

Log of Boring No. BRC-SB-09-A

BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Drilling Method: Mud Rotary
Drilling Equipment: S.S. 15K / Mud Rotary
Drilling Contractor: Water Development Corporation
Driller: Juan Aguilar

Borehole Total Depth: 400 ft bgs
Borehole Diameter: 9 7/8"
Boring Location: Location 9 (Well ID: MCF-09A)
Depth to Water (ft. bgs): NA

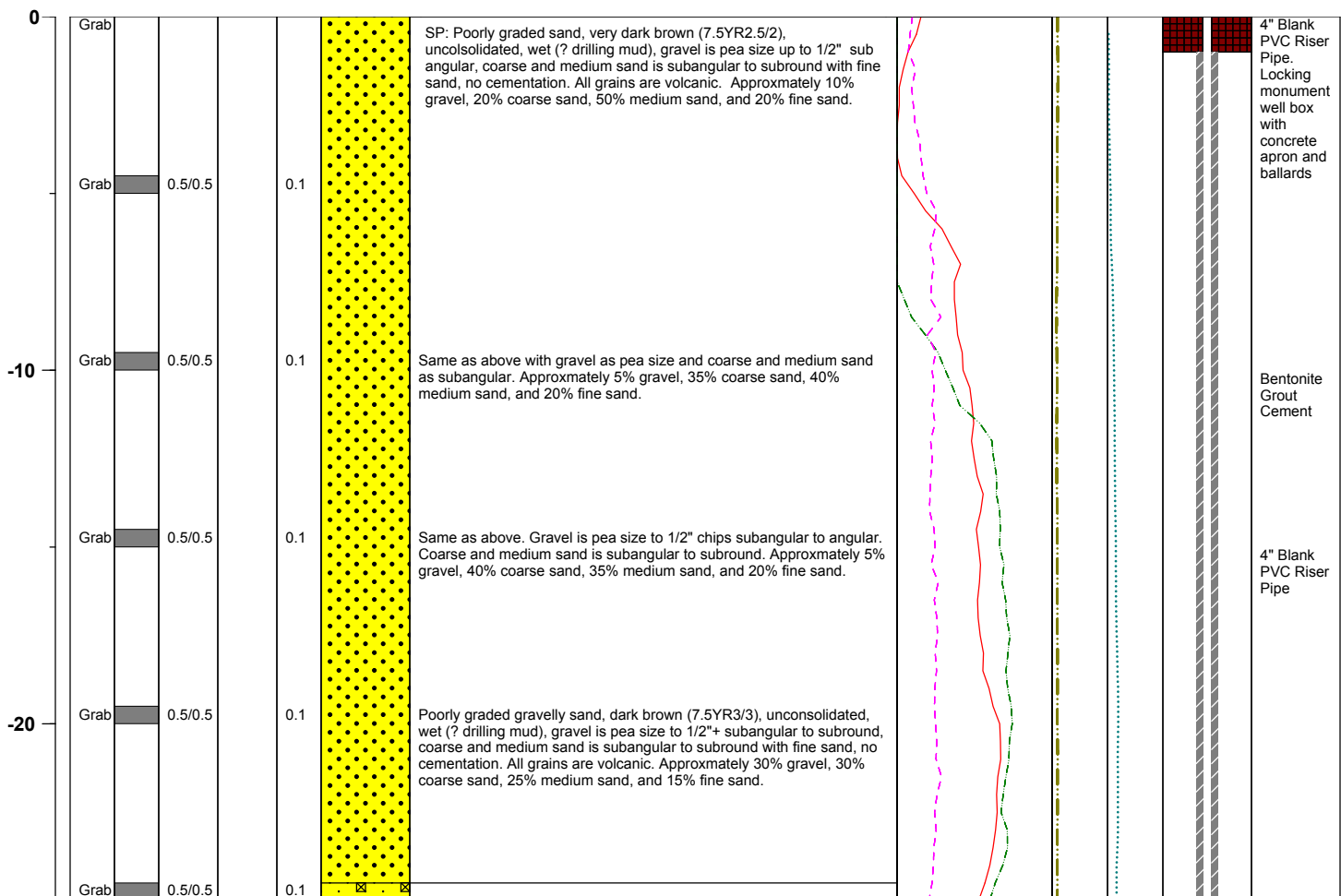
Sample Type: Grab/Soil Cuttings
Sample Interval: Varied

Logged By: Dave Kremer
Date Started: 3/10/04
Date Completed: 3/11/04

Monitoring Well Construction

Type of Surface Seal:	Bentonite-Grout	Screen Slot Size:	0.010 in
Blank Casing Type/Size:	4" Sch 80 PVC	Top of Screen (ft. bgs):	270 ft bgs
Screen Type/Size:	4" Sch 80 PVC	Bottom of Screen (ft. bgs):	290 ft bgs
Transition Sand Type:	#1C	Type of Sand Pack:	#10 x 20

Depth Elevation (BGS)	Sample Type	Sample Interval	Sample Recovery	Sample Retained for Analysis	PID	Lithology	Soil Description	Geophysical Data			Well Construction	
								E-Log		Caliper Log (inch)		Guard Log (OHM.M)
