

Log of Boring No. BRC-SB-04-A

BMI Site - Hydrogeologic Characterization

Henderson, Nevada



Drilling Method: Mud Rotary
Drilling Equipment: GEFCO 15K (Rig No.136)
Drilling Contractor: Water Development Corporation
Driller: Juan Aguilar

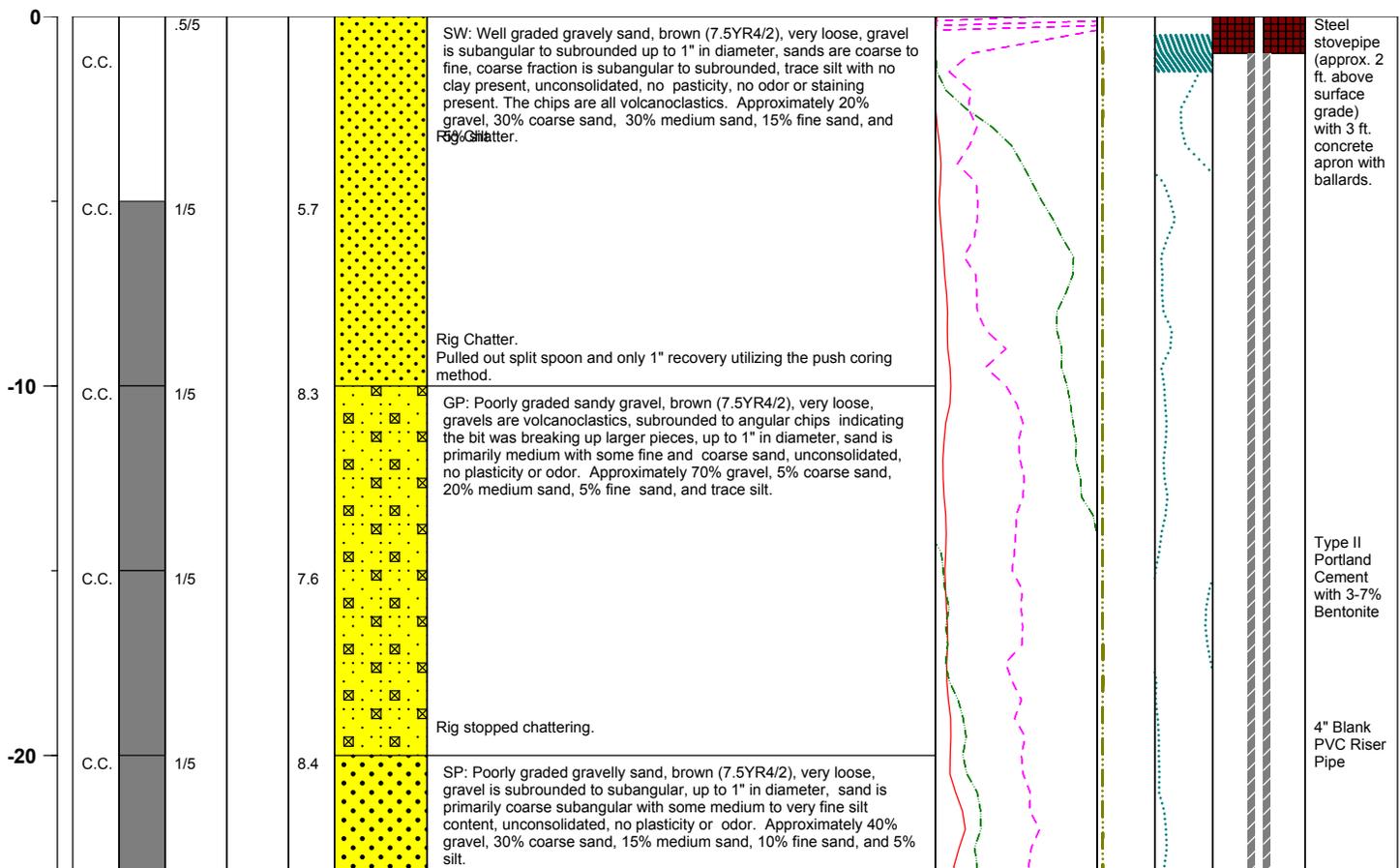
Borehole Total Depth: 420 ft bgs
Borehole Diameter: 10 in
Boring Location: Location 4 (Well ID: MCF-04)
Depth to Water (ft. bgs): NA

Sample Type: Continuous Core
Sample Interval: Varied

Logged By: Dave Kramer
Date Started: 2/05/04
Date Completed: 2/10/04

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):	-379 ft bgs
Screen Type/Size:	4" Sch 80 PVC	Bottom of Screen (ft. bgs):	-399 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)	S. PT. (OHM)			



