

Project Name: Yerington Second Step Hydrogeologic Framework Assessment

Project Number: 132025

Soil Boring: Monitoring Well: Piezometer:

Boring/Well Number: B/W-26D

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Boring Location: Just outside of the mine site on the southwest side.		Northing:	Easting:
Drilling Contractor: Boart Longyear	Driller: C. Hillman	Top of PVC Elevation: feet amsl	
Drilling Equipment: GP24-300RS	Borehole Diameter: 6-inches	Ground Surface Elevation: feet amsl	
Drilling Method: Sonic	Drilling Fluid: Water	Date Started: 2/3/08	Date Finished: 2/6/08
Sampling Method: Core Barrel		Completed Depth: 150 fbgs	Water Depth: fbmp
Well Seal: Bentonite and Cement		WELL CONSTRUCTION	
Logged By: T. Ta		Type and Diameter of Well Casing: NA	
		Slot Size: 0.010 inch	Filter Material: #10-20 Silica Sand

Depth (ft)	Elevation (ft)	USCS Group Symbol	Material Description	Sample Name	Sample Location	Lithology	Well Construction	Remarks
5		SC	Clayey Sand with Gravel (0 - 2.5) Moist, firm, no odor. Primarily coarse to fine sand with ~25% gravel to 75 mm and ~35% silt and clay. The sand and gravel are angular. The fines have low plasticity with medium toughness, and have a dark brown color.					<p>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.</p> <p>Horizontal Survey data is expressed in the Nevada State Plane system, Nevada West zone, in feet.</p> <p>Sharp contacts indicated by solid lines, gradational contacts indicated by dashed line.</p> <p>All depths are below land surface unless stated otherwise.</p> <p>WELL DESIGN for B/W-26D: PVC Stickup: feet Cement - Bentonite Grout: NA feet Bentonite Chips: NA feet No. 60 Silica Sand: NA feet #10-20 Silica Sand Filter Pack: NA feet 2-inch Nominal Schedule 80 PVC 0.010 Slotted Screen: NA feet Native Collapse: NA feet Additional Bentonite Fill: NA feet</p> <p>Number of wells at this location: 0 Screen intervals for paired wells are labeled at the installed depths.</p>
		GM	Silty Gravel with Sand (2.5 - 10) Dry, very soft, no odor. Primarily gravel to 40 mm with ~40% medium to fine grained sand and ~15% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					
		SM	Silty Sand with Gravel (10 - 12.5) Moist, very soft, no odor. Primarily medium to fine sand with ~25% gravel to 30 mm and ~35% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					
		SM	Silty Sand (12.5 - 15) Moist, very soft, no odor. Primarily medium to fine sand with ~10% gravel to 30 mm and ~30% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					

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Depth (ft)	Elevation (ft)	USCS Group Symbol	Material Description	Sample Name	Sample Location	Lithology	Well Construction	Remarks
		SM	Silty Sand with Gravel (15 - 17.5) Moist, soft, no odor. Primarily medium to fine sand with ~30% gravel to 40 mm and ~25% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					
		SM	Silty Sand with Gravel (17.5 - 20) Moist, soft, no odor. Primarily medium to fine sand with ~15% gravel to 20 mm and ~35% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					
20		SM	Silty Sand with Gravel (20 - 22.5) Moist, soft, no odor. Primarily coarse to fine sand with ~35% gravel to 50 mm and ~25% silt and clay. The sand and gravel are angular. The fines are non-plastic with low toughness, and have a brown color.					
		SM	Silty Sand with Gravel (22.5 - 25) Moist, soft, no odor. Primarily coarse to fine sand with ~35% gravel to 50 mm and ~30% silt and clay. The sand and gravel are angular. The fines have low plasticity and toughness, and have a brown color.					
25		SM	Silty Sand with Gravel (25 - 27.5) Moist, soft, no odor. Primarily coarse to fine sand with ~20% gravel to 20 mm and ~40% silt and clay. The sand and gravel are angular. The fines have low plasticity and toughness, and have a brown color.					
		SM	Silty Sand with Gravel (27.5 - 30) Moist, soft, no odor. Primarily medium to fine sand with ~20% gravel to 50 mm and ~20% silt and clay. The sand and gravel are angular. The fines have low plasticity and toughness, and have a brown color.					
30		SM	Silty Sand with Gravel (30 - 37.5) Moist, soft, no odor. Primarily medium to fine sand with ~20% gravel to 30 mm and ~20% silt and clay. The sand and gravel are angular. The fines have low plasticity and toughness, and have a brown color.					

