Appendix A
Boring Logs
### Monitoring Well: MW-1

<table>
<thead>
<tr>
<th>MOISTURE CONTENT</th>
<th>ORGANIC VAPOR (ppm)</th>
<th>A.S.S. SAMPLE</th>
<th>DEPTH (ft)</th>
<th>LITHOLOGY/DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp</td>
<td>1.5</td>
<td>SP</td>
<td>1.0</td>
<td>Asphalt surface</td>
</tr>
<tr>
<td>Damp</td>
<td>1.8</td>
<td></td>
<td>2.0</td>
<td>Road base/rocks with fine to medium grained sand</td>
</tr>
<tr>
<td>Damp</td>
<td>2.0</td>
<td></td>
<td>3.0</td>
<td>(SP) Sand, fine to medium grained sand, very dark gray, damp, loose, no odor</td>
</tr>
<tr>
<td>Damp</td>
<td>2.0</td>
<td>ML</td>
<td>5.0</td>
<td>Well boring was hand cleared to 5 ft bgs</td>
</tr>
<tr>
<td>Damp</td>
<td>1.0</td>
<td></td>
<td>6.0</td>
<td>(ML) Silt, trace of fine grained sand, dark brown, damp, soft, no odor</td>
</tr>
<tr>
<td>Damp</td>
<td>1.7</td>
<td>SB-1-9</td>
<td>8.0</td>
<td>Grades to Sandy Silt at 9 feet - fine grained sand, dark brown, soft, no odor</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.8</td>
<td></td>
<td>10.0</td>
<td>(SP) Sand, medium to fine grained sand, very dark gray, saturated, loose, no odor</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.7</td>
<td></td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>0.4</td>
<td></td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.5</td>
<td></td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.4</td>
<td></td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.3</td>
<td></td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.6</td>
<td></td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.7</td>
<td></td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>1.8</td>
<td></td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>2.0</td>
<td></td>
<td>20.0</td>
<td>Bottom of borehole at 20.0 feet.</td>
</tr>
</tbody>
</table>

**Notes:**
- Bentonite seal
- Sch 40 PVC Riser
- 20/40 filter pre-pack & 2/12 around pre-pack
- Pre-packed Sch 40 PVC 0.010-inch slotted screen
- Flush-mount well box
- Well cap
- Cement seal
- Well Screen: 6-18 in.
- Filter Pack: 2/12 & 20/40
- Well Casing: Sch 40 PVC
Monitoring Well: MW-2

Project: South Park Marina
Client: Washington State Dept of Ecology
Location: Seattle, Washington
Logged By: S Bloom

Date Started: 9/26/2007
Date Completed: 9/28/2007
Well Diameter: 0.75 in
Well Screen: 12-17 ft
Filter Pack: 2/12 & 20/40

Well Depth: 17 ft
TOC Elevation: 14.84 (msl) ft

Total Boring Depth: 21 ft
Hole Diameter: 3 in.

Well Diameter: 0.75 in
Well Screen: 12-17 ft
Filter Pack: 2/12 & 20/40

MOISTURE CONTENT ORGANIC VAPOUR (%) SAMP. INTERVAL ANALYTICAL SAMPLE U.S.G.S. SYMBOL GRAPHIC LOG DEPTH (ft) LITHOLOGY/DESCRIPTION WELL DIAGRAM

Damp 1.7 Road base/rocks with fine to medium grained sand
Damp 2.7 (SP) Sand, fine to medium grained, very dark gray, damp, no odor
Damp 2.6 Well boring hand cleared to 5 ft bgs
Damp 2.4 (ML) Sandy Silt, fine grained sand, very dark gray to very dark brown, damp, very soft/loose, no odor
Damp 3.3 Encountered water table at 8 ft bgs
Damp 0.6 (ML) Sandy Silt, very fine to fine grained sand, very dark brown to dark gray, loose/soft, no odor
Saturated 0.9 SB-2-9 (SM) Silty Sand, fine to medium grained sand, very dark gray, no odor
Saturated 0.9 (ML) Sandy Silt, very fine to fine grained sand, very dark brown to dark gray, loose/soft, no odor
Saturated 0.6 ML (ML) Sandy Silt, very fine to fine grained sand, very dark brown to dark gray, loose/soft, no odor
Saturated 0.5 ML (ML) Sandy Silt, fine to fine grained sand, very dark gray to very dark brown, damp, very soft/loose, no odor
Saturated 0.3 ML (ML) Sandy Silt, very fine to fine grained sand, very dark brown to dark gray, loose/soft, no odor
Saturated 0.4 ML
Saturated 0.2 ML
Saturated 0.1 ML
Saturated 0.0 ML
Saturated 0.1 ML

