

# Log of Boring No. BRC-SB-02-B

## BMI Site - Hydrogeologic Characterization

### Henderson, Nevada



**Drilling Method:** Rotary Sonic  
**Drilling Equipment:** Rotary Sonic  
**Drilling Contractor:** Prosonic Corporation  
**Driller:** Gerald Sealey

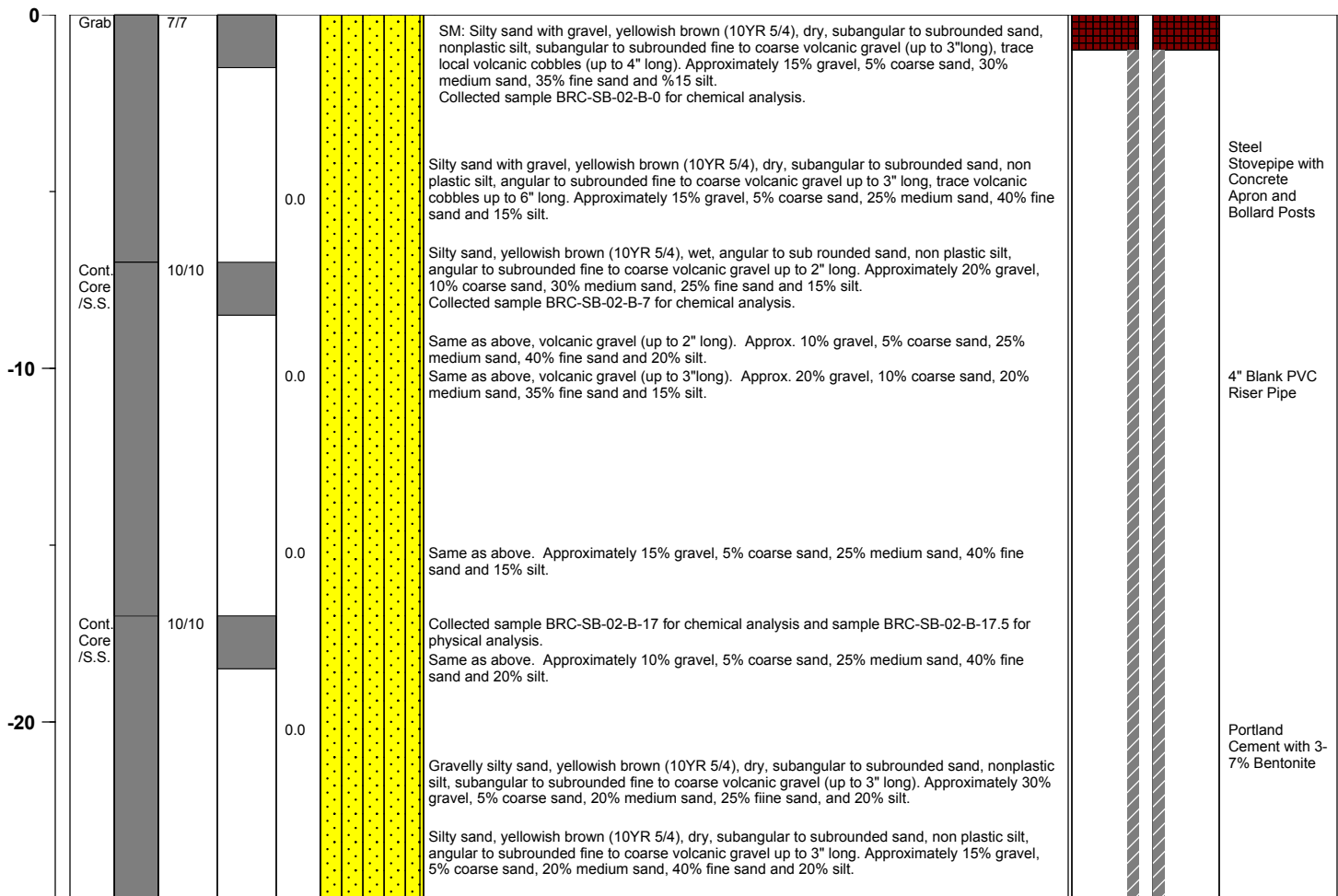
**Borehole Total Depth:** 381.5 ft bgs  
**Borehole Diameter:** 9.5 in/8.5 in  
**Boring Location:** Location 2 (Well ID: MCF-02B)  
**Depth to Water (ft. bgs):** 228.5

**Sample Type:** Cont. Core/S.S.  
**Sample Interval:** Various

**Logged By:** Adam Norris  
**Date Started:** 5/25/2004  
**Date Completed:** 5/27/2004

Monitoring Well Construction			
<b>Type of Surface Seal:</b>	Bentonite-Cement	<b>Screen Slot Size:</b>	0.010" slot
<b>Blank Casing Type/Size:</b>	4" Sch 80 PVC	<b>Top of Screen (ft. bgs):</b>	215 ft bgs
<b>Screen Type/Size:</b>	4" Sch 80 PVC	<b>Bottom of Screen (ft. bgs):</b>	235 ft bgs
<b>Transition Sand Type:</b>	NA	<b>Type of Sand Pack:</b>	# 2/12 Sand

