**MWH**

**Boring ID: B1ET0661**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

Silty Sand, dark yellowish brown (10YR 3/4), medium dense, moist, trace fine sandstone gravel, micaceous [Alluvium]

Total Depth = 2.0 ft.

Collected soil sample S001 at 13:55 from excavation sidewall.

Excavation backfilled 01-12-2011 - 01-31-2011.

**Comments:** Sidewall of excavation

**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Samplers:** Sample retained in 6-inch stainless steel sleeve / Encores  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A
[See Trench Log ISRA-B1-2 for lithology]

Silty Sand, yellowish brown (10YR 5/4), medium dense, dry, strong cementation
[Alluvium]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 13:05 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
**LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  3/30/11**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>0</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>SM</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

- **Easting (ft):** 1796807.03
- **Northing (ft):** 269277.67
- **Total Depth (ft):** 3.5
- **Borehole Diam. (in.):** 2
- **Start Time:** 13:23
- **Drill Start Date:** 11-12-2010
- **Finish Time:** 13:41
- **Drill Finish Date:** 11-12-2010

**Comments:**
- Surface soil and alluvium excavated to approx. 3 ft
- Sample retained in 6-inch stainless steel sleeve / Encores
- Collected soil sample S001 at 13:41 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.

**Sample Type:**
- **Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous [Alluvium]**

**Total Depth = 3.5 ft; terminated prior to refusal on bedrock.**

Collected soil sample S001 at 13:41 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
Boring ID: B1ET0664

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>Water Level</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>1</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), medium dense, dry, weak cementation [Alluvium]</td>
<td>10 70 20</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 2.0 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 13:30 from excavation floor. Excavation backfilled 01-12-2011 - 01-31-2011.</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Surface soil and alluvium excavated to approx. 1.5 ft

Well Comp. Date: N/A  Completion Time: N/A

Samplers: Sample retained in 6-inch stainless steel sleeve / Encores

Soil Backfill Date: N/A  Backfill Time: N/A

Est. % of Soil

Gravel  Coarse Sand  Med. Sand  Fine Sand  Silt/Clay

10 70 20
**Boring ID: B1ET0665**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 2.0  
**Project:** ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property  
**Nothing (ft):** 269301.09  
**Easting (ft):** 1796787.90  
**Job Number:** 1008208  
**Site:** B1-2  
**Drill Start Date:** 11-15-2010  
**Start Time:** NR  
**Logged By:** N. Beaty  
**Logged By:** N. Beaty  
**Drill Finish Date:** 11-15-2010  
**Finish Time:** 13:50  
**Drilling Contractor:** Jacob & Hefner Assoc.  
**Field Instrumentation:** PID  
**Depth 1st H,O (ft):** N/A  
**Date / Time:** N/A  
**Drill Rig Type/Method:** Grab (hand sampling)  
**Depth H,O After Drilling (ft):** N/A  
**Date / Time:** N/A  
**Driller’s Name:** J. Ortiz  

**Comments:** Surface soil and alluvium excavated to approx. 1.5 ft  
**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Samplers:** Sample retained in 6-inch stainless steel sleeve / Encores  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Retained Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.2</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

- **Total Depth = 2.0 ft; terminated prior to refusal on bedrock.**
- **Collected soil samples S001 and duplicate D001 at 13:50 from excavation floor.**
- **Excavation backfilled 01-12-2011 - 01-31-2011.**

<table>
<thead>
<tr>
<th>PID (ppm)</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>70</td>
<td>15</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), medium dense, dry, weak cementation [Alluvium]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravel</td>
</tr>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Easting (ft):** 
**Northing (ft):** 
**Drill Start Date:** 11-15-2010  
**Drill Finish Date:** 11-15-2010  
**Field Instrumentation:** PID  
**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Samplers:** Sample retained in 6-inch stainless steel sleeve / Encores  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A
**LOG OF BORING OUTFALL009 ISRA-2010.GPJ  BOEING.GDT  3/30/11**

**Comments:**
- **Surface soil and alluvium excavated to approx. 3 ft**

**Sample Retained:**
- Sample retained in 6-inch stainless steel sleeve / Encores

**Water Level:**
- N/A

**Sample Interval**
- 0

**Sample Type**
- In situ

**Recovery (%)**
- N/A

**Blow Count/6”**
- N/A

**Depth (feet)**
- N/A

**USCS Soil Classification**
- SM

**Description**
- Silty Sand, reddish brown (5YR 4/4), loose, dry, micaceous [Alluvium]

**[See Trench Log ISRA-B1-2 for lithology]**

**Graphic Log**

**Depth (feet)**
- 0

**Est. % of Soil**
- Gravel: 0%
- Coarse Sand: 0%
- Med. Sand: 0%
- Fine Sand: 0%
- Silt/Clay: 0%

**Total Depth (ft):** 3.5 ft

**Terminated prior to refusal on bedrock.**

**Collected soil sample S001 at 10:40 from excavation floor.**

**Excavation backfilled 01-12-2011 - 01-31-2011.**
Boring ID: B1ET0668

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 3.5  
**Easting (ft):** 1796876.89  
**Northing (ft):** 269402.27  
**Job Number:** 1008208  
**Logged By:** S. Aichner  
**Date/Time:** 12-02-2010 08:04

**Site:** B1-2  
**Logged By:** S. Aichner  
**Drilling Contractor:** Jacob & Hefner Assoc.  
**Reviewed By:** M. Milman-Barris, P.G.  
**Field Instrumentation:** PID

---

### Depth & Water Level

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, moist, micaceous [Alluvium]</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 70 20</td>
</tr>
</tbody>
</table>

**Total Depth = 3.5 ft.**

Collected soil sample S001 at 08:18 from excavation sidewall.

Excavation backfilled 01-12-2011 - 01-31-2011.
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.2</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

Silty Sand, dark yellowish brown (10YR 3/4), loose, moist, trace clay, micaceous [Alluvium]

Total Depth = 5.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 13:06 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
Boring ID: B1ET0670

Borehole Diam. (in.): 2
Northing (ft): 269403.95
Easting (ft): 1796859.01
Drill Finish Date: 12-01-2010
Start Time: 12-01-2010
Finish Time: 13:19
Drilling Contractor: MP Environmental Svcs.
Driller's Name: D. Velasquez
Logged By: S. Aichner
Reviewed By: M. Milman-Barris, P.G.

**Surface soil and alluvium excavated to approx. 5 ft**

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID ppm</th>
<th>Water Level</th>
<th>USCS Soil Classification</th>
<th>Description</th>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>S</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>SM</td>
<td>Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous [Alluvium]</td>
<td>10 70 20</td>
</tr>
</tbody>
</table>

- Total Depth = 5.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 13:19 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.
Boring ID: B1ET0671

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>S</td>
<td>0.2</td>
<td>SM</td>
<td>1</td>
<td>Silty Sand, dark brown (10YR 3/3), loose, moist, micaceous, contains plant roots and debris</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>SM</td>
<td>2</td>
<td>Total Depth = 1.5 ft; terminated prior to refusal on bedrock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>SM</td>
<td>3</td>
<td>Collected soil sample S001 at 08:03 from excavation floor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>SM</td>
<td>4</td>
<td>Excavation backfilled 01-12-2011 - 01-31-2011.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[See Trench Log ISRA-B1-2 for lithology]

Surface soil and alluvium excavated to approx. 1 ft

Total Depth = 1.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 08:03 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.

