

APPENDIX B
TEST PIT LOGS AND DAILY FIELD LOGS

Terracon

SOIL BORING NUMBER: OP-TP-1

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 2
 WELL DIA: _____ INCHES CLIENT: MPCA - GOW
 SCREEN SET: _____ TO _____ PROJECT NAME: GOW
 SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____
 TYPE OF WELL: _____ AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MJB
 END OF BORING: C DATE STARTED: 12/30/02 DATE COMPLETED: 12/30/02
 LOCATION: _____ RIG: Track hoe DRILLER: Barneke FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WEI CG DETA |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | M | M | Sandy silt | — | | 0' | ML | | | | | <1 | |
| BR | M | M | Silty sand | — | | 1 | SM | | | | | | |
| BR | M | M | Clayey sand | — | | 2 | BC | | | | | | |
| BR | M | M | Sandy silt | — | | 3 | ML | | | | | | |
| BR | M | M | Sandy silt | — | | 4 | ML | | | | | | |
| BR | M | M | Sand | Some nodules | | 5 | SP | | | | | 1.7 | |
| | | | | | | 6 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: OP-TP-2

BOREHOLE DIA: — INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1
 WELL DIA: — INCHES CLIENT: MPCA - 60W
 SCREEN SET: — TO — PROJECT NAME: 60W
 SCREEN SIZE: — SLOT PROJECT ADDRESS: —

TYPE OF WELL: — AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MJB

END OF BORING: 4' DATE STARTED: 12/30/02 DATE COMPLETED: 12/30/02

LOCATION: Sul Per Mixing Pit RIG: Truckee DRILLER: Barnett FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | ▼ AFTER DRILLING: | —ADDITIONAL INFORMATION— USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| BR | M | M | Sandy clay | | Some gravel | 0 | | | | | | | |
| BR | M | M | Sandy clay | | Some gravel | 1 | CL | | | | | <1 | |
| BR-R | M | M | Sandy clay | | Some gravel, multi colored sand seams | 2 | CH | | | | | | |
| | | | | | | 3 | CH | | | | | | |
| BR | M | M | Sandy clay | | little gravel end of boring | 4 | CL | | | | | <1 | |
| | | | | | | 5 | | | | | | # | |
| | | | | | | 6 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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:

Terracon

SOIL BORING NUMBER: *GP-TP-4*

BOREHOLE DIA: *—* INCHES PROJECT NUMBER: *41027052* SHEET *1* OF *1*

WELL DIA: *—* INCHES CLIENT: *MPCA-GOW*

SCREEN SET: *—* TO *—* PROJECT NAME: *GOW*

SCREEN SIZE: *—* SLOT PROJECT ADDRESS: *—*

TYPE OF WELL: *—* AG NG CITY, STATE: *Rosemont, Mo* TERRACON REPRESENTATIVE: *MJZ*

END OF BORING: *4'* DATE STARTED: *12/30/02* DATE COMPLETED: *12/30/02*

LOCATION: ~~*—*~~ RIG: *Truckhoe* DRILLER: *Barneke* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL: |
|--------------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| <i>BL-BR</i> | <i>—</i> | <i>M</i> | <i>silty clay</i> | <i>some sand</i> | | <i>0'</i> | | | | | | | |
| <i>DR</i> | <i>M</i> | | <i>Sand</i> | <i>—</i> | | <i>1</i> | <i>CL</i> | | | | | | |
| <i>BR</i> | <i>M</i> | | <i>Sand</i> | <i>—</i> | | <i>2</i> | <i>SP</i> | | | | | | |
| <i>BR</i> | <i>M</i> | | <i>Sand</i> | <i>—</i> | | <i>3</i> | | | | | | | |
| | | | | | | <i>4</i> | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|--------------|------------|----------|-----------------------------------|--|----------|-----------|----------|------------|-----------|-----------|--------------|----------|
| <i>YL-BR</i> | <i>F-C</i> | <i>M</i> | <i>POORLY GRADED SAND W/ SILT</i> | <i>OXIDIZED ZONES & AMMONIA ODOR</i> | <i>4</i> | <i>12</i> | <i>2</i> | <i>4-8</i> | <i>38</i> | <i>MC</i> | <i>234.5</i> | <i>*</i> |
| | | | | | <i>5</i> | | | | | | | |

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: *NO TP-4 (Okem Plant) NO RED reading taken.* GROUND ELEVATION:
RISER ELEVATION:

Terracon SOIL BORING NUMBER: *NA TP-3*

BOREHOLE DIA: *1* INCHES PROJECT NUMBER: *41027052* SHEET *1* OF *1*
 WELL DIA: *1* INCHES CLIENT: *MPCA*
 SCREEN SET: *1* TO *1* PROJECT NAME: *GOW*
 SCREEN SIZE: *1* SLOT PROJECT ADDRESS: *---*

TYPE OF WELL: *1* AG NG CITY, STATE: *Rosemount, Mn* TERRACON REPRESENTATIVE: *MJA*
 END OF BORING: *5'* DATE STARTED: *12/30/02* DATE COMPLETED: *12/30/02*

LOCATION: *#23 -* RIG: *Trackhoe* DRILLER: *Barneke* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL: |
|-----------|------------|---------------|--------------------------------------|-------------------|---|----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | ▼ AFTER DRILLING: | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>0</i> | | | | | | | |
| <i>BL</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>1</i> | <i>SP</i> | | | | | | |
| <i>BL</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>2</i> | | | | | | | |
| <i>BL</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>3</i> | | | | | | | |
| <i>BL</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>4</i> | | | | | | | |
| <i>BL</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | | | <i>5</i> | | | | | | | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|--------------|------------|----------|-----------------------------------|--|----------|-----------|----------|------------|-----------|-----------|--------------|----------|
| <i>YL-BR</i> | <i>F-C</i> | <i>M</i> | <i>POORLY GRADED SAND W/ SILT</i> | <i>OXIDIZED ZONES & AMMONIA ODOR</i> | <i>4</i> | <i>12</i> | <i>2</i> | <i>4-8</i> | <i>38</i> | <i>MC</i> | <i>234.5</i> | <i>*</i> |
| | | | | | <i>5</i> | | | | | | | |