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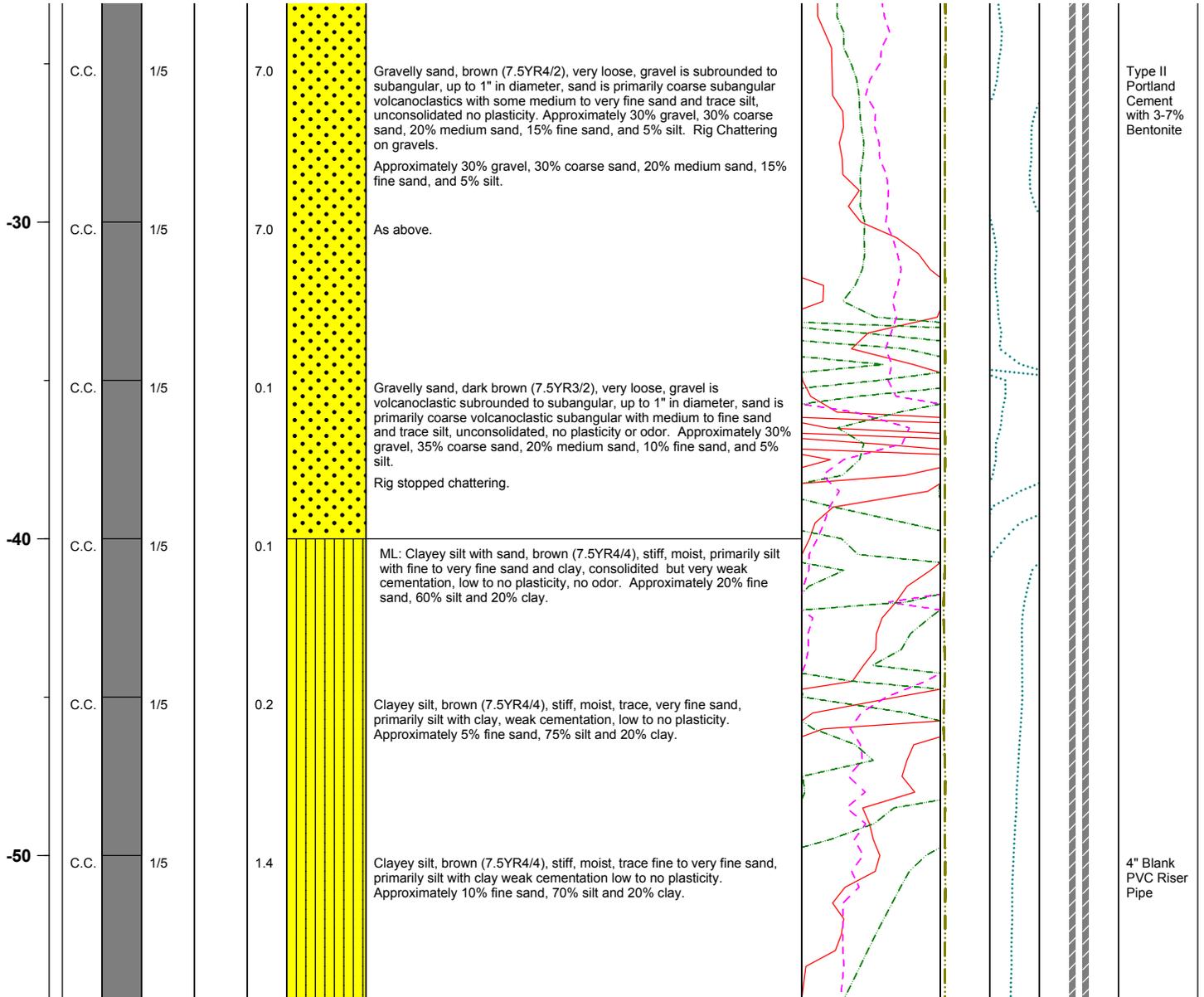
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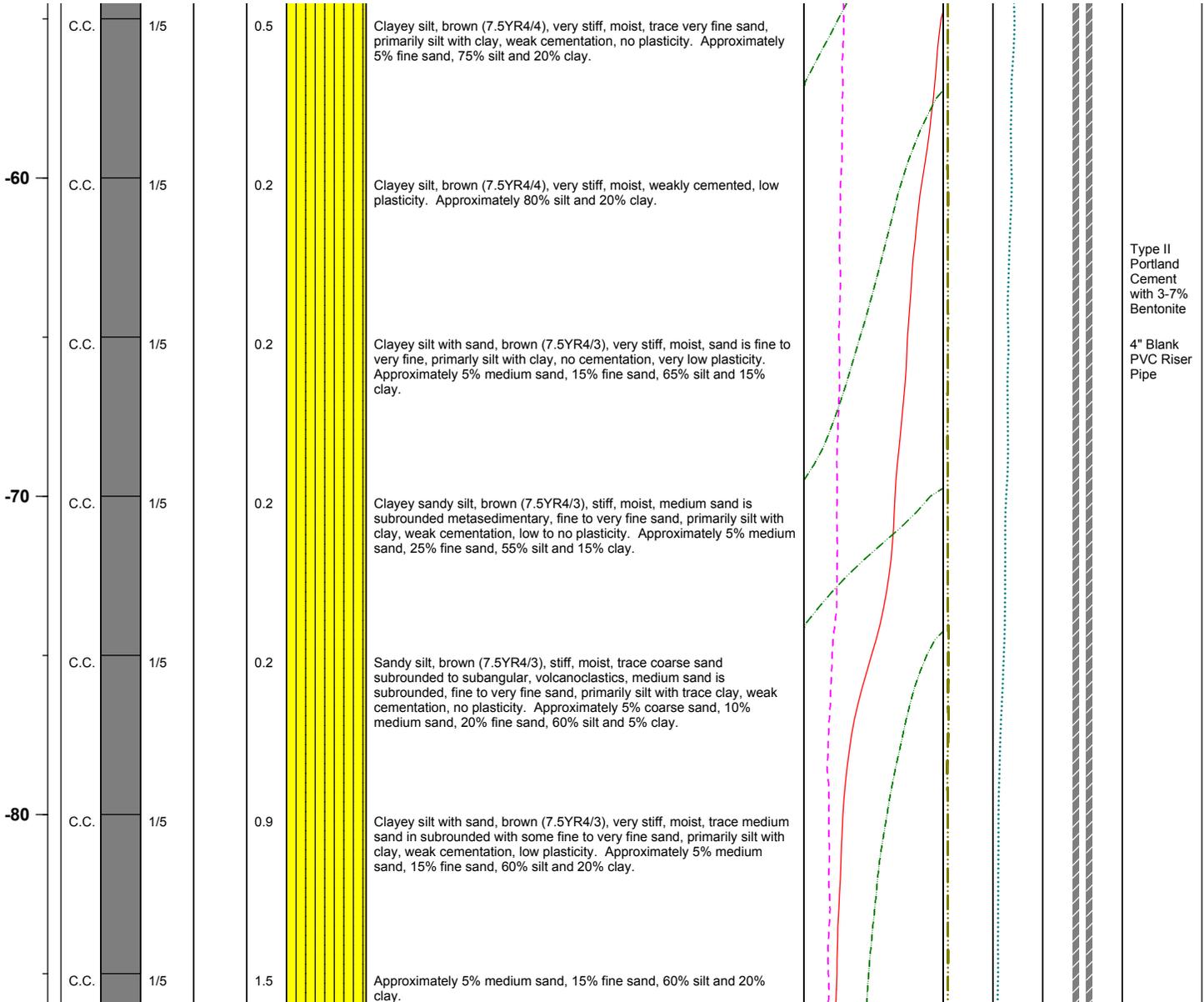