Bottom of borehole at 21.0 feet.
<table>
<thead>
<tr>
<th>DEPTH (ft)</th>
<th>LITHOLOGY/DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8</td>
<td>Dry</td>
</tr>
<tr>
<td>0.7</td>
<td>Damp</td>
</tr>
<tr>
<td>0.9</td>
<td>Damp</td>
</tr>
<tr>
<td>0.4</td>
<td>Damp</td>
</tr>
<tr>
<td>0.5</td>
<td>Damp</td>
</tr>
<tr>
<td>2.0</td>
<td>Saturated</td>
</tr>
<tr>
<td>1.9</td>
<td>Saturated</td>
</tr>
<tr>
<td>1.6</td>
<td>Saturated</td>
</tr>
<tr>
<td>2.1</td>
<td>Saturated</td>
</tr>
<tr>
<td>1.7</td>
<td>Wet</td>
</tr>
<tr>
<td>2.2</td>
<td>Wet</td>
</tr>
<tr>
<td>1.8</td>
<td>Wet</td>
</tr>
<tr>
<td>2.2</td>
<td>Wet</td>
</tr>
<tr>
<td>2.0</td>
<td>Wet</td>
</tr>
<tr>
<td>2.2</td>
<td>Wet</td>
</tr>
<tr>
<td>0.9</td>
<td>Wet</td>
</tr>
<tr>
<td>1.0</td>
<td>Wet</td>
</tr>
</tbody>
</table>

**LITHOLOGY/DESCRIPTION**

- **Well Boring hand cleared to 5 ft bgs**
- Grades to medium grained sand
- Encountered water table at 6.5 ft bgs
- Well Diameter: 0.75 in
- Hole Diameter: 3 in.
- TOC Elevation: 14.91 (msl) ft
- Well Casing: Sch 40 PVC
- Filter Pack: 2/12 & 20/40

**GEOLOGY**

- **SB-3-13.5**
- **SB-3-7**
- **SP**
- **ML**
- **SM**

**ANALYTICAL SAMPLE ORGANIC VAPOR (ppm)**

- Date Started: 9/26/2007
- Date Completed: 9/27/2007
- Driller: Cascade Drilling, Inc.
- Drill Method: Hand Auger/Geoprobe
- Total Boring Depth: 20 ft
- Hole Diameter: 3 in.
- Well Depth: 17.25 ft
- Well Diameter: 0.75 in
- Well Screen: 12.25-17.25 ft
- Filter Pack: 2/12 & 20/40
- Pre-packed Sch 40 PVC 0.010-inch slotted screen
- Bentonite seal
- 20/40 filter pre-pack & 2/12 around pre-pack
- Well cap
- Cement seal

**Well Diagram**

- Bottom of borehole at 20.0 feet.
**Project:** South Park Marina  
**Client:** Washington State Dept of Ecology  
**Location:** Seattle, Washington  
**Logged By:** S Bloom  
**Date Started:** 9/27/2007  
**Date Completed:** 9/27/2007  
**Driller:** Cascade Drilling, Inc.  
**Drill Method:** Hand Auger/Geoprobe  
**Total Boring Depth:** 20 ft