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: *NO PID reading taken* GROUND ELEVATION:
 RISER ELEVATION:

Terracon

SOIL BORING NUMBER: BP-TP-1

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET 2 OF 1

WELL DIA: INCHES CLIENT: TMCA

SCREEN SET: TO PROJECT NAME: 1

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG | NG CITY, STATE: Rosemount Mn TERRACON REPRESENTATIVE: AJB

END OF BORING: 4' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: in line trees RIG: Trackhoe DRILLER: Baraka FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | M | M | Sandy silt | Organic material | | 0' | BL | | | | | <1 | |
| BR | M | M | Sand | Sand with Few gravel | | 1' | SP | | | | | <1 | |
| BR | M | M | Sand | Some gravel | | 2' | | | | | | <1 | |
| BR | M | M | Sand | Few gravel | | 3' | | | | | | <1 | |
| | | | | End of boring | | 4' | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|

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

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.

NOTES: GROUND ELEVATION:
RISER ELEVATION:

Terracon SOIL BORING NUMBER: BP-TP-2

BOREHOLE DIA: 7 INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: 7 INCHES CLIENT: MACA - 60W

SCREEN SET: L TO C PROJECT NAME: 60W

SCREEN SIZE: — SLOT PROJECT ADDRESS: —

TYPE OF WELL: — AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MJB

END OF BORING: 6' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: — RIG: Trackhoe DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | M | D | Sandy silt | Organic material | | 0' | | | | | | | |
| BR | M | D | Sand | Few gravel | | 1 | ML | | | | | <1 | |
| BR | M | D | Sand | some gravel | | 2 | SW | | | | | | |
| BR | M | D | Sand | gravel | | 3 | SP | | | | | | |
| BR | C | D | gravel | Fine gravel | | 4 | | | | | | | |
| BR | C | D | gravel | Coarse gravel | | 5 | | | | | | | |
| BR | C | M | gravel | Coarse gravel | | 6 | | | | | | <1 | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon **SOIL BORING NUMBER: BP-TP-3**

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: _____ INCHES CLIENT: MPCA

SCREEN SET: _____ TO _____ PROJECT NAME: LOW

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: ⊙ -

TYPE OF WELL: _____ AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MUSD

END OF BORING: 8' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: _____ RIG: Trackhoe DRILLER: Borneke FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | AFTER DRILLING: | | | | | | | | |
| | | | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| BR | M | D | Sandy silt | Organic Material | 0' | | | | | | | |
| BR-YL | M | | Sand | Few gravel | 1 | ML | | | | | | C/ |
| | M | | Sand | Some gravel | 2 | | | | | | | |
| | | | | | 3 | | | | | | | |
| BR | C | | gravel | Fine gravel | 4 | | | | | | | |
| | C | | gravel | Coarse gravel | 5 | | | | | | | |
| | C | M | gravel | Coarse gravel | 6 | | | | | | | |
| | C | | gravel | | 7 | | | | | | | |
| | C | | gravel | | 8 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: Same as TP-2, coarse gravel continues

GROUND ELEVATION: _____
RISER ELEVATION: _____

Terracon **SOIL BORING NUMBER: TP-4 BP-TP-5**

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET OF

WELL DIA: INCHES CLIENT: MPCA

SCREEN SET: TO PROJECT NAME: 60W

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE:

END OF BORING: 15' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: RIG: Tractech DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|---|------------|---------------|--------------------------------------|-----------------|--|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | AFTER DRILLING: | | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| BL-DK | M | | Silty clay | | | 0' | CL | | | | | | |
| BL-DK | M | | | | | 1 | | | | | | | |
| | | | | | | 2 | | | | | | | |
| | | | | | | 3 | | | | | | | |
| | | | | | | 4 | | | | | | | |
| DK | M | | | | | 5 | | | | | | | |
| | M | | | | | 6 | | | | | | | |
| | M | | | | | 7 | | | | | | | |
| | M | | | | | 8 | | | | | | | |
| | | | | | | 9 | | | | | | | |
| | | | | | | 10 | | | | | | | |
| | | | | | | 11 | | | | | | | |
| | | | | | | 12 | | | | | | | |
| | | | | | | 13 | | | | | | | |
| | | | | | | 14 | | | | | | | |
| GR | | | | | | 15 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: BP-TP-4 same, only down to 8' GROUND ELEVATION:
Very close to BP-TP-9 pit RISER ELEVATION:

| | | | | |
|--------------------------------------|-----------------------------------|-------------------------------------|---------------------|--|
| Terracon | | SOIL BORING NUMBER: BP-TP-6 | | |
| BOREHOLE DIA: <u> </u> INCHES | PROJECT NUMBER: <u>41027052</u> | SHEET <u>1</u> OF <u>1</u> | | |
| WELL DIA: <u> </u> INCHES | CLIENT: <u>MPCA</u> | | | |
| SCREEN SET: <u> </u> TO <u> </u> | PROJECT NAME: <u>ROW</u> | | | |
| SCREEN SIZE: <u> </u> SLOT | PROJECT ADDRESS: <u> </u> | | | |
| TYPE OF WELL: <u> </u> AG NG | CITY, STATE: <u>Roseville, Mn</u> | TERRACON REPRESENTATIVE: <u>MJR</u> | | |
| END OF BORING: <u>8'</u> | DATE STARTED: <u>12/30/02</u> | DATE COMPLETED: <u>12/21/02</u> | | |
| LOCATION: <u> </u> | RIG: <u>Trackhoe</u> | DRILLER: <u>Bornike</u> | FOREMAN: <u>Jim</u> | |

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|-------------------|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | ▼ AFTER DRILLING: | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| BR | M | M | Sand | | | 0' | | | | | | | |
| BR | M | M | | little gravel | | 1 | SW | | | | | | |
| BR | M | M | | 1 | | 2 | ↓ | | | | | | |
| BR | M | M | g-1 | Few gravel | | 3 | ↓ | | | | | | |
| BR | M | M | gravel | Coarse - | | 4 | GP | | | | | | |
| I | C | I | | | | 5 | ↓ | | | | | | |
| I | C | I | | | | 6 | ↓ | | | | | | |
| I | C | I | | | | 7 | ↓ | | | | | | |
| I | C | I | | | | 8 | ↓ | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: BD-TP-7

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET L OF L

WELL DIA: INCHES CLIENT: M.A.C.A.

