Alluvium Drill Cuttings Logging Form Comments - Nye County Nuclear Waste Repository Project Office

Borehole ID: **NC-EWDP-16P** (Phase 4)

Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
12/13/2002	BCS00042501	0.00	2.50	Collar in on Friday 13th at 7:46 am. 1st sample - mostly annular return. When reaming to 12", the rig bounced on the caliche. Tare includes 5 gal bucket (0.80) and screen (0.40) = 1.20.
12/13/2002	BCS00042502	2.50	5.00	Returned through cyclone - many fines lost therein. Sample small (subsample). 3.3' (digging mud pit - hit caliche at 3.3', caliche is at least 4 ft thick.)
12/13/2002	BCS00042503	5.00	7.50	Gravel component is remarkably consistent. Grinding of it appears to yield angular sand size component (10% +-) (5'-40', this was observed).
12/13/2002	BCS00042504	7.50	10.00	Sample small (subsample) - much fines lost through cyclone.
12/13/2002	BCS00042505	10.00	12.50	
12/13/2002	BCS00042506	12.50	15.00	
12/13/2002	BCS00042507	15.00	17.50	
12/13/2002	BCS00042508	17.50	20.00	Big sample - we've cleaned out the borehole.
12/13/2002	BCS00042509	20.00	22.50	
12/13/2002	BCS00042510	22.50	25.00	
12/13/2002	BCS00042511	25.00	27.50	
12/13/2002	BCS00042512	27.50	30.00	
12/13/2002	BCS00042513	30.00	32.50	
12/13/2002	BCS00042514	32.50	35.00	
12/13/2002	BCS00042515	35.00	37.50	
12/13/2002	BCS00042516	37.50	40.00	Condition/clean hole at 40' - used water.
12/13/2002	BCS00042517	40.00	42.50	Drilling cobbles / boulders - ROP slows, troublesome… sample is "humid". Note apparent increase in fines (silt, particularly).
12/13/2002	BCS00042518	42.50	45.00	Missed sample - this sample composited, w/some from 40-42.5' and some from 45-47.5'.
12/13/2002	BCS00042519	45.00	47.50	
12/13/2002	BCS00042520	47.50	50.00	

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12/13/2002	BCS00042521	50.00	52.50	
12/13/2002	BCS00042522	52.50	55.00	
12/13/2002	BCS00042523	55.00	57.50	
12/13/2002	BCS00042524	57.50	60.00	
12/13/2002	BCS00042525	60.00	62.50	62.5' - 12/13/02 Stop, put on hole opener, ream to 12" to emplace 8 5/8" casing to +- 60'.
12/13/2002	BCS00042526	62.50	65.00	1420 hrs - 12/13/02 Casing set, 30 bags cement + 20 bags W60 (accelerant). Ready to resume drilling.
12/13/2002	BCS00042527	65.00	67.50	
12/13/2002	BCS00042528	67.50	70.00	
12/13/2002	BCS00042529	70.00	72.50	
12/13/2002	BCS00042530	72.50	75.00	
12/13/2002	BCS00042531	75.00	77.50	
12/13/2002	BCS00042532	77.50	80.00	
12/13/2002	BCS00042533	80.00	82.50	
12/13/2002	BCS00042534	82.50	85.00	
12/13/2002	BCS00042535	85.00	87.50	
12/13/2002	BCS00042536	87.50	90.00	
12/13/2002	BCS00042537	90.00	92.50	Note increase in gravel…
12/13/2002	BCS00042538	92.50	95.00	
12/13/2002	BCS00042539	95.00	97.50	
12/13/2002	BCS00042540	97.50	100.00	

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12/14/2002	BCS00042541	100.00	102.50	Note - angular "gravel" primarily broken cobbles/boulders.
12/14/2002	BCS00042542	102.50	105.00	
12/14/2002	BCS00042543	105.00	107.50	Color change and v. wk plasticity - "floury".
12/14/2002	BCS00042544	107.50	110.00	
12/14/2002	BCS00042545	110.00	112.50	
12/14/2002	BCS00042546	112.50	115.00	
12/14/2002	BCS00042547	115.00	117.50	
12/14/2002	BCS00042548	117.50	120.00	
12/14/2002	BCS00042549	120.00	122.50	
12/14/2002	BCS00042550	122.50	125.00	Increase in gravel and sand. 50/50 rounded gravels/angular broken boulders/cobbles.
12/14/2002	BCS00042551	125.00	127.50	
12/14/2002	BCS00042552	127.50	130.00	
12/14/2002	BCS00042553	130.00	132.50	
12/14/2002	BCS00042554	132.50	135.00	
12/14/2002	BCS00042555	135.00	137.50	
12/14/2002	BCS00042556	137.50	140.00	
12/14/2002	BCS00042557	140.00	142.50	
12/14/2002	BCS00042558	142.50	145.00	
12/14/2002	BCS00042559	145.00	147.50	All sand.
12/14/2002	BCS00042560	147.50	150.00	

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
12/14/2002	BCS00042561	150.00	152.50	
12/14/2002	BCS00042562	152.50	155.00	
12/14/2002	BCS00042563	155.00	157.50	
12/14/2002	BCS00042564	157.50	160.00	
12/14/2002	BCS00042565	160.00	162.50	
12/14/2002	BCS00042566	162.50	165.00	Contact: Out of alluvium at 166. So 162.5 - 165.0 is last alluvial sample. 165-170, the first non-alluvial sample, has weak effervescence.