

Log of Boring No. BRC-SB-23-A

BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Drilling Method: Rotary Sonic
Drilling Equipment: Rotary Sonic
Drilling Contractor: Prosonic Corporation
Driller: Gerardo Chavez

Borehole Total Depth: 405 ft bgs
Borehole Diameter: 9.5 in to 97 ft bgs, 8.5 in to 405 ft bgs
Boring Location: Location 23 (Well ID: MCF-23)
Depth to Water (ft. bgs): 8 ft bgs

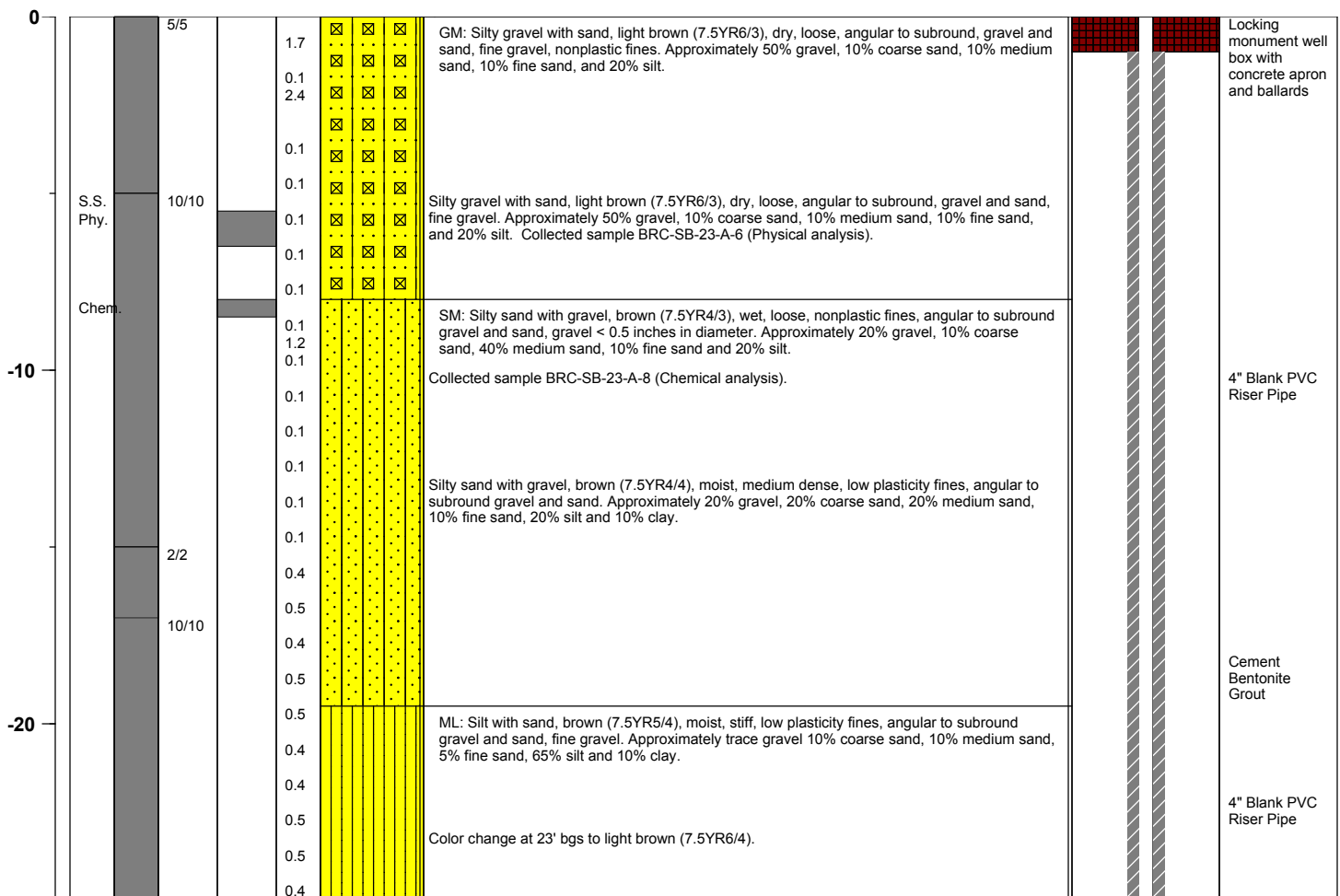
Sample Type: Split Spoon
Sample Interval: Various

Logged By: J. W./T.M.
