Monitoring Well Construction

Date Start: 6/29/00

Drilling Company: Cascade Drilling

Drillers: [Name]

Geologist: Lou La Rosa

Well ID: MW-47

Location Diagram

Reference Elevation

Ground Surface

Bottom of Surface Casing: 1

Top of Seal: 1

Top of Sand Pack: 3

Top of Screen: 4

Bottom of Well: 14

Top of Boring: 14

Bore Hole Diameter: 9 1/2" (feet bgs)

Depth to Water (bgs)

Locking Cap

Steel Protective Surface Casing

Diameter: 1 1/2" bags Set Set

Grout

Type: Cement

Annular Seal

Type: Bentonite

Riser Casing

Type: PVC

Diameter: 2"

Well Packing Material

Sand

Type: Lapis Lustre

Diameter: 3 1/2" bags

Screen

Type: PVC

Slot Width: 10 Slot

Diameter: 2"
<table>
<thead>
<tr>
<th>Date Start</th>
<th>7/7/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete</td>
<td>7/7/02</td>
</tr>
<tr>
<td>Boring Depth</td>
<td>15</td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>8½&quot;</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

**Monitor Well Construction**

**Location Diagram**

<table>
<thead>
<tr>
<th>Contractor</th>
<th>PSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drillers</td>
<td>Cascade Drilling</td>
</tr>
<tr>
<td>Geologist</td>
<td>Louisa Rosa</td>
</tr>
</tbody>
</table>

**Reference Elevation**

- Ground Surface
- Bottom of Surface Casing
- Top of Seal: 1
- Top of Sand Pack: 3
- Top of Screen: 8½

**Depth** (feet bgs)

**Steel Protective Surface Casing**

- Diameter:
  - Type: Cement

**Grout**

- Type: Bentonite

**Annular Seal**

- Type: Bentonite

**Riser Casing**

- Type: PVC
- Diameter: 2"

**Well Packing Material**

- Type: Sand
  - Lapis Lustre
  - 4 bags

**Screen**

- Type: PVC
- Slot Width: 10 slot
- Diameter: 2½"

**Notes**
Monitoring Well Construction

Well ID MW-20

Date Start: 6/23/00
Date Complete: 6/28/00
Contractor: Cascade Drilling
Drillers: Cascade Drilling
Geologist: Luci Lucio

Well ID: MW-20

Boring Depth: 12 ft
Borehole Diameter: 9 1/2"
Well Diameter: 2"

Depth to Water (bgs)

Locking Cap
Steel Protective Surface Casing
Diameter: 8"

Grout
Type: Cement

Annular Seal
Type: Bentonite
1/2 bag

Riser Casing
Type: PVC
Diameter: 2"

Well Packing Material
Lapis Lustre Sand
Type: 7/12
3 bags

Screen
Type: PVC
Slot Width: 10
Diameter: 2"

Notes
<table>
<thead>
<tr>
<th>Date Start</th>
<th>1/29/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete</td>
<td>1/29/00</td>
</tr>
<tr>
<td>Boring Depth</td>
<td>13.5</td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>8 1/2</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2</td>
</tr>
<tr>
<td>Reference Elevation</td>
<td></td>
</tr>
<tr>
<td>Ground Surface</td>
<td></td>
</tr>
<tr>
<td>Bottom of Surface Casing</td>
<td>1.0</td>
</tr>
<tr>
<td>Top of Seal</td>
<td>1.0</td>
</tr>
<tr>
<td>Top of Sand Pack</td>
<td>3.0</td>
</tr>
<tr>
<td>Top of Screen</td>
<td>3.5</td>
</tr>
<tr>
<td>Bottom of Well</td>
<td>13.5</td>
</tr>
<tr>
<td>Bottom of Boring</td>
<td>13.5</td>
</tr>
</tbody>
</table>

### Locking Cap
- Steel Protective Surface Casing Diameter
- Grout Type: Cement
- Annular Seal Type: Bentonite Chips
- Riser Casing Type: PVC
- Diameter: 2"
- Well Packing Material: Sand Lapis Lustre Type: 2/12 3 bags
- Screen Type: PVC
- Slot Width: 0.5 Slot
- Diameter: 2"
**Monitoring Well Construction**

**Well ID:** MW-23

**Location Diagram:** N

<table>
<thead>
<tr>
<th>Date Start</th>
<th>7/7/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion</td>
<td>7/7/00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Borehole Diameter</th>
<th>8 1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

**Reference Elevation**

<table>
<thead>
<tr>
<th>DEPTH (feet bgs)</th>
<th>Ground Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bottom of Surface Casing</td>
</tr>
<tr>
<td></td>
<td>Top of Seal</td>
</tr>
<tr>
<td></td>
<td>Top of Sand Pack</td>
</tr>
<tr>
<td></td>
<td>Top of Screen</td>
</tr>
</tbody>
</table>

**Steel Protective Surface Casing Diameter:**

- **Grout**
  - Type: Cement

- **Annular Seal**
  - Type: Bentonite

- **Riser Casing**
  - Type: PVC
  - Diameter: 2"

- **Well Packing Material**
  - Type: Lapis Lazuli
    - Type: 2 1/2
    - 3 1/2 bags

- **Screen**
  - Type: PVC
  - Slot Width: 10 slot
  - Diameter: 2"

**Notes**
Monitoring Well Construction

Well ID: MW-24

Date Start: 6/7/00
Date Complete: 6/28/00
Contractor: [Redacted]
Drillers: Castelle Drilling
Geologist: Loa La Rosa

Boring Depth: 12'-13"
Borehole Diameter: 8'-1"

Well Diameter: 2"

Depth to Water (bgs)

Reference Elevation

Ground Surface

- Bottom of Surface Casing: 1'-10"
- Top of Seal: 1'-10"
- Top of Sand Pack: 9'-5"
- Top of Screen: 4'-8"
- Bottom of Well: 15'-13"
- Bottom of Boring: 13'3"

Bore Hole Diameter: 13'8-1/2"

Locking Cap

Steel Protective Surface Casing
   Diameter:

Grout
   Type: Cement

Annular Seal
   Type: Reteneite Chips
   1/2 bag

Riser Casing
   Type: PVC
   Diameter: 2"

Well Packing Material
   Lapis Lustre
   Type: Sand 2/12
   3 bags

Screen
   Type: PVC
   Slot Width: 10 Slot
   Diameter: 2"

Notes
Monitorinig Well Construction

Well ID: MW-24D
Location Diagram: NE

Date Start: 6/28/00
Date Complete: 7/28/00
Well Depth: 39' bgs
Borehole Diameter: 8 1/2"
Well Diameter: 2"

Locking Cap
Steel Protective Surface Casing
   Diameter:
   Grout Cement Type:
   Annular Seal Type:
   Pure Cao Cemtn
   Bentonite Chps 7 bags
   Riser Casing Type: PVC
   Diameter: 2"
   Well Packing Material: Lapis Lustra Sand
   Type: 2/12 3 1/2 bags
   Screen Type: PVC
   Slot Width: 10 slot
   Diameter: 2"

Notes

Reference Elevation
Ground Surface
Bottom of Surface Casing
Top of Seal: 2.5
Top of Sand Pack: 27
Top of Screen: 29
Bottom of Well: 39
Bottom of Boring: 29
Bore Hole Diameter: 8 1/2"
<table>
<thead>
<tr>
<th>Date Start</th>
<th>7/7/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete</td>
<td>7/7/00</td>
</tr>
<tr>
<td>Boring Depth</td>
<td>15'</td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>8 1/2&quot;</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Contractor</td>
<td>PSC</td>
</tr>
<tr>
<td>Driller</td>
<td>Cascade Drilling</td>
</tr>
<tr>
<td>Geologist</td>
<td>La La Rosa</td>
</tr>
<tr>
<td>Location Diagram</td>
<td>NW</td>
</tr>
</tbody>
</table>

**Reference Elevation**

- **Depth (feet bgs)**
  - Bottom of Surface Casing
  - Top of Seal
  - Top of Sand Pack
  - Top of Screen
  - Bottom of Well
  - Top of Boring

**Locking Cap**

**Steel Protective Surface Casing**

**Grout**

- Type: Cement

**Annular Seal**

- Type: Bentonite

**Riser Casing**

- Type: PVC
- Diameter: 2"

**Well Packing Material**

- Sand
- Type: Lapsilicate
- 2/12
- 3 1/2 bags

**Screen**

- Type: PVC
- Slot Width: 2 1/2
- Diameter: 2"

**Notes**

- Bore Hole Diameter: 8 1/2"
**Monitoring Well Construction**

- **Well ID:** MW-102-E-21
- **Date Start:** 2/8/01
- **Contractor:** Cascade Drilling
- **Driller:** Brian Grose
- **Geologist:** Salamah Magnuson
- **Location Diagram**

### Well Details

- **Borehole Depth:** 19.0’
- **Borehole Diameter:** 8.25" 14.25”
- **Well Diameter:** 2”
- **Reference Elevation:** 0
- **Depth (feet bgs):**
  - **Ground Surface:**
  - **Bottom of Surface Casing:** 2
  - **Top of Seal:** 10.5' - 10.8' - 11
  - **Top of Sand Pack:** 12.5
  - **Top of Screen:** 13.5
  - **Bottom of Well:** 18.5
  - **Bottom of Boring:** 19
- **Bore Hole Diameter:** 8.25” 14.25”

### Casing Details

- **Steel Protective Surface Casing:**
  - Diameter: Standup Well with ballard posts
- **Cement Mix:** Premix
- **Grout Type:** Bentonite Powder
- **Annular Seal Type:** Medium Chip Bentonite
- **Riser Casing Type:** Schedule 40
  - Diameter: 2” PVC
- **Well Pack Material:** Lapis Lustre Sand 7/16
- **Screen Type:** Schedule 40
  - Slot Width: 10 Slot
  - Diameter: 2” PVC

### Notes

- **8.25” OD to 5.5’ bgs**
- **14.25” OD to 19.0’ bgs**
- **8.25”**
- **2-3’ bags bentonite chips**
- **2-10.5’ bags bentonite powder**
- **10.5-12.5’ bags bentonite chips**
### Monitoring Well Construction

<table>
<thead>
<tr>
<th>Date Start</th>
<th>9/1/01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete</td>
<td>9/1/01</td>
</tr>
<tr>
<td>Boring Depth</td>
<td>8.0</td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>8.25&quot;</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Contractor</td>
<td>Cascade Drillers</td>
</tr>
<tr>
<td>Driller</td>
<td>Times Groble</td>
</tr>
<tr>
<td>Geologist</td>
<td>Salamah Magnuson</td>
</tr>
<tr>
<td>Depth to Water (bgs)</td>
<td>NA</td>
</tr>
</tbody>
</table>
| Location Diagram | 77th Ave S
| | nw-112-s-040 |

**Reference Elevation**
- Ground Surface
- Bottom of Surface Casing: 1'
- Top of Seal: 1'
- Top of Sand Pack: 2.5'
- Top of Screen: 3.0'

**Steel Protective Surface Casing**
- Diameter: Set at
- Concrete Premix
- Grout: Type: NA

**Annular Seal**
- Type: Bentonite Chips

**Riser Casing**
- Type: Schedule 40
- Diameter: 2"

**Well Packing Material**
- Lapis/Slusine
- Type: Sand
- 2/12

**Screen**
- Type: PVC Schedule 40
- Slot Width: 1/2 Slot
- Diameter: 2"

**Notes**
Well ID: DMW - 12 - 17

Date Start: 2/14/17
Date Complete: 2/14/17

Boring Depth: 37.5' bgs
Borehole Diameter: 14.25'' / 8.25''
Well Diameter: 2''

Contractor: Cascade Drilling
Drillers: Bryan Aze
Geologist: Tanya Gray

Depth to Water (bgs): NA

Reference Elevation: 0

Ground Surface

Bottom of Surface Casing: 1
Top of Seal: 22.5' chips
Top of Sand Pack: 23.5'
Top of Screen: 24'