								16" (OHM)	64" (OHM)			



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-30	Grab	0.5/0.5					GP: Poorly graded sandy gravel, dark brown (7.5YR3/3), unconsolidated, wet (?drilling mud), gravel is pea size to 1 1/4" chips subangular to subround, coarse and medium sand is subangular to subround, with fine sand, no cementation. All grains are volcanic. Approximately 60% gravel, 20% coarse sand, 10% medium sand, and 10% fine sand.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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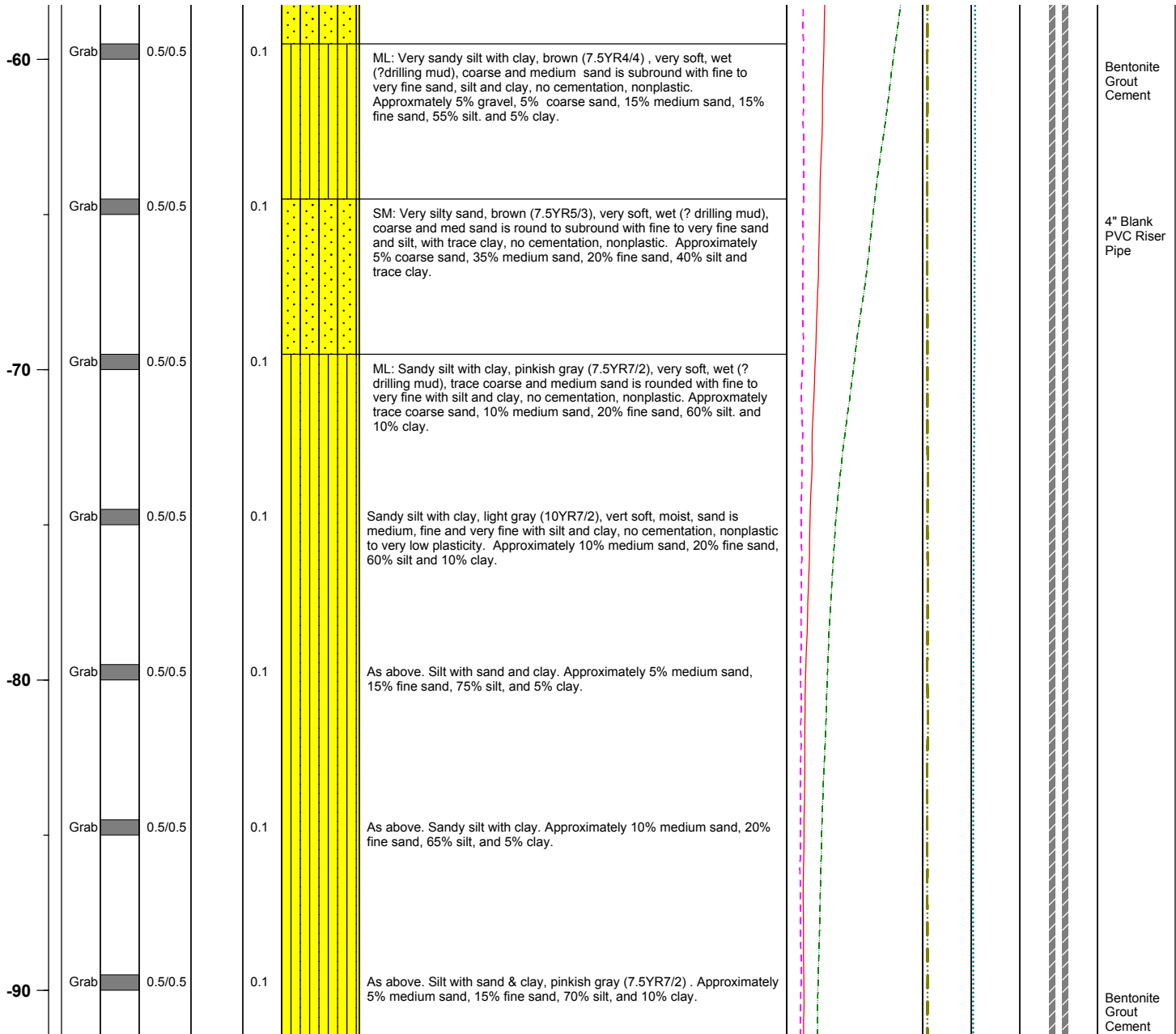
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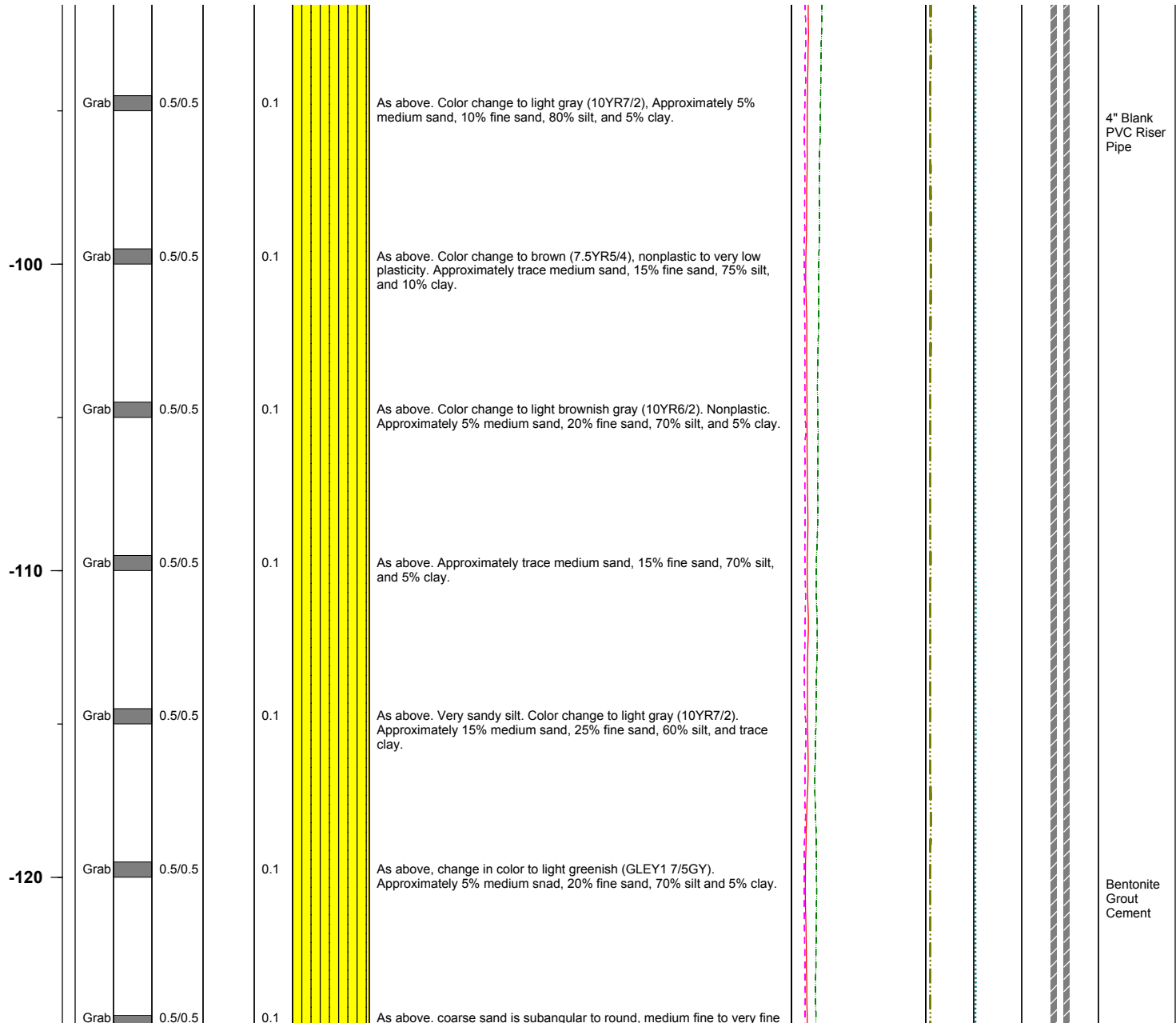
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							sand with silt and clay. Approximately 5% coarse sand, 10% medium sand, 20% fine sand, 60% silt, 5% clay.						4" Blank PVC Riser Pipe
-130	Grab	0.5/0.5	0.1				As above. Very sandy silt. coarse sand is subangular to round gypsum crystal chips. Approximately 5% coarse sand, 10% medium sand, 25% fine sand, 60% silt, and trace clay.						
	Grab	0.5/0.5	0.1				Clayey silt, light bluish gray (Gley 2 7/5B) , very soft, moist, trace medium sand, very fine sand with silt and clay, no cementation, nonplastic to very low plasticity. Approximately trace medium sand, 5% fine sand, 80% silt and 15% clay.						
-140	Grab	0.5/0.5	0.1				Sandy silt with clay, greenish gray (Gley 2 6/10BG), sand is medium fine to very fine with silt and clay, no cementation, nonplastic. Approximately 10% medium sand, 20% fine sand, 65% silt, and 5% clay.						
	Grab	0.5/0.5	0.1				As above with approximately 10% increase in fine sand.						
-150	Grab	0.5/0.5	0.1				As above. Color change to bluish gray (Gley 2 5/5B). Trace gravel up to 1/2" and coarse sand is subangular gypsum crystal chips. Approximately trace gravel, 5% coarse sand, 10% medium sand, 20% fine sand, 60% silt, and 5% clay.						
	Grab	0.5/0.5	0.1				As above with color change to bluish gray (Gley 2 6/5B) . Approximately 10% medium sand, 20% fine sand, 65% silt, and 5% clay.						