<table>
<thead>
<tr>
<th>Depth 1st H2O (ft):</th>
<th>Date / Time:</th>
<th>Borehole Diam. (in.):</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Time:</th>
<th>Finish Time:</th>
<th>Date / Time:</th>
<th>Date / Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:51</td>
<td>08:03</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Comments: Surface soil and alluvium excavated to approx. 1 ft

Total Depth = 1.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 08:03 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
**MWH**

Boring ID: B1ET0672

**Borehole Diam. (in.):** 2

**Total Depth (ft):** 5.5

**Project:** ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property

**Job Number:** 1008208

**Site:** B1-2

**Logged By:** S. Aichner

**Sheet 1 of 1**

**Easting (ft):** 1796860.42

**Northing (ft):** 269376.71

**Drill Start Date:** 12-02-2010

**Start Time:** 07:36

**Logged By:** S. Aichner

**Reviewed By:** M. Milman-Barris, P.G.

**Drill Finish Date:** 12-02-2010

**Finish Time:** 07:49

**Drilling Contractor:** Jacob & Hefner Assoc.

**Field Instrumentation:** PID

**Depth 1st H2O (ft):** N/A

**Date / Time:** N/A

**Drill Rig Type/Method:** Grab (hand sampling)

**Depth H2O After Drilling (ft):** N/A

**Date / Time:** N/A

**Driller's Name:** S. Aichner

**Comments:** Surface soil and alluvium excavated to approx. 5 ft

**Well Comp. Date:** N/A

**Completion Time:** N/A

**Samplers:** Sample retained in 6-inch stainless steel sleeve / Encores

**Soil Backfill Date:** N/A

**Backfill Time:** N/A

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>Graphic Log</td>
<td>SM</td>
<td>Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous [Alluvium]</td>
</tr>
</tbody>
</table>

[See Trench Log ISRA-B1-2 for lithology]

<table>
<thead>
<tr>
<th>Depth 1st H</th>
<th>After Drilling (ft):</th>
<th>Recovery (%)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>PID</th>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0.1</td>
<td>SM</td>
<td>SM</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Depth = 5.5 ft; terminated prior to refusal on bedrock.

Collected soil samples S001 and duplicate D001 at 07:49 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
**Boring ID: B1ET0673**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Surface soil and alluvium excavated to approx. 5 ft

- **Well Comp. Date:** N/A
- **Completion Time:** N/A

**Samplers:** Sample retained in 6-inch stainless steel sleeve/Encores

- **Soil Backfill Date:** N/A
- **Backfill Time:** N/A

**Drilling Contractor:** MP Environmental Svcs.

**Field Instrumentation:** PID

[See Trench Log ISRA-B1-2 for lithology]

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM</td>
<td>10</td>
<td>70</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Description:** Silty Sand, dark yellowish brown (10YR 4/4), loose, moist, trace clay, micaceous [Alluvium]

- **Total Depth:** 5.5 ft; terminated prior to refusal on bedrock.

- **Collected soil sample S001 at 11:53 from excavation floor.**

- **Excavation backfilled 01-12-2011 - 01-31-2011.**
Borehole Diam. (in.): 2  Total Depth (ft): 5.5  Project: ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property
Northing (ft): 269358.09  Easting (ft): 1796844.57  Job Number: 1008208  Site: B1-2
Drill Start Date: 12-01-2010  Start Time: 11:07  Logged By: S. Aichner  Reviewed By: M. Milman-Barris, P.G.
Drill Finish Date: 12-01-2010  Finish Time: 11:20  Drilling Contractor: MP Environmental Svcs.  Field Instrumentation: PID
Depth 1st H2O (ft): N/A  Date / Time: N/A  Drill Rig Type/Method: Grab (hand sampling)
Depth H2O After Drilling (ft): N/A  Date / Time: N/A  Driller’s Name: D. Velasquez

Comments: Surface soil and alluvium excavated to approx. 5 ft  Well Comp. Date: N/A  Completion Time: N/A
Samplers: Sample retained in 6-inch stainless steel sleeve / Encores  Soil Backfill Date: N/A  Backfill Time: N/A

[See Trench Log ISRA-B1-2 for lithology]

Depth

Sample Interval

Sample Type

Sample Retained

Recovery (%)

Blow Count/6”

PID

Water Level

Depth (feet)

Graphic Log

USCS Soil Classification

Description

Gravel

Coarse Sand

Med. Sand

Fine Sand

Silt/Clay

SM

Silty Sand, dark yellowish brown (10YR 4/4), loose, moist, trace clay, micaceous, contains plant roots [Alluvium]

10 70 20

Total Depth = 5.5 ft; terminated prior to refusal on bedrock.
Collected soil sample S001 at 11:20 from excavation floor.
Excavation backfilled 01-12-2011 - 01-31-2011.
**Boring ID: B1ET0675**

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>2</td>
<td>SM</td>
<td></td>
<td></td>
<td>2</td>
<td>SM</td>
<td>Silt/Clay</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, contains plant roots [Alluvium]</td>
</tr>
</tbody>
</table>

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 14:11 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.

**Comments: Surface soil and alluvium excavated to approx. 2 ft**

**Well Comp. Date:** N/A  
**Completion Time:** N/A

**Sample Retained in 6-inch stainless steel sleeve / Encores**  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A
**Boring ID: B1ET0676**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, contains plant roots [Alluvium]</td>
<td></td>
</tr>
</tbody>
</table>

- Total Depth = 2.0 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 11:04 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.
## Boring ID: B1ET0677

- **Borehole Diam. (in.):** 2
- **Total Depth (ft):** 1.0
- **Project:** ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property
- **Nothing (ft):** 269358.31
- **Easting (ft):** 1796889.86
- **Job Number:** 1008208
- **Site:** B1-2
- **Drill Start Date:** 11-18-2010
- **Start Time:** 11:05
- **Logged By:** S. Aichner
- **Drill Finish Date:** 11-18-2010
- **Finish Time:** 11:19
- **Drilling Contractor:** MP Environmental Svcs.
- **Field Instrumentation:** PID
- **Depth 1st H,O (ft):** N/A
- **Date / Time:** N/A
- **Depth H,O After Drilling (ft):** N/A
- **Date / Time:** N/A
- **Drill Rig Type/Method:** Grab (hand sampling)
- **Comments:** Sidewall of excavation
- **Sample Interval:**
- **Sample Type:**
- **Sample Retained:**
- **Sample Type:**
- **Recovered:**
- **Blow Count/6":**
- **PID (ppm):**
- **Water Level:**
- **Depth (feet):**
- **Graphic Log:**
- **USCS Soil Classification:**
- **Description:**
- **Est. % of Soil:**

### Sample Retained

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blown Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Sm</td>
<td>N/A</td>
<td>0.1</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
<td>SM</td>
<td>SM</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

**Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, contains plant roots [Alluvium]**

**Total Depth = 1.0 ft.**

Collected soil sample S001 at 11:19 from excavation sidewall.

Excavation backfilled 01-12-2011 - 01-31-2011.
### LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  3/30/11

<table>
<thead>
<tr>
<th>Sample Interval (feet)</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.1</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM</td>
<td>SM, Silt, yellowish brown (10YR 5/4), loose, moist, micaceous [Alluvium]</td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

- Surface soil and alluvium excavated to approx. 6 ft
- Collected soil sample S001 at 07:30 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.

**Total Depth:** 6.5 ft; terminated prior to refusal on bedrock.

**Est. % of Soil**

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Silt/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Est. %</td>
<td>10</td>
<td>70</td>
<td>20</td>
<td>10</td>
<td>70</td>
</tr>
</tbody>
</table>

**Additional Information:**

- Borehole Diam. (in.): 2
- Total Depth (ft): 6.5
- Northing (ft): 269341.08
- Easting (ft): 1796826.86
- Drill Start Date: 12-02-2010
- Drill Finish Date: 12-02-2010
- Start Time: 07:18
- Finish Time: 07:30
- PID: B1ET0678
- Boring ID: B1ET0678
- Job Number: 1008208
- Site: B1-2
- Driller’s Name: S. Aichner
- Drilling Contractor: Jacob & Hefner Assoc.
- Field Instrumentation: PID
- Soil Backfill Date: N/A
- Backfill Time: N/A
- Well Comp. Date: N/A
- Completion Time: N/A
- Sample retained in 6-inch stainless steel sleeve / Encores
- Well Comp. Date: N/A
- Completion Time: N/A
- Reviews By: M. Milman-Barris, P.G.
<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, contains plant roots [Alluvium]</td>
</tr>
<tr>
<td>0.0</td>
<td>S</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Total Depth = 2.5 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 13:50 from excavation floor. Excavation backfilled 01-12-2011 - 01-31-2011.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. % of Soil</th>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Silt/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>tr</td>
<td>10</td>
<td>70</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Interval</td>
<td>Sample Type</td>
<td>Recovery (%)</td>
<td>Blow Count/6&quot;</td>
<td>PID (ppm)</td>
<td>Water Level</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>0</td>
<td>SM</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Depth = 2.0 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 12:58 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>3</td>
<td>SM</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, brownish yellow (10YR 6/6), loose, dry, micaceous, contains plant roots [Alluvium]</td>
</tr>
</tbody>
</table>

Total Depth = 3.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 10:41 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
**LOG OF BORING OUTFALL009 ISRA-2010.GPJ  BOEING.GDT  3/30/11**

**Boring ID: B1ET0682**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 2.5  
**Project:** ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property

**Northing (ft):** 269326.30  
**Easting (ft):** 1796841.10  
**Job Number:** 1008208  
**Site:** B1-2

**Drill Start Date:** 11-18-2010  
**Start Time:** 09:48  
**Logged By:** S. Aichner  
**Reviewed By:** M. Milman-Barris, P.G.