23.5' - 14.25'' + 0.5' bgs

Depth: 12'' Shir + 8'' diameter

Steel Protective Surface Casing
Diameter: concrete ~ 60' in 2/14/17

Seal - Med. Bentonite chips ± 150 lb

Grout
Type: Bentonite Powder - 100 gal + 100 lb
Pure 10 lb

Annular Seal
Type: Medium Bentonite Chips

Riser Casing
Type: Sched HD PVC
Diameter: 2''

Well Packing Material

~ 150 lb
Type: Sand Lapis Luster #12

Screen
Type: Sched 40 PVC
Slot Width: 10' x 10' +
Diameter: 2''

Notes:
- Chipped to 27.5' before sand pack (150 lb)
- 1.5' chips below grout
- 2' chips above grout
- TF (directional)

Location Diagram:
- 77th Ave
- Driveway
- / (indicating well location)
- TF (directional marker)
Monitoring Well Construction

Well ID: MW-112-D

Contractor: Cascade Drilling
Drillers: Brian
Geologist: Siamak Magham

Date Start: 2/5/01
Date Complete: 2/5/01
Boring Depth: 44'
Borehole Diameter: 4' 1/4" - 8' 1/4"
Well Diameter: 2"
Depth to Water (bgs): 11.5'

Reference Elevation: 0'

Depth (feet bgs):
Ground Surface: 1'
Bottom of Surface Casing: 3'
Top of Seal: 35'
Top of Sand Pack: 37.5'
Top of Screen: 38.5'
Bottom of Well: 43.5'
Bottom of Boring: 44'

Steel Protective Surface Casing Diameter:
Set Set Concrete Premix
Grout Type: Bentonite
Grout
Chips
Annular Seal Type: Medium Bentonite

Riser Casing Type: Schedule 40 PVC
Diameter: 2"

Well Packing Material
Lapis Lustre
Type: Sand
Diameter: 2" 1/2

Screen Type: Schedule 40 DVC
Slot Width: 1/8" slotted
Diameter: 2.11"

Notes:
14.25" OD to 7.0' OD
8.25" OD to 44' bgs
<table>
<thead>
<tr>
<th>Layer</th>
<th>Depth (feet bgs)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Surface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom of Surface Casing</td>
<td>1'</td>
<td>4&quot; Chips</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Top of Seal 10&quot; J-chips</td>
</tr>
<tr>
<td></td>
<td>Top of Sand Pack</td>
<td>12&quot;</td>
</tr>
<tr>
<td></td>
<td>Top of Screen</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom of Well</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>Bottom of Boring</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Bore Hole Diameter</td>
<td></td>
<td>14.25&quot; 80 7&quot; bgs then 8.25&quot;</td>
</tr>
</tbody>
</table>

**Concrete Premix**
- 37 gal
- Pure Gold Medium Bentonite Chips

**Grout**
- Type: Pure Gold Bentonite Powder

**Annular Seal**
- Type: Medium Bentonite Chips

**Riser Casing**
- Type: Schedule 40 PVC
- Diameter: 2"

**Well Packing Material**
- Coqui Lusterine
- Type: Sand #2/12

**Screen**
- Type: Schedule 40 PVC
- Slot Width: 0.10"
- Diameter: 2"

**Notes**
- 2" Chips above i. below grout
- Chips from 14-19.5 bgs = 100 lb
- 14.25" OD to 7.0" bgs
- 8.25" OD to 18.0" bgs
**Monitoring Well Construction**

<table>
<thead>
<tr>
<th>Date Start</th>
<th>2/4/01</th>
<th>Date Complete</th>
<th>2/4/01</th>
<th>Contractor</th>
<th>Cascade Drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring Depth</td>
<td>15' BGS</td>
<td>Driller(s)</td>
<td>Brian Gose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>14(\frac{7}{8})&quot;</td>
<td>Geologist</td>
<td>Salamael Magnuson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth to Water</td>
<td>2.0'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference Elevation**

<table>
<thead>
<tr>
<th>Ground Surface</th>
<th>Depth (feet bgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom of Surface Casing</td>
<td>1'</td>
</tr>
<tr>
<td>+ 3'</td>
<td></td>
</tr>
<tr>
<td>Top of Seal</td>
<td>8.5'</td>
</tr>
<tr>
<td>Top of Sand Pack</td>
<td>11.0'</td>
</tr>
<tr>
<td>Top of Screen</td>
<td>11.5'</td>
</tr>
</tbody>
</table>

**Steel Protective Surface Casing**

- Diameter: 4.875"

**Jet Set**

- Concrete Premix

**Grout**

- Type: Bentonite

**Annular Seal**

- Type: Mud, Hydration Chips

**Riser Casing**

- Type: 2" PVC

**Well Packing Material**

- Type: Sand

**Screen**

- Type: Schedule 40
- Slot Width: 2" PVC

**Notes**

- 14.25" OD to 3.0' bgs
- 8.25" OD to 15.0' bgs
Date Start: 2/6/01
Date Complete: 2/6/01
Boring Depth: 19.5'
Borehole Diameter: 14 1/4" x 8 1/4"
Well Diameter: 2"
Depth to Water (bgs): 60'

Reference Elevation: 0'
Depth (feet bgs):
- Ground Surface: 10'
- Bottom of Surface Casing: 30'
- Top of Seal: 110'
- Top of Sand Pack: 130'
- Top of Screen: 140'
- Bottom of Well: 190'
- Bottom of Boring: 19.5'
Bore Hole Diameter: 14 1/4" x 8 1/4"

Contractor: Cascade Drilling
Drillers: Brian
Geologist: Salamah Magnuson

Area Diagram:

Plotted Diagram:

Protection Surface Casing:
- Diameter: 2" PVC
- Type: Schedule 40

Concrete Precast:
- Type: Bentonite Powder
- Type: Bentonite Sand

Grout:
- Type: Pure Grout

Annular Seal:
- Type: Bentonite Chip

Riser Casing:
- Type: Schedule 40
- Diameter: 2" PVC

Well Packing Material:
- Lag: 2 1/2" Sand

Screen:
- Type: Schedule 40 PVC
- Slot Width: 10.510'
- Diameter: 2" PVC

Notes:
14.25" OD to
8.25" OD to 19.5' bgs
**Monitoring Well Construction**

**Well ID:** MW-118-2

**Date Start:** 1/29/01  
**Date Complete:** 1/29/01

**Contractor:** Cascade Drilling  
**Drillers:** Ray Goble

**Boring Depth:** 15.0  
**Borehole Diameter:** 14.25"  
**Well Diameter:** 2"  
**Depth to Water (bgs):** 60' bgs

**Geologist:** Salamah Magnason

---

**Reference Elevation:** 0'

**Ground Surface**

**Bottom of Surface Casing:** 1'

**Top of Seal:** 4'

**Top of Sand Pack:** 5.46'

**Top of Screen:** 70'

---

**Steel Protective Surface Casing**

**Set Set**

**Concrete Premix:** PureGrid

**Grout:** Type: Bentonite Powder

**Annular Seal:** Type: Medium Chips

---

**Riser Casing**

**Type:** PVC  
**Diameter:** 2"

**Lapis Huske Sand**

**Well Packing Material**

**Type:** 2/12

---

**Screen**

**Type:** PVC Schedule 40  
**Slot Width:** 10 Slot  
**Diameter:** 2"

---

**Notes**

14.25" OD + 0 15.0' bgs
Chip 5.0-4.0' bgs
Grout 4.0-2.0' bgs
Chip 2.0-1.0' bgs
<table>
<thead>
<tr>
<th>Monitoring Well Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor: Cascade Drilling</td>
</tr>
<tr>
<td>Drillers: James Jackson</td>
</tr>
<tr>
<td>Geologist: Lou La Rosa</td>
</tr>
<tr>
<td>Location Diagram:</td>
</tr>
<tr>
<td>Well ID: MW-118</td>
</tr>
</tbody>
</table>

| Depth to Water (bgs): 12.5' |

- Locking Cap
- Steel Protective Surface Casing: Diameter
  - Jet Set
    - Concrete Premix
      - Pure Gold Bonding
    - Grout
      - Type: Polyurethane
  - Annular Seal: Type: Bentonite Chips

- Riser Casing: Type: PVC Schedule 40
  - Diameter: 2"
- Well Packing Material: Lapis Luster Sand
  - Type: 2/12
  - Zlogs
  - Screen: Type: PVC Schedule 90
    - Slot Width: 1/8
    - Diameter: 2"

**Notes**
- 14.25" OD to 9.0' bgs
- 8.25" OD to 17.0' bgs

**Dimensions**
- Bore Hole Diameter: 14 5/8"
Date Start: 2/12/01
Date Complete: 2/17/01
Boring Depth: 17.5'
Borehole Diameter: 14' 4" / 5' 4"
Well Diameter: 2"

Reference Elevation: 0
Ground Surface:

Bottom of Surface Casing: 1'
Bentonite chips to 1.5
Grout to 3
Top of Seal: 10'
Top of Sand Pack: 11.5'
Top of Screen: 12'

Bottom of Well: 17'
Bottom of Boring: 17.5'
Bore Hole Diameter:
8.25" OD to 6.0" BGS
14.25" OD to 17.5" BGS

Notes:
- Bentonite seals above and below grout
- 8.25" OD to 6.0" BGS
- 14.25" OD to 17.5" BGS
Monitoring Well Construction

<table>
<thead>
<tr>
<th>Date Start</th>
<th>2/15/01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete</td>
<td>2/15/01</td>
</tr>
<tr>
<td>Boring Depth</td>
<td>28.5'</td>
</tr>
<tr>
<td>Borehole Diameter</td>
<td>1 1/2&quot;, 8 1/2&quot;</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Contractor</td>
<td>Cascade Drilling</td>
</tr>
<tr>
<td>Drillers</td>
<td>Brian Gore</td>
</tr>
<tr>
<td>Geologist</td>
<td>Salimah Hamilton</td>
</tr>
<tr>
<td>Depth to Water (bgs)</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Reference Elevation**

- Depth (feet bgs)
  - Ground Surface
  - Bottom of Surface Casing 1
  - Top of Seal 20
  - Top of Sand Pack 22
  - Top of Screen 23
  - Bottom of Well 28.0
  - Bottom of Boring 28.5

**Steel Protective Surface Casing**
- Diameter: 2"
- Type: Schedule 40
- Material: Lapis Lustre Sand 3/12

**Grout**
- Type: Bentonite Powder

**Annular Seal**
- Type: Chip Bentonite

**Riser Casing**
- Type: PVC
- Diameter: 2"

**Well Packing Material**
- Lapis Lustre Sand 3/12

**Screen**
- Type: Schedule 40
- Slot Width: 10.5 Slot+
- Diameter: 2" PVC

**Notes**
- 8.25" OD to 4.5" bgs
- 14.25" OD to 28.5" bgs
Monitoring Well Construction

Date Start: 3/11/21
Date Complete: 3/24/21
Contractor: Casada Drilling
Drillers: Brian Carpe
Geologist: Salamone Magnusson
Location Diagram: [Diagram]

Boring Depth: 20.5'
Borehole Diameter: 14 1/4" 8 1/4"'
Well Diameter: 22.5'
Depth to Water (bgs): 7.5'

Reference Elevation: 0
Depth (feet bgs):
Ground Surface: 0
Bottom of Surface Casing: 1.0'
3.0'
Top of Seal: 12.5'
Top of Sand Pack: 14.5'
Top of Screen: 15.5'

Stand up Monument with Bumper posts

Steel Protective Surface Casing Diameter:
Concrete Premix: Pure Gold
Grout: Bentonite powder
Annular Seal: Airseal chips
Riser Casing: Type: Schedule 40 PVC
Diameter: 2"

Well Packing Material: Lapis Lusite
Type: Sand

Screen: Type: Schedule 40 PVC
Slot Width: 0.510
Diameter: 2"

Notes:
14.25" OD to 5.5' bgs
8.25" OD to 21.5' bgs
Monitoring Well Construction

Well ID: MW-122-S
Facility: KENT

Date Start: 11/20/02
Date Complete: 11/20/02
Total Boring Depth: 25'
Borehole Diameter: 8.4''
Well Diameter: 21''