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B



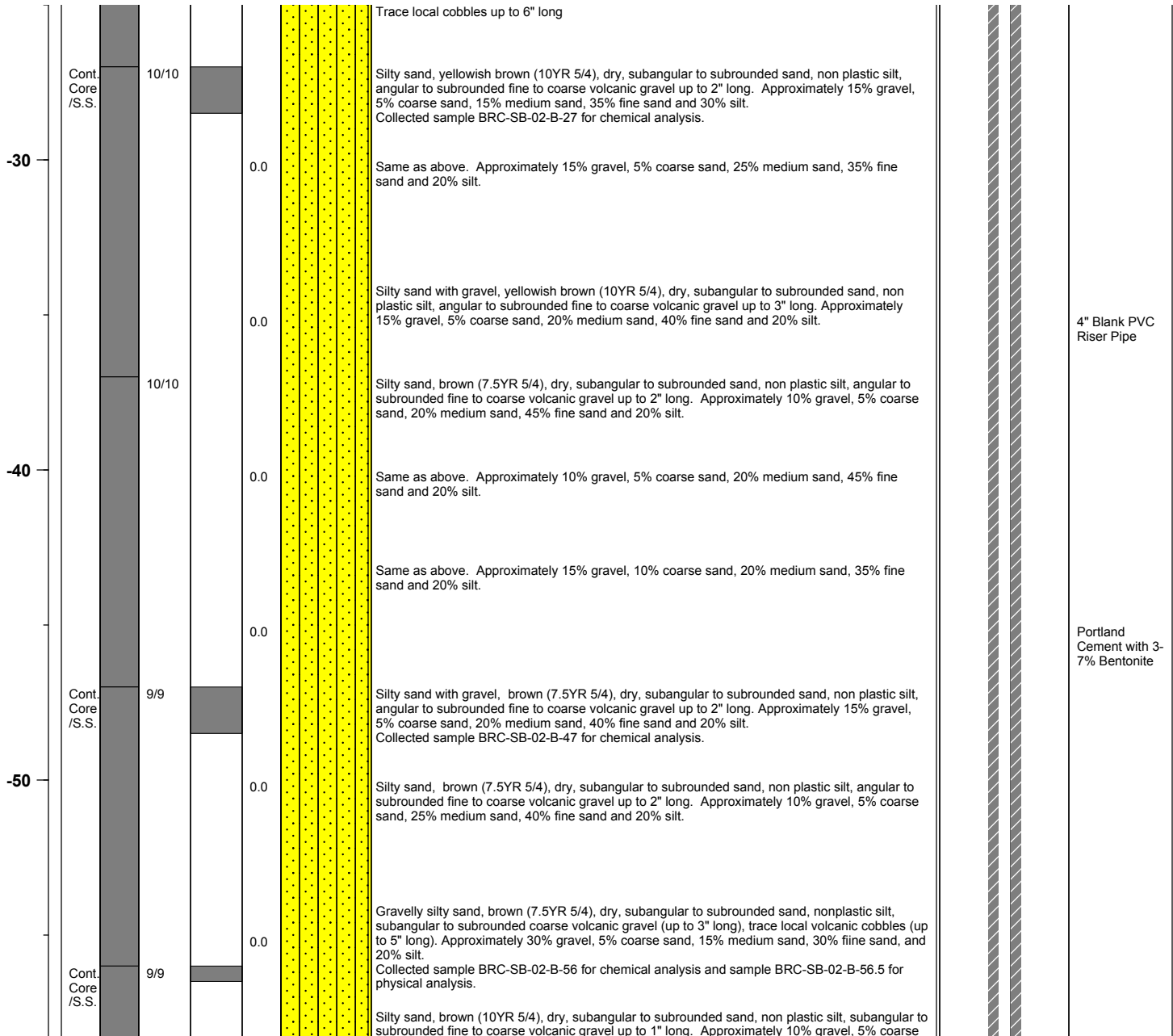
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B



