Non-Alluvium Logging Form - Nye County Nuclear Waste Repository Project Office

Borehole ID: **NC-EWDP-32P** (Phase 5) Driller/Drilling Company: Dennis White/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Non-Alluvium Depth (ft bgs): 400 to 500 Start Date: 4/6/2006 End Date: 4/7/2006

Logged		Checked		Sample	Depth Interval (feet/bgs)		Drilling/Coring Data: Liquid Drilling Fluid Injection Rate (gpm)	Drilling/Coring Rate (feet/min)	Water Production (gpm)	Sample Recovery (gallons)	Sample Density Data: Borehole Diameter (inches)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
04/06/06	EJH	05/15/06	JSW	32P-400-402.5-D	400.00	402.50	0.50	0.70	30.00	2.00	6.50				2.5YR 4/4
04/06/06	EJH	05/15/06	JSW	32P-402.5-405-D	402.50	405.00	0.50	0.70	30.00	2.50	6.50				2.5YR 4/4
04/06/06	EJH	05/15/06	JSW	32P-405-407.5-D	405.00	407.50	0.50	0.70	30.00	2.00	6.50				10R 3/4
04/06/06	EJH	05/15/06	JSW	32P-407.5-410-D	407.50	410.00	0.50	0.70	30.00	2.50	6.50				10R 3/4
04/06/06	EJH	05/15/06	JSW	32P-410-412.5-D	410.00	412.50	0.50	0.70	30.00	2.00	6.50				10R 3/4
04/06/06	EJH	05/15/06	JSW	32P-412.5-415-D	412.50	415.00	0.50	0.70	30.00	2.50	6.50				10YR 2/2
04/06/06	EJH	05/15/06	JSW	32P-415-417.5-D	415.00	417.50	0.50	0.70	30.00	2.50	6.50				10YR 2/2
04/06/06	EJH	05/15/06	JSW	32P-417.5-420-D	417.50	420.00	0.50	0.70	30.00	2.50	6.50				10YR 2/2
04/06/06	EJH	05/15/06	JSW	32P-420-422.5-D	420.00	422.50	0.50	0.10	30.00	2.50	6.50				10YR 4/1
04/06/06	EJH	05/15/06	JSW	32P-422.5-425-D	422.50	425.00	0.50	0.10	30.00	2.00	6.50				10YR 4/1
04/06/06	EJH	05/15/06	JSW	32P-425-427.5-D	425.00	427.50	0.50	0.10	30.00	2.00	6.50				2.5YR 2/1
04/06/06	EJH	05/15/06	JSW	32P-427.5-430-D	427.50	430.00	0.50	0.10	30.00	2.00	6.50				2.5YR 2/1
04/06/06	EJH	05/15/06	JSW	32P-430-432.5-D	430.00	432.50	0.50	0.10	30.00	2.50	6.50				2.5YR 2/1
04/06/06	EJH	05/15/06	JSW	32P-432.5-435-D	432.50	435.00	0.50	0.10	30.00	2.50	6.50				2.5YR 2/1
04/06/06	EJH	05/15/06	JSW	32P-435-437.5-D	435.00	437.50	0.50	0.10	30.00	5.00	6.50				2.5YR 2/3
04/06/06	EJH	05/15/06	JSW	32P-437.5-440-D	437.50	440.00	0.50	0.10	30.00	4.00	6.50				N1
04/06/06	EJH	05/15/06	JSW	32P-440-442.5-D	440.00	442.50	0.50	0.10	75.00	4.00	6.50				N1
04/06/06	EJH	05/15/06	JSW	32P-442.5-445-D	442.50	445.00	0.50	0.10	75.00	3.00	6.50				N1
04/06/06	EJH	05/15/06	JSW	32P-445-447.5-D	445.00	447.50	0.50	0.10	75.00	2.00	6.50				N1
04/06/06	EJH	05/15/06	JSW	32P-447.5-450-D	447.50	450.00	0.50	0.10	75.00	2.50	6.50				N1
04/06/06	EJH	05/15/06	JSW	32P-450-452.5-D	450.00	452.50	0.50	0.10	75.00	2.50	6.50				10YR 2/1
04/06/06	EJH	05/15/06	JSW	32P-452.5-455-D	452.50	455.00	0.50	0.10	75.00	3.50	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-455-457.5-D	455.00	457.50	0.50	0.10	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-457.5-460-D	457.50	460.00	0.50	0.10	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-460-462.5-D	460.00	462.50	0.50	0.10	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-462.5-465-D	462.50	465.00	0.50	0.10	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-465-467.5-D	465.00	467.50	0.50	0.10	75.00	2.00	6.50				10YR 2/1

