCREEN SIZE: _____ SLOT
TYPE OF WELL: _____ AG _____ NG
CITY, STATE: Roanoke, VA
END OF BORING: 31'
DATE STARTED: 1/2/03
DATE COMPLETED: 1/2/03
LOCATION: _____
RIG: Trackho
DRILLER: Barcheks
FOREMAN: Tim

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>RECOVERY</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>X or Y SAMPLE COLLECTED</th>
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<tr>
<td>1</td>
<td>L</td>
<td></td>
<td></td>
<td></td>
<td>1.1</td>
<td></td>
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<tr>
<td>2</td>
<td>L</td>
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<td>2.1</td>
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<tr>
<td>3</td>
<td>CL</td>
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</tbody>
</table>

SAMPLE LOG:

KEY: COLORS: BR=Brown  G=Gray  BL=Black  R=Red  O=Orange  Y=Yellow
      GRAIN SIZE: P=Fine  M=Medium  C=Coarse
      WATER CONTENT: D=Dry  M=Moist  W=Wet

INCLUDE ACCURATE SOIL TYPES AND DESCRIBITIONS WHEN COMPLETING LOG.

NOTES: 

GROUND ELEVATION: 
RISER ELEVATION: 

DEPTH GO BETWEEN TICS AND INDICATED ~PTH AT LINE
SOIL BORING NUMBER: UMP-70-14

TERRACON REPRESENTATIVE: KIR

DATE STARTED: 11/2/03
DATE COMPLETED: 11/2/03

CITY, STATE: Rosemount, Mn

PROJECT NAME: 60W

COLOR | GRAIN | WATER | SOIL TYPE
--- | --- | --- | ---
M | M | 1 | Sandy silt
M | M | 1 | Silty clay

DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

GROUND ELEVATION:

RISER ELEVATION:

NOTES:

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.

KEY: COLORS: BR=BROWN G=GRAY BL=BLACK R=RED O=ORANGE Y=YELLOW
GRAIN SIZE: F=FINE M=MEDIUM C=COARSE
WATER CONTENT: D=DRY M=MOIST W=WET

SAMPLE LOG:

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>POORLY GRADED SAND W/ SILT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OXIDIZED ZONES &amp; AMMONIA ODOR</td>
</tr>
</tbody>
</table>
SOIL BORING NUMBER: wup-1p-15

BOREHOLE DIA. - INCHES
WELL DIA. - INCHES
SCREEN SET: - TO -
SCREEN SIZE: - AG TO NG
TYPE OF WELL: -
CITY, STATE: Rosemount
END OF BORING: 7'
DATE STARTED: 1/2/03
DATE COMPLETED: 1/2/03

LOCATION: Old soil line
RIG: Truckhoe
DRILLER: Berseke
FOREMAN: Tim

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN</th>
<th>WATER</th>
<th>EXAMPLE</th>
<th>SOIL TYPE</th>
<th>DEPTH</th>
<th>BLOW COUNT</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE INTERVAL</th>
<th>RECOVERY IN INCHES</th>
<th>SAMPLE TYPE</th>
<th>PID (ppm)</th>
<th>WELL CORR</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1</td>
<td></td>
<td>Clayey Sand</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YLBR</td>
<td>1</td>
<td></td>
<td>Earth Clay</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

SAMPLE LOG:

- YL-BR F-C M POORLY GRADED SAND W/ SILT
- OXIDIZED ZONES & AMMONIA ODOR

KEY: COLORS: BR=BROWN G=GRAY B=BLACK R=RED O=ORANGE Y=YELLOW
- GRAIN SIZE: F=FINE M=MEDIUM C=COARSE
- WATER CONTENT: D=DRY M=MOIST W=WET

NOTES: NO PED FLOW

GROUND ELEVATION:
RISER ELEVATION:

UMP000525
# Soil Boring Number

**BOREHOLE DIA:** —

**INCHES**

**WELL DIA:** —

**INCHES**

**CLIENT:** MPCA

**SCREEN SET:** —

**TO:**

**PROJECT NUMBER:** 41027052

**PROJECT NAME:** GOW

**SCREEN SIZE:** —

**SLOT**

**PROJECT ADDRESS:**

**TYPE OF WELL:**

**AGING**

**CITY, STATE:** Pocatello

**TERRACON REPRESENTATIVE:** MJD

**END OF BORING:** 6'

**DATE STARTED:** 1/2/03

**DATE COMPLETED:** 1/2/03

**LOCATION:**

**RIG:** Track hoe

**DRILLER:** Botheke

**FOREMAN:** Tim

## Soil Type

<table>
<thead>
<tr>
<th>Color</th>
<th>Grain Size</th>
<th>Water Content</th>
<th>Soil Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Medium</td>
<td>Sand &amp; silt</td>
<td>Organic A horizon</td>
<td></td>
</tr>
<tr>
<td>Clays</td>
<td>Medium</td>
<td>Sand</td>
<td>Few gravel</td>
<td></td>
</tr>
<tr>
<td>Illite</td>
<td>Illite</td>
<td>Illite</td>
<td>Illite</td>
<td></td>
</tr>
<tr>
<td>Illite</td>
<td>Illite</td>
<td>Illite</td>
<td>Illite</td>
<td></td>
</tr>
</tbody>
</table>

### Sample Log

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>Poorly Graded Sand W/Silt</th>
<th>Oxidized Zones &amp; Ammonia Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>38</td>
</tr>
</tbody>
</table>

**KEY:**
- **BR = Brown**
- **G = Gray**
- **BL = Black**
- **R = Red**
- **O = Orange**
- **Y = Yellow**
- **F = Fine**
- **M = Medium**
- **C = Coarse**
- **W = Wet**
- **D = Dry**
- **M = Moist**

**NOTES:** No FDP taken.

**GROUND ELEVATION:**

**RISE ELEVATION:**

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG**

**UMP000526**
### SOIL BORING NUMBER: WWP - TP - 18

**BOREHOLE DIA:**

**WELL DIA:**

**SCREEN SET:**

**SCREEN SIZE:**

**TYPE OF WELL:**

**END OF BORING:**

**LOCATION:**

**RIG:**

**DRILLER:**

**FOREMAN:**

**CITY, STATE:** Raleigh, NC

**PROJECT NAME:** Duke

**PROJECT NUMBER:** 4602705

**CLIENT:** MPCA

**DATE STARTED:** 1/2/03

**DATE COMPLETED:** 1/2/03

**TERRACON REPRESENTATIVE:** JTB

### SAMPLE LOG:

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W/SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE**

**KEY: COLORS**
- BR = BROWN
- GR = GRAY
- BL = BLACK
- R = RED
- O = ORANGE
- Y = YELLOW
- X = CORAL

**GRAIN SIZE**
- F = FINE
- M = MEDIUM
- C = COARSE

**WATER CONTENT**
- D = DRY
- M = MOIST
- W = WET

**NOTES:**

Ground Elevation:

Riser Elevation:
### Terracon

**SOIL BORING NUMBER:** JULY 19-19

<table>
<thead>
<tr>
<th>BOREHOLE DIA:</th>
<th>INCHES</th>
<th>PROJECT NUMBER: 44207652</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL DIA:</td>
<td>INCHES</td>
<td>CLIENT: MPDA</td>
</tr>
<tr>
<td>SCREEN SET:</td>
<td>TO</td>
<td>PROJECT NAME: 60W</td>
</tr>
<tr>
<td>SCREEN SIZE:</td>
<td>SLOT</td>
<td>PROJECT ADDRESS:</td>
</tr>
<tr>
<td>TYPE OF WELL:</td>
<td>AGING</td>
<td>CITY, STATE: Rosemont, IN</td>
</tr>
<tr>
<td>END OF BORING:</td>
<td>86</td>
<td>DATE STARTED: 1/1/03</td>
</tr>
<tr>
<td>LOCATION:</td>
<td></td>
<td>DATE COMPLETED: 1/2/03</td>
</tr>
<tr>
<td>RIG:</td>
<td></td>
<td>TERRACON REPRESENTATIVE:</td>
</tr>
<tr>
<td>DRILLER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOREMAN:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SAMPLE LOG:

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GRAIN SIZE</th>
<th>WATER CONTENT</th>
<th>SOIL TYPE</th>
<th>EXAMPLE: CLAYEY SAND</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR</td>
<td>1</td>
<td>1</td>
<td>Silty sand</td>
<td>So little sand</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>1</td>
<td>1</td>
<td>Clayey sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>1</td>
<td>1</td>
<td>Clayey sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YL-BR</td>
<td>1</td>
<td>1</td>
<td>Cont bits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE DETAILS:**

- **DEPTHS:** GO BETWEEN TCS AND INDICATE DEPTH AT USE
- **MC:** 234.5
- **KEY:** COLORS: BR=Brown, G=Gray, BL=Black, R=Red, O=Orange, Y=Yellow
- **GRAIN SIZE:** F=Fine, M=Medium, C=Coarse
- **WATER CONTENT:** D=Dry, M=Moist, W=Wet
- **INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.**
- **NOTES:**

**GROUND ELEVATION:**

**RISER ELEVATION:**
**SOIL BORING NUMBER:** WMT TP-20  
**PROJECT NUMBER:** 41027652  
**CLIENT:** MKC  
**PROJECT NAME:** GOL  
**CITY, STATE:** Rosemount, Mn  
**DATE STARTED:** 1/2/03  
**DATE COMPLETED:** 1/2/03  
**TERRACON REPRESENTATIVE:** JLB  
**FOREMAN:** Tim  

**SAMPLE LOG:**

<table>
<thead>
<tr>
<th>YL-GR</th>
<th>F-C</th>
<th>M</th>
<th>POORLY GRADED SAND W SILT</th>
<th>OXIDIZED ZONES &amp; AMMONIA ODOR</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT:**

| DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY [%] | SAMPLE TYPE | PID (ppm) | X = SAMPLE COLLECTED | WELL TYPE | OTHER |
|-------|------------|----------------|-----------------|--------------|-------------|-----------|-----------------------|-----------|
|       | 1          | 1              |                 |              |             |           | <1                    |           |       |

**KEY:**
- **COLOR:** BR=BROWN  GR=GRAY  SL=BLACK  R=RED  O=ORANGE  Y=yellow  
- **GRAIN SIZE:** F=FINE  M=MEDIUM  C=COARSE  
- **WATER CONTENT:** D=DRY  M=MOIST  W=WET  

**NOTES:**

- Vem (6")D of clay and gray silt.
### Terracon Soil Boring Number: WJTP-13-23

**Borehole Dia:**

**Well Dia:**

**Screen Set:**

**Screen Size:**

**Type of Well:**

**End of Boring:**

**Location:**

**Rig:**

**Driller:**

**Foreman:**

**Project Number:** WJTP-13-23

**Client:** MPCA

**Project Name:** Gow

**City, State:** Rosemont, MN

**Date Started:** 1/2/03

**Date Completed:** 12/03

**Terracon Representative:** MJD

**Additional Information:** Use more than one line if necessary

### Sample Log:

<table>
<thead>
<tr>
<th>YL-BR</th>
<th>F-C</th>
<th>M</th>
<th>Poorly Graded Sand w/ Silt</th>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

**Key:**

- Colors: B=Brown, G=Gray, Bl=Black, R=Red, O=Orange, Y=Yellow
- Grain Size: F=Fine, M=Medium, C=Coarse
- Water Content: D=Dry, M=Moist, W=Wet

**Notes:**

**Ground Elevation:**

**Riser Elevation:**
SOIL BORING NUMBER: WWTP-YP-23

<table>
<thead>
<tr>
<th>SAMPLE LOG:</th>
</tr>
</thead>
<tbody>
<tr>
<td>YL-BR</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

KEY: COLORS: BR-BROWN G=GRAY BL-BLACK R=RED O=ORANGE Y=YELLOW
GRAIN SIZE: F=FINE M=MEDIUM C=COARSE WATER CONTENT: D=DRY M=MOIST W=WET