							SM: Poorly graded silty sand, gray (10YR6/1), very soft, wet, sand is coarse to very fine primarily gypsum crystal fragments with trace						Bentonite Grout Cement

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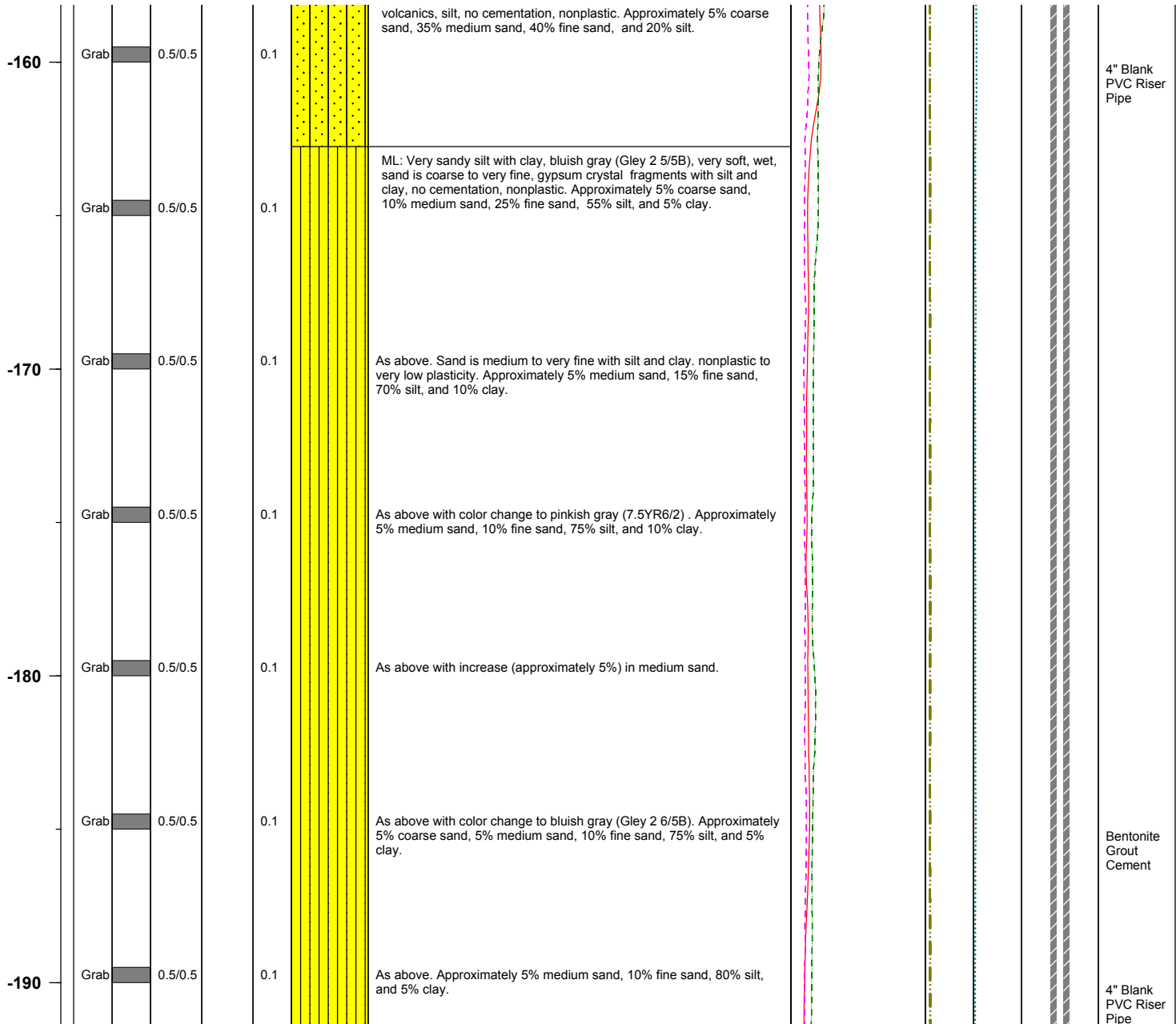
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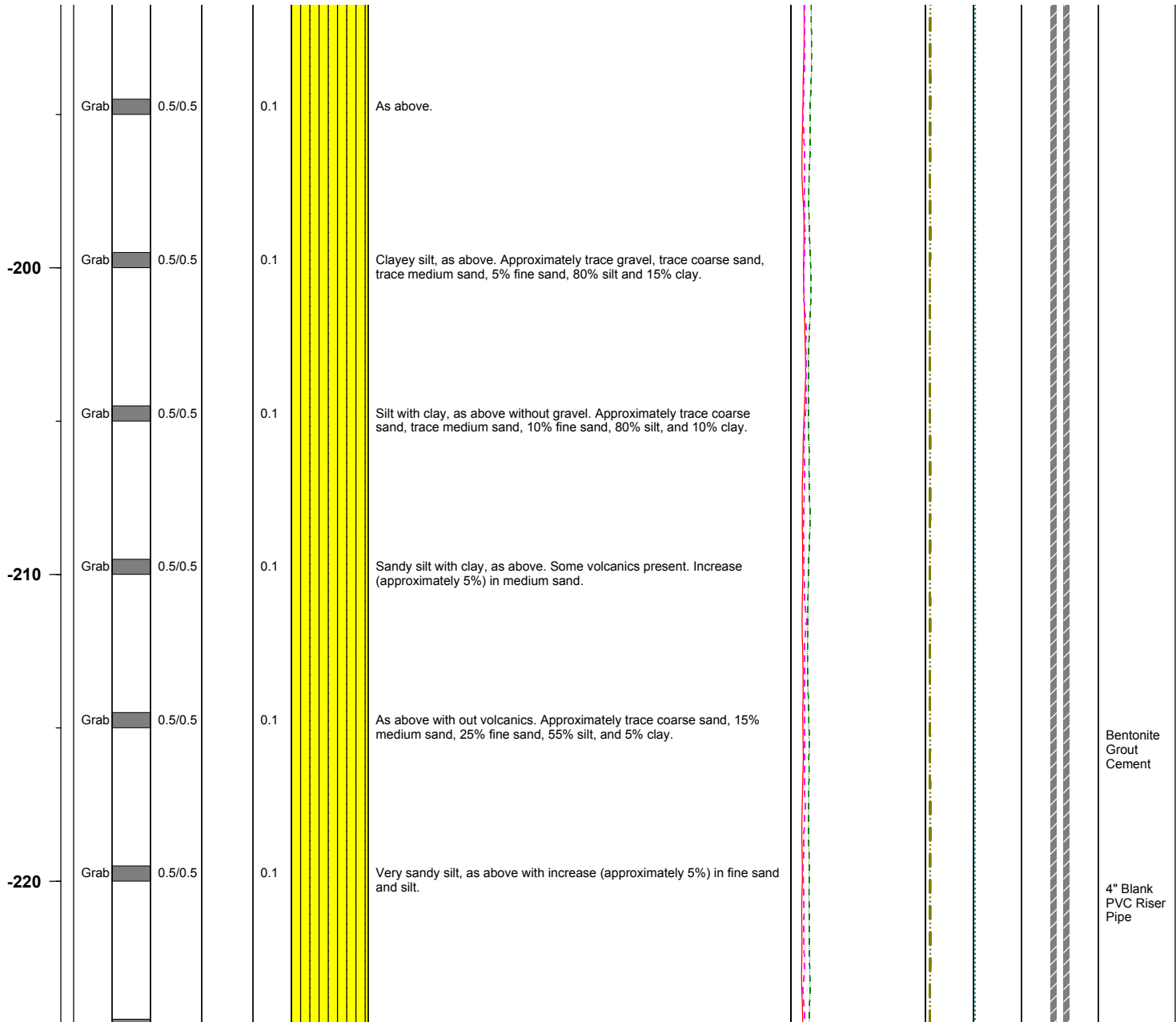
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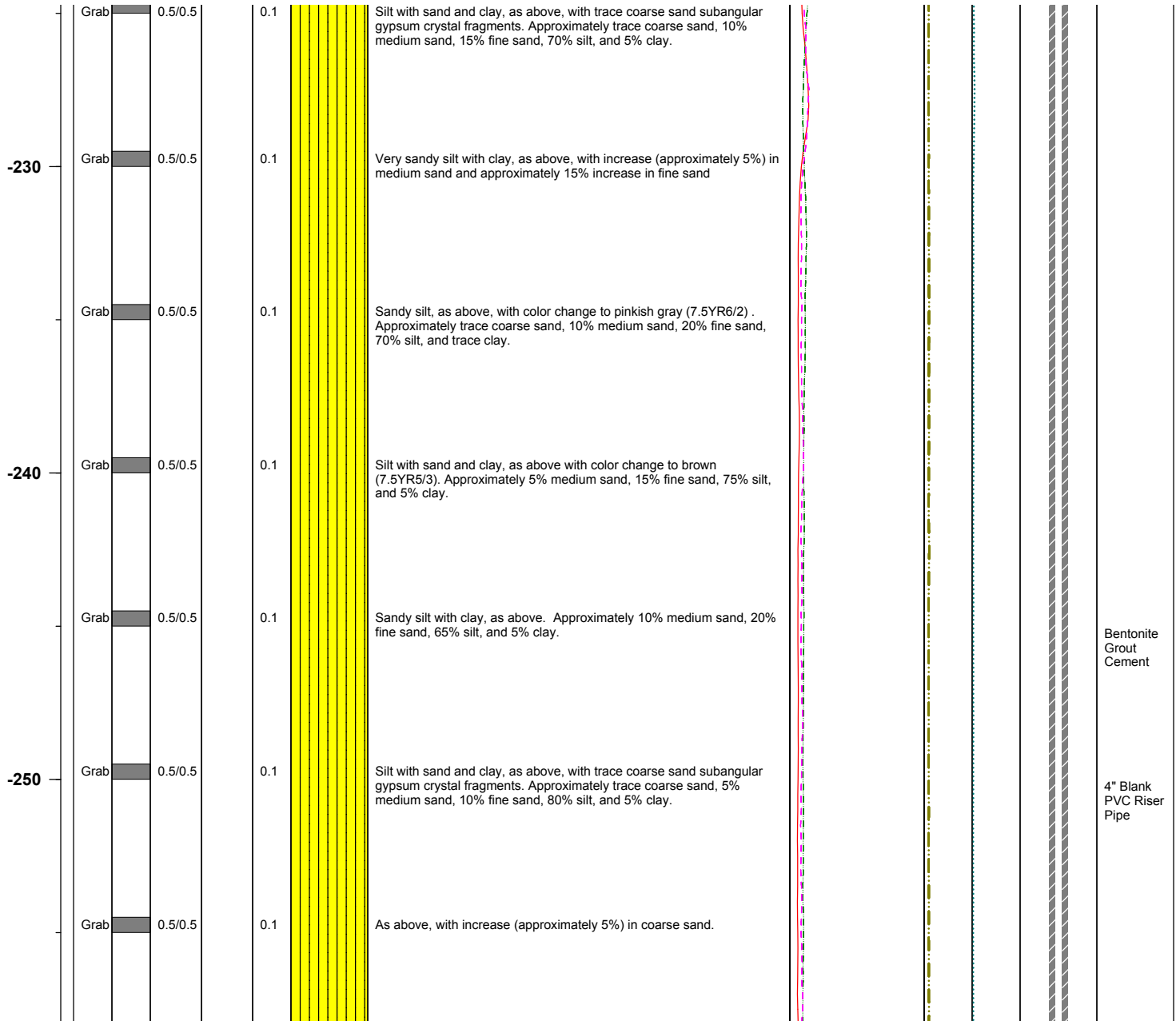