Date Started: 4/26/04
Date Completed: 5/06/04

Monitoring Well Construction

Type of Surface Seal:	Bentonite-Cement	Screen Slot Size:	0.010 in
Blank Casing Type/Size:	4" Sch 80 PVC	Top of Screen (ft. bgs):	195 ft bgs
Screen Type/Size:	4" Sch 80 PVC	Bottom of Screen (ft. bgs):	205 ft bgs
Transition Sand Type:	NA	Type of Sand Pack:	#3

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
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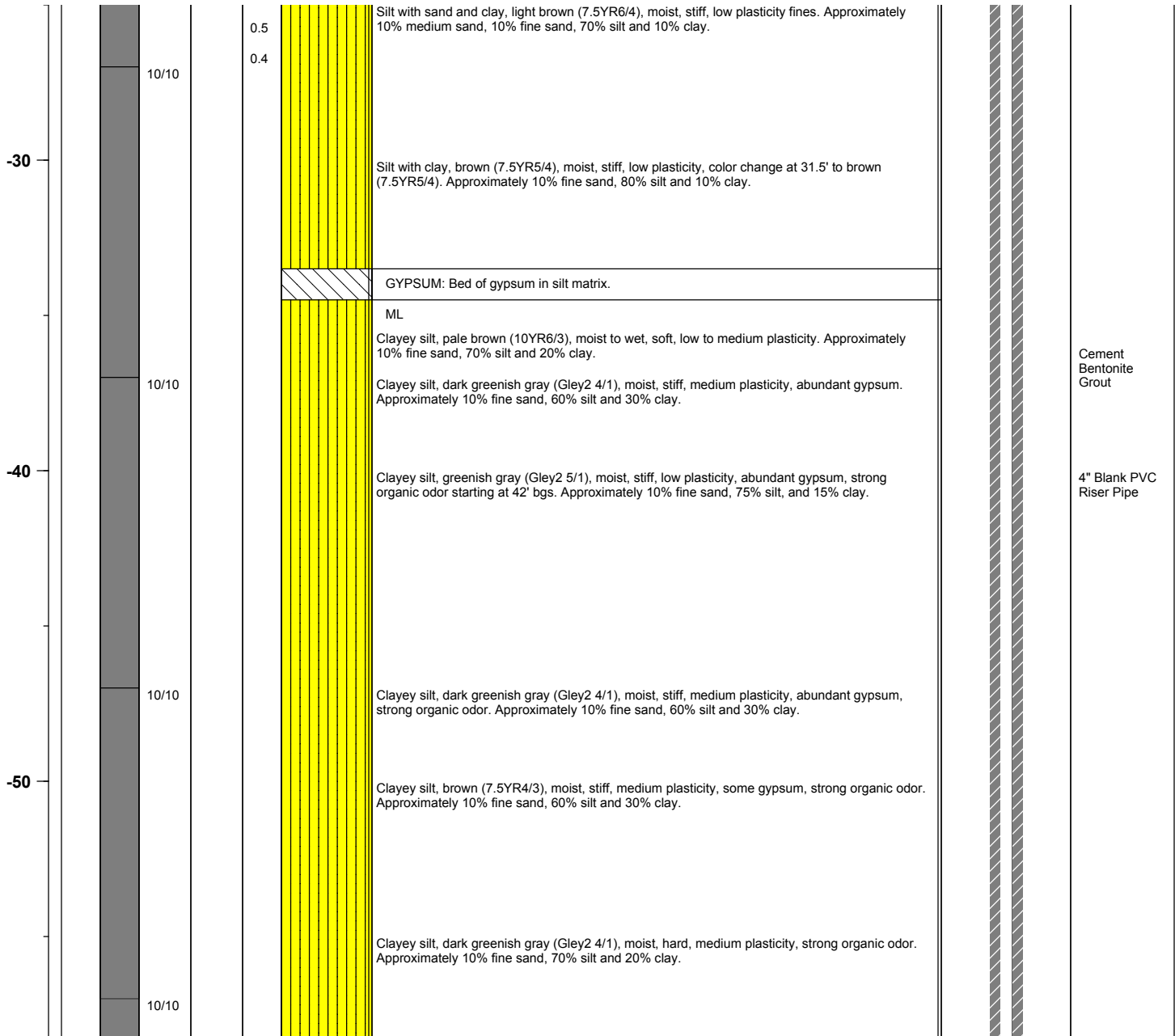