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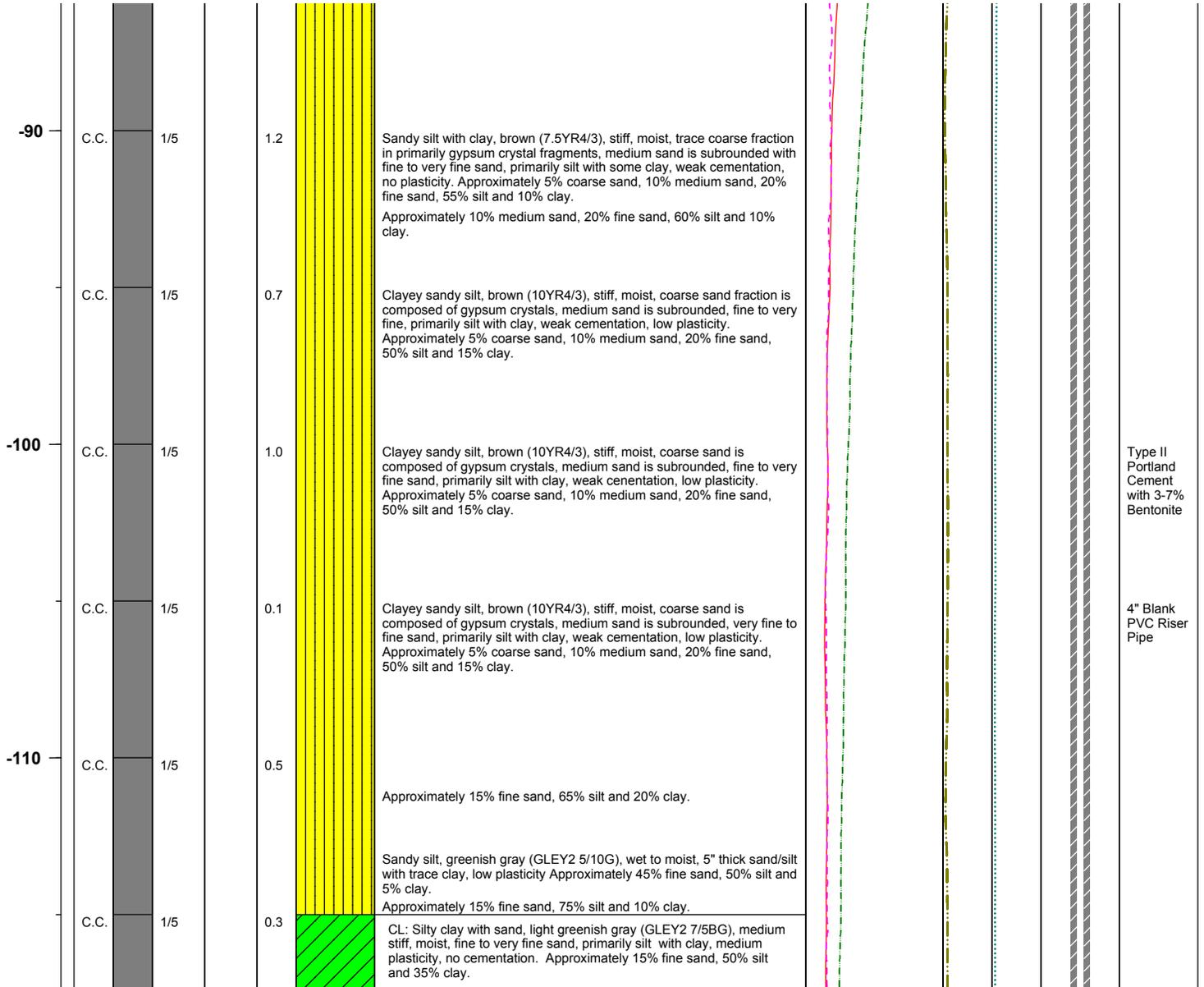
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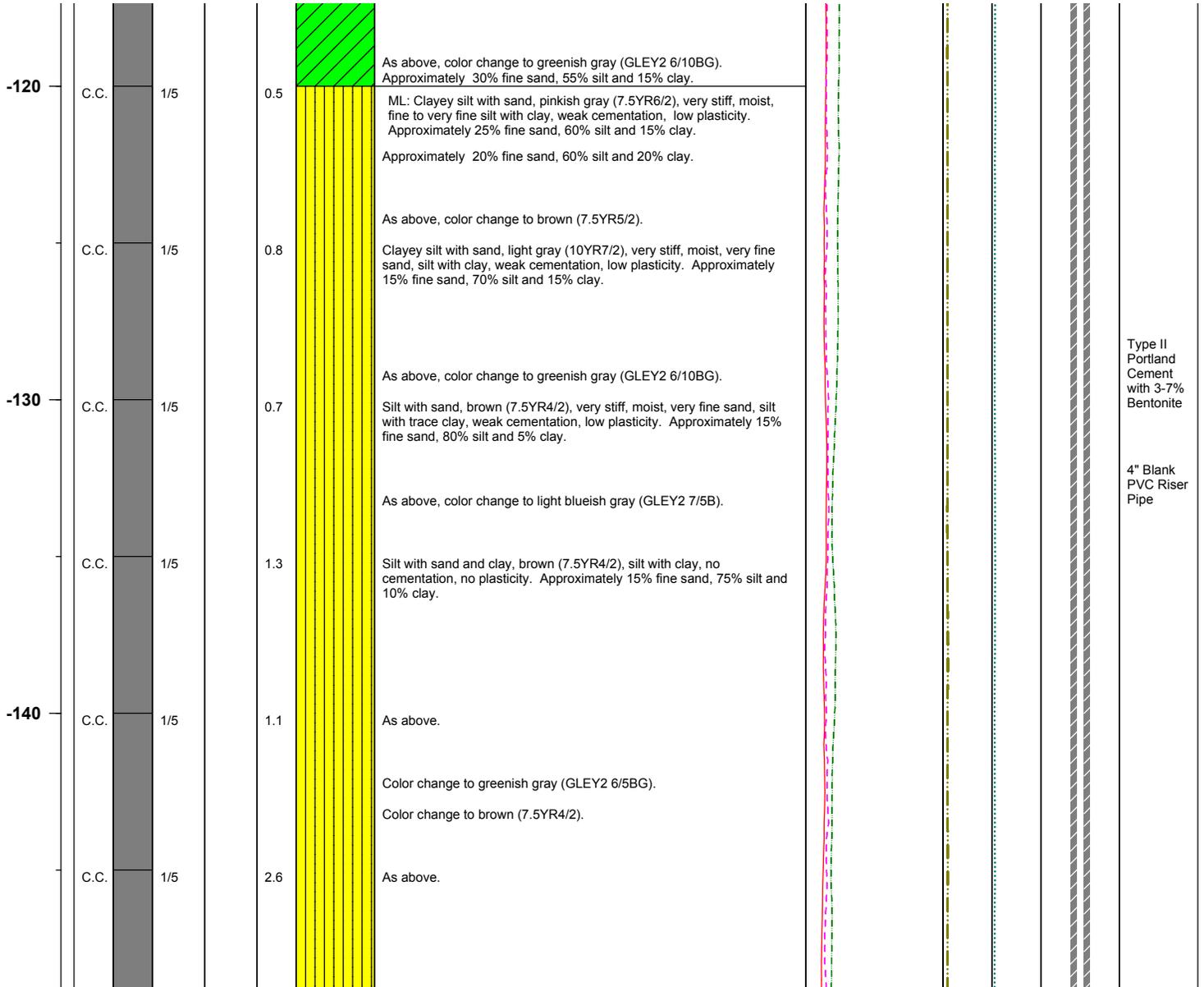