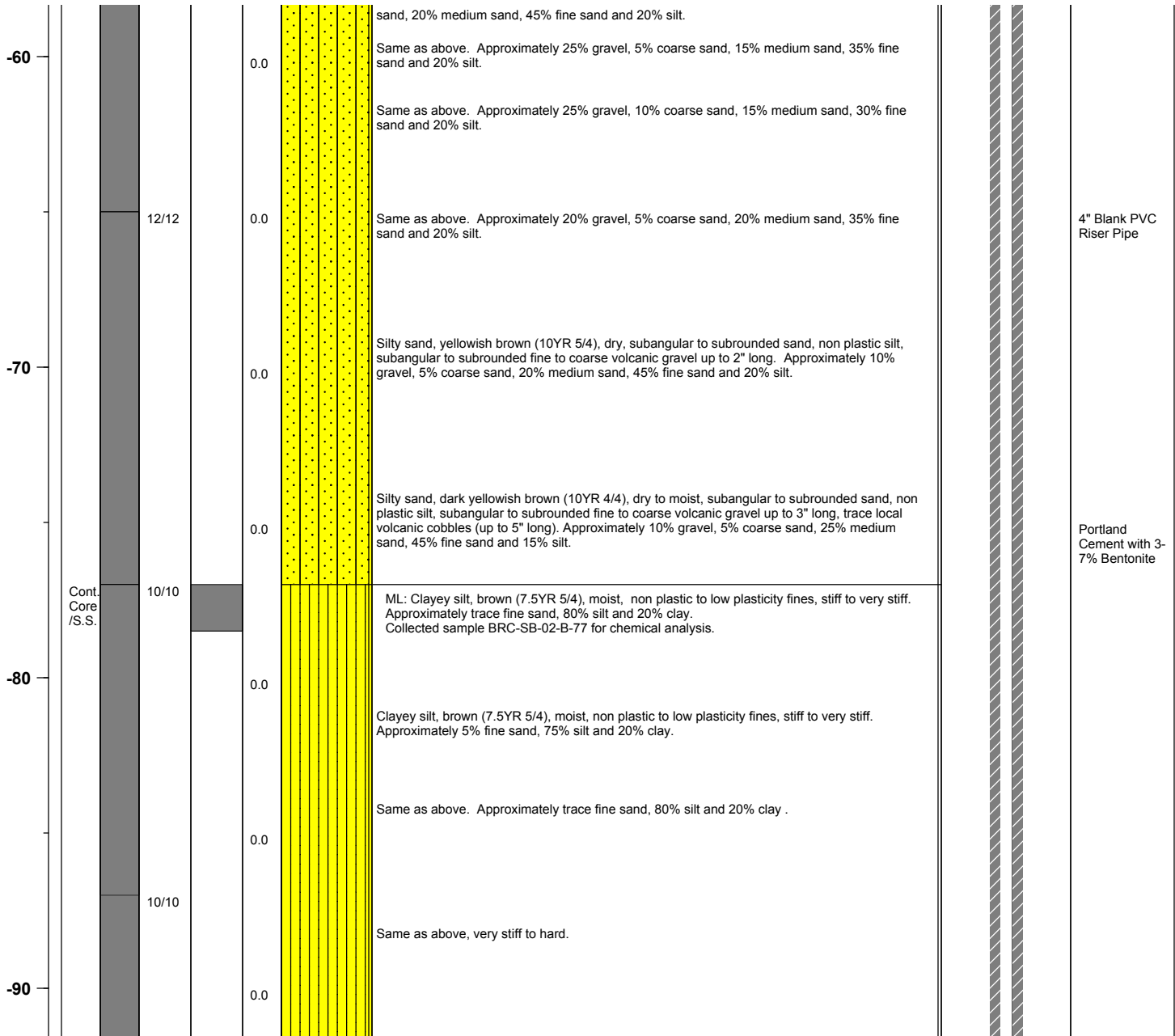
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B



# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------

							Same as above. Approximately trace fine sand, 80% silt and 20% clay .	
					0.0		Same as above. Approximately trace fine sand, 85% silt and 15% clay .	
	Cont. Core /S.S.	10/10					Collected sample BRC-SB-02-B-97 for chemical analysis.	
							Same as above. Approximately 80% silt and 20% clay .	
-100					0.0		Same as above. Approximately trace fine sand, 85% silt and 15% clay .	
					0.0		Same as above. Approximately 85% silt and 15% clay .	
	Cont. Core /S.S.	10/10					Collected sample BRC-SB-02-B-107 for chemical analysis.	4" Blank PVC Riser Pipe
-110					0.0		Same as above.	
					0.0		Clayey silt, brown (7.5YR 5/4), moist, non plastic to low plasticity fines, very stiff. Approximately trace fine sand, 85% silt and 15% clay.	
					0.0		Same as above. Approximately 85% silt and 15% clay .	
		10/10					Same as above. Approximately trace fine sand, 85% silt and 15% clay .	Portland Cement with 3-7% Bentonite
-120					0.0		Same as above. Approximately trace fine sand, 80% silt and 20% clay .	
							Silt, brown (7.5YR 5/4), moist, stiff to medium stiff, non plastic to low plasticity fines. Approximately 5% sand, 90% silt and 5% clay.	