**Drill Finish Date:** 11-18-2010  
**Finish Time:** 10:06  
**Drilling Contractor:** MP Environmental Svcs.  
**Field Instrumentation:** PID

**Depth 1st H₂O (ft):** N/A  
**Date / Time:** N/A  
**Drill Rig Type/Method:** Grab (hand sampling)

**Depth H₂O After Drilling (ft):** N/A  
**Date / Time:** N/A  
**Driller’s Name:** A. Vann

**Comments:** Surface soil and alluvium excavated to approx. 2 ft

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, brown (10YR 4/3), loose, dry, micaceous, contains plant roots [Alluvium]</td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 2.5 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 10:06 from excavation floor. Excavation backfilled 01-12-2011 - 01-31-2011.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravel</td>
</tr>
<tr>
<td>Coarse Sand</td>
</tr>
<tr>
<td>Med. Sand</td>
</tr>
<tr>
<td>Fine Sand</td>
</tr>
<tr>
<td>Silt/Clay</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

**Well Comp. Date:** N/A  
**Completion Time:** N/A

**Samplers:** Sample retained in 6-inch stainless steel sleeve / Encores  
**Soil Backfill Date:** N/A

**Drill Start Date:** N/A  
**Drill Finish Date:** N/A  
**Surface soil and alluvium excavated to approx. 2 ft**  
**Sample retained in 6-inch stainless steel sleeve / Encores**  
**Soil Backfill Date:** N/A

**Field Instrumentation:**

**Driller’s Name:** A. Vann

**Drilling Contractor:** MP Environmental Svcs.

**Reviewed By:** M. Milman-Barris, P.G.
Borehole Diam. (in.): 2
Northing (ft): 269316.78
Easting (ft): 1796852.47
Drill Start Date: 11-18-2010
Drill Finish Date: 11-18-2010
Depth 1st H2O (ft): N/A
Depth H2O After Drilling (ft): N/A
Comments: Surface soil and alluvium excavated to approx. 1.5 ft
Samplers: Sample retained in 6-inch stainless steel sleeve / Encores

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>s</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, contains plant roots [Alluvium]</td>
<td>tr 10 70 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Total Depth = 2.0 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 13:36 from excavation floor. Excavation backfilled 01-12-2011 - 01-31-2011.</td>
<td></td>
</tr>
</tbody>
</table>
Silty Sand, yellowish brown (10YR 5/6), loose, dry, micaceous, contains plant roots [Alluvium]

Total Depth = 1.0 ft.

Collected soil sample S001 at 13:12 from excavation sidewall.

Excavation backfilled 01-12-2011 - 01-31-2011.
<table>
<thead>
<tr>
<th>Sample Interval (ft)</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0</td>
<td>SM</td>
<td></td>
<td></td>
<td>3.5</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, contains plant roots [Alluvium]**
- **Total Depth = 3.5 ft; terminated prior to refusal on bedrock.**
- **Collected soil samples S001 and split S001SP at 14:19 from excavation floor.**
- **Excavation backfilled 01-12-2011 - 01-31-2011.**
<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>SM</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

**Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, contains plant roots [Alluvium]**

- Total Depth = 3.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 14:27 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.

**[See Trench Log ISRA-B1-2 for lithology]**
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>SM</td>
<td>0.0</td>
<td></td>
<td></td>
<td>2</td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), medium dense, dry, trace fine sandstone gravel, micaceous [Alluvium]</td>
<td>tr tr 10 70 20</td>
</tr>
</tbody>
</table>

Total Depth = 2.0 ft.
Collected soil sample S001 at 14:25 from excavation sidewall.
Excavation backfilled 01-12-2011 - 01-31-2011.
[See Trench Log ISRA-B1-2 for lithology]

Clayey Sand, dark brown (10YR 3/3), moist, trace silt, micaceous [Alluvium]

Total Depth = 5.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 12:51 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.
Boring ID: B1ET0689

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>Water Level (ft)</th>
<th>Graphic Log</th>
<th>Depth (feet)</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- [See Trench Log ISRA-B1-2 for lithology]

- Silty Sand, dark yellowish brown (10YR 3/4), loose, dry, trace clay, micaceous [Alluvium]

- Total Depth = 2.5 ft.

- Collected soil sample S001 at 12:25 from excavation sidewall.

- Excavation backfilled 01-12-2011 - 01-31-2011.

- Easting (ft): 269197.83
- Northing (ft): 1796934.41
- Drill Start Date: 12-06-2010
- Drill Finish Date: 12-06-2010
- Start Time: 12:06
- Finish Time: 12:25
- Borehole Diam. (in.): 2
- Total Depth (ft): 2.5
- Field Instrumentation: PID
- Drill Rig Type/Method: Grab (hand sampling)

- Site: B1-2
- Job Number: 1008208
- Site: B1-2
- Reviewed By: M. Milman-Barris, P.G.

- Comments: Sidewall of excavation
- Well Comp. Date: N/A
- Completion Time: N/A
- Samplers: Sample retained in 6-inch stainless steel sleeve / Encores
- Soil Backfill Date: N/A
- Backfill Time: N/A

- Total Depth = 2.5 ft.

- Collected soil sample S001 at 12:25 from excavation sidewall.

- Excavation backfilled 01-12-2011 - 01-31-2011.
**LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  3/30/11**

<table>
<thead>
<tr>
<th>Sample Interval (ft)</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, greenish black (GLEY 1 10Y 2.5/1), loose, moist, trace clay, micaceous, staining, odor</td>
</tr>
</tbody>
</table>

**Comments:**

- Surface soil and alluvium excavated to approx. 5 ft
- Total Depth = 5.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 14:40 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.
**Boring ID: B1ET0691**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 4.5  
**Northing (ft):** 269124.05  
**Easting (ft):** 1796815.48  
**Drill Start Date:** 12-06-2010  
**Start Time:** 13:58  
**Drill Finish Date:** 12-06-2010  
**Finish Time:** 14:09  
**Depth 1st H2O (ft):** N/A  
**Date / Time:** N/A  
**Depth H2O After Drilling (ft):** N/A  
**Date / Time:** N/A

**Logged By:** S. Aichner  
**Reviewed By:** M. Milman-Barris, P.G.

**Drill Rig Type/Method:** Grab (hand sampling)  
**Field Instrumentation:** PID

**PID (ppm):** 0.2

**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Drill Start Date:** 12-06-2010  
**Drill Finish Date:** 12-06-2010  
**Surface soil and alluvium excavated to approx. 4 ft**

**Sample Retained in 6-inch stainless steel sleeve / Encores:**  
**Well Backfill Date:** N/A  
**Backfill Time:** N/A

**Comments:** [See Trench Log ISRA-B1-2 for lithology]

<table>
<thead>
<tr>
<th>Depth Interval</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 3/4), loose, moist, trace clay, micaceous [Alluvium]</td>
</tr>
<tr>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>0.2</td>
<td></td>
<td>SM</td>
<td>Total Depth = 4.5 ft; terminated prior to refusal on bedrock.</td>
</tr>
<tr>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
<td>Collected soil sample S001 at 14:09 from excavation floor.</td>
</tr>
<tr>
<td>6.0</td>
<td></td>
<td></td>
<td></td>
<td>Excavation backfilled 01-12-2011 - 01-31-2011.</td>
</tr>
<tr>
<td>7.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Est. % of Soil**