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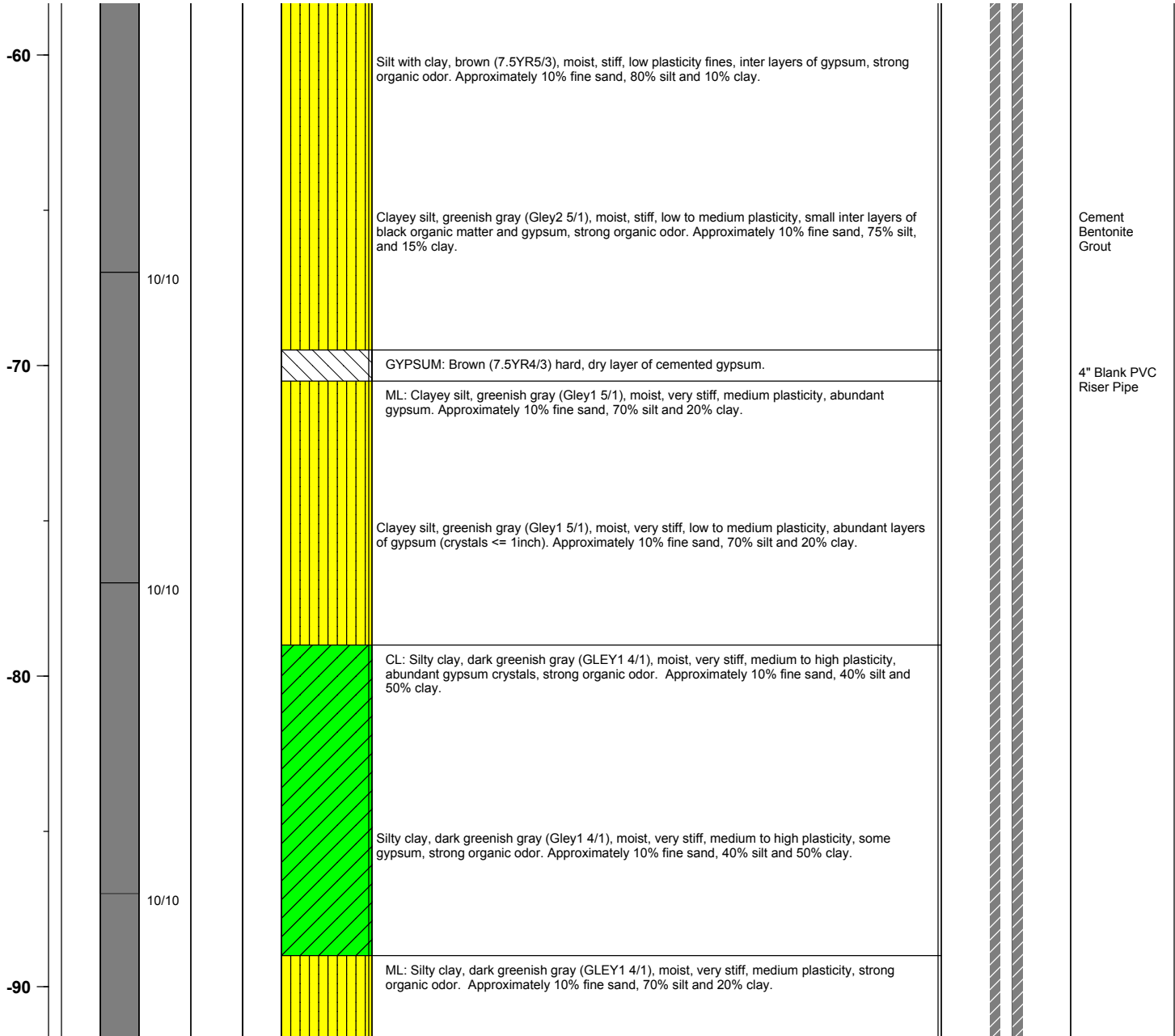
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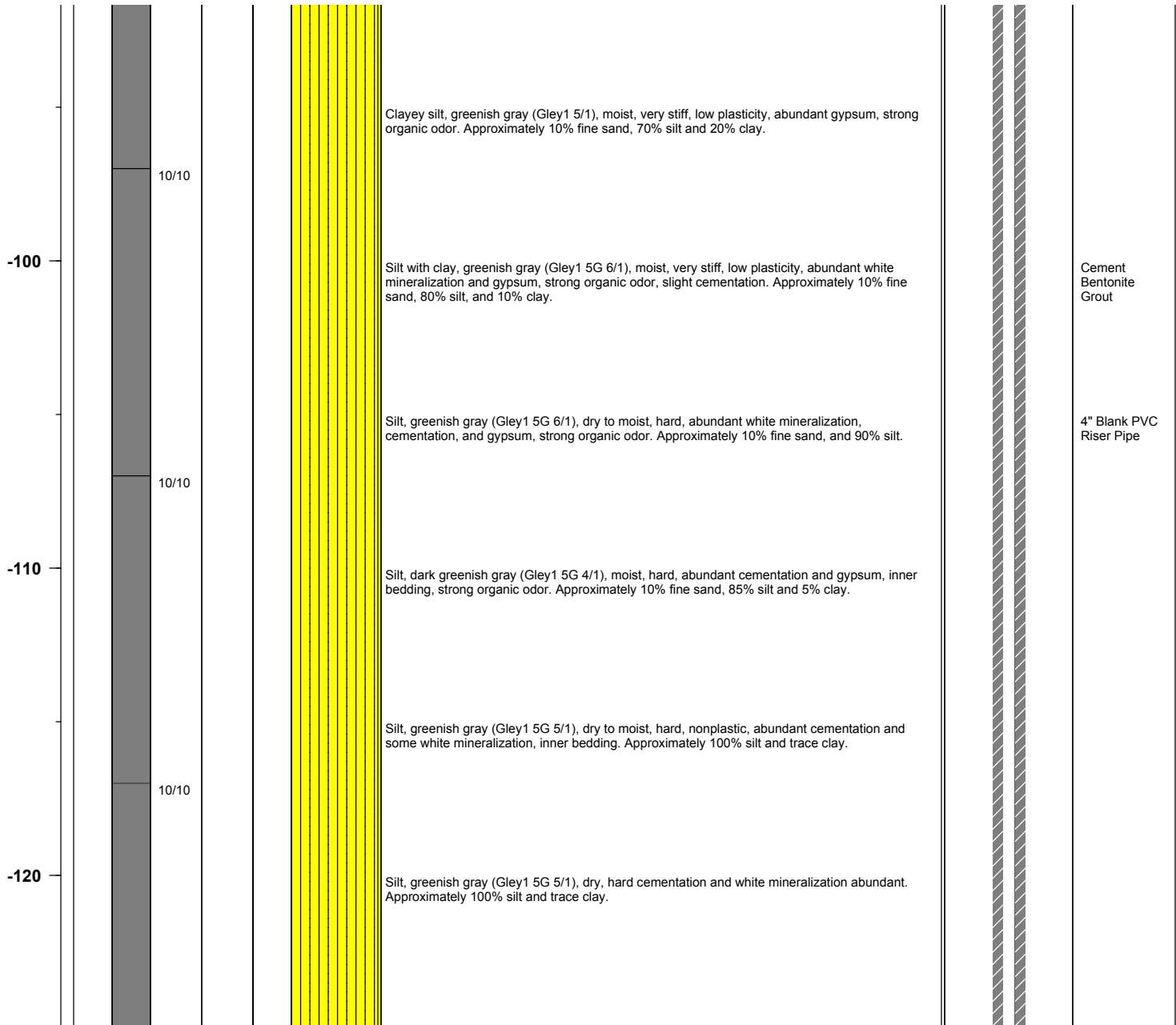
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							Silt, greenish gray (Gley1 10GY 5/1), dry, hard, cementation and white mineralization abundant. Approximately 10% fine sand, 90% silt and trace clay.	