Project No. 3850360

Log of Boring: BRC-SB-02-B

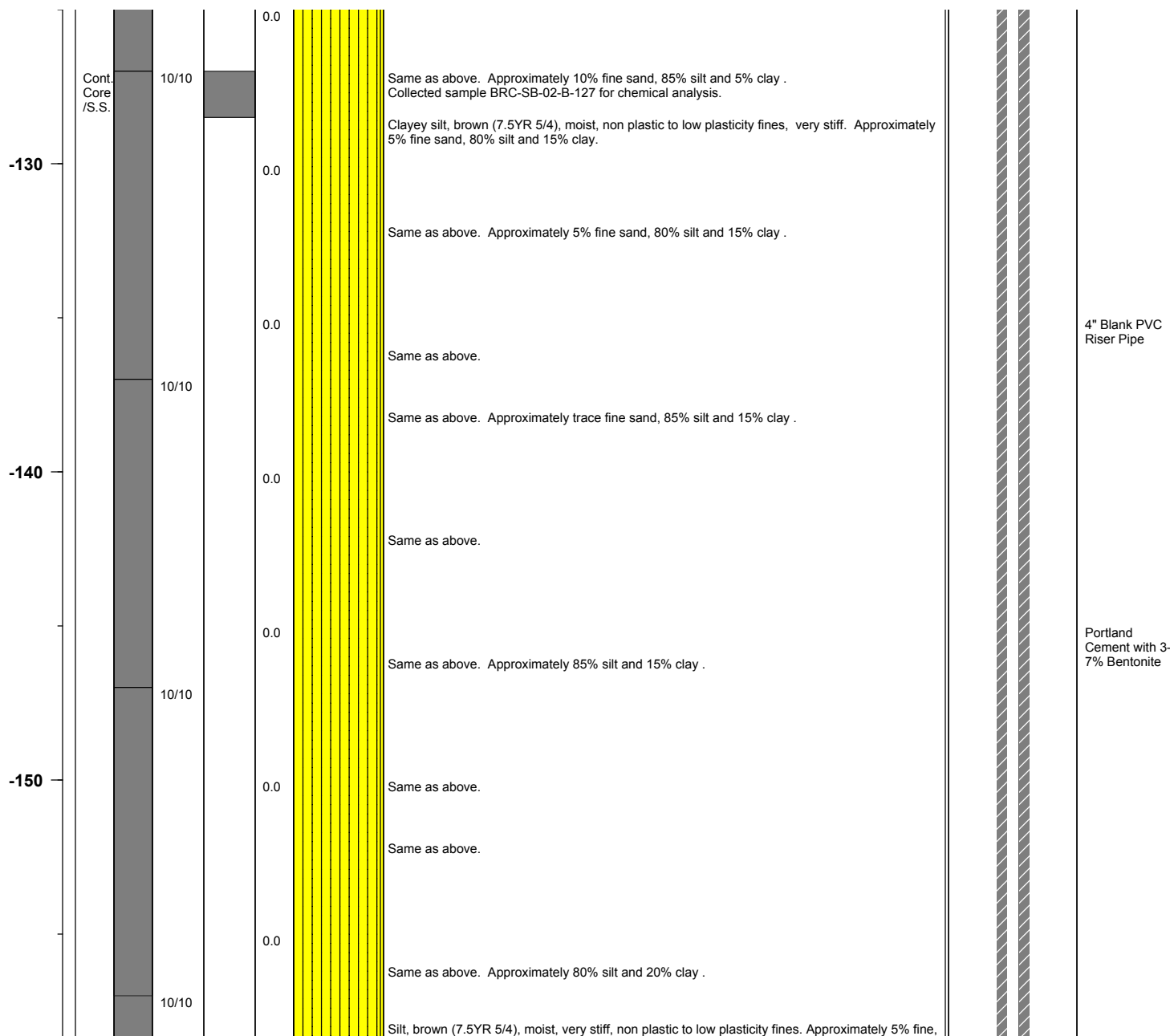


## Henderson, Nevada



**Log of Boring No. BRC-SB-02-B**

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------

