Brown and Caldwell

Carson City, Nevada

BORING LOG

Project Name: OU4 Phase 1 - Yerington Mine Evaporation Ponds **Project Number:** 136742

Soil Boring: [X] Monitoring Well: [ ] Piezometer: [ ] **Boring/Well Name:** OU4-UEP-06 **Sheet** 1 **of** 2

Boring Location: OU4 Unlined Evaporation Ponds

Drilling Contractor: WDC

Drilling Equipment: Geoprobe

Drilling Method: Direct-Push

Sampling Method: Continuous Core **Driller:** Rick Smedley

Well Seal: N/A **Borehole Diameter:** 2"

Logged By: C. Haley **Drilling Fluid:** N/A

Northing: 1554567.6 **Easting:** 323363.44

Top of PVC Elevation:

Ground Surface Elevation: 4381.58 feet amsl

Date Started: 10-14-08 **Date Finished:** 10-14-08

Completed Depth: 40 ft bgs **Water Depth:** 35 ft bgs

WELL CONSTRUCTION

Type and Diameter of Well Casing: N/A

Slot Size: N/A **Filter Material:** Cement grout

Depth (ft)	Elevation (famsl)	USCS Group Symbol	Material Description	Sample Type I Name	Sample Type I Location	Sample Type II Name	Sample Type II Location	Lithology	Remarks
0	4380	GW	**GRAVEL with sand and silt (VLT Roadway) (0 - 14.5)** Used to construct pond berm/roadway (fill). Gravel is 3/4"-minus crushed rock.						Description of drilled cuttings based on ASTM Method D-2488 (the visual-manual procedure), grain-size determinations and nomenclature based on the Unified Soil Classification System. Horizontal Survey data is expressed in the Nevada State Plane system, Nevada West zone, in feet. Sharp contacts indicated by solid lines, gradational contacts indicated by dashed line. All depths are below land surface unless stated otherwise. Type 1 Samples are representative of geochemical and geotechnical soil samples as well as groundwater samples. Type 2 Samples are representative of meteoric water mobility soil samples.
5	4375								
10	4370								
15		SM	**Silty Sand (Native Soil) (14.5 - 16)** Native Soil. Sample: OU4-UEP-06A-SC from 15.5 to 20 feet.	OU4-UEP-06A-SC					
	4365	ML	**SILT with clay (16 - 19)** High clay content.						
		SM	**SAND with some silt (19 - 23)**						

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Depth (ft)	Elevation (famsl)	USCS Group Symbol	Material Description	Sample Type I Name	Sample Type I Location	Sample Type II Name	Sample Type II Location	Lithology	Remarks
	4360								
		SM	**Silty SAND (23 - 25)**						
25		ML	**SILT with clay (25 - 29)**						
	4355								
		CL	**CLAY (29 - 30)** Moist.						
30		SW	**SAND (30 - 33)** Fine- to coarse-grained sand. Sample: OU4-UEP-06B-SC from 30-35 feet.	OU4-UEP-06B-SC					
	4350								
		ML	**Sandy SILT (33 - 35)** Becomes wet at 35 feet.						
35		SM	**Silty SAND (35 - 40)** Sample: OU4-UEP-06-GW from 36-40 feet. Groundwater grab sample from hydropunch screen using bailer.	OU4-UEP-06-GW					
	4345								
40			Bottom of Borehole at 40 feet below ground surface.						
	4340								
45									