**LITHOLOGY/DESCRIPTION**

<table>
<thead>
<tr>
<th>MOISTURE CONTENT</th>
<th>ORGANIC VAPOR (ppm)</th>
<th>SAMPL. INTERVAL</th>
<th>U.S.C.S. SYMBOL</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp</td>
<td>1.2</td>
<td>SP</td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Damp</td>
<td>1.0</td>
<td>SP</td>
<td></td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>Damp</td>
<td>1.6</td>
<td>SP</td>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Damp</td>
<td>2.3</td>
<td>SP</td>
<td></td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>Damp</td>
<td>2.5</td>
<td>SP</td>
<td></td>
<td></td>
<td>5.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.5</td>
<td>ML</td>
<td></td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.7</td>
<td>ML</td>
<td></td>
<td></td>
<td>9.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>0.7</td>
<td>ML</td>
<td></td>
<td></td>
<td>10.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.2</td>
<td>ML</td>
<td></td>
<td></td>
<td>12.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.0</td>
<td>ML</td>
<td></td>
<td></td>
<td>13.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.3</td>
<td>ML</td>
<td></td>
<td></td>
<td>14.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.3</td>
<td>SP</td>
<td></td>
<td></td>
<td>15.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.2</td>
<td>SP</td>
<td></td>
<td></td>
<td>16.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.0</td>
<td>SM</td>
<td></td>
<td></td>
<td>17.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>2.0</td>
<td>SP</td>
<td></td>
<td></td>
<td>18.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.5</td>
<td>SP</td>
<td></td>
<td></td>
<td>19.0</td>
</tr>
</tbody>
</table>

- **Asphalt:** Road base/rocks, with fine to medium grained sand  
- **(SP) Sand, fine to medium grained, very dark gray, damp, loose, no odor:** Boring was hand cleared to 5 ft bgs  
- **(ML) Sandy Silt, fine grained sand, olive gray, saturated, very soft, no odor:** Encountered water table at 9 ft bgs  
- **(ML) Silty Sand, fine to medium grained sand, very dark brown, loose, no odor:** Color changes to dark gray  
- **(SP) Sand, fine to medium grained sand, dark brown to dark gray, soft, no odor:** (SM) Silty Sand, fine to medium grained sand, very dark brown, loose, no odor  
- **(SP) Sand, fine to medium grained sand, very dark gray, loose, no odor.** Bottom of borehole at 20.0 feet.
Logged By: S Bloom  
Date Started: 9/27/2007  
Date Completed: 9/27/2007

Driller: Cascade Drilling, Inc.  
Drill Method: Hand Auger/Geoprobe  
Total Boring Depth: 16 ft

**Asphalt**
Road base/rocks, fine to medium grained SAND, damp, loose, no odor

**Damp**
Boring was hand cleared to 5 ft bgs

**Encountered water table at 8 ft bgs**

**(ML) Silt, very dark gray, very soft, no odor; saturated**

**Becomes firm**

**Boring: SB-5**

**Bottom of borehole at 16.0 feet.**
**Boring: SB-6**

**Project:** South Park Marina  
**Client:** Washington State Dept of Ecology  
**Location:** Seattle, Washington  
**Logged By:** S Bloom  
**Date Started:** 9/26/2007  
**Date Completed:** 9/28/2007  
**Driller:** Cascade Drilling, Inc.  
**Drill Method:** Hand Auger/Geoprobe  
**Total Boring Depth:** 17 ft

---

**LITHOLOGY/DESCRIPTION**

<table>
<thead>
<tr>
<th>MOISTURE CONTENT</th>
<th>ORGANIC VAPOR (ppm)</th>
<th>SAMP. INTERVAL</th>
<th>U.S.C.S. SYMBOL</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp</td>
<td>1.2</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>1.0</td>
</tr>
<tr>
<td>Damp</td>
<td>0.4</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>1.1</td>
</tr>
<tr>
<td>Damp</td>
<td>1.1</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>1.2</td>
</tr>
<tr>
<td>Damp</td>
<td>1.2</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>1.7</td>
</tr>
<tr>
<td>Damp</td>
<td>0.6</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>1.1</td>
</tr>
<tr>
<td>Damp</td>
<td>0.8</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to medium grained sand, very dark gray; damp, no odor</td>
<td>Damp</td>
<td>0.7</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.0</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Saturated</td>
<td>1.0</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.0</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Saturated</td>
<td>1.2</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.5</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Saturated</td>
<td>1.1</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.1</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>(ML) Sandy Silt, fine to very fine grained sand, very dark gray; damp, no odor</td>
<td>Saturated</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**ANALYTICAL SAMPLE**