INCLUDE ACCURATE SOIL TYPES & DESCRIPTIONS WHEN COMPLETING

NOTES:

DEPTH'S GO BETWEEN TCS AND INDICATE DEPTH

GROUND ELEVATION:

RISER ELEVATION:

UMP0000532
DAILY FIELD LOG

PROJECT NAME: Former GOW  
PROJECT LOCATION: Rosemont, MN  
WEATHER: Sunny, 35°, windy  
EQUIPMENT: PID, Colours, hand auger, sample sacs  
FORM COMPLETED BY: A. J. R.  
DATE: 2/3/02

WORK PERFORMED: Arrived at site at 9:20. Started sampling after first pit was dug. Olean Plant (OP) test pits (TP) were dug 1-6 and sampled. Pit were all dug to different depths. Was not able to field log every pit.

Moved to nitric acid (NA) storage blending area. dug and sampled 2 TP 1-3 and dug well. TP-3 was a tile pit and an TP-1 was a sample from inside the.

Moved to WWTP (Waste water treatment plant) and dug and sampled two composite 6 x surface TP, which were composited into two samples, 1C + 2C.
Dug and sampled TP-3 and TP-4 from inside a secondary containment.

The original plan that was submitted to Terracon was not representative of the work that happened. Mostly the type of lab work assigned to each sample changed. It was not always possible to be PID samples.
DAILY FIELD LOG

PROJECT NAME: G06
PROJECT LOCATION: Rosemont, MN
WEATHER: Sunny 50°
EQUIPMENT:
FORM COMPLETED BY: MJK D  DATE: 12/31/02

WORK PERFORMED: Arrived on site at about 8:15. Began sampling test pits B6 (building ground) 1-18. Generally, one sample was taken from each pit. When interesting things were found, like discarded soil or debris, then more samples were taken. Often these other samples were from deeper into the soil profile.

After finishing the soil sampling I copied the points from Monday as well as Tuesday.

Went back to the shop and put samples in appropriate storage.

Was hurried when filling out my log information. The excavator was digging new pits before I could accurately describe exact soil types. Peer said, and so did the University representative, that they were much more concerned with collecting the samples.
DAILY FIELD LOG

PROJECT NAME: GeoW                  PROJECT NO. 4427052

PROJECT LOCATION: Rosemount, MN

WEATHER: Sunny 25°

EQUIPMENT

FORM COMPLETED BY: MJB                 DATE 1/21/03

WORK PERFORMED: Arrived @ site @ 8:00am. Started sampling

WWTP - TP (waste water treatment plant - test pit) 5-

GPS'd points that  when pits were dug.

TP-10 was a pit of debris, bricks, concrete, steel rebar, some soil and some
wire parts. This was the most potentially most contaminated
first pit.

Continued taking soil samples from WWTP up to TP-23.

Then we relocated to a new site.

Three tickets were not marked at the new site, so we paid for
the day. I finished GPSing the sites we did the 2nd day and
went back to office.

It was not possible to PID sample in the field, or take
accurate notes on the soil boring logs due to the speed we
were progressing drilling TP's.
DAILY FIELD LOG

PROJECT NAME       AOW       PROJECT NO.        41087053
PROJECT LOCATION  Rosemount, Mn
WEATHER            Cloudy, 1°
EQUIPMENT         PPE, Gloves, Ziplock bags
FORM COMPLETED BY  Matt Branymaster        DATE 1/13/2023

WORK PERFORMED:
Arrived on site at 9:00. Started digging V of manhole shop. MS-TP-1 and MS-TP-2. Took samples from both pits. MS-TP-1 has the entire list of analyses run on it. MS-TP-2 has only a few. Moved to PSD and next. Primary settling basin (PSB) is in the area thought to collect all the runoff from the AOW area. We dug 2 pits in the PSB and ran one for the entire list of analyses and the other for a few. Finished at about 11:00 am. There were more spots that Peer environmental wanted to collect samples from but could not because there were too many trees in the way and too much frost to use a hand auger. Peer also wants to sample the Leinen tax sewer, but has not yet.

Came back to office, LED'd the samples and finished sorting them so they could be sent out.