Gravel | 10  
Coarse Sand | 70  
Med. Sand | 20  
Fine Sand |  
Silt/Clay |  

**Driller's Name:** D. Velasquez  
**Project:** ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property  
**Site:** B1-2  
**Job Number:** 1008208  
**Site:** B1-2
ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property

**Boring ID: B1ET0692**

**Borehole Diam. (in.):** 2
**Total Depth (ft):** 4.5
**Northing (ft):** 269129.83
**Easting (ft):** 1796799.80
**Drill Start Date:** 12-06-2010
**Start Time:** 14:40
**Logged By:** S. Aichner
**Easting (ft):** 1796799.80
**Drill Rig Type/Method:** Grab (hand sampling)

**Job Number:** 1008208
**Site:** B1-2

**Drill Finish Date:** 12-06-2010
**Finish Time:** 14:48
**Drilling Contractor:** MP Environmental Svcs.

**Logged By:** S. Aichner
**Reviewed By:** M. Milman-Barris, P.G.

**Surface soil and alluvium excavated to approx. 4 ft**

**Sample Retained in 6-inch stainless steel sleeve / Encores**

**Sample Interval Retained**

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>SM</th>
<th>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous [Alluvium]</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>SM</td>
<td>80 20</td>
</tr>
</tbody>
</table>

**Total Depth = 4.5 ft; terminated prior to refusal on bedrock.**

**Collected soil sample S001 at 14:48 from excavation floor.**

**Excavation backfilled 01-12-2011 - 01-31-2011.**
Total Depth = 4.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 14:56 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.

[See Trench Log ISRA-B1-2 for lithology]
Boring ID: B1ET0694

Borehole Diam. (in.): 2
Total Depth (ft): 6.5
Project: ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property

Northing (ft): 269213.16
Easting (ft): 1796803.79
Job Number: 1008208
Site: B1-2

Drill Start Date: 12-06-2010
Start Time: 13:45
Logged By: S. Aichner
Reviewed By: M. Milman-Barris, P.G.

Drill Finish Date: 12-06-2010
Finish Time: 13:56
Drilling Contractor: MP Environmental Svcs.

Depth 1st H₂O (ft): N/A
Date / Time: N/A
Drill Rig Type/Method: Grab (hand sampling)

Depth H₂O After Drilling (ft): N/A
Date / Time: N/A
Driller's Name: D. Velasquez

Comments: Surface soil and alluvium excavated to approx. 6 ft
Well Comp. Date: N/A
Completion Time: N/A

Samples: Sample retained in 6-inch stainless steel sleeve / Encores
Soil Backfill Date: N/A
Backfill Time: N/A

Drill Start Date: 12-06-2010
Start Time: 13:45
Logged By: S. Aichner
Reviewed By: M. Milman-Barris, P.G.

Start Time: 13:45
Finish Time: 13:56
Drill Rig Type/Method: Grab (hand sampling)

Total Depth (ft): 6.5
Terminated prior to refusal on bedrock.

Collected soil sample S001 at 13:56 from excavation floor.
Excavation backfilled 01-12-2011 - 01-31-2011.

[See Trench Log ISRA-B1-2 for lithology]
**LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  3/30/11**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
</tbody>
</table>

| 5 | SM | Silty Sand, dark yellowish brown (10YR 3/4), loose, moist, trace clay, micaceous [Alluvium] | 10 | 70 | 20 |

**NOTES:**
- Total Depth = 5.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 13:42 from excavation floor.
- Excavation backfilled 01-12-2011 - 01-31-2011.
### LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  3/30/11

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blown Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
</tr>
<tr>
<td>1</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 3/4), loose, moist, micaceous, contains plant roots [Alluvium]</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 1.5 ft. Collected soil sample S001 at 14:27 from excavation sidewall. Excavation backfilled 01-12-2011 - 01-31-2011.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravel</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>
Borehole Diam. (in.): 2
Total Depth (ft): 5.0
Project: ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property
Northing (ft): 269199.84
Easting (ft): 1796909.85
Job Number: 1008208
Logged By: A. Goldenberg
Drill Start Date: 12-16-2010
Start Time: 08:00
Logged By: A. Goldenberg
Reviewed By: M. Milman-Barris, P.G.
Drill Finish Date: 12-16-2010
Finish Time: 11:45
Drilling Contractor: MP Environmental Svcs.
Depth 1st H2O (ft): N/A
Date / Time: N/A
Drill Rig Type/Method: Grab (hand sampling)
Depth H2O After Drilling (ft): N/A
Date / Time: N/A
Driller’s Name: S. Fink
Comments: Surface soil and alluvium excavated to approx. 4.5 ft
Well Comp. Date: N/A
Completion Time: N/A
Samplers: Sample retained in 6-inch stainless steel sleeve / Encores
Soil Backfill Date: N/A
Backfill Time: N/A

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>USCS Soil Classification</th>
<th>Description</th>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-B1-2 for lithology]</td>
<td></td>
</tr>
</tbody>
</table>

Silty Sand with Gravel, very dark grayish brown (10YR 3/2), medium dense, moist, subangular gravel to 3 inches, few cobbles, wood and root debris, no odor or staining [Fill]

Total Depth = 5.0 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 11:45 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.

Gain - 25

Silt/Clay

Fine Sand

Med. Sand

Coarse Sand

Retained

Gravel

Blow Count/6”

Field Instrumentation:

Drilling Contractor: MP Environmental Svcs.
ISRA Confirmation Sampling 2010, Outfall 009, Boeing Property

Soil excavated to approx. 4.5 ft

Grill (hand sampling)

Silty Sand, dark yellowish brown (10YR 4/4), medium dense, moist, subangular gravel to 2-1/2 inches, no odor or staining

Total Depth = 5.0 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 13:30 from excavation floor.

Excavation backfilled 01-12-2011 - 01-31-2011.

[See Trench Log ISRA-B1-2 for lithology]
# LOG OF BORING  OUTFALL009_ISRA-2010.GPJ  BOEING.GDT  2/21/11

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blown Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.1</td>
<td>1</td>
<td></td>
<td>2</td>
<td>Silty Sand, light yellowish brown (10YR 6/4), loose, dry, micaceous, trace fine sandstone gravel [Alluvium]</td>
<td></td>
</tr>
</tbody>
</table>

- Total Depth = 1.0 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 12:06 from excavation floor.
- Excavation backfilled 11-01-2010.

[See Trench Log ISRA-IEL-1 for lithology]
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.2</td>
<td></td>
<td>SM</td>
<td>1</td>
<td>SM</td>
<td>Silty Sand</td>
<td>Silty Sand, light yellowish brown (10YR 6/4), loose, dry, micaceous, trace fine sandstone gravel [Alluvium]</td>
</tr>
</tbody>
</table>

- Total Depth = 1.0 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 11:20 from excavation floor.
- Excavation backfilled 11-01-2010.
**Boring ID: LFET0100**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 3.5

**Northing (ft):** 267875.83  
**Easting (ft):** 1794284.94

**Drill Start Date:** 08-09-2010  
**Start Time:** 12:26

**Drill Finish Date:** 08-09-2010  
**Finish Time:** 12:30

**Logged By:** S. Aichner  
**Reviewed By:** M. Milman-Barris, P.G.

**Depth 1st H2O (ft):** N/A  
**Date / Time:** N/A

**Depth H2O After Drilling (ft):** N/A  
**Date / Time:** N/A

**Comments:** Surface soil and alluvium overexcavated to approx. 3 ft

**Samplers:** Grab sample retained in 6-inch stainless steel sleeve

---

### Description

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Water Level</th>
<th>Recovery</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Est. % of Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Retained</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Gravel 20, Coarse Sand 50, Med. Sand 30, Fine Sand 0, Silt/Clay 0</td>
</tr>
</tbody>
</table>