**ORGANIC VAPOR (ppm)**

- Damp: 1.2
- Damp: 0.4
- Damp: 1.1
- Damp: 1.2
- Damp: 1.7
- Damp: 0.6
- Damp: 0.8
- Damp: 0.7
- Saturated: 1.0
- Saturated: 1.0
- Saturated: 1.2
- Saturated: 1.2
- Saturated: 1.5
- Saturated: 1.1

**MOISTURE CONTENT**

- Damp: 1.2
- Damp: 0.4
- Damp: 1.1
- Damp: 1.2
- Damp: 1.7
- Damp: 0.6
- Damp: 0.8
- Damp: 0.7
- Saturated: 1.0
- Saturated: 1.0
- Saturated: 1.2
- Saturated: 1.2
- Saturated: 1.5
- Saturated: 1.1

**PROJECT LOCATIONS**

18912 North Creek Parkway, Suite 101  
Bothell, WA 98011
Boring: SB-7

Project: South Park Marina  
Client: Washington State Dept of Ecology  
Location: Seattle, Washington

Logged By: S Bloom  
Date Started: 9/28/2007  
Date Completed: 9/28/2007

Driller: Cascade Drilling, Inc.  
Drill Method: Hand Auger/Geoprobe  
Total Boring Depth: 17 ft

<table>
<thead>
<tr>
<th>MOISTURE CONTENT</th>
<th>ORGANIC VAPOR (ppm)</th>
<th>SAMP. INTERVAL ANALYTICAL SAMPLE</th>
<th>U.S.C.S. SYMBOL</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>LITHOLOGY/DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp</td>
<td>0.9</td>
<td></td>
<td></td>
<td>SP</td>
<td>1</td>
<td>Road base/rocks, with fine to medium grained sand</td>
</tr>
<tr>
<td>Damp</td>
<td>0.9</td>
<td></td>
<td></td>
<td>SP</td>
<td>2</td>
<td>Sand, fine to medium grained, very dark gray, loose, no odor</td>
</tr>
<tr>
<td>Damp</td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>Boring was hand cleared to 5 ft bgs</td>
</tr>
<tr>
<td>Damp</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>Sand grades to fine grained</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.6</td>
<td></td>
<td>SM</td>
<td></td>
<td>5</td>
<td>Encountered the water table at 8 ft bgs</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.4</td>
<td></td>
<td>SM</td>
<td></td>
<td>6</td>
<td>(SM) Silty Sand, fine to medium grained sand, very dark brown to very dark gray, loose, no odor</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.3</td>
<td></td>
<td>SM</td>
<td></td>
<td>7</td>
<td>(SM) Silt, very dark gray, soft, no odor, some organic material (wood pieces)</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.5</td>
<td></td>
<td>ML</td>
<td></td>
<td>8</td>
<td>Becomes firm</td>
</tr>
<tr>
<td>Saturated</td>
<td>1.6</td>
<td></td>
<td>ML</td>
<td></td>
<td>9</td>
<td>(ML) Sandy Silt, very fine to medium grained sand, very dark gray, no odor</td>
</tr>
<tr>
<td>Wet</td>
<td>1.6</td>
<td></td>
<td>ML</td>
<td></td>
<td>10</td>
<td>Color changes to very dark brown</td>
</tr>
<tr>
<td>Wet</td>
<td>1.5</td>
<td></td>
<td>ML</td>
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<td>11</td>
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<tr>
<td>Wet</td>
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<td></td>
<td>ML</td>
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<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.3</td>
<td></td>
<td>ML</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.3</td>
<td></td>
<td>ML</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.3</td>
<td></td>
<td>ML</td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.3</td>
<td></td>
<td>ML</td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.3</td>
<td></td>
<td>ML</td>
<td></td>
<td>17</td>
<td>Bottom of borehole at 17.0 feet.</td>
</tr>
</tbody>
</table>

18912 North Creek Parkway, Suite 101  
Bothell, WA 98011  

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U.S.C.S. SYMBOL  
SYMBOL  

eastward, with fine to medium grained sand  
(SM) Sandy Silt, very fine to medium grained sand, very dark gray, no odor  
(SM) Silt, very dark gray, soft, no odor, some organic material (wood pieces)  
(SM) Silty Sand, fine to medium grained sand, very dark brown to very dark gray, loose, no odor  
Asphalt  
Road base/rocks, with fine to medium grained sand  
(SP) Sand, fine to medium grained, very dark gray, loose, no odor  
Bottom of borehole at 17.0 feet.
Boring: SB-8