			10/10					
-130							Silt with clay, brown (7.5YR 4/4), moist, stiff, low plasticity, moderate cementation and white mineralization. Approximately trace fine sand, 90% silt and 10% clay.	Cement Bentonite Grout
							Silt, brown (7.5YR5/4), dry, hard, inner bedded cementation, trace white mineralization. Approximately trace fine sand and 100% silt.	4" Blank PVC Riser Pipe
			10/10					
-140							Silt with sand, dark brown (7.5YR3/3), moist, stiff, slight cementation, abundant small gypsum crystals. Approximately 15% fine sand, 85% silt and trace clay.	
							Silt with clay, strong brown (7.5YR4/6), moist, stiff, low plasticity, abundant gypsum crystals (<=0.5"). Approximately trace fine sand, 90% silt and 10% clay.	
							Silt, brown (7.5YR5/4), dry to moist, stiff, nonplastic, abundant gypsum crystals (<= 1"). Approximately 5% fine sand, 95% silt and trace clay.	
			10/10					
-150							Silt, dark brown (7.5YR3/3), moist, stiff, low plasticity, abundant small gypsum crystals. Approximately trace fine sand, 100% silt and trace clay.	
							Abundant gypsum crystals (<=2" - dia.) in silt matrix, 90% gypsum, 10% silt matrix.	
							Silt with sand, brown (7.5YR4/4), dry to moist, hard, nonplastic, moderate cementation, abundant small gypsum crystals. Approximately 15% fine sand, and 85% silt.	
			10/10					

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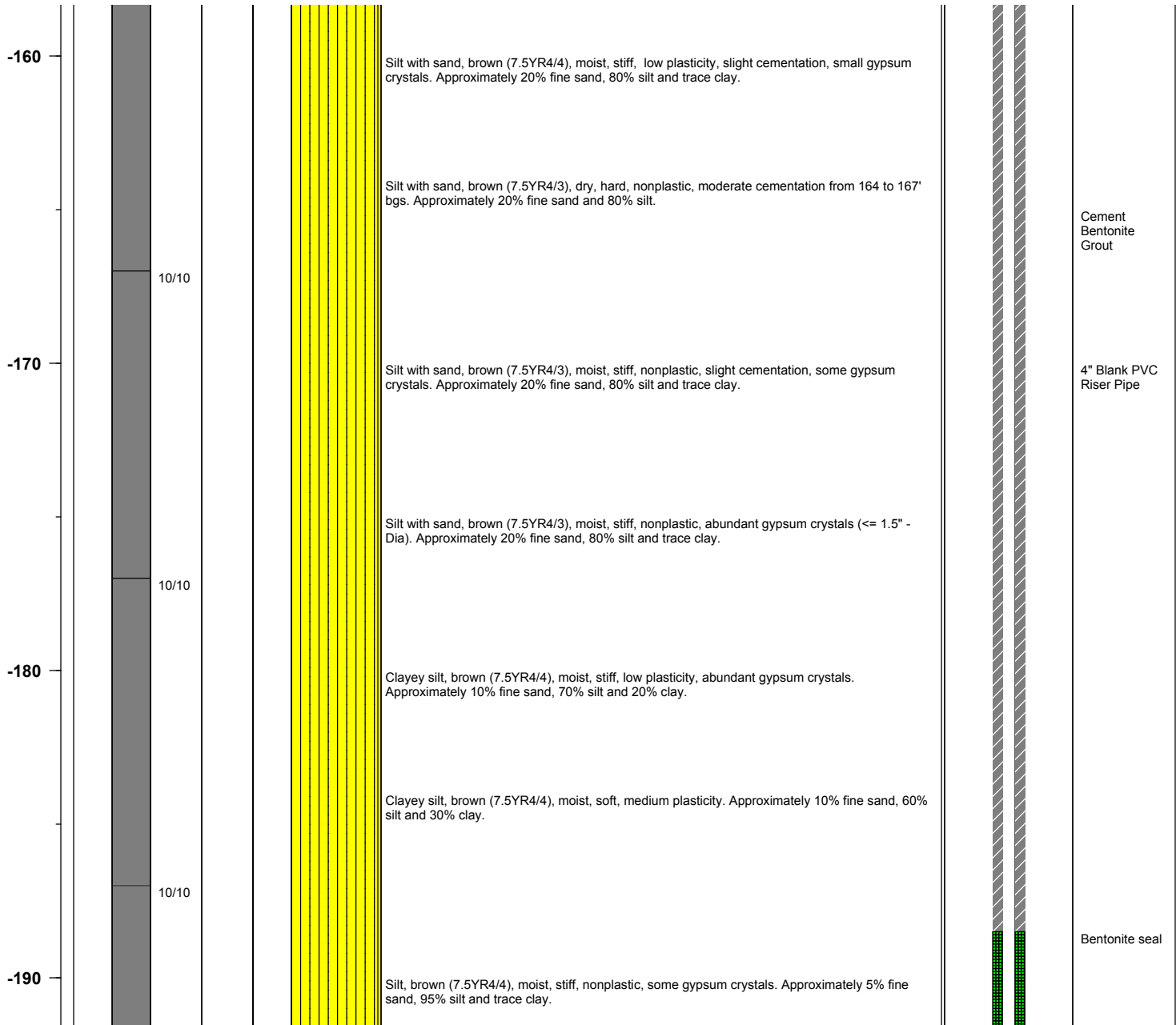
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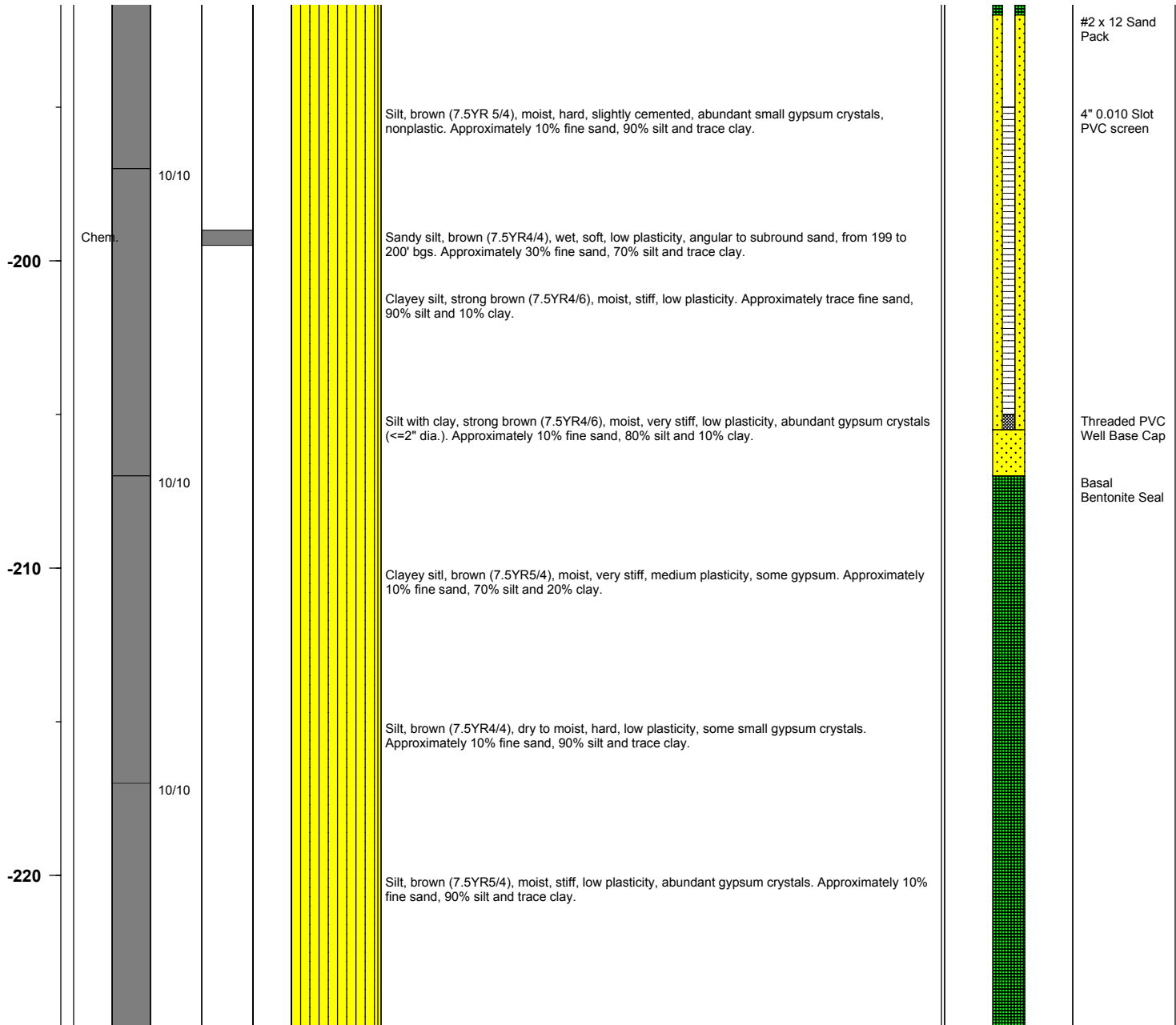
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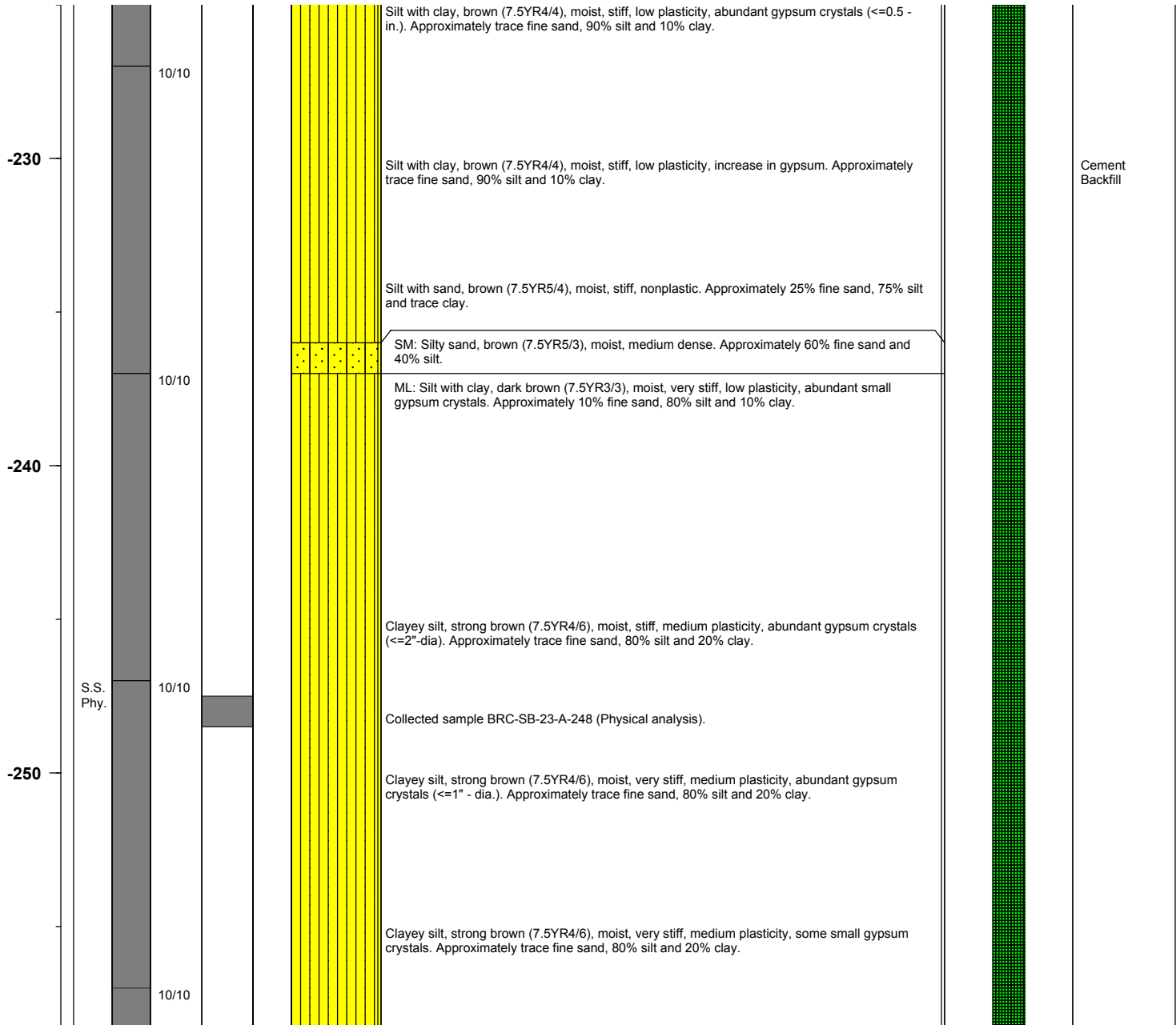
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-260							Clayey silt, strong brown (7.5YR4/6), moist, very stiff, medium plasticity, some small gypsum crystals. Approximately trace fine sand, 80% silt and 20% clay.	
			10/10				Silt with clay, brown (7.5YR5/4), moist, stiff, low plasticity, trace small gypsum crystals. Approximately trace fine sand, 90% silt and 10% clay.	
-270							Silt, brown (10YR5/3), very stiff, moist, moderate induration, no odor, low plasticity, trace fine crystalline gypsum throughout. Approximately trace fine sand, 90% silt and 10% clay.	
			10/10				Silt with clay, brown (10YR5/3), very stiff, moist, moderate induration, no odor, medium plasticity. Approximately 80% silt and 20% clay.	
-280							Silt with clay, brown (10YR4/3), very stiff, moist, weak induration, no odor, medium plasticity. Approximately 75% silt and 25% clay.	
			10/10				Clayey silt, brown (7.5YR5/4), very stiff, moist, weak induration, no odor, medium to high plasticity. Approximately 60% silt and 40% clay. Color change to strong brown (7.5YR4/6) At 287' - 288' abundant medium to coarse crystalline gypsum.	