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-260	Grab	0.5/0.5	0.1				Silt with sand and clay, as above, without coarse sand. Approximately trace medium sand, 15% fine sand, 70% silt, and 5% clay.					Bentonite seal
	Grab	0.5/0.5	0.1				As above, with trace coarse sand subangular gypsum crystal fragments. Approximately trace coarse sand, 5% medium sand, 10% fine sand, 80% silt, and 5% clay.					#1C Transition Sand
												#10 x 20 Sand Pack
-270	Grab	0.5/0.5	0.1				Very silty sand, as above, without coarse sand. Approximately 15% medium sand, 25% fine sand, 60% silt, and trace clay.					4" 0.010 Slot PVC screen
	Grab	0.5/0.5	0.1				Silt with clay, as above, with trace gravel up to 1/2" and coarse sand subangular gypsum crystals and fragments. Approximately trace gravel, trace coarse sand, 5% medium sand, 5% fine sand, 80% silt, and 10% clay.					4" 0.010 Slot PVC screen
-280	Grab	0.5/0.5	0.1				Silt with sand, as above, without trace gravel and coarse sand. Approximately trace medium sand, 20% fine sand, 80% silt, and trace clay.					#10 x 20 Sand Pack
	Grab	0.5/0.5	0.1				As above. Approximately 5% medium sand, 20% fine sand, 75% silt and trace clay.					
-290	Grab	0.5/0.5	0.1				Very sandy silt, as above, with trace coarse sand, subangular gypsum crystal fragments. Approximately trace coarse sand, 10% medium sand, 30% fine sand, 60% silt, and trace clay.					