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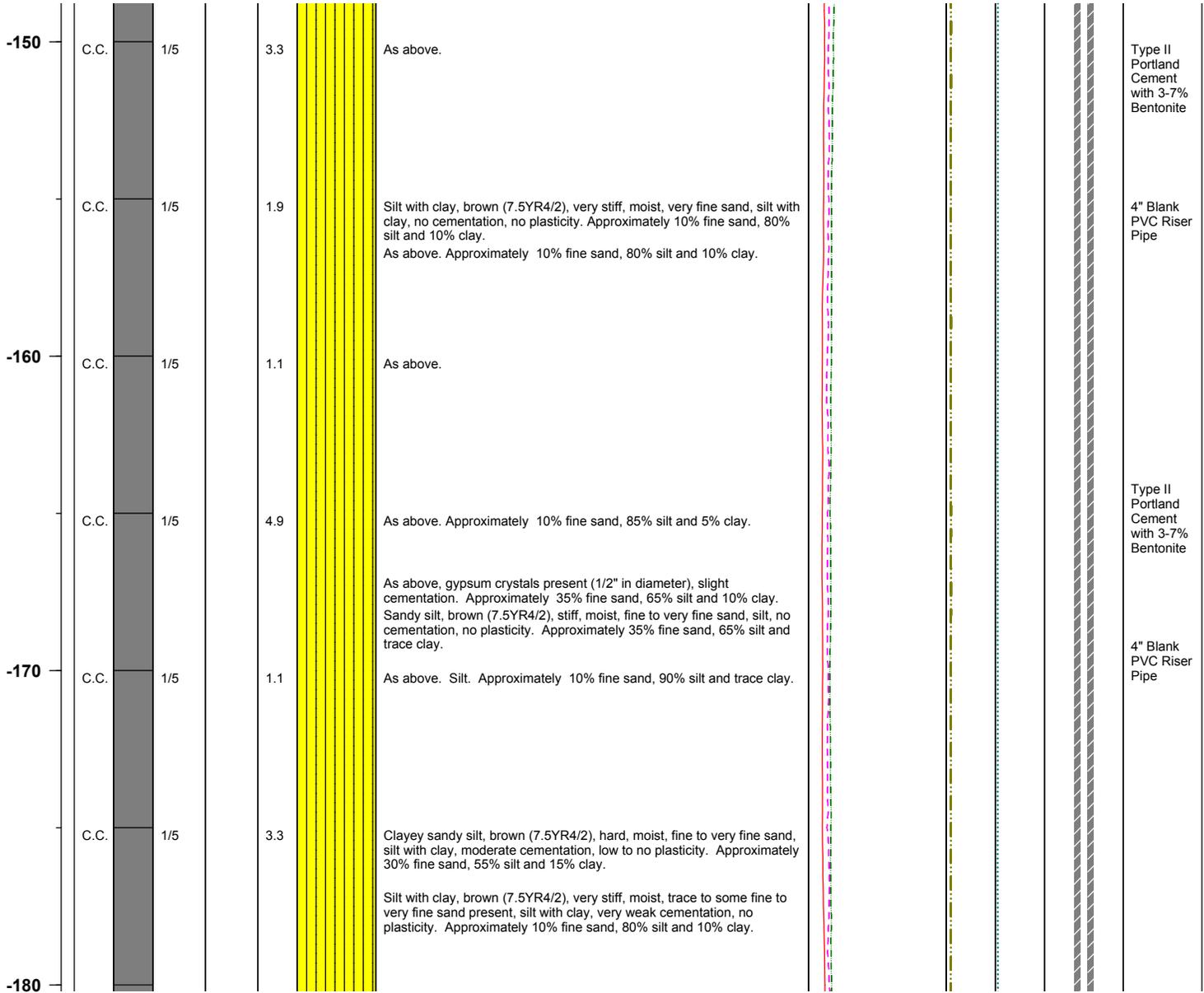