-290							Silt with clay, brown (10YR5/3), very stiff, moist, moderate induration, no odor, medium plasticity, trace fine crystalline gypsum. Approximately trace fine sand, 80% silt and 20% clay.	Cement Backfill

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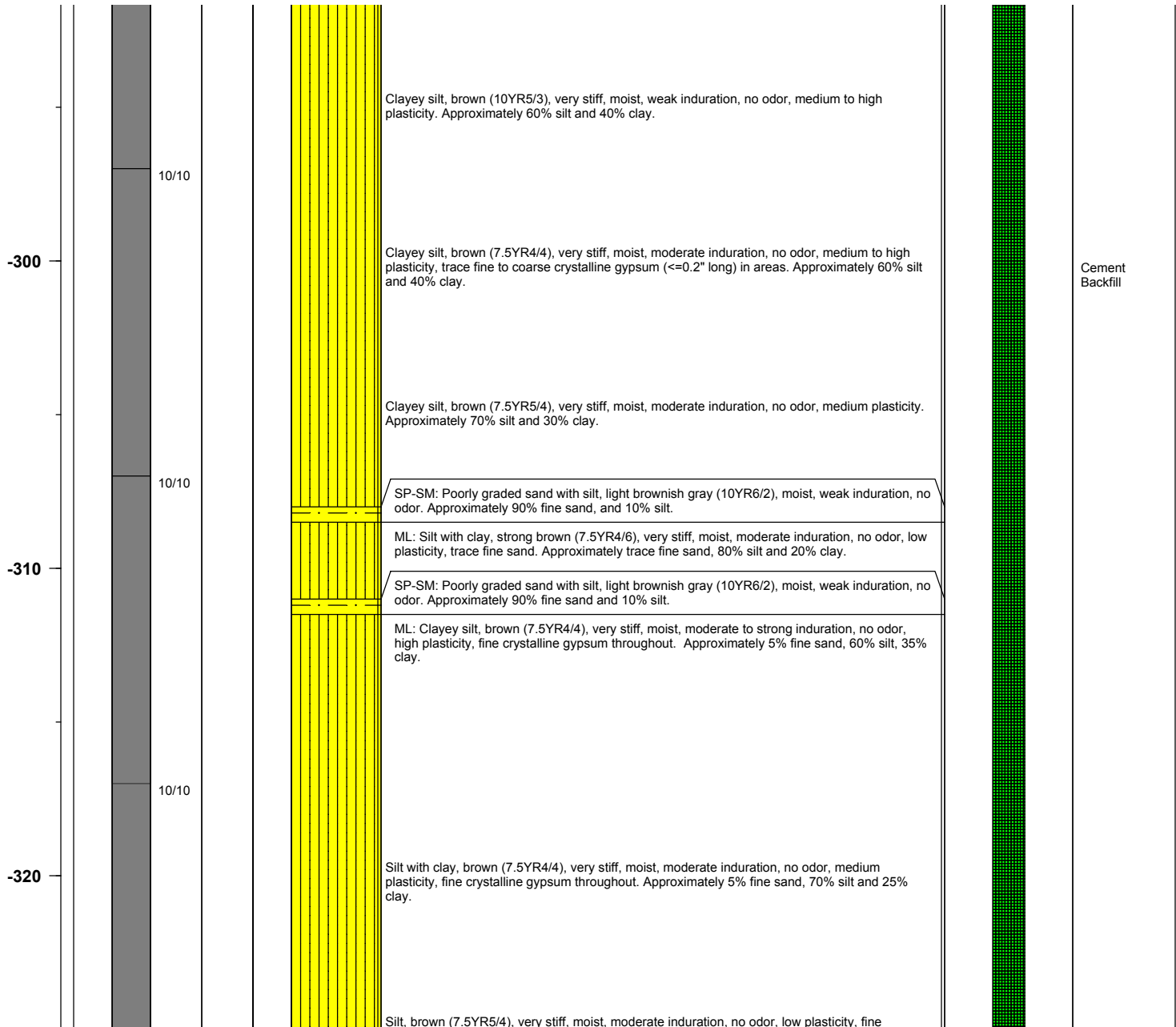
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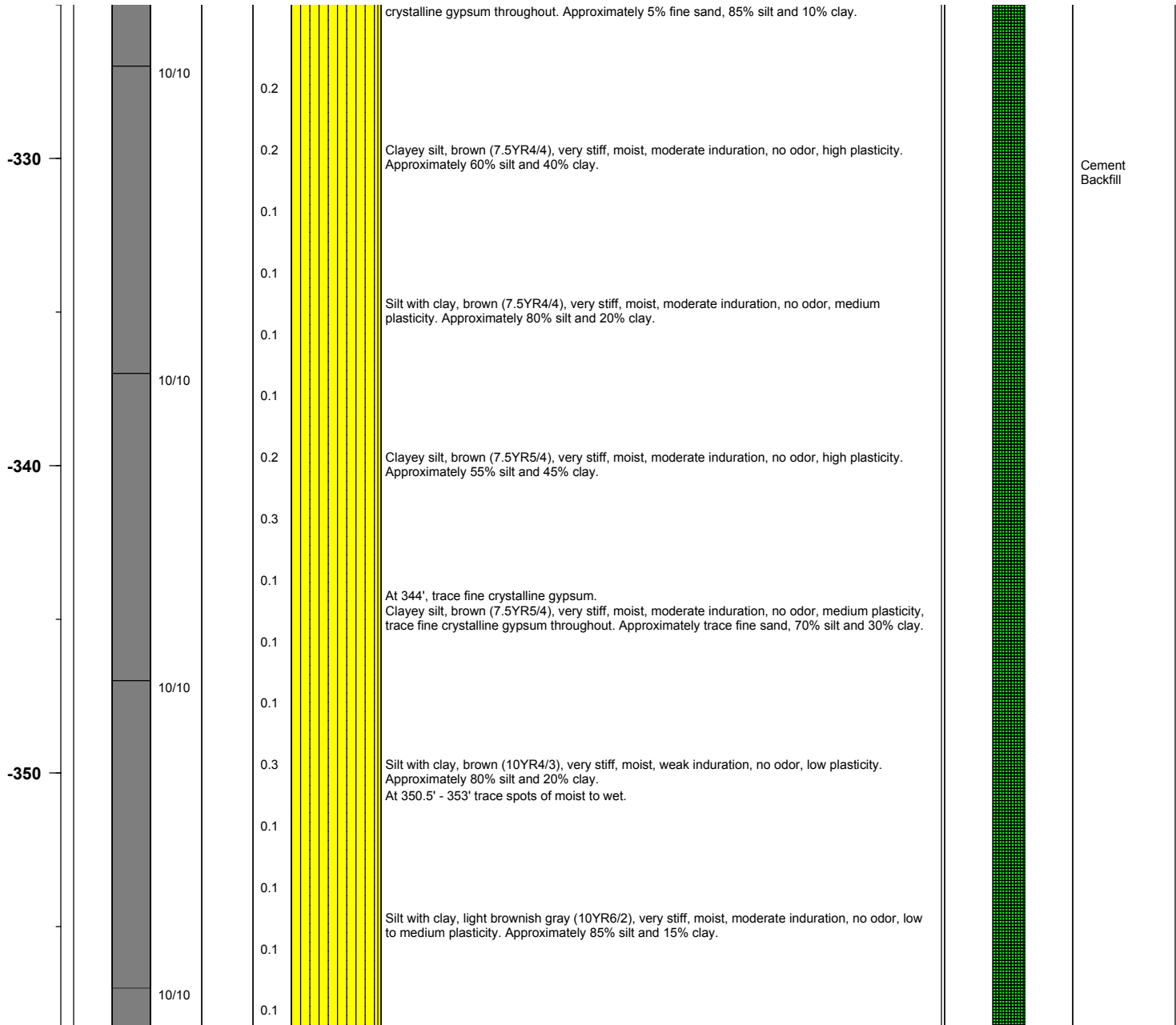
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-360					0.1		Silt with clay, brown (7.5YR5/3), very stiff, moist, moderate induration, no odor, low to medium plasticity. Approximately 85% silt and 15% clay.	
					0.1			
					0.1			
					0.1		Silt with clay, brown (7.5YR4/4), very stiff, moist, moderate induration, no odor, low plasticity. Approximately 85% silt and 15% clay.	
		10/10			0.1			Cement Backfill
					0.1			
-370					0.1		Silt with clay, brown (7.5YR4/4), very stiff, moist, moderate induration, no odor, medium plasticity, trace fine crystalline gypsum throughout. Approximately trace fine sand, 80% silt and 20% clay.	
					0.2			
					0.1		At 372.5', color change to brown (10YR5/3) and increase in gypsum - trace fine to coarse crystalline gypsum.	
					0.1		Clayey silt, mottled pale brown (10YR6/3) and brown (10YR5/3), hard, dry, moderate induration, no odor, high plasticity, slightly fissile. Approximately 65% silt and 45% clay.	
					0.1			