Contractor: CASCADE DRILLING
Drillers: BRIAN GORE
Drill Rig: #1
Geologist: LOU LA ROSA

DEPTH (feet bgs)

- Ground Surface
- Bottom of Surface Casing: 0.5
- Top of Annular Seal: 0.5
- Top of Chips: 0.5
- Top of Grout:
- Bottom of Chips: 1.0
- Top of Sand Pack: 1.0
- Top of Screen: 1.5
- Bottom of Screen: 3.5
- Bottom of Well Cap: 3.5
- Bottom of Sand Pack: 3.5
- Bottom of Boring: 3.5

Steel Protective Surface Casing
- Diameter: 10''
- Length: 1.0
- Flush or Stand-Up: w/bollard posts

Surface Seal
- Type: PREMIX CONCRETE
- Amount Used: 6

Annular Seal
- Type: MED. BEAUCOMITE CHIPS
- Amount Used: 0.5

Riser Casing
- Type: PVC
- Schedule: 40
- Diameter: 2''

Well Packing Material
- Type: SAND
- #: 2/12
- Amount Used: 1.25

Screen
- Type: PVC
- Schedule: 40
- Slot Width: 0.0
- Diameter: 2''

Backfill Material
- Type: 
- Amount: 

Casing/Joint Type- Permi #: AHR-292

Notes:
- START CARD #: R63604
**Monitoring Well Construction**

| Date Start: | 1/22/02 | Contractor: | Cascade Drilling |
| Date Complete: | 1/22/02 | Drillers: | Bryan Coose |
| Total Boring Depth: | 6.0 | Drill Rig: | #1 |

| Borehole Diameter: | 8 1/4" |
| Well Diameter: | 2" |

**DEEPH (feet bgs)**

- Ground Surface
- Bottom of Surface Casing: 1.0
- Top of Annular Seal: 1.5
- Top of Chips: 1.5
- Top of Grout: __
- Bottom of Chips: 2.5
- Top of Sand Pack: 2.5
- Top of Screen: 3.0
- Bottom of Screen: 6.0
- Bottom of Well Cap: 6.0
- Bottom of Sand Pack: 6.0
- Bottom of Boring: 6.0

**Steel Protective Surface Casing**
- Diameter: 8"
- Length: 1.0
- Flush or Stand-Up (w/bollard posts)

**Surface Seal**
- Type: Premix Concrete
- Amount Used: __

**Annular Seal**
- Type: Med. Bentonite Chips
- Amount Used: 2

**Riser Casing**
- Type: PVC
- Schedule: 40
- Diameter: 2"
- Well Packing Material
- Type: Sand
- Amount Used: 1

**Screen**
- Type: PVC
- Schedule: 40
- Slot Width: .010
- Diameter: 2"

**Backfill Material**
- Type: __
- Amount: __

**Casing/Joint Type**
- Permit #: AHR 294

**Notes:**
- START CARD = R6 3604
Monitoring Well Construction

Well ID: MW-123-5

Date Start: 2/1/01
Date Complete: 2/1/01

Contractor: Cascade Drillers
Driller: James Gooble
Geologist: Samah Magnuson

Boring Depth: 7' Bgs
Borehole Diameter: 8.5'4
Well Diameter: 2'
Depth to Water (bgs): 6.0

Reference Elevation: 0' Bgs
Ground Surface Depth (feet bgs):
Bottom of Surface Casing: 11'
Top of Seal: 11
Top of Sand Pack: 2.5'
Top of Screen: 3'
Bottom of Well: 6.75'
Bottom of Boring: 7'
Bore Hole Diameter: 8.15'

Standup Well with Pumps

Locking Cap

Steel Protective Surface Casing:
Diameter:
Concrete Premix

Grout
Type: NA

Annular Seal
Type: Benzocaulk (4oz)

Riser Casing
Type: Schedule 40 PVC
Diameter: 2'

Well Packing Material
Type: Lapis Lustre Sand 2/12

Screen
Type: Schedule 40 PVC
Slot Width: 10.559
Diameter: 2'

Notes
Monitoring Well Construction

- Contractor: Cascade Drilling
- Drillers: James Dobie
- Geologist: Salamah Magnuson
- Well ID: MW-123-17

- Date Start: 1/31/01
- Date Complete: 1/31/01
- Drilling Depth: 26.5'
- Borehole Diameter: 14.25", 8.25"
- Well Diameter: 2"
- Depth to Water (bgs): 10' bgs
- Locking Cap
- Steel Protective Surface Casing Diameter
  - Concrete remix
  - Pure Gold
  - Grout: Bentonite/Portland Type
  - Annular Seal: Pure Gold Type: Medium Chip
  - Riser Casing: Type: PVC
  - Diameter: 2"
  - Well Packing Material: Lapis Lustre Monterey
  - Type: Sand #2/12
  - Screen: Type: PVC
  - Slot Width: 10.5 slot
  - Diameter: 2"

- Notes:
  - 14.25" OD to 85'bgs 8.5
  - 8.25" OD to 26'bgs

- Bore Hole Diameter: 14.25", 8.25"
Monitoring Well Construction

Date Start: 11/22/02
Date Complete: 11/22/02
Total Boring Depth: 26.5
Borehole Diameter: 14 1/4 x 6.5' 8 7/8 x 26.5

Contractor: Cascade Drilling
Drillers: Brian Case
Geologist: Lou La Rosa

Well ID: MGJ-126-5
Facility: KENT

Location Diagram

**DEPTH (feet bgs)**

- Ground Surface
- Bottom of Surface Casing: 1.0
- Top of Annular Seal: 2.0
- Top of Chips: 2.6
- Top of Grout:
- Bottom of Chips: 20.0
- Top of Sand Pack: 28.0
- Top of Screen: 28.5
- Bottom of Screen: 25.5
- Bottom of Well Cap: 25.5
- Bottom of Sand Pack: 26.5
- Bottom of Boring: 26.5