[Silts with Gravel, light yellowish brown (10YR 6/4), loose, dry, fine shale gravel, micaceous [Alluvium]]

Total Depth = 3.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 12:30 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
**Boring ID: LFET0101**

- **Borehole Diam. (in.):** 2
- **Total Depth (ft):** 2.5
- **Project:** Outfall 009 Boeing Area 2010 ISRA Implementation
- **Nothing (ft):** 267899.43
- **Easting (ft):** 1794283.31
- **Job Number:** 1008208
- **Site:** CTLI-1A Area
- **Drill Start Date:** 08-09-2010
- **Start Time:** 12:40
- **Logged By:** S. Aichner
- **Drill Finish Date:** 08-09-2010
- **Finish Time:** 12:46
- **Drilling Contractor:** Jacob & Hefner Assoc.
- **Reviewed By:** M. Milman-Barris, P.G.
- **Depth 1st H₂O (ft):** N/A
- **Date / Time:** N/A
- **Drill Rig Type/Method:** Grab (hand sampling)
- **Depth H₂O After Drilling (ft):** N/A
- **Date / Time:** N/A
- **Driller’s Name:** S. Aichner

**Comments:**
- Surface soil and alluvium overexcavated to approx. 2 ft
- Well Comp. Date: N/A
- Completion Time: N/A
- Samplers: Grab sample retained in 6-inch stainless steel sleeve
- Soil Backfill Date: N/A
- Backfill Time: N/A

**Sample Interval Retained Sample Type Recovery (%) Blow Count/6” PID (ppm) Water Level Depth (feet) Graphic Log USCS Soil Classification Description Est. % of Soil**

- GP-GM
  - Poorly Graded Gravel with Silt and Sand, light yellowish brown (10YR 6/4), loose, dry, coarse angular shale gravel, micaceous [Alluvium]
  - Total Depth = 2.5 ft; terminated prior to refusal on bedrock.
  - Collected soil sample S001 at 12:46 from excavation floor.
  - Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
**Boring ID: LFET0102**

- **Project:** Outfall 009 Boeing Area 2010 ISRA Implementation
- **Site:** CTLI-1A Area
- **Job Number:** 1008208
- **Borehole Diam. (in.):** 2
- **Total Depth (ft):** 3.5

**Drill Start Date:** 08/10/2010  
**Start Time:** 08:34

**Logged By:** S. Aichner  
**Reviewed By:** M. Milman-Barris, P.G.

- **Drill Rig Type/Method:** Grab (hand sampling)
- **Drilling Contractor:** Jacob & Hefner Assoc.
- **Field Instrumentation:** PID

**Comments:** Surface soil and alluvium overexcavated to approx. 3 ft

**Easting (ft):** 267833.36  
**Northing (ft):** 1794295.18

**Sample Interval Retained**  
- **Sample Type:** 6-inch stainless steel sleeve
- **Recovery (%):** N/A
- **Blow Count/6":** N/A
- **PID (ppm):** N/A
- **Water Level:** N/A

**Description:** [See Trench Log ISRA-CTLI-1A for lithology]

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>USCS Soil Classification</th>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Silts/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>SM</td>
<td>20</td>
<td>50</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Depth 1st H2O (ft):** N/A  
- **Date / Time:** N/A
- **Completion Time:** N/A

**Total Depth = 3.5 ft; terminated prior to refusal on bedrock.**

- **Collected soil sample S001 at 08:40 from excavation floor.**
- **Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.**

**Well Comp. Date:** N/A  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A
Boring ID: LFET0103

Borehole Diam. (in.): 2
Total Depth (ft): 2.5

Project: Outfall 009 Boeing Area 2010 ISRA Implementation

Northing (ft): 267834.22
Easting (ft): 1794266.66

Job Number: 1008208
Site: CTLI-1A Area

Drill Start Date: 08-10-2010
Start Time: 08:46
Logged By: S. Aichner
Reviewed By: M. Milman-Barris, P.G.

Drill Finish Date: 08-10-2010
Finish Time: 08:58
Drilling Contractor: Jacob & Hefner Assoc.
Field Instrumentation: PID

Depth 1st H₂O (ft): N/A
Date / Time: N/A
Drill Rig Type/Method: Grab (hand sampling)

Depth H₂O After Drilling (ft): N/A
Date / Time: N/A
Driller's Name: S. Aichner

Comments: Surface soil and alluvium overexcavated to approx. 2 ft

Well Comp. Date: N/A
Completion Time: N/A

Samplers: Grab sample retained in 6-inch stainless steel sleeve

Soil Backfill Date: N/A
Backfill Time: N/A

Depth 1st H₂O (ft): N/A
Date / Time: N/A

Drill Start Date: N/A
Drill Finish Date: N/A

Well Comp. Date: N/A
Completion Time: N/A

Samplers: Grab sample retained in 6-inch stainless steel sleeve

Soil Backfill Date: N/A
Backfill Time: N/A

Surface soil and alluvium overexcavated to approx. 2 ft

Grab sample retained in 6-inch stainless steel sleeve

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

Silty Sand with Gravel, yellowish brown (10YR 5/4), loose, dry, fine shale gravel, micaceous [Alluvium]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 08:58 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
**Boring ID: LFET0104**

**Project:** Outfall 009 Boeing Area 2010 ISRA Implementation

**Site:** CTLI-1A Area

**Job Number:** 1008208

**Logged By:** S. Aichner

**Reviewed By:** M. Milman-Barris, P.G.

---

**Easting (ft): 1794251.99**

**Northing (ft): 267834.71**

**Drill Start Date:** 08-10-2010

**Drill Finish Date:** 08-10-2010

**Start Time:** 09:10

**Finish Time:** 09:17

**Drill Rig Type/Method:** Grab (hand sampling)

**Driller’s Name:** S. Aichner

**Comments:** Surface soil and alluvium overexcavated to approx. 2 ft

**Sample Interval:** Retained in 6-inch stainless steel sleeve

**Sample Type:** Grab sample retained in 6-inch stainless steel sleeve

**Depth 1st H₂O (ft): N/A**

**Depth H₂O After Drilling (ft): N/A**

**Date / Time:** N/A

---

**Borehole Diam. (in.): 2**

**Total Depth (ft): 2.5**

**PID (ppm):**

**Field Instrumentation:** PID

**Drill Start Date:** 08-10-2010

**Drill Finish Date:** 08-10-2010

**Well Comp. Date:** N/A

**Completion Time:** N/A

**Drill Start Date:** 08-10-2010

**Drill Finish Date:** 08-10-2010

**Start Time:** 09:10

**Finish Time:** 09:17

**Date / Time:** N/A

---

**Sample Interval**

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-CTL1-1A for lithology]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 2.5 ft; terminated prior to refusal on bedrock.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Collected soil samples S001 and duplicate D001 at 09:17 from excavation floor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.</td>
</tr>
</tbody>
</table>

**Est. % of Soil**

<table>
<thead>
<tr>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Silt/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tr</td>
<td>10</td>
<td>50</td>
<td>40</td>
</tr>
</tbody>
</table>

---

**Surface soil and alluvium overexcavated to approx. 2 ft**

**Grab sample retained in 6-inch stainless steel sleeve**

**Logged By:** S. Aichner

**Reviewed By:** M. Milman-Barris, P.G.
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine gravel [Alluvium]</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>[See Trench Log ISRA-CTL1-A for lithology]</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 3.5 ft; terminated prior to refusal on bedrock.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Collected soil sample S001 at 09:51 from excavation floor.</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.</td>
</tr>
</tbody>
</table>

**Est. % of Soil**

- **Gravel**: 60%
- **Coarse Sand**: 40%
**S. Aichner**

**Grab (hand sampling)**

**CTLI-1A Area**

**40 60tr**

**Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]**

**Total Depth = 0.5 ft.**

Collected soil sample S001 at 10:03 from excavation sidewall.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
**Boring ID**: LFET0107