SCREEN SET: TO PROJECT NAME: CDW

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG | NG CITY, STATE: Rosemont, Mo TERRACON REPRESENTATIVE: MJB

END OF BORING: 12' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: RIG: Trackhoe DRILLER: Barnick FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|------------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| <u>BRK</u> | <u>-</u> | <u>M</u> | <u>silty clay</u> | <u>-</u> | <u>-</u> | <u>0'</u> | <u>CL</u> | | | | | | |
| <u>BR</u> | <u>M</u> | <u>M</u> | <u>Sand</u> | <u>Trace</u> | <u>to</u> | <u>1</u> | <u>SW</u> | | | | | <u>LI</u> | |
| <u>BR</u> | <u>M</u> | <u>M</u> | <u>Sand</u> | <u>Trace</u> | <u>to</u> | <u>2</u> | <u>SW</u> | | | | | | |
| <u>BR</u> | <u>-</u> | <u>M</u> | <u>silty clay</u> | <u>-</u> | <u>-</u> | <u>3</u> | <u>CL</u> | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>4</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>5</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>6</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>7</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>8</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>9</u> | | | | | | | |
| <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>10</u> | | | | | | | |
| <u>BR</u> | <u>M</u> | <u>M</u> | <u>Silty clay</u> | <u>some</u> | <u>sand</u> | <u>11</u> | | | | | | | |
| | | | | | | <u>12</u> | | | | | | | |

SAMPLE LOG:

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

4 DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | |
|----|---|-----|----|----|-------|---|
| 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
|----|---|-----|----|----|-------|---|

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: _____

Terracon

SOIL BORING NUMBER: 3P-TP-8

| | | |
|--------------------------------------|-----------------------------------|---|
| BOREHOLE DIA: <u> </u> INCHES | PROJECT NUMBER: <u>41027052</u> | SHEET <u>1</u> OF <u>1</u> |
| WELL DIA: <u> </u> INCHES | CLIENT: <u>MPCA</u> | |
| SCREEN SET: <u> </u> TO <u> </u> | PROJECT NAME: <u>60W</u> | |
| SCREEN SIZE: <u> </u> SLOT | PROJECT ADDRESS: <u> </u> | |
| TYPE OF WELL: <u> </u> AG NG | CITY, STATE: <u>Rosemount, Mn</u> | TERRACON REPRESENTATIVE: <u>MJB</u> |
| END OF BORING: <u>5'</u> | DATE STARTED: <u>12/31/02</u> | DATE COMPLETED: <u>12/31/02</u> |
| LOCATION: <u> </u> | RIG: <u>Trackhoe</u> | DRILLER: <u>Barneke</u> FOREMAN: <u>Tim</u> |

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| DR-BK | - | M | silty clay | | | 0' | CL | | | | | CL | |
| 1 | | 1 | 1 | | | 1 | ↓ | | | | | | |
| 1 | | 1 | 1 | | | 2 | ↓ | | | | | | |
| BR | | 1 | 1 | | | 3 | ↓ | | | | | | |
| 1 | 0 | 1 | Sand | | | 4 | ↓ | | | | | | |
| | | | | | | 5 | Scd | | | | | CL | |
| | | | | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |
| | | | | | | 8 | | | | | | | |

SAMPLE LOG:

DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: BP-TP-9

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: INCHES CLIENT: MPCA

SCREEN SET: TO PROJECT NAME: LOW

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MWR

END OF BORING: 5' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02

LOCATION: RIG: Trackhoe DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) * = SAMPLE COLLECTED | WELL CONST DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|---|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| | | | | AFTER DRILLING: | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | |
| YL-BR | C | M | silty sand | | | 0' | | | | | | | |
| BR | C | M | Sand | | | 1 | SW | | | | | <1 | |
| BR | - | M | silty clay | | | 2 | SW | | | | | | |
| BR | C | M | gravel | | | 3 | CL | | | | | | |
| BR | C | M | gravel | | | 4 | GP | | | | | | |
| DR | M | M | Sand | | | 5 | GP | | | | | | |
| | | | | | | 6 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon SOIL BORING NUMBER: SP-TP-10

BOREHOLE DIA: — INCHES PROJECT NUMBER: 410 28052 SHEET 1 OF 1
 WELL DIA: — INCHES CLIENT: MPCA
 SCREEN SET: — TO — PROJECT NAME: GOW
 SCREEN SIZE: — SLOT PROJECT ADDRESS: —
 TYPE OF WELL: — AG NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: LDB
 END OF BORING: 3' DATE STARTED: 12/31/02 DATE COMPLETED: 12/31/02
 LOCATION: on hillside RIG: Trackhoe DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WEL CONS DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-----------------|
| | | | | ▼ AFTER DRILLING: | — ADDITIONAL INFORMATION — USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| BK | — | M | sily clay | — | — | 0' | | | | | | | |
| l | — | M | sily clay | — | — | 1 | CL | | | | | 21 | |
| l | F | M | clayey sand | — | — | 2 | CL | | | | | 21 | |
| | | | | | | 3 | SC | | | | | | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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:

Terracon **SOIL BORING NUMBER: BP-TP-15**

BOREHOLE DIA: — INCHES PROJECT NUMBER: 41027652 SHEET 1 OF 1
 WELL DIA: — INCHES CLIENT: MPCA
 SCREEN SET: — TO — PROJECT NAME: 60W
 SCREEN SIZE: — SLOT PROJECT ADDRESS: —
 TYPE OF WELL: — AG NG CITY, STATE: Rosemont, Mo TERRACON REPRESENTATIVE: MJB
 END OF BORING: 3' DATE STARTED: 12/31/02 DATE COMPLETED: 1/11/02
 LOCATION: — RIG: Trackhoe DRILLER: Bomeke FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|---|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | AFTER DRILLING: | | | | | | | | | |
| | | | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | |
| BK | - | M | Silty clay | — | — | 0 | CL | | | | | | |
| | | | | — | — | 1 | ↓ | | | | | | |
| | | | | — | — | 3 | ↓ | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: No PID reading taken
 INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.
 GROUND ELEVATION:
 RISER ELEVATION:

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

BOREHOLE DIA: — INCHES PROJECT NUMBER: **41029052** SHEET **1** OF **1**

WELL DIA: — INCHES CLIENT: **MPCA**

SCREEN SET: — TO — PROJECT NAME: **60W**

SCREEN SIZE: — SLOT PROJECT ADDRESS: —

TYPE OF WELL: — AG NG CITY, STATE: **Rosemount, Mn** TERRACON REPRESENTATIVE: **MJB**

END OF BORING: **6'** DATE STARTED: **1/15/03** DATE COMPLETED: **1/15/03**

LOCATION: **WA machine shop** RIG: **Frankhoe** DRILLER: **Bornette** FOREMAN: **Tim**

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | FID (ppm) X = SAMPLE COLLECTED | WELL LOG DETAIL | |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-----------------|--|
| | | | | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | |
| | | | | <input checked="" type="checkbox"/> | | 0 | | | | | | | | |
| BR | E | M | Clayey Gravel | | | 1 | GC | | | | | | | |
| 1 | C | M | 1 | | | 2 | GC | | | | | | | |
| 1 | — | M | Silty Clay | | | 3 | CL | | | | | | | |
| 1 | M | A | Silty Sand | | | 4 | ML | | | | | <1 | WAF | |
| 1 | 1 | 1 | 1 | | | 5 | AL | | | | | <1 | | |
| 1 | 1 | 1 | Sand | | | 6 | SSSC | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 48 | 38 | MC | 234.5 | * |
| | | | | | 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: _____ INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.

GROUND ELEVATION: _____
 RISER ELEVATION: _____

Terracon

SOIL BORING NUMBER: MS-TP-2

BOREHOLE DIA: - INCHES PROJECT NUMBER: 41027052 SHEET L OF L

WELL DIA: - INCHES CLIENT: MPCA

SCREEN SET: - TO - PROJECT NAME: GOW

SCREEN SIZE: - SLOT PROJECT ADDRESS: -

TYPE OF WELL: - AG NG CITY, STATE: Rosemont, MN TERRACON REPRESENTATIVE: MJB

END OF BORING: 5' DATE STARTED: 1/13/03 DATE COMPLETED: 1/13/03

LOCATION: N&B parking shop RIG: Trasker DRILLER: Bunkle FOREMAN: Jhm

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | C | M | Clayey Gravel | | | 0' | | | | | | | |
| L | L | L | | | | 1 | GC | | | | | | |
| BR-OK | M | L | Silty Sand | | | 2 | GC | | | | | <1 | |
| BR | M | L | | | | 3 | MZ | | | | | | |
| L | L | L | | | | 4 | | | | | | | |
| | | | | | | 5 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODCR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: ~~XXXXXXXXXX~~ GROUND ELEVATION: RISER ELEVATION:

Terracon

SOIL BORING NUMBER: *PSB-TV-1*

BOREHOLE DIA: *-* INCHES PROJECT NUMBER: *41027052* SHEET *1* OF *1*

WELL DIA: *-* INCHES CLIENT: *MPCA*

SCREEN SET: *-* TO *-* PROJECT NAME: *CoW*

SCREEN SIZE: *-* SLOT PROJECT ADDRESS: *-*

TYPE OF WELL: *-* AG NG CITY, STATE: *Rainmont, Mn* TERRACON REPRESENTATIVE: *MJS*

END OF BORING: *5'* DATE STARTED: *1/12/03* DATE COMPLETED: *1/13/03*

LOCATION: *-* RIG: *Trackhoe* DRILLER: *Bornieke* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-----------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| <i>DK</i> | <i>F</i> | <i>M</i> | <i>silty clay silt</i> | <i>Some sand + clay</i> | | <i>0'</i> | | | | | | | |
| <i>DK</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | <i>1</i> | <i>ML</i> | | | | | <i><1</i> | <i>ML</i> |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | <i>2</i> | | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | <i>3</i> | | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | <i>4</i> | | | | | | <i><1</i> | <i>ML</i> |
| | | | | | | <i>5</i> | | | | | | | |

SAMPLE LOG:

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

DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | |
|----------|-----------|----------|------------|-----------|-----------|--------------|----------|
| <i>4</i> | <i>12</i> | <i>2</i> | <i>4-8</i> | <i>38</i> | <i>MC</i> | <i>234.5</i> | <i>*</i> |
| <i>5</i> | | | | | | | |

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:

Terracon SOIL BORING NUMBER: PSD-TP-2

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: _____ INCHES CLIENT: MPCA

SCREEN SET: _____ TO _____ PROJECT NAME: GOW

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG NG CITY, STATE: Rosemount TERRACON REPRESENTATIVE: MJB

END OF BORING: 6' DATE STARTED: 1/13/03 DATE COMPLETED: 1/13/03

LOCATION: _____ RIG: Trackhoe DRILLER: Bonette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) * = SAMPLE COLLECTED | WELL LOG DETAIL |
|-------|------------|---------------|--------------------------------------|---|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-----------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| | | | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | |
| DR | M | M | Silty sand | | | 0' | | | | | | | |
| DR | C | M | Sand | | | 1' | ML | | | | | | |
| | | | | | | 2' | SW | | | | | <1 | |
| | | | | | | 3' | | | | | | | |
| | | | | | | 4' | | | | | | | |
| DR | F | M | silt | | | 5' | | | | | | <1 | |
| | | | | | | 6' | ML | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: WWTP TR-5

| | | |
|--|-----------------------------------|--|
| BOREHOLE DIA: <u> </u> INCHES | PROJECT NUMBER: <u>41027052</u> | SHEET <u>1</u> OF <u>1</u> |
| WELL DIA: <u> </u> INCHES | CLIENT: <u>MPCA</u> | |
| SCREEN SET: <u> </u> TO <u> </u> | PROJECT NAME: <u>GOW</u> | |
| SCREEN SIZE: <u> </u> SLOT | PROJECT ADDRESS: <u> </u> | |
| TYPE OF WELL: <u> </u> AG NG | CITY, STATE: <u>Rosemount, Mn</u> | TERRACON REPRESENTATIVE: <u>MJB</u> |
| END OF BORING: <u>3'</u> | DATE STARTED: <u>1/2/03</u> | DATE COMPLETED: <u>1/2/03</u> |
| LOCATION: <u> </u> | RIG: <u>Trackhoe</u> | DRILLER: <u>Banche</u> FOREMAN: <u>Tim</u> |