		8/8			0.1		Clayey silt, brown (10YR5/3), hard, dry, moderate induration, no odor, high plasticity, massive. Approximately 70% silt and 30% clay.	
					0.1		Clayey silt, brown (10YR5/3), hard, dry, moderate induration, no odor, high plasticity. Approximately 70% silt and 30% clay.	
-380					0.1			
					0.1			
					0.1		8' run instead of 10' due to sluff.	
					0.1		Silt with clay, brown (10YR5/3), hard, moist, moderate induration, no odor, medium plasticity. Approximately 85% silt and 15% clay.	
		20/20			0.1			
					0.1			
					0.1			
-390					0.1		Silt with clay, brown (10YR4/3), very stiff, moist, moderate induration, no odor, medium plasticity. Approximately 80% silt and 20% clay.	

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-400					0.2			
					0.1			
					0.2		Silt with clay, brown (10YR5/3), stiff, moist with spots of very moist, weak induration, no odor, medium plasticity. Approximately 80% silt and 20% clay.	
					0.1			
					0.1			
					0.1		Silt with clay, brown (7.5YR4/4), very stiff, moist, moderate induration, no odor, medium plasticity, trace fine crystalline gypsum throughout. Approximately trace fine sand, 80% silt and 20% clay.	
					0.1			
					0.1		Silt with clay, brown (10YR5/3), stiff, moist, weak induration, no odor, medium plasticity trace fine to coarse crystalline gypsum in areas. Approximately 80% silt and 20% clay.	
								Cement Backfill

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