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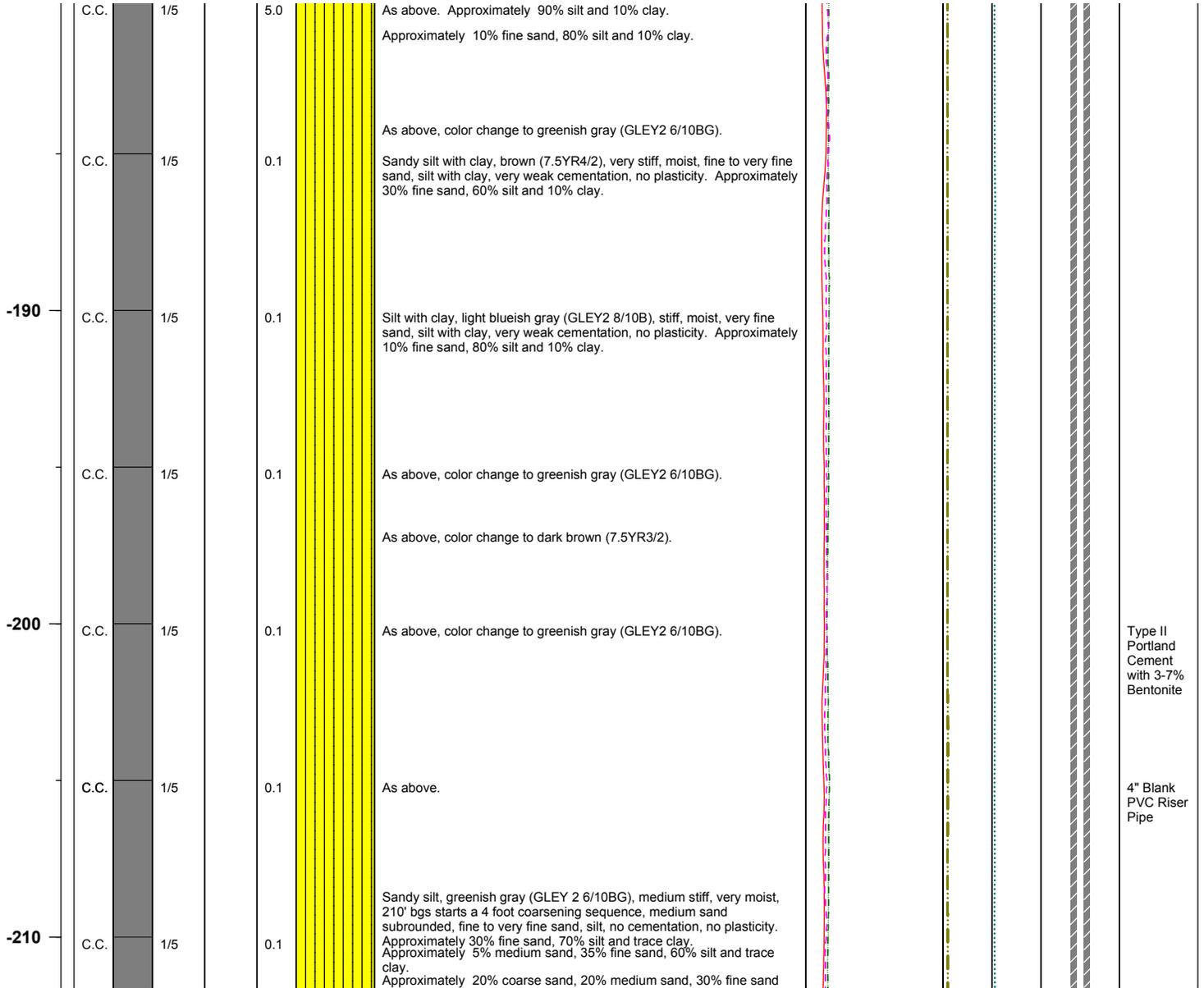