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST DETAILS |
|------------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| <u>BR</u> | <u>M</u> | <u>M</u> | <u>Sandy silt</u> | <u>Few gravel</u> | | <u>0</u> | <u>ML</u> | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>1</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>2</u> | | | | | | | |
| <u>BRX</u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>3</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>4</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>5</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>6</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>7</u> | | | | | | | |
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u>8</u> | | | | | | <u><1</u> | |

SAMPLE LOG:

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

4 — DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | |
|---|----|---|-----|----|----|-------|---|
| 4 | 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

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.

NOTES: _____ GROUND ELEVATION: _____
 _____ RISER ELEVATION: _____

Terracon

SOIL BORING NUMBER: WUTP-TP-6

BOREHOLE DIA: — INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: — INCHES CLIENT: MPC

SCREEN SET: — TO — PROJECT NAME: GOW

SCREEN SIZE: — SLOT PROJECT ADDRESS: —

TYPE OF WELL: — AG NG CITY, STATE: Rosemont, Mn TERRACON REPRESENTATIVE:

END OF BORING: 7' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: — RIG: Trackhoe DRILLER: Basneke FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|---|---------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | ✓ | ▼ | | | | | | | | |
| | | | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | |
| BR | M | M | Sandy silt | | Few gravel | 0' | | | | | | | |
| BR | | | | | | 1 | SA | | | | | 61 | |
| | | | | | | 2 | ML | | | | | | |
| | | | | | | 3 | | | | | | | |
| | | | | | little gravel | 4 | | | | | | | |
| DR-X | | | | | | 5 | | | | | | | |
| BR-X | | | | | | 6 | | | | | | | |
| | | | | | little gravel | 7 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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:

Terracon SOIL BORING NUMBER: LWTP-TN-7 SHEET 1 OF 1

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027057

WELL DIA: _____ INCHES CLIENT: MPCA

SCREEN SET: _____ TO _____ PROJECT NAME: GOW

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG NG CITY, STATE: Rosemount TERRACON REPRESENTATIVE: MJB

END OF BORING: 10' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: _____ RIG: Truckhoe DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | M | M | sandy silt | Few gravel, Fine | | 0' | | | | | | | |
| | | | | | | 1 | ML | | | | | | |
| | | | | Coal chunk 1" D | | 2 | | | | | | | |
| | | | | Sub angular blocky structure | | 3 | | | | | | | C1 |
| | | | | Few gravel, Fine | | 4 | | | | | | | |
| | | | | | | 5 | | | | | | | |
| | | | | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |
| | | | | | | 8 | | | | | | | C1 |
| | | | | | | 9 | | | | | | | |
| 12-DR | | | Sand | looks native | | 10 | SW | | | | | | |

SAMPLE LOG:

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

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: Dug along the side of hill. From the top down / all fill material.

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG

DEPTH GO BETWEEN TICS AND INDICATE DEPTH AT

| | | | | | | | |
|---|----|---|-----|----|----|-------|---|
| 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| 5 | | | | | | | |

GROUND ELEVATION: _____
RISER ELEVATION: _____

Terracon **SOIL BORING NUMBER:** *WWTB-TP-3*

BOREHOLE DIA: *—* INCHES PROJECT NUMBER: *41027652* SHEET *1* OF *1*

WELL DIA: *—* INCHES CLIENT: *MPCA*

SCREEN SET: *—* TO *—* PROJECT NAME: *604*

SCREEN SIZE: *—* SLOT PROJECT ADDRESS: *—*

TYPE OF WELL: *—* AGING CITY, STATE: *Rosemount, Mn* TERRACON REPRESENTATIVE: *MJB*

END OF BORING: *2'* DATE STARTED: *1/2/03* DATE COMPLETED: *1/2/03*

LOCATION: *1* RIG: *Trackhoe* DRILLER: *Barneke* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NESSESARY | | | | | | | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>M</i> | <i>Sandy silt</i> | | | <i>0'</i> | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>M</i> | <i>1</i> | | | <i>1</i> | <i>ML</i> | | | | | | |
| | | | | | | <i>2</i> | <i>ML</i> | | | | | <i>21</i> | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|--------------|------------|----------|-----------------------------------|--|----------|-----------|----------|------------|-----------|-----------|--------------|----------|
| <i>YL-BR</i> | <i>F-C</i> | <i>M</i> | <i>POORLY GRADED SAND W/ SILT</i> | <i>OXIDIZED ZONES & AMMONIA ODOR</i> | <i>4</i> | <i>12</i> | <i>2</i> | <i>4-8</i> | <i>38</i> | <i>MC</i> | <i>234.5</i> | <i>*</i> |
| | | | | | <i>5</i> | | | | | | | |

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: _____

Terracon SOIL BORING NUMBER: *WTP-TP-9*

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: *41027052* SHEET *1* OF *1*

WELL DIA: _____ INCHES CLIENT: *MPCA*

SCREEN SET: _____ TO _____ PROJECT NAME: *60W*

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG | NG CITY, STATE: *Rosemount, Mn* TERRACON REPRESENTATIVE: *MJR*