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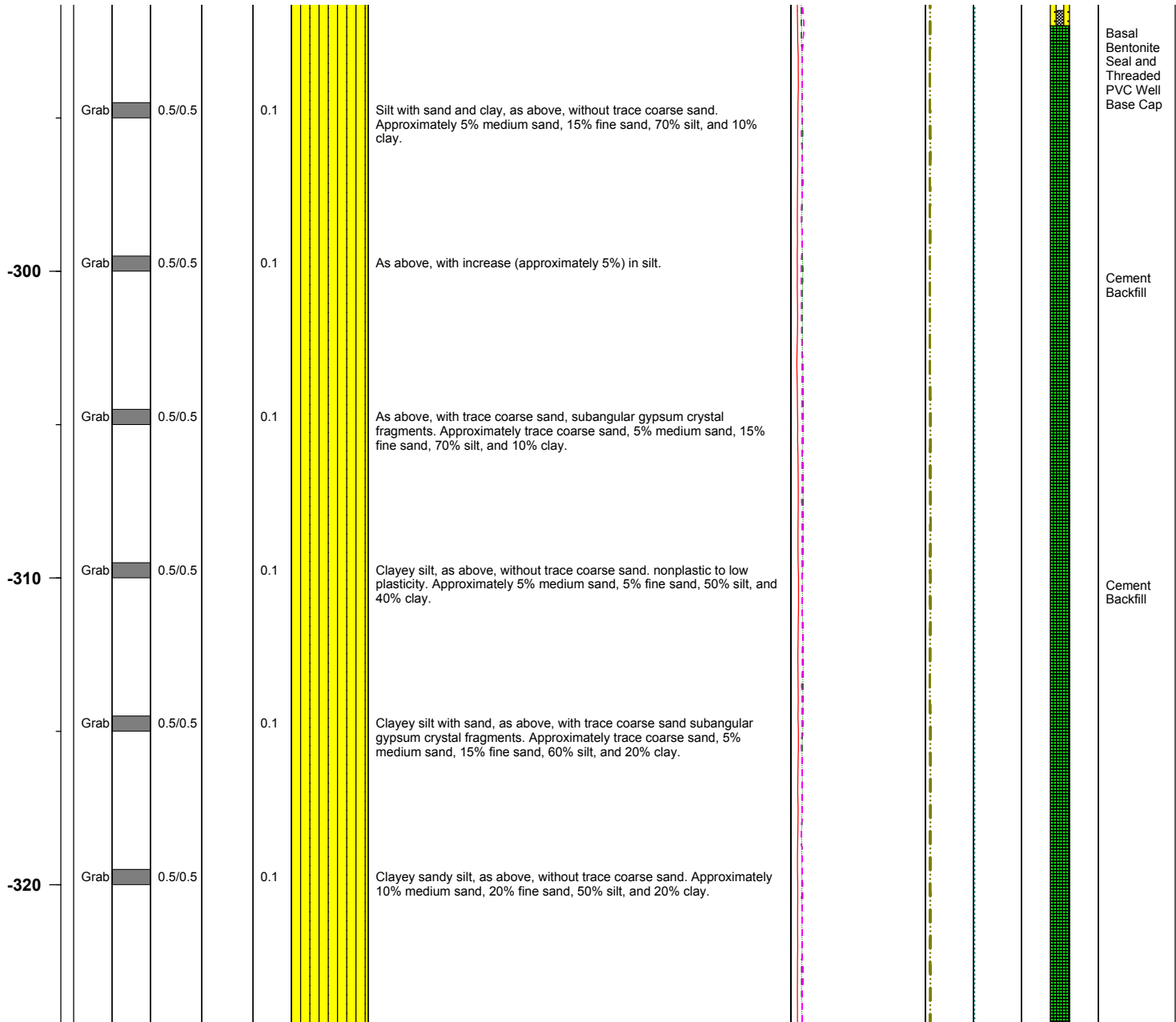
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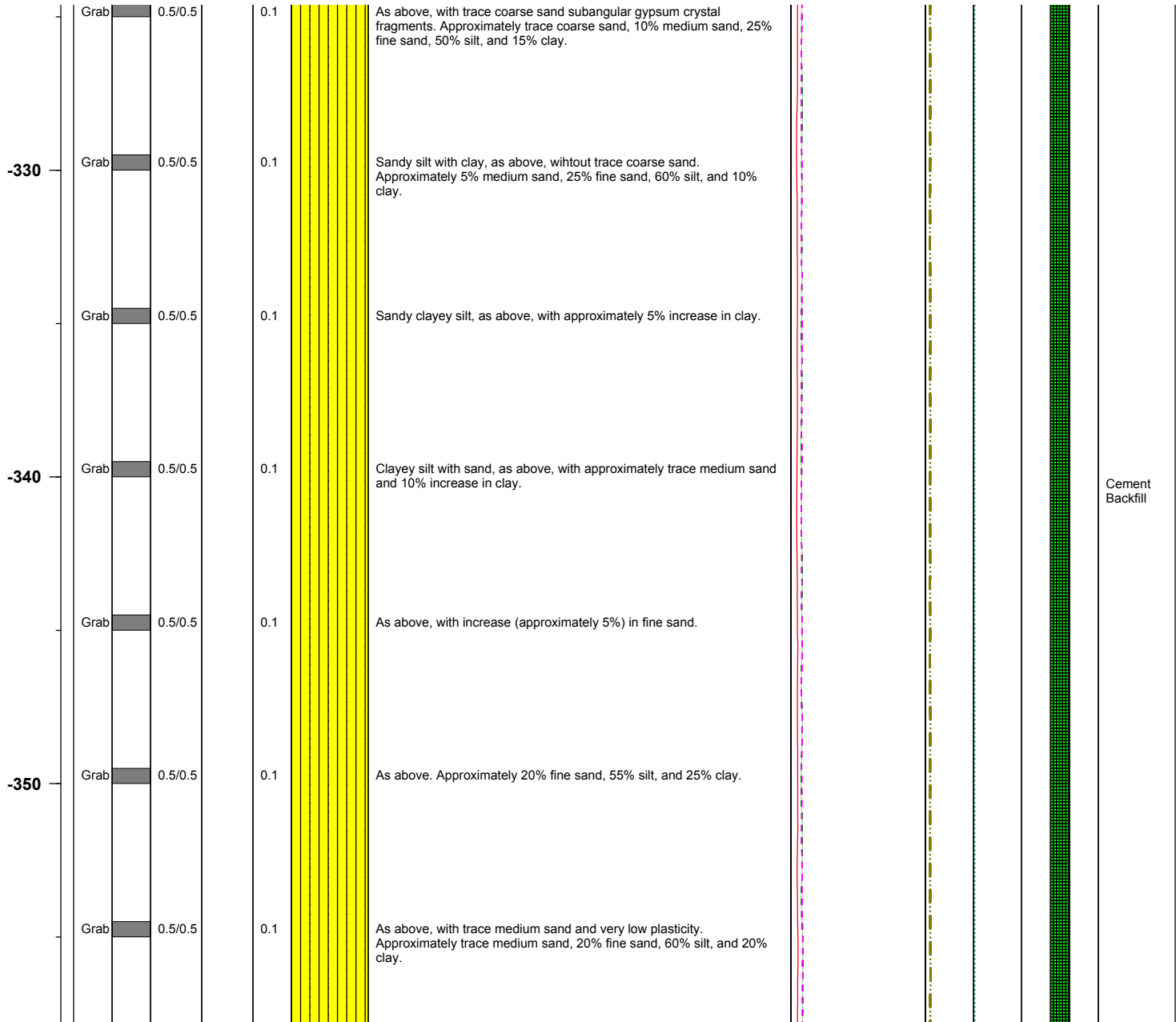
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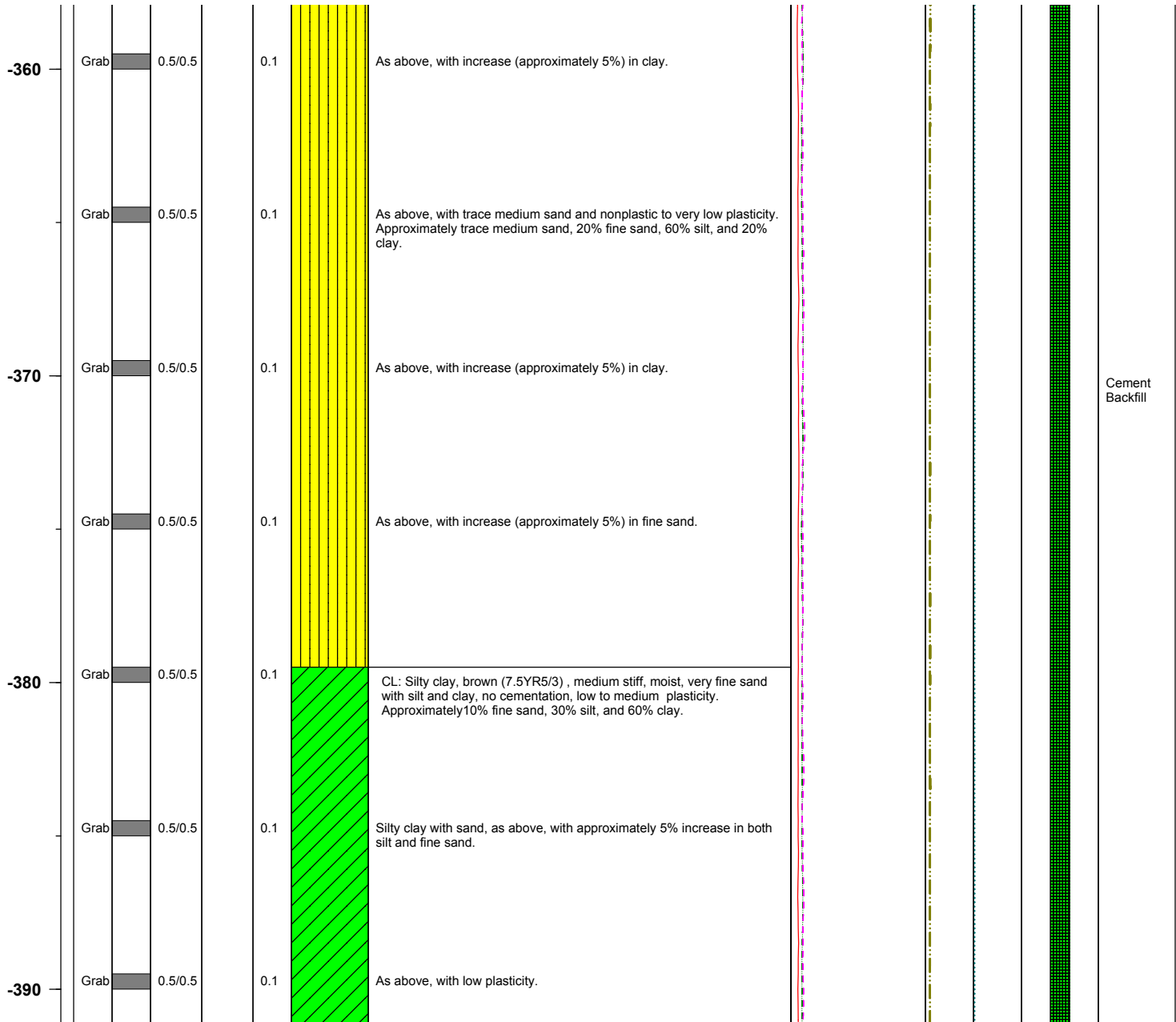
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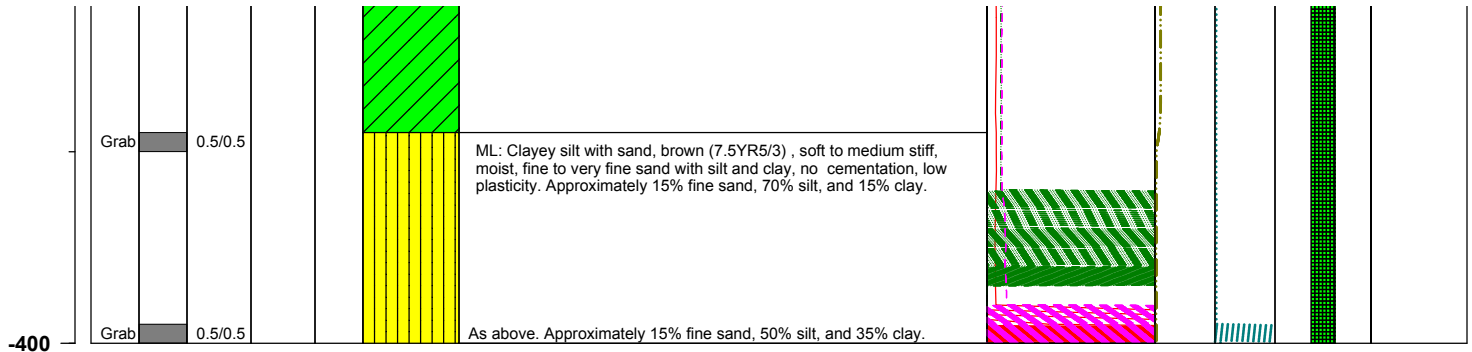
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