**Project No.** 3850360

**Log of Boring: BRC-SB-02-B**



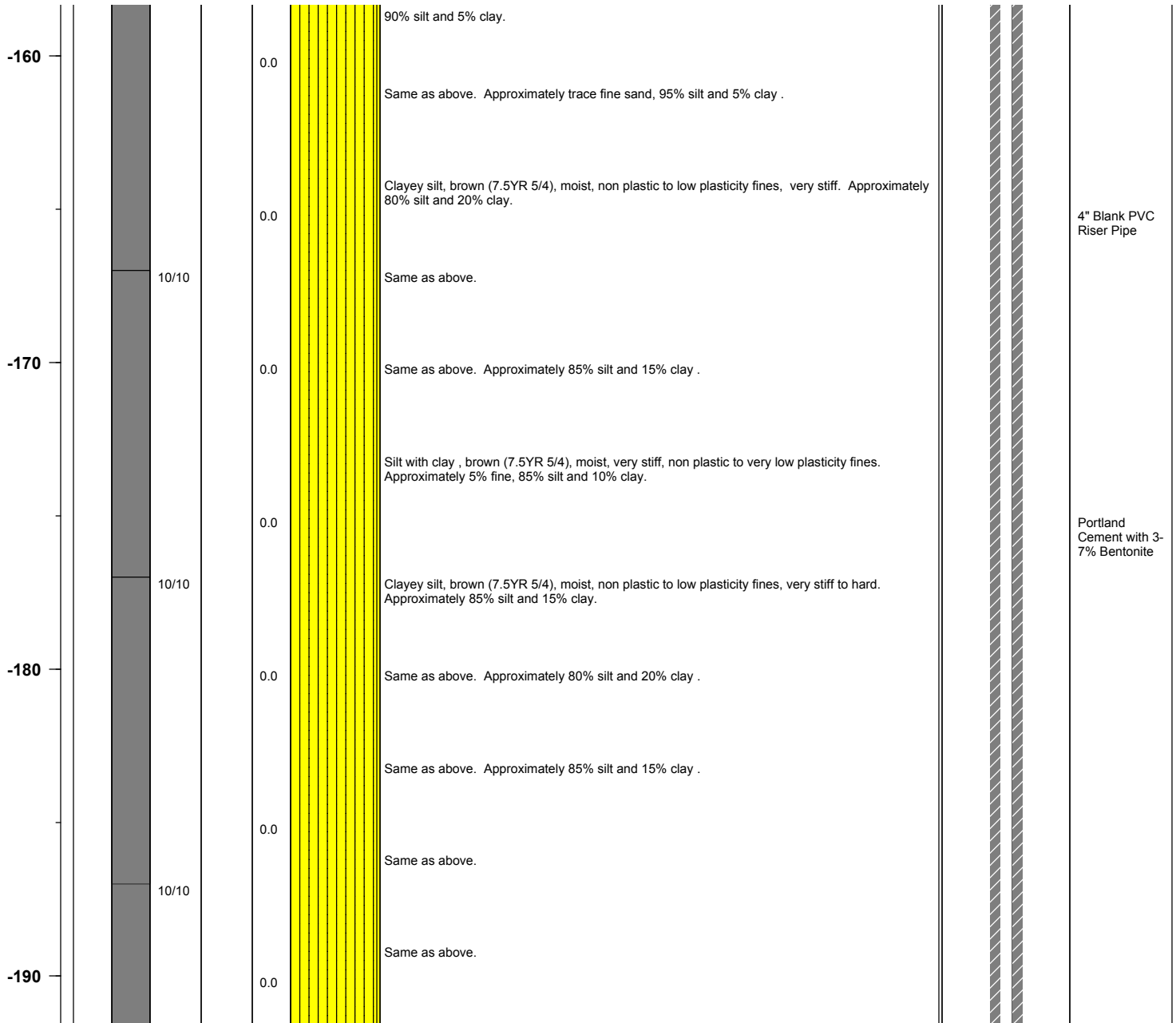
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B



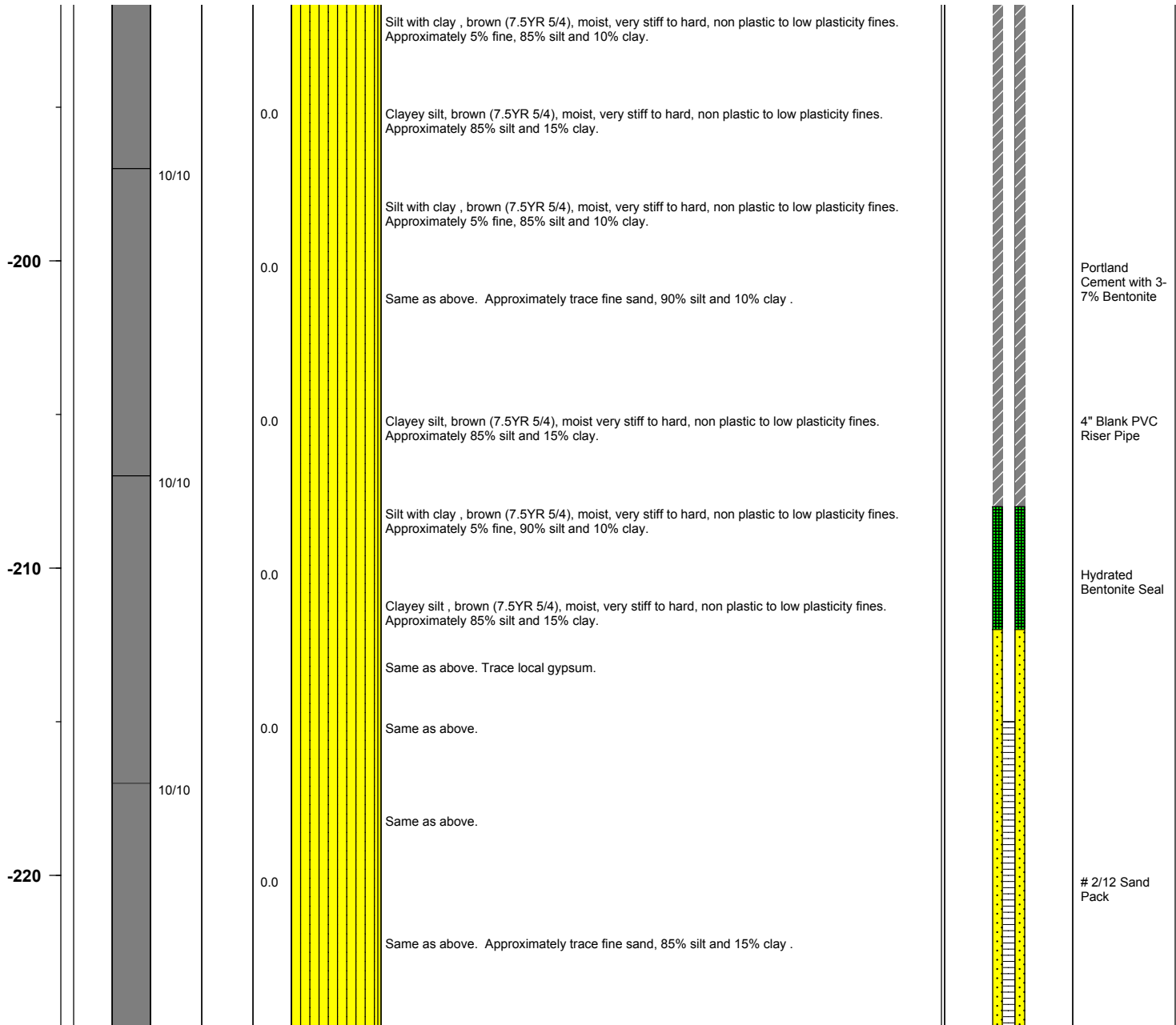
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B