END OF BORING: *3'* DATE STARTED: *1/2/03* DATE COMPLETED: *1/7/03*

LOCATION: _____ RIG: *Trackhoe* DRILLER: *Barnabe* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | <input checked="" type="checkbox"/> WHILE DRILLING: <input checked="" type="checkbox"/> AFTER DRILLING: -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST DETAILS |
|--------------|------------|---------------|--------------------------------------|---|---------------|----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | | | | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>M</i> | <i>Sandy silt</i> | <i>Few gravel</i> | <i>1 Fill</i> | <i>0</i> | <i>ML</i> | | | | | | |
| <i>l</i> | <i>l</i> | <i>l</i> | <i>l</i> | <i>l</i> | <i>1 Fill</i> | <i>1</i> | <i>↓</i> | | | | | | |
| <i>YL-BR</i> | <i>M</i> | <i>M</i> | <i>Sand</i> | <i>Looks native</i> | | <i>2</i> | <i>SW</i> | | | | | | |
| | | | | | | <i>3</i> | | | | | | | |

SAMPLE LOG:

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

4 DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | |
|----|---|-----|----|----|-------|---|
| 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
|----|---|-----|----|----|-------|---|

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: *NO PDD causing failure* GROUND ELEVATION: _____
 RISER ELEVATION: _____

Terracon

SOIL BORING NUMBER: WLTP-TP-10

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027057 SHEET 1 OF 1

WELL DIA: INCHES CLIENT: MPCA

SCREEN SET: TO PROJECT NAME: 60W

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG NG CITY, STATE: Rosemead, Mn TERRACON REPRESENTATIVE: MJD

END OF BORING: 15' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: RIG: Trackhoe DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| BR | M | M | Sandy Silt | | | 0' | | | | | | | |
| | | | | | | 1 | ML | | | | | | |
| BR | | | | | | 2 | | | | | | | |
| BR | | | | | | 3 | | | | | | | |
| BR-BK | | | | | | 4 | | | | | | | |
| | | | | | | 5 | | | | | | | |
| | | | | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |
| | | | | | | 8 | | | | | | | |
| | | | | | | 9 | | | | | | | |
| | | | Silly clay | | | 10 | CL | | | | | | |
| BK | | | | | | 11 | | | | | | | |
| | | | | | | 12 | | | | | | <1 | |
| | | | | | | 13 | | | | | | | |
| DR-BK | | | | | | 14 | | | | | | | |
| W-DR | 1 | | Sand | | | 15 | Sw | | | | | <1 | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: WTP-TP-11

| | | |
|----------------------------|---------------------------------|-------------------------------------|
| BOREHOLE DIA: _____ INCHES | PROJECT NUMBER: <u>41027052</u> | SHEET <u>1</u> OF <u>1</u> |
| WELL DIA: _____ INCHES | CLIENT: <u>MPCA</u> | |
| SCREEN SET: _____ TO _____ | PROJECT NAME: <u>GOW</u> | |
| SCREEN SIZE: _____ SLOT | PROJECT ADDRESS: _____ | |
| TYPE OF WELL: _____ AG NG | CITY, STATE: <u>Rosemount</u> | TERRACON REPRESENTATIVE: <u>MTB</u> |
| END OF BORING: <u>15'</u> | DATE STARTED: <u>1/2/03</u> | DATE COMPLETED: <u>1/2/03</u> |
| LOCATION: _____ | RIG: <u>Trackhoe</u> | DRILLER: <u>Bonete</u> |
| | | FOREMAN: <u>Jim</u> |

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL LOG DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------|---|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-----------------|
| | | | | ▼ AFTER DRILLING: | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | |
| BR | M | M | Sandy silt | ✓ | Few gravel | 0 | | | | | | | |
| BR | | | | | | 1 | ML | | | | | | |
| BR | | | | | | 2 | | | | | | | |
| BR | | | | | | 3 | | | | | | | |
| BR-DK | | | | | | 4 | | | | | | | |
| | | | | | | 5 | | | | | | | |
| | | | | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |
| | | | | | | 8 | | | | | | | |
| | | | Silty Clay | | | 9 | ↓ | | | | | | |
| BK | | | | | | 10 | C | | | | | <1 | |
| | | | | | | 11 | | | | | | | |
| | | | | | | 12 | | | | | | | |
| | | | | | | 13 | | | | | | | |
| BR-DK | | | | | | 14 | ↓ | | | | | | |
| YL-BR | | | Sand | | - looks native | 15 | Sw | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: same as #10 TP-10

GROUND ELEVATION: _____
 RISER ELEVATION: _____

Terracon SOIL BORING NUMBER: WVTP-TP-12

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: INCHES CLIENT: MPCA

SCREEN SET: TO PROJECT NAME: GDW

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG | NG CITY, STATE: Rosemont, Mn TERRACON REPRESENTATIVE: MJR

END OF BORING: 8' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: near WTP stacks RIG: Trackhoe DRILLER: Darnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|---|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| | | | | -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | 0' | | | | | | | |
| | | | | <u>(Bricks, cement, asbestos same soil)</u> | | 1 | | | | | | | |
| | | | | | | 2 | | | | | | | |
| | | | | | | 3 | | | | | | | |
| | | | | | | 4 | | | | | | | |
| | | | | | | 5 | | | | | | | |
| | | | | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |
| | | | | | | 8 | | | | | | | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: This dig was a trash pit. GROUND ELEVATION: _____
 RISER ELEVATION: _____

T... .. 40 ft from the P.E.D.

Terracon SOIL BORING NUMBER: WWTP-TP-14

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: _____ INCHES CLIENT: MPCA

SCREEN SET: _____ TO _____ PROJECT NAME: 60w

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG | NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: WTR

END OF BORING: 2' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: _____ RIG: Trackhoe DRILLER: Dornick FOREMAN: Jim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WEL CONC DETAIL |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-----------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| <u>BR-BK</u> | <u>M</u> | <u>M</u> | <u>Sandy silt</u> | | | <u>0'</u> | | | | | | | |
| <u>DR</u> | <u>M</u> | <u>M</u> | <u>1</u> | | | <u>1</u> | <u>ML</u> | | | | | <u>21</u> | |
| <u>PR</u> | | <u>M</u> | <u>silty clay</u> | | | <u>2</u> | <u>↓</u> | | | | | | |
| | | | | | | <u>3</u> | <u>CL</u> | | | | | | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|--------------|------------|----------|-----------------------------------|--|----------|-----------|----------|------------|-----------|-----------|--------------|----------|
| <u>YL-BR</u> | <u>F-C</u> | <u>M</u> | <u>POORLY GRADED SAND W/ SILT</u> | <u>OXIDIZED ZONES & AMMONIA ODOR</u> | <u>4</u> | <u>12</u> | <u>2</u> | <u>4-8</u> | <u>38</u> | <u>MC</u> | <u>234.5</u> | <u>*</u> |
| | | | | | <u>5</u> | | | | | | | |

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 LCG.