**Project**: Outfall 009 Boeing Area 2010 ISRA Implementation

**Site**: CTLI-1A Area

<table>
<thead>
<tr>
<th>Borehole Diam. (in.)</th>
<th>2</th>
<th>Total Depth (ft)</th>
<th>2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northing (ft)</td>
<td>267847.10</td>
<td>Easting (ft)</td>
<td>1794290.30</td>
</tr>
<tr>
<td>Drill Start Date</td>
<td>08-10-2010</td>
<td>Start Time</td>
<td>10:00</td>
</tr>
<tr>
<td>Drill Finish Date</td>
<td>08-10-2010</td>
<td>Finish Time</td>
<td>10:15</td>
</tr>
<tr>
<td>Depth 1st H₂O (ft)</td>
<td>N/A</td>
<td>Date / Time</td>
<td>N/A</td>
</tr>
<tr>
<td>Depth H₂O After Drilling (ft)</td>
<td>N/A</td>
<td>Date / Time</td>
<td>N/A</td>
</tr>
<tr>
<td>Driller’s Name</td>
<td>S. Aichner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>Surface soil and alluvium overexcavated to approx. 2 ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samplers</td>
<td>Grab sample retained in 6-inch stainless steel sleeve</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Field Instrumentation**: PID

**Drilling Contractor**: Jacob & Hefner Assoc.

**Drill Rig Type/Method**: Grab (hand sampling)

**Job Number**: 1008208

**Reviewed By**: M. Milman-Barris, P.G.

**Logged By**: S. Aichner

**Sample Interval**

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Easting (ft)**: 1794290.30
- **N/A**: Not applicable
- **PID**:
- **SM**:
- **Graphite Log**
- **USCS Soil Classification**
- **Well Comp. Date**: N/A
- **Completion Time**: N/A
- **Est. % of Soil**
- **Gravel**: 10
- **Coarse Sand**: 50
- **Med. Sand**: 40
- **Fine Sand**: 0
- **Silt/Clay**: 0

**Comments**:

- Total Depth = 2.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 10:15 from excavation floor.
- Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

**Log of Boring OUTFALL009 ISRA-2010 GPJ Boeing GDT 2/21/11**
**Boring ID:** LFET0108

- **Project:** Outfall 009 Boeing Area 2010 ISRA Implementation
- **Site:** CTLI-1A Area
- **Job Number:** 1008208
- **Logged By:** M. Milman-Barris, P.G.

**Borehole Diam. (in.):** 2
- **Total Depth (ft):** 2.5

**Northing (ft):** 267855.02
- **Easting (ft):** 1794263.86

**Drill Start Date:** 08-10-2010
- **Start Time:** 10:26
- **Drilling Contractor:** Jacob & Hefner Assoc.
- **Field Instrumentation:** PID

**Drill Finish Date:** 08-10-2010
- **Finish Time:** 10:30

**Depth 1st H2O (ft):** N/A
- **Date / Time:** N/A
- **Drill Rig Type/Method:** Grab (hand sampling)

**Depth H2O After Drilling (ft):** N/A
- **Date / Time:** N/A

**Driller’s Name:** S. Aichner

**Comments:**  Surface soil and alluvium overexcavated to approx. 2 ft
- **Well Comp. Date:** N/A
- **Completion Time:** N/A

**Easting (ft):** 267855.02
- **Start Time:** 10:26

**Backfill Time:** N/A

**Northing (ft):** 1794263.86
- **Finish Time:** 10:30

**Recommended Backfill:** N/A

**Comments:** Collected soil sample S001 at 10:30 from excavation floor.

**Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.**

---

**Sample Interval Retained:** Grab sample retained in 6-inch stainless steel sleeve

**Sample Type:** Grab sample retained in 6-inch stainless steel sleeve

**Recovery (%)**

<table>
<thead>
<tr>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Est. % of Soil**

<table>
<thead>
<tr>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Silt/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>tr</td>
<td>60</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Boring ID: LFET0109

Borehole Diam. (in.): 2  
Total Depth (ft): 3.5  
Project: Outfall 009 Boeing Area 2010 ISRA Implementation

Northing (ft): 267850.22  
Easting (ft): 1794243.30  
Job Number: 1008208  
Site: CTLI-1A Area

Drill Start Date: 08-10-2010  
Start Time: 10:38  
Logged By: S. Aichner

Drill Finish Date: 08-10-2010  
Finish Time: 10:42  
Drilling Contractor: Jacob & Hefner Assoc.

Depth 1st H₂O (ft): N/A  
Date / Time: N/A  
Drill Rig Type/Method: Grab (hand sampling)

Depth H₂O After Drilling (ft): N/A  
Date / Time: N/A  
Driller's Name: S. Aichner

Comments: Surface soil and alluvium overexcavated to approx. 3 ft

Comments: [See Trench Log ISRA-CTL1-A for lithology]

Surface soil and alluvium overexcavated to approx. 3 ft.

Drill Start Date: 08-10-2010  
Drill Finish Date: 08-10-2010

Comments: [See Trench Log ISRA-CTL1-A for lithology]

Comments: Total Depth = 3.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 10:42 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

Sample Interval

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID ppm</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
<td>GP-GM</td>
<td>3</td>
<td></td>
<td>Poorly Graded Gravel with Silt and Sand, light yellowish brown (10YR 6/4), loose, dry, fine and coarse angular shale gravel, micaceous [Alluvium]</td>
<td>60 30 10</td>
</tr>
<tr>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-CTL1-A for lithology]</td>
<td></td>
</tr>
</tbody>
</table>

Total Depth = 3.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 10:42 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>2.5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

[See Trench Log ISRA-CTLI-1A for lithology]

- Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 11:03 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

Comments: Surface soil and alluvium overexcavated to approx. 2 ft

Well Comp. Date: N/A  Completion Time: N/A

Samplers: Grab sample retained in 6-inch stainless steel sleeve

Soil Backfill Date: N/A  Backfill Time: N/A

Est. % of Soil

- Gravel: tr
- Coarse Sand: 60
- Med. Sand: 40
- Fine Sand: 0
- Silt/Clay: 0

LOG OF BORING OUTFALL009_ISRA-2010.GPJ  BOEING.GDT 2/21/11
**Boring ID: LFET0111**

- **Borehole Diam. (in.):** 2
- **Total Depth (ft):** 2.5
- **Job Number:** 1008208
- **Site:** CTLI-1A Area

**Comments:**
- Surface soil and alluvium overexcavated to approx. 2 ft
- Collected soil sample S001 at 11:16 from excavation floor.
- Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

**Depth (feet):**
- [See Trench Log ISRA-CTLI-1A for lithology]

**Sample Interval Retained:**
- [S]

**Sample Recovery:**
- 0.1

**Blow Count/6” PID (ppm):**
- GP-GM

**USCS Soil Classification:**
- Poorly Graded Gravel with Silt and Sand, light yellowish brown (10YR 6/4), loose, dry, fine shale gravel, micaceous [Alluvium]

**Description:**
- Total Depth = 2.5 ft; terminated prior to refusal on bedrock.
- Collected soil sample S001 at 11:16 from excavation floor.
- Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
Boring ID: LFET0112

Easting (ft): 1794297.59  Site: CTLI-1A Area

Date / Time: 50  10  Completion Time: N/A

Comments: Surface soil and alluvium overexcavated to approx. 2 ft

Depth H2O After Drilling (ft): N/A  Backfill Time: N/A

Well Comp. Date: N/A

Driller's Name: S. Aichner

Easting (ft): 267863.16  Backfill Date: N/A

Job Number: 1008208

Logged By: S. Aichner  Reviewed By: M. Milman-Barris, P.G.

Easting (ft): 1794297.59  Start Time: 11:23

Borehole Diam. (in.): 2

Drill Finish Date: 08-10-2010  Finish Time: 11:30

Drill Rig Type/Method: Grab (hand sampling)

Depth 1st H2O (ft): N/A  Summary: N/A

Comments: [See Trench Log ISRA-CTL1-A for lithology]

Drill Start Date: 08-10-2010  Start Time: 11:23

Shale gravel [Alluvium]

Easting (ft): 1794297.59  Drilling Contractor: Jacob & Hefner Assoc.