MOISTURE CONTENT | ORGANIC VAPOR (ppm) | SAMPL. INTERVAL | U.S.C.S. SYMBOL | GRAPHIC LOG | DEPTH (ft) | LITHOLOGY/DESCRIPTION

- **Damp**
  - 0.0
  - 0.1
  - 1.5
  - 1.5
  - 1.7
  - 0.9

- **Saturated**
  - 1.2
  - 1.0

- **Wet**
  - 1.0
  - 0.9
  - 1.4
  - 1.2

**GRAPHIC LOG**

- **Asphalt**
  - Road base/rocks, with fine to medium grained sand, very dark gray

- **(SP) Sand**
  - (SP) Sand, fine to medium grained sand, very dark gray, damp, loose, no odor

- **Boring**
  - Boring was hand cleared down to 5 ft bgs

- **(ML) Silt**
  - (ML) Silt, very dark gray, soft, no odor, some organic material (wood pieces)

- **(ML) Sandy Silt**
  - (ML) Sandy Silt, fine to very fine grained sand, very dark gray, very soft, no odor

- **Becomes stiff**

- **Bottom of borehole at 16.0 feet.**
### Project: South Park Marina
- **Client:** Washington State Dept of Ecology
- **Location:** Seattle, Washington
- **Logged By:** S Bloom
- **Date Started:** 9/26/2007
- **Date Completed:** 9/27/2007
- **Driller:** Cascade Drilling, Inc.
- **Drill Method:** Hand Auger/Geoprobe
- **Total Boring Depth:** 20 ft

### Lithology/Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Lithology/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Asphalt</td>
</tr>
<tr>
<td>0.7</td>
<td>Road base/rocks, fine to medium grained sand</td>
</tr>
<tr>
<td>1.0</td>
<td>(SP) Sand, fine to medium grained, very dark gray, damp, very loose, no odor</td>
</tr>
<tr>
<td>1.1</td>
<td>Becomes loose</td>
</tr>
<tr>
<td>5.0</td>
<td>Boring was hand cleared to 5 ft bgs</td>
</tr>
<tr>
<td>6.0</td>
<td>Color changes to dark olive gray</td>
</tr>
<tr>
<td>7.0</td>
<td>Color changes to dark olive brown</td>
</tr>
<tr>
<td>11.0</td>
<td>(ML) Sandy Silt, very fine grained sand, dark gray, saturated, no odor</td>
</tr>
<tr>
<td>12.0</td>
<td>Color changes to dark olive brown</td>
</tr>
<tr>
<td>13.0</td>
<td>(ML) Silt, dark gray, no odor, some organic material (wood pieces)</td>
</tr>
<tr>
<td>15.0</td>
<td>(ML) Silt, very fine grained sand, dark gray, saturated, no odor</td>
</tr>
<tr>
<td>16.0</td>
<td>(ML) Silt, very fine grained sand, dark gray, saturated, no odor</td>
</tr>
<tr>
<td>20.0</td>
<td>Bottom of borehole at 20.0 feet.</td>
</tr>
</tbody>
</table>

### Analytical Sample

<table>
<thead>
<tr>
<th>Moisture Content</th>
<th>Organic Vapor (ppm)</th>
<th>Samp. Interval</th>
<th>U.S.C.S. Symbol</th>
<th>Graphic Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp</td>
<td>0.0</td>
<td></td>
<td>AS</td>
<td></td>
</tr>
<tr>
<td>Damp</td>
<td>0.0</td>
<td></td>
<td>SP</td>
<td></td>
</tr>
<tr>
<td>Damp</td>
<td>0.0</td>
<td></td>
<td>SB-9-10</td>
<td></td>
</tr>
<tr>
<td>Damp</td>
<td>0.5</td>
<td></td>
<td>SP</td>
<td></td>
</tr>
<tr>
<td>Damp</td>
<td>0.6</td>
<td></td>
<td>SP</td>
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</tr>
<tr>
<td>Saturated</td>
<td>0.4</td>
<td></td>
<td>ML</td>
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</tr>
<tr>
<td>Saturated</td>
<td>0.8</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>0.5</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>0.8</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>0.7</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.1</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.0</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>Wet</td>
<td>1.0</td>
<td></td>
<td>ML</td>
<td></td>
</tr>
</tbody>
</table>
Boring: SB-10