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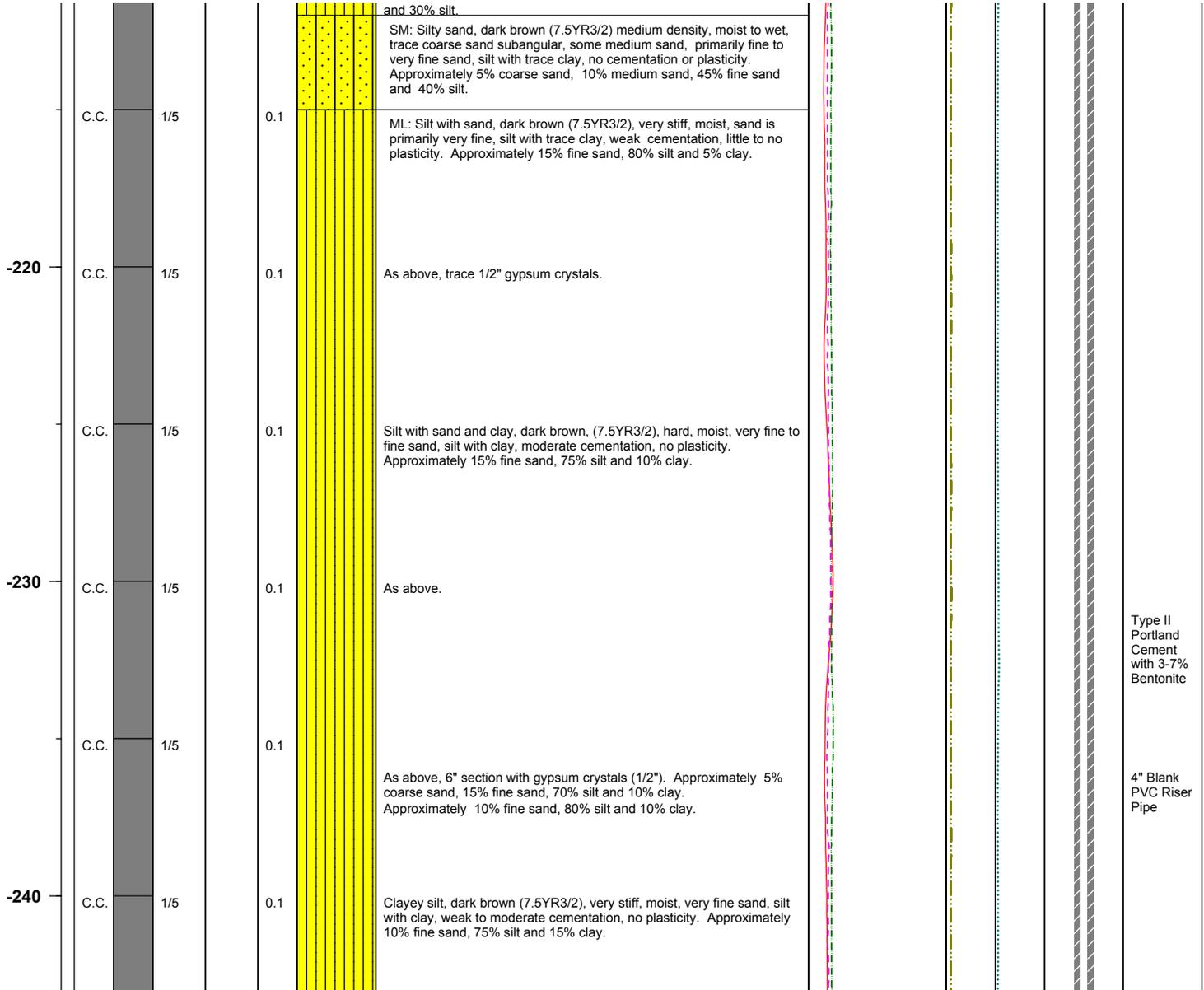
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							As above, color change greenish gray (GLEY2 5/5BG).					
	C.C.	1/5			0.1		As above, Silt with clay. Approximately 10% fine sand, 80% silt and 10% clay.					
-250	C.C.	1/5			0.1		As above, Silt with sand and clay. Approximately 15% fine sand, 75% silt and 10% clay. 1" gypsum crystals.					Type II Portland Cement with 3-7% Bentonite
							No gypsum crystals.					
	C.C.	1/5			0.1		As above, Silt with sand and clay.					4" Blank PVC Riser Pipe
							As above, color change to greenish gray (GLEY2 5/10G). Approximately 10% fine sand, 80% silt and 10% clay.					
-260	C.C.	1/5			0.1		Silt with sand, greenish gray (GLEY 2 5/10G), stiff, moist, fine to very fine sand, no gypsum, silt with clay, no cementation, no plasticity. Approximately 25% fine sand, 70% silt and 5% clay.					
							As above, nine inches of 1/4" gypsum crystals, subangular. Approximately 5% gravel, 5% coarse sand, 5% medium sand, 10% fine sand, 65% silt and 10% clay.					
	C.C.	1/5			0.1		Silt with sand and clay, greenish gray (GLEY 2 6/10BG), very stiff, moist, fine to very fine sand, silt with clay, no cementation, no plasticity, five inches of 1/2" gypsum crystals. Approximately 20% fine sand, 70% silt and 10% clay.					
							Approximately 5% fine sand, 75% silt and 20% clay.					
							As above, Clayey silt.					Type II Portland Cement with 3-7% Bentonite
-270	C.C.	1/5			0.1		As above. Approximately 10% fine sand, 70% silt and 20% clay.					4" Blank PVC Riser Pipe