Sample Interval Retained Sample Type Recovery (%) Blow Count/gr" PID (ppm) Depth (feet) Graphic Log

Depth after Drilling (ft): N/A

USCS Soil Classification Description

Silty Sand, light yellowish brown (10YR 6/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 11:30 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

<table>
<thead>
<tr>
<th>Sample Interval Retained Sample Type Recovery (%) Blow Count/gr&quot; PID (ppm) Depth (feet) Graphic Log</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SM</td>
<td>Silty Sand, light yellowish brown (10YR 6/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
</tr>
</tbody>
</table>
| 3 | | Total Depth = 2.5 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 11:30 from excavation floor. Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
**Boring ID: LFET0113**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 2.5  
**Project:** Outfall 009 Boeing Area 2010 ISRA Implementation  
**Northing (ft):** 267887.00  
**Easting (ft):** 1794298.75  
**Job Number:** 1008208  
**Site:** CTLI-1A Area  
**Drill Start Date:** 08-10-2010  
**Start Time:** 11:38  
**Logged By:** S. Aichner  
**Drill Finish Date:** 08-10-2010  
**Finish Time:** 11:46  
**Drilling Contractor:** Jacob & Hefner Assoc.  
**Drill Rig Type/Method:** Grab (hand sampling)  
**Reviewed By:** M. Milman-Barris, P.G.  
**Depth 1st H₂O (ft):** N/A  
**Date / Time:** N/A  
**Depth H₂O After Drilling (ft):** N/A  
**Date / Time:** N/A  
**Driller’s Name:** S. Aichner  
**Comments:** Surface soil and alluvium overexcavated to approx. 2 ft  
**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Sample #** | **Sample Type** | **Recovery (%)** | **Blow Count/6”** | **PID** (ppm) | **Water Level** | **USCS Soil Classification** | **Description** | **Gravel** | **Coarse Sand** | **Med. Sand** | **Fine Sand** | **Silt/Clay** |
---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| | | | | | | | [See Trench Log ISRA-CTL1-1A for lithology] | | | | | |
| S | 0.3 | GP-GM | Poorly Graded Gravel with Silt and Sand, light yellowish brown (10YR 6/4), loose, dry, fine shale gravel, micaceous [Alluvium] | 60 | 30 | 10 |
| | | | | | | | Total Depth = 2.5 ft; terminated prior to refusal on bedrock. Collected soil sample S001 at 11:46 from excavation floor. Excavation recontoured 10-27-2010 and 10-28-2010 without backfill. | | | | | |
Borehole Diam. (in.): 2  Total Depth (ft): 2.5  Project: Outfall 009 Boeing Area 2010 ISRA Implementation
Northing (ft): 267873.96  Easting (ft): 1794273.93  Job Number: 1008208  Site: CTLI-1A Area
Drill Start Date: 08-10-2010  Start Time: 11:48  Logged By: S. Aichner  Reviewed By: M. Milman-Barris, P.G.
Drill Finish Date: 08-10-2010  Finish Time: 11:59  Drilling Contractor: Jacob & Hefner Assoc.  Field Instrumentation: PID
Depth 1st H₂O (ft): N/A  Date / Time: N/A  Drill Rig Type/Method: Grab (hand sampling)
Depth H₂O After Drilling (ft): N/A  Date / Time: N/A  Driller’s Name: S. Aichner
Comments: Surface soil and alluvium overexcavated to approx. 2 ft  Well Comp. Date: N/A  Completion Time: N/A
Samplers: Grab sample retained in 6-inch stainless steel sleeve  Soil Backfill Date: N/A  Backfill Time: N/A

<table>
<thead>
<tr>
<th>Sample Interval</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>S</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>[See Trench Log ISRA-CTLI-1A for lithology]</td>
</tr>
</tbody>
</table>

- Silty Sand, yellowish brown (10YR 5/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.
Collected soil sample S001 at 11:59 from excavation floor.
Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
### Boring Log

**Borehole Diam. (in.):** 2

**Total Depth (ft):** 3.5

**Northing (ft):** 267913.90

**Easting (ft):** 1794337.89

**Drill Start Date:** 08-10-2010

**Start Time:** 12:08

**Logged By:** S. Aichner

**Drill Finish Date:** 08-10-2010

**Finish Time:** 12:10

**Drilling Contractor:** Jacob & Hefner Assoc.

**Logged By:** S. Aichner

**Date / Time:** N/A

**Review:** N/A

**Drill Rig Type/Method:** Grab (hand sampling)

**Date / Time:** N/A

**Review:** N/A

**Sample Type:** Grab sample retained in 6-inch stainless steel sleeve

**Sample Interval:** 0

**Sample Retained:** Surface soil and alluvium overexcavated to approx. 3 ft

**Well Comp. Date:** N/A

**Completion Time:** N/A

**Sample Recovery:** 0.3

**Blow Count/6":** 0.3

**PID (ppm):** 0.3

**Water Level:** N/A

**Sample Interval:** 0

**Sample Retained:** Grab sample retained in 6-inch stainless steel sleeve

**Well Comp. Date:** N/A

**Completion Time:** N/A

**Sample Recovery:** 0.3

**Blow Count/6":** 0.3

**PID (ppm):** 0.3

**Water Level:** N/A

**Sample Interval:** 0

**Sample Retained:** Surface soil and alluvium overexcavated to approx. 3 ft

**Well Comp. Date:** N/A

**Completion Time:** N/A

**Sample Recovery:** 0.3

**Blow Count/6":** 0.3

**PID (ppm):** 0.3

**Water Level:** N/A

### Description

**[See Trench Log ISRA-CTL1-A for lithology]**

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Sample Interval</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Sample Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>SM</td>
<td>60</td>
<td>0.3</td>
<td>0.3</td>
<td>N/A</td>
<td>Grab sample retained in 6-inch stainless steel sleeve</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous [Alluvium]</td>
</tr>
</tbody>
</table>

- **Total Depth = 3.5 ft; terminated prior to refusal on bedrock.**
- **Collected soil sample S001 at 12:10 from excavation floor.**
- **Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.**
**MWH**

**Boring ID: LFET0116**

**Borehole Diam. (in.):** 2  
**Total Depth (ft):** 3.5  
**Project:** Outfall 009 Boeing Area 2010 ISRA Implementation  
**Northing (ft):** 267894.95  
**Easting (ft):** 1794319.46  
**Job Number:** 1008208  
**Site:** CTLI-1A Area  
**Drill Start Date:** 08-10-2010  
**Drill Finish Date:** 08-10-2010  
**Logged By:** S. Aichner  
**Drilling Contractor:** Jacob & Hefner Assoc.  
**Field Instrumentation:** PID  
**Reviewed By:** M. Milman-Barris, P.G.  
**Comments:** Surface soil and alluvium overexcavated to approx. 3 ft  
**Grab sample retained in 6-inch stainless steel sleeve**  
**Samplers:** Grab sample retained in 6-inch stainless steel sleeve  
**Well Comp. Date:** N/A  
**Completion Time:** N/A  
**Soil Backfill Date:** N/A  
**Backfill Time:** N/A  

### Sample Interval Retained

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6”</th>
<th>Water Level</th>
<th>PID (ppm)</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SM</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine shale gravel [Alluvium]</td>
<td></td>
</tr>
</tbody>
</table>

**PID**

| 1008208 |

- **Total Depth:** 3.5 ft; terminated prior to refusal on bedrock.
- **Collected soil sample S001 at 12:24 from excavation floor.**
- **Excavation recounted 10-27-2010 and 10-28-2010 without backfill.**

**Sheet 1 of 1**
## Boring Log

**Boring ID:** LFET0117

**Project:** Outfall 009 Boeing Area 2010 ISRA Implementation

**Site:** CTLI-1A Area

**Logged By:** S. Aichner

**Drilled By:** Jacob & Hefner Assoc.

**Reviewed By:** M. Milman-Barris, P.G.

### Site Information

- **Easting:** 1794234.61
- **Northing:** 267911.34
- **Drill Start Date:** 08-10-2010
- **Drill Finish Date:** 08-10-2010
- **Well Comp. Date:** N/A
- **Soil Backfill Date:** N/A
- **Driller’s Name:** S. Aichner
- **Job Number:** 1008208
- **Drilling Contractor:** Jacob & Hefner Assoc.
- **Drill Rig Type/Method:** Grab (hand sampling)
- **Field Instrumentation:** PID