MOISTURE CONTENT | ORGANIC VAPOR (ppm) | SAMP. INTERVAL | U.S.C.S. SYMBOL | GRAPHIC LOG | DEPTH (ft) |
--- | --- | --- | --- | --- | --- |
Damp | 0.3 | | | | 1 |
Damp | 0.2 | | | | 2 |
Damp | 0.6 | | | | 3 |
Damp | 1.6 | | | | 4 |
Damp | 1.4 | | | | 5 |
Damp | 1.3 | | | | 6 |
Damp | 1.3 | | | | 7 |
Damp | 1.1 | | | | 8 |
Damp | 1.0 | | | | 9 |
Saturated | 1.1 | | | | 10 |
Saturated | 1.0 | | | | 11 |
Saturated | 1.8 | | | | 12 |
Saturated | 1.7 | | | | 13 |
Wet | 1.7 | | | | 14 |
Wet | 1.5 | | | | 15 |
Wet | 1.4 | | | | 16 |
Wet | 1.5 | | | | 17 |
Wet | 1.6 | | | | 18 |
Wet | 1.7 | | | | 19 |
Wet | 1.7 | | | | 20 |
Wet | 1.6 | | | | 21 |
Wet | 1.7 | | | | 22 |
Wet | 1.7 | | | | 23 |
Wet | 1.5 | | | | 24 |

LITHOLOGY/DESCRIPTION

Asphalt
Road base/rocks, fine to medium grain sand, very dark gray
(SP) Sand, fine to medium grained, very dark gray, very loose, no odor
Becomes loose
Boring was hand cleared to 5 ft bgs
(SM) Silty Sand, fine grained sand, very dark gray, loose, no odor
(SM) Sandy Silt, very dark gray
(ML) Silt, very dark brown
(ML) Sandy Silt, very dark gray
(ML) Silt, very dark gray, soft, grades to medium stiff, no odor
Encountered water table at 11 ft bgs
Color changes to brown
(ML) Sandy Silt, fine to very fine grained sand, very dark gray, loose/soft, no odor
Color changes to very dark brown
Bottom of borehole at 20.0 feet.
Bottom of borehole at 2.8 feet.

This boring was attempted twice - the first boring was done one foot away from second location. The first boring was advanced to 2 ft bgs. The second boring was advanced to a total depth of 2.75 ft bgs.

Refusal at 2.75 ft on rock

Strong sheen observed at 2 ft

Strong odor observed (Solvent/Fuel) from 1.5 to 2.5 ft

LITHOLOGY/DESCRIPTION

(SM) Sand, fine to coarse grained with some silt and gravel (up to 6" in size), brown-gray, damp, dense, waste debris (bolts, wood pieces, tubing, etc.) FILL

MOISTURE CONTENT | ORGANIC VAPOR (ppm) | SAMPL. INTERVAL | U.S.C.S. SYMBOL | GRAPHIC LOG | DEPTH (ft) |
--- | --- | --- | --- | --- | --- |
78 | | | | | |
88 | | | | | |
65 | | | | | |
### Lithology/Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>MOISTURE CONTENT</th>
<th>ORGANIC VAPOR (ppm)</th>
<th>SAMPL. INTERVAL (ft)</th>
<th>U.S.C.S. SYMBOL</th>
<th>LITHOLOGY/DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>3.9</td>
<td>23.9</td>
<td>SB-12-2-2.5</td>
<td>GP</td>
<td>Gravel up to 3/4&quot; in size, gray-brown, loose, no odor. FILL</td>
</tr>
<tr>
<td>2.5</td>
<td>8.2</td>
<td>33.9</td>
<td>SB-12-2.5</td>
<td>SM</td>
<td>Sand, fine to coarse grained, some silt and gravel (up to 5&quot; in size), dark brown, damp, dense. Waste debris. FILL</td>
</tr>
<tr>
<td>3.0</td>
<td></td>
<td></td>
<td>SB-12-2</td>
<td></td>
<td>Moderate odor observed between 1-2 ft bgs (solvent/fuel) Moderate odor observed between 1-2 ft bgs (solvent/fuel)</td>
</tr>
<tr>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Weak to moderate sheen at 2 ft</td>
</tr>
<tr>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Refusal at 2 ft bgs on rock</td>
</tr>
<tr>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bottom of borehole at 2.0 feet.</td>
</tr>
</tbody>
</table>
Encountered water table at 7 ft bgs