NOTES: _____ GROUND ELEVATION: _____
 _____ RISER ELEVATION: _____

Terracon

SOIL BORING NUMBER: WLTP-TP-15

BOREHOLE DIA: INCHES PROJECT NUMBER: 41027052 SHEET 1 OF 1

WELL DIA: INCHES CLIENT: MPCA

SCREEN SET: TO PROJECT NAME: GOW

SCREEN SIZE: SLOT PROJECT ADDRESS:

TYPE OF WELL: AG NG CITY, STATE: Rosemount TERRACON REPRESENTATIVE: MJB

END OF BORING: 7' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: Old rail line RIG: Trackhoe DRILLER: Barreke FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL: |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| BR | | | clayey sand | | | 0 | | | | | | | |
| BR-BK | | | 1 | | | 1 | SC | | | | | | |
| BR | | | 1 | | | 2 | | | | | | | |
| 1 | | | 1 | | | 3 | | | | | | | |
| 1 | | | 1 | | | 4 | | | | | | | |
| 1 | | | 1 | | | 5 | | | | | | | |
| YLDR | | | sandy clay | | | 6 | | | | | | | |
| | | | | | | 7 | | | | | | | |

SAMPLE LOG: DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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=NET

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG.

NOTES: NO PFD taken GROUND ELEVATION: _____
RISER ELEVATION: _____

Terracon **SOIL BORING NUMBER:** *NWTP-TP-16*

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: *41027052* SHEET *1* OF *1*

WELL DIA: _____ INCHES CLIENT: *MPCA*

SCREEN SET: _____ TO _____ PROJECT NAME: *GOW*

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG NG CITY, STATE: *Rosemount* TERRACON REPRESENTATIVE: *MJD*

END OF BORING: *6'* DATE STARTED: *1/2/03* DATE COMPLETED: *1/2/03*

LOCATION: _____ RIG: *Trackhoe* DRILLER: *Borheke* FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL LOGS/DETAILS |
|-----------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|-------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>M</i> | <i>Sandy silt</i> | <i>Organic A horizon</i> | | <i>0'</i> | | | | | | | |
| <i>BR</i> | <i>M</i> | <i>1</i> | <i>Sand</i> | | | <i>1</i> | <i>ML</i> | | | | | | |
| <i>BR</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>Few gravel</i> | | <i>2</i> | <i>SW</i> | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | | <i>3</i> | <i>SP</i> | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | | <i>4</i> | | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>Few gravel</i> | | <i>5</i> | | | | | | | |
| <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | | | <i>6</i> | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 5 | | | | | | | |

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

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING LOG

NOTES: *No PID taken.* GROUND ELEVATION: _____

RISER ELEVATION: _____

| | | | |
|------------------------|----------------------------|---------------------------------------|--------------|
| Terracon | | SOIL BORING NUMBER: JWTA TP-19 | |
| BOREHOLE DIA: — INCHES | PROJECT NUMBER: 41027052 | SHEET 1 OF 1 | |
| WELL DIA: — INCHES | CLIENT: MPCA | | |
| SCREEN SET: — TO — | PROJECT NAME: GOW | | |
| SCREEN SIZE: — SLOT | PROJECT ADDRESS: — | | |
| TYPE OF WELL: — AG NG | CITY, STATE: Rosemount, Mn | TERRACON REPRESENTATIVE: MJB | |
| END OF BORING: 8' | DATE STARTED: 1/2/03 | DATE COMPLETED: 1/2/03 | |
| LOCATION: — | RIG: Truckee | DRILLER: Barnett | FOREMAN: Tim |

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | <input checked="" type="checkbox"/> WHILE DRILLING: <input type="checkbox"/> AFTER DRILLING: -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAILS |
|-------|------------|---------------|--------------------------------------|--|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|---------------------|
| | | | | | | | | | | | | |
| BR | | M | Silt. sand | SE little gravel | 0' | | | | | | | |
| BR | | | | | 1' | ML | | | | | 21 | |
| BR | | | | | 2' | ↓ | | | | | | |
| BR | | | | | 3' | ↓ | | | | | | |
| | | | Clayey sand | — | 4' | ↓ | | | | | | |
| | | | | — | 5' | SC | | | | | | |
| | | | | — | 6' | ↓ | | | | | | |
| | | | | Coal bits | 7' | ↓ | | | | | | |
| | | | | | 8' | | | | | | | |

| | | | | | | | | | | | | |
|--------------------|-----|---|----------------------------|-------------------------------|---|---|---|-----|----|----|-------|---|
| SAMPLE LOG: | | | | | | DEPTHS GO BETWEEN TICS AND INDICATE DEPTH AT LINE | | | | | | |
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: |

Terracon SOIL BORING NUMBER: WMP-TP-20 SHEET 1 OF 2

BOREHOLE DIA: _____ INCHES PROJECT NUMBER: 41027652

WELL DIA: _____ INCHES CLIENT: MCA

SCREEN SET: _____ TO _____ PROJECT NAME: GOW

SCREEN SIZE: _____ SLOT PROJECT ADDRESS: _____

TYPE OF WELL: _____ AG | NG CITY, STATE: Rosemount, Mn TERRACON REPRESENTATIVE: MJB

END OF BORING: 2' DATE STARTED: 1/2/03 DATE COMPLETED: 1/2/03

LOCATION: _____ RIG: Tractor DRILLER: Barnette FOREMAN: Tim

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X = SAMPLE COLLECTED | WELL CONST. DETAIL |
|-------|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-------|------------|---------------|-----------------|--------------------|-------------|-----------------------------------|--------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| BR | M | M | Silty sand | | | 0' | | | | | | | |
| SL | M | M | 1 | | | 1 | ML | | | | | <1 | |
| | | | | | | 2 | ↓ | | | | | | |
| | | | | | | 2 | | | | | | | |