**Steel Protective Surface Casing**
- Diameter: 8''
- Length: 1.0
- Type: Premix Concrete
- Amount Used: 9

**Surface Seal**
- Type: MED Bentonite Chips
- Amount Used: 12

**Riser Casing**
- Type: PVC
- Schedule: 40
- Diameter: 2''

**Well Packing Material**
- Type: SAND #2: 2/12
- Amount Used: 3

**Screen**
- Type: PVC
- Schedule: 40
- Slot Width: 0.10
- Diameter: 2''

**Backfill Material**
- Type: 
- Amount: 

**Casing/Joint Type**
- Permit #: AHM 297

**Notes:**
- START CARD # R 63604
PSC
PHILIP SERVICES

Monitoring Well Construction

Well ID: MW - 127 - S
Facility: KENT

Date Start: 11/20/02
Contractor: CASCADE DRILLING
Date Complete: 11/20/02
Drillers: BRIAN GAGE
Total Boring Depth: 8.0
Drill Rig: # 1
Borehole Diameter: 8 1/4"
Geologist: LOU LA ROSA
Well Diameter: 2 1/16"

DEPTH (feet bgs)

Ground Surface

Bottom of Surface Casing: 1.0

Top of Annular Seal: 1.5

Top of Chips: 1.5

Top of Grout: 2.5

Bottom of Chips: 2.5

Steel Protective Surface Casing
Diameter: 8"
Length: 1.0
Flush or Stand-Up (w/bollard posts)

Surface Seal
Type: Premium Concrete
Amount Used: 5

Annular Seal
Type: Med Bentonite Chips
Amount Used: 2.0

Riser Casing
Type: PVC
Schedule: 40
Diameter: 2 1/16"

Well Packing Material
Type: Sand
Amount Used: 1.5

Screen
Type: PVC
Schedule: 40
Slot Width: 3/10
Diameter: 2 1/16"

Backfill Material
Type: 
Amount: 

Casing/Joint Type:

Permit: AHR 275

Notes:
START CARD # 63604


Date Start: 2/8/11
Date Complete: 2/8/11
Boring Depth: 180
Borehole Diameter: 14 3/4" Ø, 8 1/4"
Well Diameter: 2"

Reference Elevation:

Ground Surface:

Bottom of Surface Casing: 1' 3'
Top of Seal: 95'
Top of Sand Pack: 115'

Top of Screen: 120'

Bottom of Well: 165'
Bottom of Boring: 180'

Bore Hole Diameter: 14 3/4" Ø, 8 1/4"

Depth to Water (bgs): 9.5'

Steel Protective Surface Casing:

Diameter:

Concrete Premix

Grout Type: Pure Cements, Powders, Bentonite

Annular Seal Type: Wax, Bentonite Chips

Riser Casing Type: Schedule 40
Diameter: 2" PVC

Well Packing Material:

Type: Lapis Lustrous Sand 2/12

Screen Type: Schedule 40
Slot Width: 10 slot
Diameter: 2" PVC

Notes:
14.25" OD top 6' bgs
8.25" OD to 18.0' bgs
Date Start: 2/15/01  
Date Complete: 2/13/01  
Boring Depth: 30.5'  
Borehole Diameter: 14 1/4", 8 1/4"  
Well Diameter: 2"  
Depth to Water (bgs): 10.25'  
Reference Elevation: 0  
Ground Surface:  
Bottom of Surface Casing: 11'  
Top of Seal: 10.5'  
Top of Sand Pack: 11.5'  
Top of Screen: 12.0'  
Bottom of Well: 13.5'  
Bottom of Boring: 30.5'  
Bore Hole Diameter: 14 1/4", 8 1/4"  

**Monitoring Well Construction**  
Well ID: MW-125-T-2  
Contractor: Cascade Drillers  
Drillers: Brian Chase  
Geologist: Salamah Magnuson  

**Locking Cap**  
Steel Protective Surface Casing  
Diameter: 12" 8"  
Concrete Premix: Pure Gold  
Grout: Type: Bentonite Powder  
Annular Seal: Type: Chip Bentonite  

**Riser Casing**  
Type: PVC  
Diameter: 2"  
Well Packing Material: Lapis Lustre Sand  
Type: 2/12"  
Screen: Type: Schedule 10  
Slot Width: Slot 4  
Diameter: 2"  

**Notes**  
14.25" OD to 5.5 bgs  
8.25" OD to 30.5 bgs
**Monitoring Well Construction**

**Well ID:** MW-102-S  
**Facility:** KENT

| Date Start: | 11/20/02 | Contractor: CASCADE DRILLING |
| Date Complete: | 11/20/02 | Driller: BRIAN COOSS |
| Total Boring Depth: | 5.75' | Drill Rig: D-1 |
| Borehole Diameter: | 8 1/4" | Geologist: Lou LAKOSA |
| Well Diameter: | 2" |

**DEPTH (feet bgs)**

- Ground Surface
- Bottom of Surface Casing: 1.0
- Top of Annular Seal: 1.50
- Top of Chips: 1.50
- Top of Grout: 
- Bottom of Chips: 2.25
- Top of Sand Pack: 2.25
- Top of Screen: 2.75
- Bottom of Screen: 5.75
- Bottom of Well Cap: 5.75
- Bottom of Sand Pack: 5.75
- Bottom of Boring: 5.75