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Moisture Content</th>
<th>Organic Vapor (ppm)</th>
<th>Sample Interval (ft)</th>
<th>U.S.C.S. Symbol</th>
<th>Lithology/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8</td>
<td>Damp</td>
<td>0.8</td>
<td>SB-13-1</td>
<td>GP</td>
<td>(GP) Sandy gravel wth cobbles and waste debris. (FILL)</td>
</tr>
<tr>
<td>0.6</td>
<td>Damp</td>
<td>0.6</td>
<td>SB-13-3.5</td>
<td>SM</td>
<td>(SM) Sand, very fine to medium grained sand, some silt, very dark gray, damp, loose, no odor</td>
</tr>
<tr>
<td>0.6</td>
<td>Damp</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.4</td>
<td>Damp</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.8</td>
<td>Saturated</td>
<td>0.8</td>
<td>SB-13-7</td>
<td>ML</td>
<td>(ML) Sandy Silt, very fine to fine grained sand, very dark gray, saturated, soft/loose, no odor</td>
</tr>
</tbody>
</table>

Encountered water table at 7 ft bgs

Bottom of borehole at 7.5 feet.
Moist Sand becomes slight coarser

(ML) Gravelly Silt, gravel up to 3", gray-brown, moist, dense, no odor, some waste debris. FILL

(SP) Sand, fine to medium grained sand, trace silt and fine gravel (to 0.25 inch), gray-brown, damp, no odor

Moist Sandy Gravel, gravel up to 1/2", gray-brown, damp, no odor, loose. FILL

(ML) Gravelly Silt, gravel up to 3", gray-brown, moist, dense, no odor, some waste debris. FILL

(SP) Sand, fine to medium grained sand, trace silt and fine gravel (to 0.25 inch), gray-brown, damp, no odor

Strong solvent/petroleum odor and heavy sheen at 7 to 8 ft bgs

Encountered water table at 7.5 ft bgs

Bottom of borehole at 8.0 feet.
(GP) Sandy Gravel, gravel up to 3/4" big, gray-brown, damp, no odor. FILL

(ML) Gravelly Silt, gravel up to 6", some medium grained sand, gray-brown, very moist, stiff, no odor, some waste debris. FILL

(SP) Sand, fine to medium grained, minor silt and gravel (up to 1"), gray-brown, very moist to wet, loose, slight solvent/petroleum odor

Solvent/petroleum odor observed

Encountered water table at 3.25 ft bgs (after completion water level measured at 2.8 ft); dense below 3.5 ft

Bottom of borehole at 4.0 feet.

SAMP. INTERVAL

1.0

2.2

36

42

U.S.C.S.
SYMBOL

ORBIC
ORGANIC VAPOR (ppm)

GRAPHIC
LOG

LITHOLOGY/DESCRIPTION
Bottom of borehole at 4.0 feet.

Refusal on rock at 4 ft bgs

Moderate sheen 2.5 to 4 ft bgs

Moist 171
SB-16-3.5

(ML) Gravelly Silt, gravel is up to 3.5", some sand, gray-brown, damp, stiff, some waste debris (wire, nails, etc), FILL

Subtle sheen at 1.5 ft bgs.

Faint odor observed at 1.25', increasing with depth to moderate odor at 4 ft bgs

(ML) Gravelly Silt, gravel is up to 3.5", some sand, gray-brown, damp, stiff, some waste debris (wire, nails, etc), FILL

(GP) Sandy gravel, gravel up to 3/4", gray-brown, damp, loose, no odor. FILL