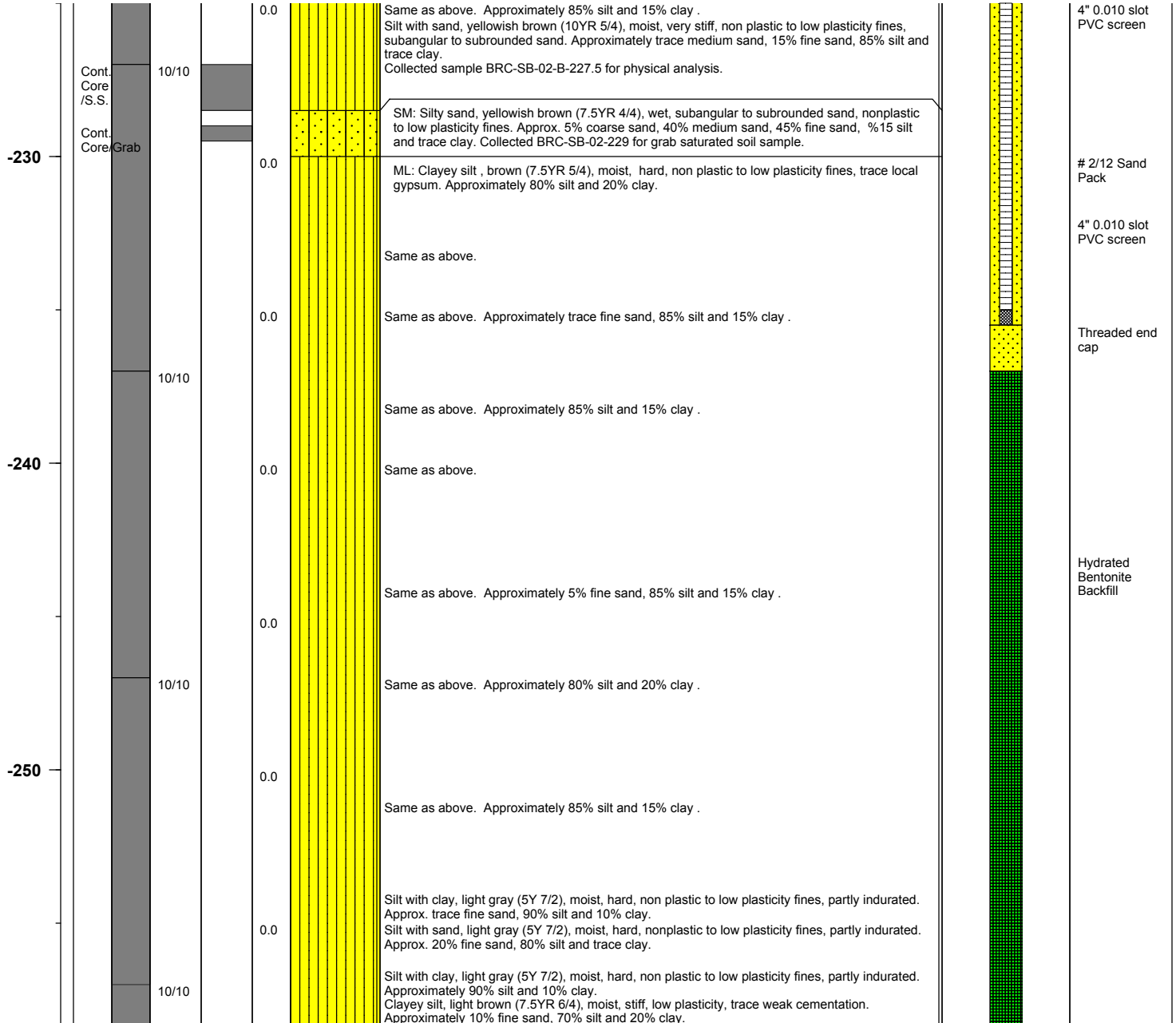
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B





# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------

-260					0.2		Same as above. No cementation. Approximately trace fine sand, 80% silt and 20% clay.	
							Color change to brown (7.5YR 5/4).	
		10/10			0.1		CL: Silt clay, brown (7.5YR 4/3), moist, very stiff, medium plasticity. Approximately trace fine sand, 20% silt and 80% clay.	
							ML: Silt with clay, brown (7.5YR 4/3), moist, very stiff, trace moderate cementation, low plasticity. Approximately 10% fine sand, 80% silt and 10% clay.	
-270					0.3		Silt with sand, brown (7.5YR 4/3), moist, stiff, nonplastic. Approximately 20% fine sand, 80% silt and trace clay.	
		10/10			0.1		Silt with sand and clay, brown (7.5YR 4/3), moist, very stiff, low plasticity. Approximately 10% fine sand, 80% silt and 10% clay.	
-280					0.2		Sandy silt, brown (7.5YR 4/3), moist, moderate cementation. Approximately 30% fine sand, 70% silt and trace clay. Silt, brown (7.5YR 4/3), moist, very stiff, low plasticity. Approximately 10% fine sand, 90% silt and trace clay. Clayey silt, brown (7.5 YR 4/3), moist, very stiff, medium plasticity, no cementation. Approximately 10% fine sand, 70% silt and 20% clay.	
		10/10			0.1		Sandy silt, brown (7.5YR 4/4), moist, very stiff, medium plasticity. Approximately 30% fine sand, 60% silt and 10% clay.	
							Silt, light brown (7.5YR 6/4), moist, stiff, low plasticity, no cementation. Approximately 10% fine sand, 80% silt and 10% clay.	
-290					0.2		Clayey silt, brown (7.5YR 4/3), moist, very stiff, medium plasticity. Approximately 10% fine sand, 60% silt and 30% clay.	Portland Cement with 3-7% Bentonite

Project No. 3850360

Log of Boring: BRC-SB-02-B



# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------

-300		10/10			0.1		Sandy silt, brown (7.5YR 4/3), moist, stiff, nonplastic. Approximately 30% fine sand, 70% silt and trace clay. Clayey silt, brown (7.5YR 4/4), moist, very stiff, medium plasticity. Approximately 10% fine sand, 70% silt and 20% clay.  At 297', a 6-inch thick layer of dry silt. Approximately trace fine sand, 100% silt and trace clay.  Clayey silt, brown (7.5YR 4/4), moist, very stiff, medium plasticity, trace layers of moderate cementation. Approximately trace fine sand, 70% silt and 30% clay.	
					0.1		Same as above. Brown (7.5YR 4/3), hard.	
		10/10			0.1		Silt with sand, brown (7.5YR 4/3), moist, very stiff, low plasticity, no cementation. Approximately 20% fine sand, 70% silt and 10% clay.	
-310		10/10			0.2		Clayey silt, brown (7.5YR 4/4), moist, hard, medium plasticity, no cementation. Approximately 10% fine sand, 70% silt and 20% clay.  Same as above. Trace moderate cementation.	Portland Cement with 3- 7% Bentonite
		10/10			0.2		Clayey silt with sand, brown (7.5YR 4/4), moist, hard, medium plasticity. Approximately 20% fine sand, 60% silt and 20% clay.	
-320					0.1		Silt with sand, brown (7.5YR 4/3), moist, hard, low plasticity, trace moderate cementation. Approximately 20% fine sand, 70% silt and 10% clay.  Same as above. Brown (7.5YR 4/3), very stiff, no cementation. Approximately 20% fine sand, 70% silt and 10% clay.	