SAMPLE LOG:

| | | | | | | | | | | | | |
|-------|-----|---|----------------------------|-------------------------------|---|----|---|-----|----|----|-------|---|
| YL-BR | F-C | M | POORLY GRADED SAND W/ SILT | OXIDIZED ZONES & AMMONIA ODOR | 4 | 12 | 2 | 4-8 | 38 | MC | 234.5 | * |
| | | | | | 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: _____

Terracon

SOIL BORING NUMBER: *WHP-YP-23*

SHEET OF

BOREHOLE DIA: INCHES

PROJECT NUMBER: *41027052*

WELL DIA: INCHES

CLIENT: *MPCA*

SCREEN SET: TO

PROJECT NAME: *60W*

SCREEN SIZE: SLOT

PROJECT ADDRESS:

TYPE OF WELL: AG NG

CITY, STATE: *Rosemount*

TERRACON REPRESENTATIVE: *MJB*

END OF BORING: *41*

DATE STARTED: *1/2/03*

DATE COMPLETED: *1/2/03*

LOCATION:

RIG: *Trackhoe*

DRILLER: *Basneke*

FOREMAN: *Tim*

| COLOR | GRAIN SIZE | WATER CONTENT | SOIL TYPE EXAMPLE: CLAYEY SAND | WHILE DRILLING: | | DEPTH | BLOW COUNT | SAMPLE NUMBER | SAMPLE INTERVAL | RECOVERY IN INCHES | SAMPLE TYPE | PID (ppm) X= SAMPLE COLLECTED | WELL CONST. DETAILS |
|---|------------|---------------|--------------------------------------|-------------------------------------|--------------------------|-----------|------------|---------------|-----------------|--------------------|-------------|----------------------------------|---------------------|
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |
| -ADDITIONAL INFORMATION- USE MORE THAN ONE LINE IF NECESSARY | | | | | | | | | | | | | |
| <i>BK</i> | <i>M</i> | <i>M</i> | <i>Sandy silt</i> | | | <i>0'</i> | | | | | | <i>1.7</i> | |
| <i>BR</i> | <i>M</i> | <i>I</i> | <i>sand</i> | | | <i>1</i> | <i>SW</i> | | | | | | |
| <i>I</i> | <i>M</i> | <i>I</i> | <i>Sand</i> | | | <i>2</i> | <i> </i> | | | | | | |
| <i>I</i> | <i>M</i> | <i>I</i> | <i>I</i> | | | <i>3</i> | <i> </i> | | | | | | |
| | | | | | | <i>4</i> | <i>V</i> | | | | | | |

SAMPLE LOG:

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

4 DEPTHS GO BETWEEN TICS AND INDICATE DEPTH

| | | | | | |
|----|---|-----|----|----|-------|
| 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:

INCLUDE ACCURATE SOIL TYPES AND DESCRIPTIONS WHEN COMPLETING
GROUND ELEVATION:
RISER ELEVATION:

DAILY FIELD LOG

PROJECT NAME Former GOW PROJECT NO. 41027052

PROJECT LOCATION Rosemont, MA

WEATHER Sunny 35°, windy

EQUIPMENT PIID, Gloves, hand auger, sample jars

FORM COMPLETED BY MJB DATE 12/30/02

WORK PERFORMED: Arrived at site ≈ 9:20. Started sampling
after ^{rest} first pit was dug. Clean Plant (CP) 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 + handling area. Dug
and sampled TP 1-3 and Dry Well. TP-3 was a tile inlet
and on TP-1 was a ~~tile~~ sample from inside a tile.

Moved to WWTP (Wastewater treatment plant) and
Dug and sampled ~~two composite~~ six surface TP,
which were composited ~~to~~ into two samples, 1C + 2C.
~~So~~ 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~~ PIID samples,

Terracon

DAILY FIELD LOG

PROJECT NAME 60W PROJECT NO. 41027052

PROJECT LOCATION Rosemont, Mn

WEATHER Sunny 30°

EQUIPMENT _____

FORM COMPLETED BY MJTB DATE 12/31/02

WORK PERFORMED: Arrived on site at about 8:15. Began sampling test pits DG (burial 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 in the soil profile.

After finishing the soil sampling I GPS'ed the points from Monday as well as Tuesday.

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

Was hurried when taking boring log information. The excavator was ~~not~~ digging new pits before it could ~~be~~ accurately describe exact soil types. Peer said, ~~that~~ and so did the University representative, that they were much more concerned with collecting the samples.

Terracon

DAILY FIELD LOG

PROJECT NAME 60W PROJECT NO. 41027052

PROJECT LOCATION Rosemount, Mn

WEATHER Sunny 25°

EQUIPMENT _____

FORM COMPLETED BY M. JB DATE 1/2/03

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

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

GPS'ed points that when pits were dug.

TP-12 was a pit of debris, bricks, concrete, steel, asbestos, some soil and some
misc parts. This was the ~~most~~ potentially most contaminated
test pit.

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

Then we relocated to a new site:

The utilities were not marked at this new site, so we quit for
the day. I finished GPS'ing the sites we did that day and
went back to office.

It was not possible to PID samples in the field, or take
accurate notes on the soil boring logs due to the speed we
were progressing & digging TP's.

Terracon

DAILY FIELD LOG

PROJECT NAME 604 PROJECT NO. 41027052
PROJECT LOCATION Rosemount, Mn
WEATHER Cloudy 1°
EQUIPMENT PFD, Gloves, Ziplock bags
FORM COMPLETED BY Matt Baumgartner DATE 1/13/03

WORK PERFORMED:

Arrived on site at 9:00. Started digging 1 of machineshop.

MS-TP-1 and MS-TP-2. Took samples from both pits.

MS-TP-1 has the whole list of analysis run on it.

MS-TP-2 had only a few. Moved to P&B and next.

Primary settling basin (P&B) is the next to area thought to collect all the runoff from the 604 area.

We dug 2 pits in the P&B and ran one for the ~~entire~~ entire list of analysis and the other for a few.

Finished at about 11:00 am. There were more spots that Peer environmental wanted to collect samples ^{in the P&B} 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 Lenox box sewer, but has not yet.

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