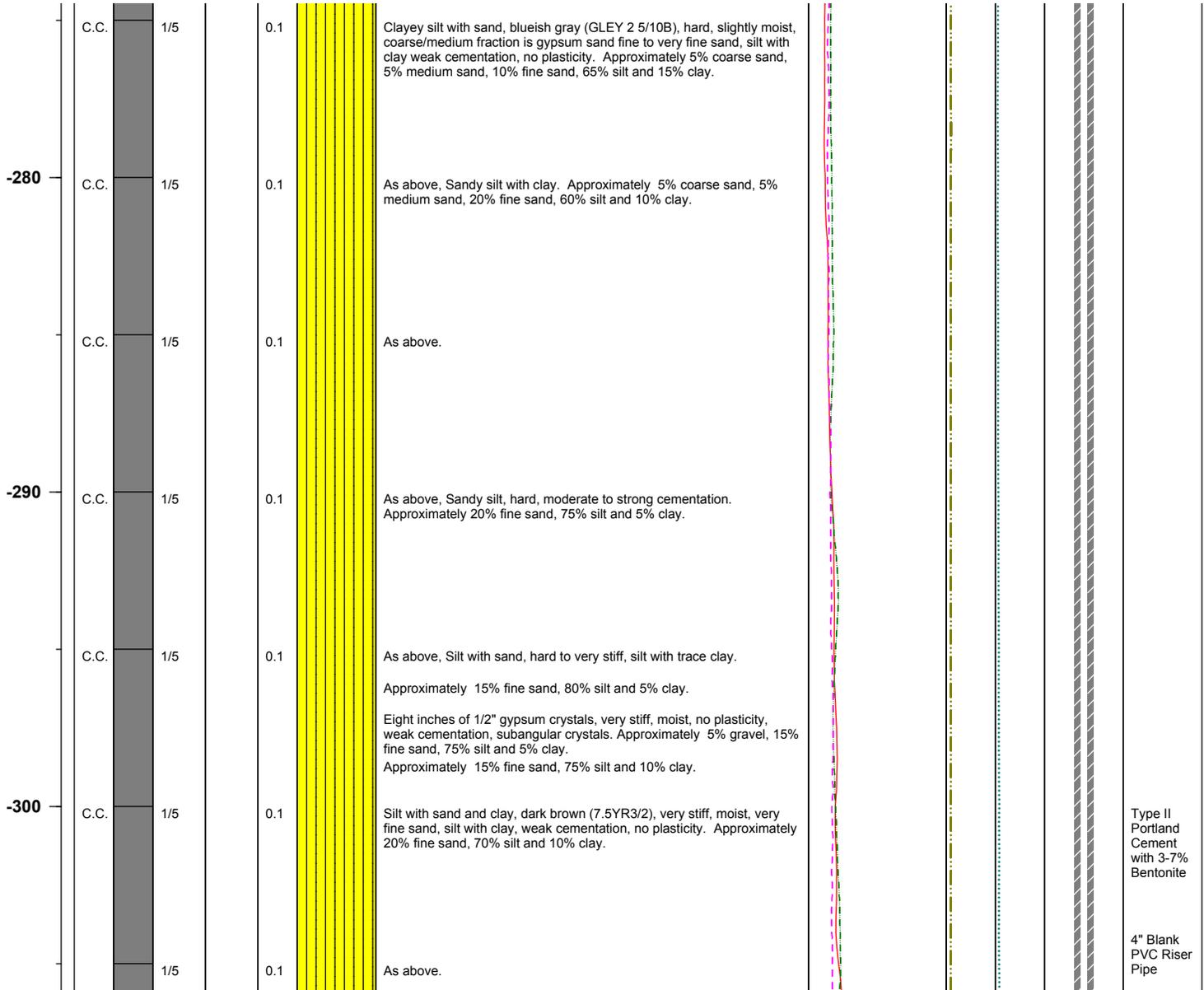


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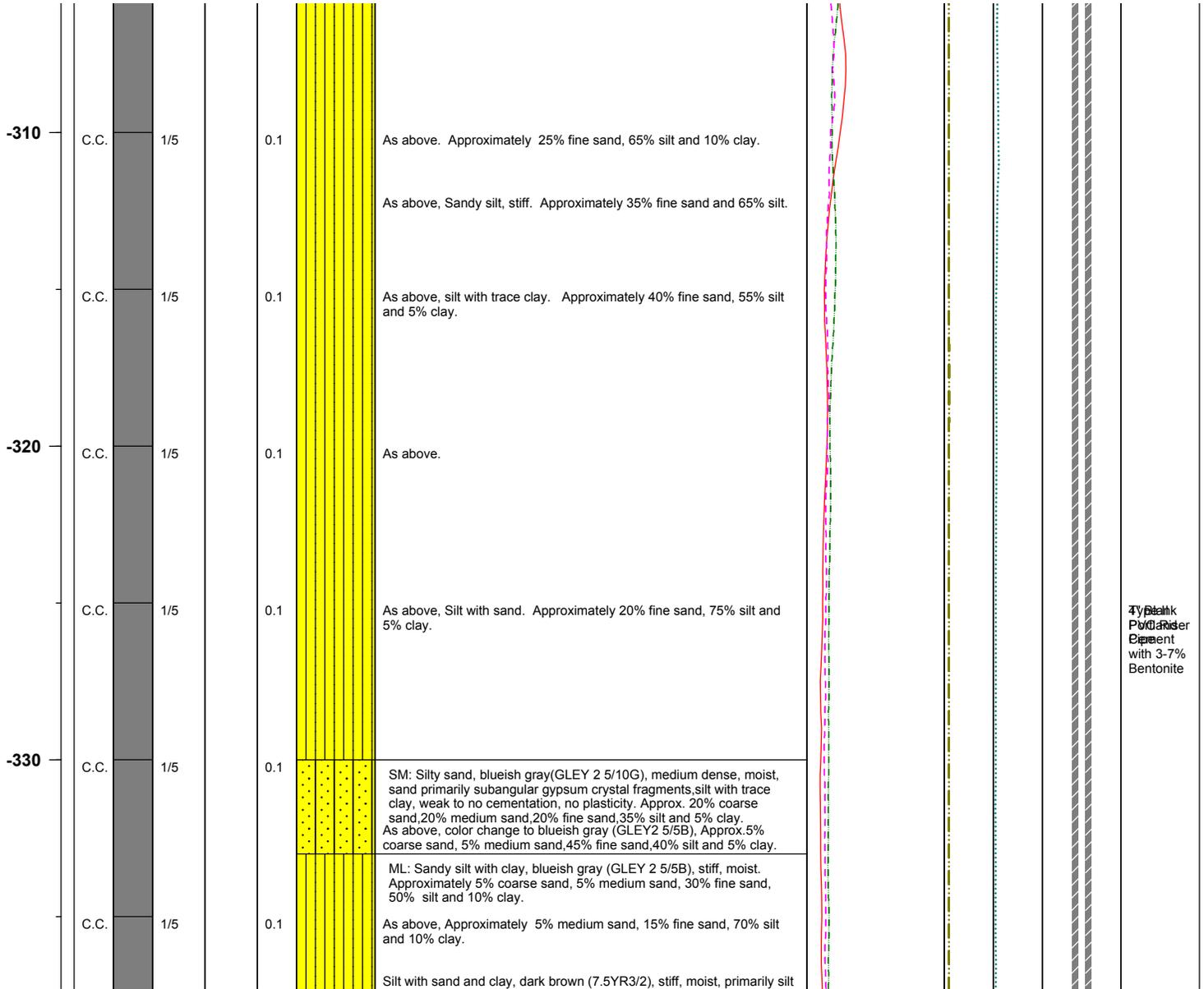
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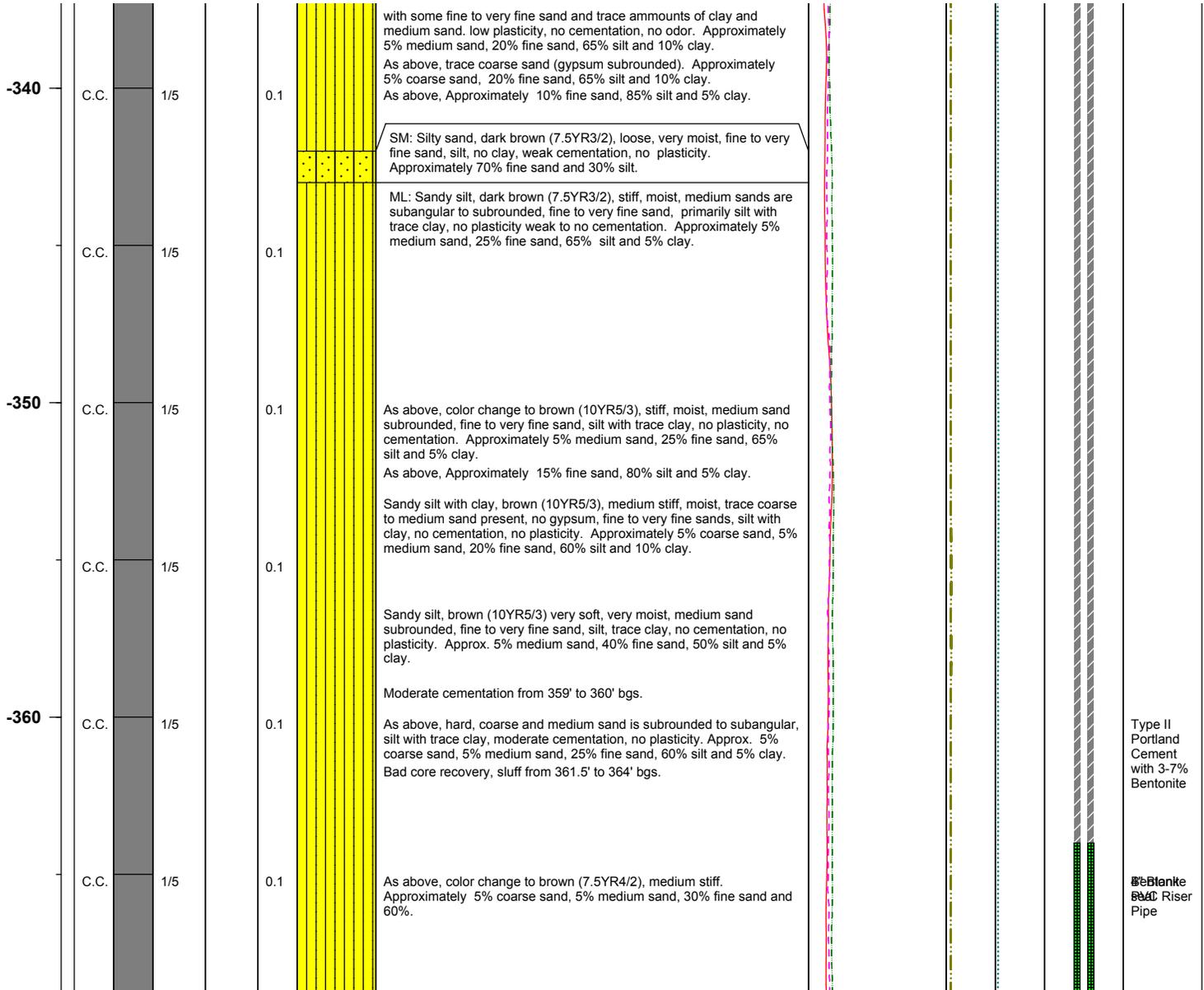
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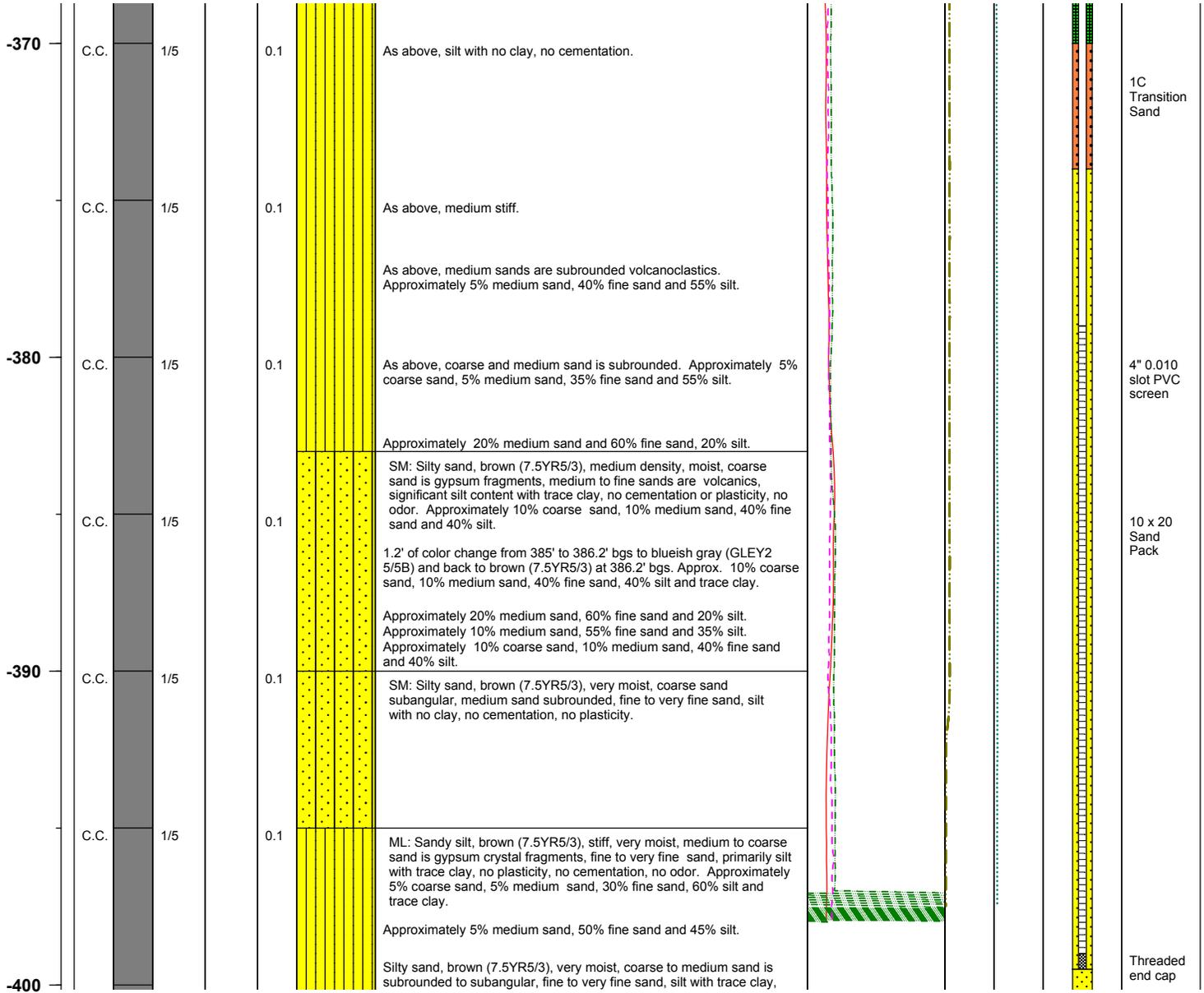