**Steel Protective Surface Casing**
- Diameter: 8"
- Length: 1.0
- Flush or Stand-Up (w/bollard posts)

**Surface Seal**
- Type: Premix Concrete
- Amount Used: 7

**Annular Seal**
- Type: Med Bentonite Chips
- Amount Used: 1.0

**Riser Casing**
- Type: PVC
- Schedule: 40
- Diameter: 2 1/16

**Well Packing Material**
- Type: Monitorite Sand: 2 1/2
- Amount Used: 1.75

**Screen**
- Type: PVC
- Schedule: 40
- Slot Width: 0.010
- Diameter: 2"

**Backfill Material**
- Type: 
- Amount: 

**Casing/Joint Type**
- Permit #: AHR 293

**Notes:**
- START CARD # R 63604
<table>
<thead>
<tr>
<th>Depth (feet bgs)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Surface</td>
<td></td>
</tr>
<tr>
<td>Bottom of Surface Casing:</td>
<td>1.0</td>
</tr>
<tr>
<td>Top of Annular Seal:</td>
<td>2.0</td>
</tr>
<tr>
<td>Top of Chips:</td>
<td>2.0</td>
</tr>
<tr>
<td>Top of Grout:</td>
<td></td>
</tr>
<tr>
<td>Bottom of Chips:</td>
<td>21.0</td>
</tr>
<tr>
<td>Top of Sand Pack:</td>
<td>21.0</td>
</tr>
<tr>
<td>Top of Screen:</td>
<td>21.5</td>
</tr>
<tr>
<td>Bottom of Screen:</td>
<td>26.5</td>
</tr>
<tr>
<td>Bottom of Well Cap:</td>
<td>26.5</td>
</tr>
<tr>
<td>Bottom of Sand Pack:</td>
<td>29.5</td>
</tr>
<tr>
<td>Bottom of Boring:</td>
<td>27.5</td>
</tr>
</tbody>
</table>

**Monitoring Well Construction**

- **Well ID:** MW-128-J
- **Facility:** KENT
- **Contractor:** CASCADE DRILLING
- **Drillers:** BRIAN COPE
- **Drill Rig:** #1
- **Geologist:** LOU LA ROSA
- **Location Diagram**

- **Steel Protective Surface Casing**
  - Diameter: 8"
  - Length: 1.0
  - Type: Premix Concrete
  - Amount Used: 9

- **Annular Seal**
  - Type: Med. Bentonite Chips
  - Amount Used: 12

- **Riser Casing**
  - Type: PVC
  - Diameter: 2.0
  - Schedule: 40

- **Well Packing Material**
  - Type: Sand
  - Amount Used: 3

- **Screen**
  - Type: PVC
  - Slot Width: 0.10
  - Diameter: 2.0
  - Schedule: 40

- **Backfill Material**
  - Type: 
  - Amount: 

- **Casing/Joint Type**
  - Permit #: AHR 298
  - Start Card #: R63604

**Notes:**

![Diagram of well construction details, including depth measurements and materials used.](image-url)
## Monitoring Well Construction

**Well ID:** MW-130-1  
**Facility:** KENT  
**Location Diagram**

<table>
<thead>
<tr>
<th>Date Start:</th>
<th>11/19/02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Complete:</td>
<td>11/19/02</td>
</tr>
<tr>
<td>Total Boring Depth:</td>
<td>23.0'</td>
</tr>
<tr>
<td>Borehole Diameter:</td>
<td>8 7/8&quot; = 23'</td>
</tr>
<tr>
<td>Well Diameter:</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Contractor:</td>
<td>CASCADE DRILLING</td>
</tr>
<tr>
<td>Drillers:</td>
<td>BRIAN COSS</td>
</tr>
<tr>
<td>Drill Rig:</td>
<td>#1</td>
</tr>
<tr>
<td>Geologist:</td>
<td>LOUISE RASA</td>
</tr>
</tbody>
</table>

###DEPTH (feet bgs)

- **Ground Surface:**
- **Bottom of Surface Casing:**
- **Top of Annular Seal:** 2.0'
- **Top of Chips:** 2.0'
- **Top of Grout:**
- **Bottom of Chips:** 18.0'
- **Top of Sand Pack:** 18.0'
- **Top of Screen:** 18.5'
- **Bottom of Screen:** 22.0'
- **Bottom of Well Cap:** 22.0'
- **Bottom of Sand Pack:** 23.0'
- **Bottom of Boring:** 23[

###Steel Protective Surface Casing
- **Diameter:** 8"  
- **Length:** 5.0  
- **Flush or Stand-Up:** boullard post

###Annular Seal
- **Type:** Medium Bentonite Chips  
- **Amount Used:** 17-50 lb bags

###Riser Casing
- **Type:** PVC  
- **Schedule:** 40  
- **Diameter:** 2"

###Well Packing Material
- **Type:** Sand  
- **Amount Used:** 2-100 lb bags

###Screen
- **Type:** PVC  
- **Schedule:** 40  
- **Slot Width:** 0.10  
- **Diameter:** 2"

###Backfill Material
- **Type:**  
- **Amount:**

###Casing/Join Type-
- **Permit #:** AHR 280

**Notes:** START CARD #: R63604  
**TOL = 2.9' AGS**
Monitoring Well Construction

Well ID: MW-131-J
Facility: KEPT

Date Start: 11/19/02
Contractor: CASCADE DRILLING
Date Complete: 11/19/02
Drillers: BRIAN O'DEE
Total Boring Depth: 14.5'
Drill Rig: #1
Borehole Diameter: 3.1/4" - 4.5"
Geologist: LOU LARA
Well Diameter: 2"

DEPT (feet bgs)

Ground Surface

Bottom of Surface Casing: ______________

Top of Annular Seal: 2.0'

Top of Chips: 2.0'

Top of Grout: ______________

Bottom of Chips: 8.0'

Top of Sand Pack: 8.0'

Top of Screen: 8.5'

Bottom of Screen: 13.5'

Bottom of Well Cap: 13.5'

Bottom of Sand Pack: 14.5'

Bottom of Boring: 14.5'

Steel Protective Surface Casing

Diameter: 10"-20" 8"

Length: 5.000 1.0

Flush or Stand-Up (w/bollard posts)

Surface Seal

Type: REDIMIX CONCRETE

Amount Used: 4 - 60# bags

Annular Seal

Type: MED. BEADITE CHIPS

Amount Used: 10 - 50# bags

Riser Casing

Type: PVC Schedule: 40

Diameter: 2"

Well Packing Material

Type: SAND #: 2/12

Amount Used: 2.5 - 100# bags

Screen

Type: PVC Schedule: 40

Slot Width: .010

Diameter: 2"