Project No. 3850360

Log of Boring: BRC-SB-02-B



# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------

					0.1		Same as above. Approximately 15% fine sand, 75% silt and 10% clay.	
		10/10						
-330					0.1		Sandy silt, brown (7.5YR 4/4), moist, medium stiff, low plasticity, no cementation. Approximately 30% fine sand, 60% silt and 10% clay.	
					0.1		Clayey silt, brown (7.5YR 4/4), moist, very stiff, medium plasticity, no cementation. Approximately 10% fine sand, 70% silt and 20% clay.	
		10/10						
-340					0.1		Silt, brown (7.5YR 4/4), moist, very stiff, low plasticity, no cementation. Approximately 10% fine sand, 80% silt and 10% clay.	
					0.1			
		10/10						
-350					0.1		Silt with sand, brown (7.5YR 4/3), moist, very stiff, low plasticity, no cementation. Approximately 20% fine sand, 70% silt and 10% clay.	
					0.1		Clayey silt, brown (7.5YR 4/3), moist, very stiff, medium plasticity. Approximately 10% fine sand, 70% silt and 20% clay.	
							Same as above. Approximately 10% fine sand, 60% silt and 30% clay.	
		10/10					Same as above. Brown (7.5YR 4/4), hard, low plasticity. Approximately 10% fine sand, 70% silt and 20% clay.	Portland Cement with 3-7% Bentonite

Project No. 3850360

Log of Boring: BRC-SB-02-B



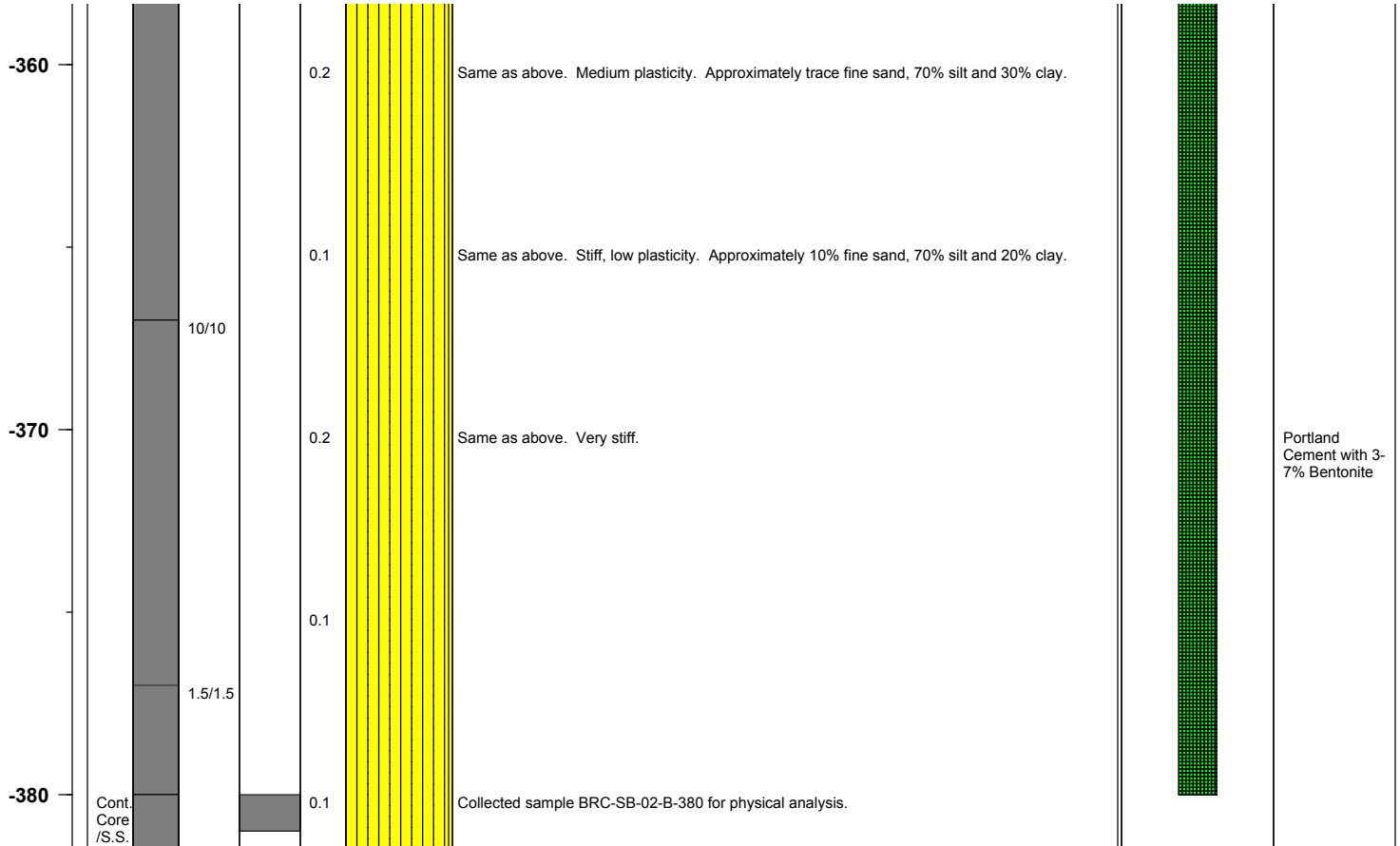
# BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Log of Boring No. BRC-SB-02-B

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
---------------------------	-------------	-----------------	---------------------------	---------------------------------	-----	-----------	------------------	-------------------



Project No. 3850360

Log of Boring: BRC-SB-02-B