### Sample Information

- **Sample Type:** Grab sample retained in 6-inch stainless steel sleeve
- **Sample Interval:** 0
- **Sample Recovery (%)**
- **Blow Count/6” (ppm):**
- **PID:** Retained
- **Water Level:**
- **Depth (feet):**
- **USCS Soil Classification:**
- **Description:**

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blown Count/6” (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>S</td>
<td>0.2</td>
<td>SM</td>
</tr>
</tbody>
</table>

- **Silty Sand, dark yellowish brown (10YR 4/4), loose, moist, micaceous, trace fine shale gravel [Alluvium]**

- **Total Depth = 3.5 ft; terminated prior to refusal on bedrock.**
- **Collected soil sample S001 at 12:45 from excavation floor.**
- **Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.**

### Est. % of Soil

<table>
<thead>
<tr>
<th>Gravel</th>
<th>Coarse Sand</th>
<th>Med. Sand</th>
<th>Fine Sand</th>
<th>Sil/Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>tr</td>
<td>60</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Borehole Diam. (in.): 2
Total Depth (ft): 3.0
Project: Outfall 009 Boeing Area 2010 ISRA Implementation
Northing (ft): 267906.61
Easting (ft): 1794281.15
Job Number: 1008208
Drill Start Date: 09-23-2010
Start Time: 11:25
Logged By: S. Valenzuela
Drill Finish Date: 09-23-2010
Finish Time: 11:30
Reviewed By: M. Milman-Barris, P.G.
Drill Rig Type/Method: Grab (hand sampling)
Depth 1st H2O (ft): N/A
Date / Time: N/A
Depth H2O After Drilling (ft): N/A
Date / Time: N/A
Driller's Name: S. Valenzuela
Comments: Sidewall sample on north face of additional excavation area

Logged By: S. Valenzuela
Reviewed By: M. Milman-Barris, P.G.

Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, trace fine gravel
[Alluvium]

[See Trench Log ISRA-CTLI-1A for lithology]

Total Depth = 3.0 ft; terminated prior to refusal on bedrock.
Collected soil sample S001 at 11:30 from excavation floor.
Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
Borehole Diam. (in.): 2
Total Depth (ft): 2.5

Northing (ft): 267993.39
Easting (ft): 1794253.85

Drill Start Date: 08-09-2010
Start Time: 12:57

Logged By: S. Aichner

Drill Finish Date: 08-09-2010
Finish Time: 13:03

Drilling Contractor: Jacob & Hefner Assoc.
Field Instrumentation: PID

Drill Rig Type/Method: Grab (hand sampling)

Easting (ft):

Start Time:

Finish Time:

Date / Time:

N/A

Job Number: 1008208

Site: CTLI-1B Area

Comments: Surface soil and alluvium overexcavated to approx. 2 ft

Logged By: M. Milman-Barris, P.G.

Reviewed By: S. Aichner

PID

Boring ID: LFET0200

Depth 1st H₂O (ft):

Date / Time:

Depth H₂O After Drilling (ft):

Date / Time:

N/A

N/A

Driller’s Name: S. Aichner

Well Comp. Date: N/A

Completion Time: N/A

Samplers: Grab sample retained in 6-inch stainless steel sleeve

Soil Backfill Date: N/A

Backfill Time: N/A

Well Completion Date:

Soil Backfill Date:

N/A

N/A

Field Instrumentation:

Samplers:

Grab sample retained in 6-inch stainless steel sleeve

[See Trench Log ISRA-CTL1-B for lithology]

[Detailed description of soil types and conditions]

Total Depth = 2.5 ft; terminated prior to refusal on bedrock.

Collected soil sample S001 at 13:03 from excavation floor.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.
Borehole Diam. (in.): 2  Total Depth (ft): 0.5  Project: Outfall 009 Boeing Area 2010 ISRA Implementation
Northing (ft): 268051.20  Easting (ft): 1794249.95  Job Number: 1008208  Site: CTLI-1B Area
Drill Start Date: 08-09-2010  Start Time: 13:10  Logged By: S. Aichner
Drill Finish Date: 08-09-2010  Finish Time: 13:16  Reviewed By: M. Milman-Barris, P.G.
Depth 1st H₂O (ft): N/A  Date / Time: N/A  Driller’s Name: S. Aichner
Depth H₂O After Drilling (ft): N/A  Date / Time: N/A  Drill Rig Type/Method: Grab (hand sampling)

Comments: Topsoil and weeds  Well Comp. Date: N/A  Completion Time: N/A
Samplers: Grab sample retained in 6-inch stainless steel sleeve  Soil Backfill Date: N/A  Backfill Time: N/A

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Depth 1st H₂O After Drilling (ft): N/A</th>
<th>Depth H₂O After Drilling (ft): N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>S</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SM</td>
<td>0.5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Description**

Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine gravel [Alluvium]

Total Depth = 0.5 ft.

Collected soil sample S001 at 13:16 from excavation sidewall; removed overturned grass and weeds prior to sampling.

Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.

**Est. % of Soil**

- **Gravel**: 60%
- **Coarse Sand**: 40%
- **Med. Sand**: 0%
- **Fine Sand**: 0%
- **Silt/Clay**: 0%

**Well Comp. Date**: N/A  **Soil Backfill Date**: N/A

**Comments**: Topsoil and weeds

**Samplers**: Grab sample retained in 6-inch stainless steel sleeve
**LOG OF BORING OUTFALL009 ISRA-2010.GPJ  BOEING.GDT  2/21/11**

<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>PID (ppm)</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-CTL-1B for lithology]</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine gravel [Alluvium]</td>
</tr>
<tr>
<td>2</td>
<td>SM</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Depth = 2.5 ft; terminated prior to refusal on bedrock. Collected soil samples S001 and S001SP at 13:43 from excavation floor. Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.</td>
</tr>
</tbody>
</table>

**Notes:**
- Surface soil and alluvium overexcavated to approx. 2 ft
- Grab sample retained in 6-inch stainless steel sleeve
- Well Comp. Date: N/A
- Completion Time: N/A
- Soil Backfill Date: N/A
- Backfill Time: N/A
- S. Aichner

**Additional Information:**
- **Borehole Diam. (in.):** 2
- **Total Depth (ft):** 2.5
- **Job Number:** 1008208
- **Date / Time:** 267970.62 08-10-2010
- **Logged By:** S. Aichner
- **Reviewed By:** M. Milman-Barris, P.G.
- **Well Comp. Date:** N/A
- **Completion Time:** N/A
- **Backfill Time:** N/A

**Location:** Outfall 009 Boeing Area 2010 ISRA Implementation

**Contractor:** Jacob & Hefner Assoc.

**Soil Backfill Date:** N/A

**Backfill Time:** N/A
<table>
<thead>
<tr>
<th>Sample Interval Retained</th>
<th>Sample Type</th>
<th>Recovery (%)</th>
<th>Blow Count/6&quot;</th>
<th>Water Level</th>
<th>Depth (feet)</th>
<th>Graphic Log</th>
<th>USCS Soil Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>[See Trench Log ISRA-CTL1-B for lithology]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>SM</td>
<td>Silty Sand, dark yellowish brown (10YR 4/4), loose, dry, micaceous, trace fine gravel [Alluvium]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>Total Depth = 2.5 ft; terminated prior to refusal on bedrock.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td>Collected soil sample S001 at 13:57 from excavation floor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>Excavation recontoured 10-27-2010 and 10-28-2010 without backfill.</td>
</tr>
</tbody>
</table>

Well Comp. Date: N/A
Completion Time: N/A

Surface soil and alluvium overexcavated to approx. 2 ft
Grab sample retained in 6-inch stainless steel sleeve

Est. % of Soil
Gravel: 60
Coarse Sand: 40
Med. Sand: 0
Fine Sand: 0
Silt/Clay: 0