Backfill Material

Type: ______ Amount: ______

Casing/Joint Type-
Permit #: AHR 281

Notes: START CARD # R63604
**Monitoring Well Construction**

**Well ID:** MW-132-S  
**Location:** KENT

**Contractor:** CASCADE DRILLING  
**Drillers:** BRIAN COOCE

**Date Start:** 1/20/02  
**Date Complete:** 1/20/02  
**Total Boring Depth:** 4' 6"  
**Drill Rig:** #1  
**Borehole Diameter:** 8 1/4'  
**Geologist:** Lou La Rosa  
**Well Diameter:** 2"

---

**DEPTH (feet bgs)**

- **Ground Surface**
- **Bottom of Surface Casing:** 0.5
- **Top of Annular Seal:** 0.5
- **Top of Chips:** 0.5
- **Top of Grout:**
- **Bottom of Chips:** 1.0
- **Top of Sand Pack:** 1.0
- **Top of Screen:** 1.5'  
- **Bottom of Screen:** 4'
- **Bottom of Well Cap:** 4'  
- **Bottom of Sand Pack:** 4'
- **Bottom of Boring:** 4'

---

**Steel Protective Surface Casing**
- **Diameter:** 10"
- **Length:** 1.0
- **Flush or Stand-Ups (w/bollard posts)**

**Surface Seal**
- **Type:** Premix Concrete
- **Amount Used:** 6

**Annular Seal**
- **Type:** Med Bentonite Chips
- **Amount Used:** 0.5

**Riser Casing**
- **Type:** PVC
- **Schedule:** 40
- **Diameter:** 2"

**Well Packing Material**
- **Type:** Ceramic Sand
- **Amount Used:** 2 1/2

**Screen**
- **Type:** PVC
- **Schedule:** 40
- **Slot Width:** 0.010"  
- **Diameter:** 2"

**Backfill Material**
- **Type:**
- **Amount:**

**Casing/Joint Type**
- **Permit #:** AHR 291

**Notes:**
- **START CARD:** R63604
**Log of Well No. MW-129-I**

**TOP OF CASING ELEVATION AND DATUM:** 29.40 feet (NAVD 1988)

**DATE STARTED:** 6/15/07  
**DATE FINISHED:** 6/15/07

**TOTAL DEPTH (ft.):** 16.0  
**SCREEN INTERVAL (ft.):** 11 to 16

**DEPTH TO WATER (ft.):** 5.0  
**FIRST COMPL.:** 5.5  
**CASING:** 1” Sched. 40 PVC

**SAMPLE INTERVAL (ft.):** 1.0

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Sample/Blows/ Foot</th>
<th>OVM Reading</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td><strong>Silty Sand with Gravel (SM):</strong> brown (10YR 4/3), dry to moist, 45% fine to coarse sand, 40% fine to coarse subangular to subrounded gravel, 15% low plasticity fines</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Gravel (SP):</strong> brown (10YR 4/3), moist, 55% fine to coarse sand, 40% fine to coarse subangular to subrounded gravel, 5% fines</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>Geotextile fabric (black)</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td><strong>Silty Sand (SM):</strong> very dark gray (10YR 3/1), moist, 50% fine to coarse sand, 40% fines, 10% fine subrounded to rounded gravel</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Silt (SP-SM):</strong> very dark grayish brown (10YR 3/2), moist to wet, 90% fine to medium sand, 10% low plasticity fines, iron-stained</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td><strong>Silt (ML):</strong> gray (10YR 5/1), mottled yellowish orange, moist, 95% fines, 5% fine sand, low plasticity, firm</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td><strong>Sandy Silt (ML):</strong> very dark gray (10YR 3/1), wet, 70% fines, 30% fine sand, low plasticity, very soft</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Silt (SP-SM):</strong> black (10YR 2/1), wet, 90% fine sand, 10% low plasticity fines, soupy</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td><strong>Silt (ML):</strong> very dark gray (10YR 3/1), moist, 90% fines, 10% fine sand, low plasticity, firm</td>
</tr>
</tbody>
</table>

**Log of Well No. MW-129-I**

**Surface Elevation:** 29.59 feet (NAVD 1988)

**Well Construction Details and/or Drilling Remarks**

- **Traffic Box**
  - Concrete (Basalite Mix)
- **Medium bentonite chip**
  - (PureGold) seal
- **1” diameter Schedule 40 PVC casing**
- **2” diameter borehole**
- **Native sand slough**
- **OVM = ThermoEnvironmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.**
- **#2/12 filter pack sand**
- **Schedule 40 PVC pre-pack well screen with 3/4” diameter (nominal)**
  - Inner screen with 1.25” O.D. outer stainless steel screen, 0.010” slot, and
  - #20/40 filter pack sand
- **1” diameter Schedule 40 PVC end cap**

**Sample Details:**

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Sample/Blows/ Foot</th>
<th>OVM Reading</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td><strong>Silty Sand with Gravel (SM):</strong> brown (10YR 4/3), dry to moist, 45% fine to coarse sand, 40% fine to coarse subangular to subrounded gravel, 15% low plasticity fines</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Gravel (SP):</strong> brown (10YR 4/3), moist, 55% fine to coarse sand, 40% fine to coarse subangular to subrounded gravel, 5% fines</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>Geotextile fabric (black)</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td><strong>Silty Sand (SM):</strong> very dark gray (10YR 3/1), moist, 50% fine to coarse sand, 40% fines, 10% fine subrounded to rounded gravel</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Silt (SP-SM):</strong> very dark grayish brown (10YR 3/2), moist to wet, 90% fine to medium sand, 10% low plasticity fines, iron-stained</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td><strong>Silt (ML):</strong> gray (10YR 5/1), mottled yellowish orange, moist, 95% fines, 5% fine sand, low plasticity, firm</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td><strong>Sandy Silt (ML):</strong> very dark gray (10YR 3/1), wet, 70% fines, 30% fine sand, low plasticity, very soft</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td><strong>Poorly Graded Sand with Silt (SP-SM):</strong> black (10YR 2/1), wet, 90% fine sand, 10% low plasticity fines, soupy</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td><strong>Silt (ML):</strong> very dark gray (10YR 3/1), moist, 90% fines, 10% fine sand, low plasticity, firm</td>
</tr>
</tbody>
</table>

Bottom of boring at 16.0 feet.