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								16" (OHM)	64" (OHM)	S. PT. (OHM)	Calliper Log (inch)	

-410	C.C.	1/5	0.1		weak to moderate cementation, no plasticity, slightly wet from 400.8'-401.1' bgs, slightly moist down to 405' bgs. Approximately 5% medium sand, 50% fine sand, 45% silt and trace clay. Approximately 5% coarse sand, 5% medium sand, 30% fine sand and 60% silt. Approximately 5% coarse sand, 15% medium sand, 35% fine sand, 45% silt and trace clay. Approximately 5% gravel, 10% medium sand, 35% fine sand, 50% silt and trace clay.								
	C.C.	1/5	0.1		SM/ML: Silty sand, brown (7.5YR5/3), stiff, moist, medium sand is subangular gypsum, very fine sand, silt with trace clay, no cementation, no plasticity, gypsum crystals (1/2" in size) from 406' to 406.5' bgs. Approximately 10% medium sand, 40% fine sand, 50% silt and trace clay. Silty sand, brown (7.5YR5/3), stiff, moist, medium sand is subangular gypsum, very fine sand, silt with trace clay, no cementation, no plasticity, gypsum crystals (1/2" in size) from 406' to 406.5' bgs. Approximately 10% medium sand, 40% fine sand, 50% silt and trace clay. Approximately 10% medium sand, 60% fine sand and 30% silt.								
	C.C.	1/5	0.1		ML: Sandy silt, brown (7/5YR5/3), stiff, moist, coarse and medium sand is subangular gypsum, very fine sand, silt with trace clay, no cementation, no plasticity. Approximately 5% coarse sand, 5% medium sand, 20% fine sand, 70% silt and trace clay.								
	C.C.	1/5	0.1		SM/ML: Silty sand, brown (7.5YR5/3), very stiff, moist, medium sand subangular gypsum, very fine sand, silt with trace clay, weak cementation, no plasticity. Approximately 15% medium sand, 45% fine sand, 40% silt and trace clay. Approximately 5% coarse sand, 5% medium sand, 60% fine sand and 30% silt.								
-420	C.C.	1/5	0.1		Silty with sand, brown (7.5YR5/3), stiff, moist, very fine sand and silt, gypsum crystal fragments, trace clay, no cementation, no plasticity. Total Depth = 420' bgs. Approximately 20% fine sand, 75% silt and 5% clay.								

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