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35								
		SM	Silty Sand with Gravel (37.5 - 40) Moist, soft, no odor. Primarily coarse to fine sand with ~20% gravel to 20 mm and ~30% silt and clay. The sand and gravel are angular to subangular. The fines have low plasticity and toughness, and have a brown color.					
40		SM	Silty Sand with Gravel (40 - 42.5) Moist, soft, no odor. Primarily coarse to fine sand with ~20% gravel to 30 mm and ~30% silt and clay. The sand and gravel are angular to subangular. The fines have low plasticity and toughness, and have a brown color.					
		SM	Silty Sand with Gravel (42.5 - 45) Moist, soft, no odor. Primarily coarse to fine sand with ~25% gravel to 30 mm and ~25% silt and clay. The sand and gravel are angular to subangular. The fines have low plasticity and toughness, and have a brown color.					
45		SM	Silty Sand with Gravel (45 - 47.5) Moist, soft, no odor. Primarily coarse to fine sand with ~20% gravel to 30 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.					
		SM	Silty Sand with Gravel (47.5 - 52.5) Moist, soft, no odor. Primarily coarse to fine sand with ~20% gravel to 40 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.					
50		SM	Silty Sand (52.5 - 55)					

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55			Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 20 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.			[Lithology Pattern]		
		SM	Silty Sand (55 - 60) Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 25 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.			[Lithology Pattern]		
60		SM	Silty Sand (60 - 65) Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 15 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.			[Lithology Pattern]		
65		SM	Silty Sand (65 - 67.5) Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 18 mm and ~35% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.			[Lithology Pattern]		
70		SM	Silty Sand (67.5 - 72.5) Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 10 mm and ~35% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.			[Lithology Pattern]		

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Depth (ft)	Elevation (ft)	USCS Group Symbol	Material Description	Sample Name	Sample Location	Lithology	Well Construction	Remarks
75		SM	<p>Silty Sand (72.5 - 75) Moist, soft, no odor. Primarily medium to fine sand with ~10% gravel to 13 mm and ~30% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.</p>					
		SM	<p>Silty Sand (75 - 80) Moist, soft, no odor. Primarily coarse to fine sand with ~10% gravel to 10 mm and ~25% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.</p>					
80		SM	<p>Silty Sand (80 - 92.5) Moist, soft, no odor. Primarily coarse to fine sand with ~10% gravel to 15 mm and ~25% silt and clay. The sand and gravel are subangular. The fines have low plasticity and toughness, and have a brown color.</p>					
85								
90								

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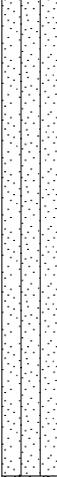
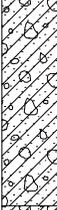
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Depth (ft)	Elevation (ft)	USCS Group Symbol	Material Description	Sample Name	Sample Location	Lithology	Well Construction	Remarks
130								
135		SC	<p>Clayey Sand with Gravel (135 - 137.5) Moist, firm, no odor. Primarily coarse to fine sand with ~15% gravel to 8 mm and ~30% silt and clay. The sand and the gravel are subrounded. The fines have medium plasticity and toughness, and have a brown color.</p>					
140		SC	<p>Clayey Sand with Gravel (137.5 - 140) Moist, firm, no odor. Primarily medium to fine sand with ~15% gravel to 15 mm and ~25% silt and clay. The sand and the gravel are subrounded. The fines have medium plasticity and toughness, and have a brown color.</p>					
145		SC	<p>Clayey Sand with Gravel (140 - 142.5) Moist, firm, no odor. Primarily coarse to fine sand with ~25% gravel to 13 mm and ~40% silt and clay. The sand and the gravel are subrounded. The fines have medium plasticity and toughness, and have a brown color. Trace coarse gravel to cobbles encountered that are potentially bedrock.</p>					
145			<p>Bedrock (142.5 - 150)</p>					

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150			Bottom of Borehole at 150 feet below ground surface.					