Sample	Moisture Content: Not Applicable	Dry	Moist	Wet	HCL Reaction: None	Weak	Strong	Rock Unit – Tuff – Deposition: Ash Fall	Ash Flow	Reworked	Welding: Dense	Moderate	Weak	None	Alteration: Vitric	Devitrified	Matrix	Vapor Phase	Spherulitic	Sedimentary: Claystone	Mudstone	Siltstone	Sandstone	Conglomerate	Chert	Carbonate: Limestone	Dolomite	Other	Weathering: Fresh	Slight	Moderate	High	Decomposed	Structure: None Observed	Stratified	Laminated	Fractured	Other	Matrix: Dense/Non-porous	Open/Porous	Other
32P-400-402.5-D				✓	✓																							✓				✓					✓		✓		
32P-402.5-405-D				✓	✓																							✓				✓					✓		✓		
32P-405-407.5-D				✓	✓																							✓				✓					✓		✓		
32P-407.5-410-D				✓	✓																							✓			✓						✓		✓		
32P-410-412.5-D				✓	✓																							✓		✓							✓		✓		
32P-412.5-415-D				✓	✓																							✓		✓							✓			✓	
32P-415-417.5-D				✓	✓																							✓		✓				✓						✓	
32P-417.5-420-D				✓	✓																							✓		✓				✓						✓	
32P-420-422.5-D				✓	✓																							✓		✓				✓						✓	
32P-422.5-425-D				✓	✓																							✓		✓							✓		✓		
32P-425-427.5-D				✓	✓																							✓		✓				✓					✓		
32P-427.5-430-D				✓	✓																							✓		✓							✓		✓		
32P-430-432.5-D				✓	✓																							✓		✓				✓					✓		
32P-432.5-435-D				✓	✓																							✓		✓				✓					✓		
32P-435-437.5-D				✓	✓																							✓		✓				✓					✓		
32P-437.5-440-D				✓	✓																							✓		✓				✓					✓		
32P-440-442.5-D				✓	✓																							✓		✓				✓					✓		
32P-442.5-445-D				✓	✓																							✓		✓				✓					✓		
32P-445-447.5-D				✓		✓																						✓		✓							✓		✓		
32P-447.5-450-D				✓																								✓		✓						✓			✓		
32P-450-452.5-D				✓	✓																							✓		✓							✓		✓		
32P-452.5-455-D				✓	✓																							✓		✓				✓					✓		
32P-455-457.5-D				✓	✓																							✓		✓							✓		✓		
32P-457.5-460-D				✓	✓																							✓		✓							✓		✓		
32P-460-462.5-D				✓	✓																							✓		✓							✓		✓		
32P-462.5-465-D				✓		✓																						✓		✓							✓		✓		
32P-465-467.5-D				✓	✓																							✓		✓				✓					✓		

Sample	Phenocrysts – Mafics: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Quartz: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Feldspar: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Clasts – Pumice: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Lithics: % by Vol.	Munsell Color Symbol	Max. Size (mm)
32P-400-402.5-D	1	N1	3										5	VARIED	2
32P-402.5-405-D	2	N1	4												
32P-405-407.5-D	2	N1	3												
32P-407.5-410-D	1	N1	3										2	N4	2
32P-410-412.5-D	1	N1	2										1	N4	2
32P-412.5-415-D	2	10YR 7/8	3												
32P-415-417.5-D	2	10YR 7/8	4												
32P-417.5-420-D	2	10YR 7/8	4												
32P-420-422.5-D	2	10YR 7/8	4												
32P-422.5-425-D	2	10YR 7/8	4												
32P-425-427.5-D	1	10YR 7/8	4												
32P-427.5-430-D	1	10YR 7/8	4												
32P-430-432.5-D	1	10YR 7/8	2												
32P-432.5-435-D	1	10YR 7/8	2												
32P-435-437.5-D	1	10YR 7/8	2												
32P-437.5-440-D	1	10YR 7/8	2												
32P-440-442.5-D	1	10YR 7/8	2												
32P-442.5-445-D	1	10YR 7/8	2												
32P-445-447.5-D	1	10YR 7/8	2												
32P-447.5-450-D	1	10YR 7/8	2												
32P-450-452.5-D	1	5YR 5/8	3												
32P-452.5-455-D	1	5YR 5/8	2												
32P-455-457.5-D	1	5YR 5/8	2												
32P-457.5-460-D	1	5YR 5/8	2												
32P-460-462.5-D	1	5YR 5/8	2				1	5Y 3/1	1						
32P-462.5-465-D	1	5YR 5/8	2												
32P-465-467.5-D	1	5YR 5/8	2				1	5Y 3/1	0.5						

Non-Alluvium Logging Form - Nye County Nuclear Waste Repository Project Office

Borehole ID: **NC-EWDP-32P** (Phase 5) Driller/Drilling Company: Dennis White/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Non-Alluvium Depth (ft bgs): 400 to 500 Start Date: 4/6/2006 End Date: 4/7/2006

Logged (date)	Logged (by)	Checked (date)	Checked (by)	Sample	Depth Interval (feet/bgs) from	Depth Interval (feet/bgs) to	Liquid Drilling Fluid Injection Rate (gpm)	Drilling/Coring Rate (feet/min)	Water Production (gpm)	Sample Recovery (gallons)	Borehole Diameter (inches)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
04/07/06	EJH	05/15/06	JSW	32P-467.5-470-D	467.50	470.00	0.50	0.20	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-470-472.5-D	470.00	472.50	0.50	0.20	75.00	2.00	6.50				10YR 2/1
04/07/06	EJH	05/15/06	JSW	32P-472.5-475-D	472.50	475.00	0.50	0.20	75.00	2.00	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-475-477.5-D	475.00	477.50	0.50	0.20	75.00	1.50	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-477.5-480-D	477.50	480.00	0.50	0.20	75.00	1.00	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-480-482.5-D	480.00	482.50	0.50	0.60	75.00	1.00	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-482.5-485-D	482.50	485.00	0.50	0.60	75.00	1.00	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-485-487.5-D	485.00	487.50	0.50	0.60	75.00	1.00	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-487.5-490-D	487.50	490.00	0.50	0.60	75.00	1.50	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-490-492.5-D	490.00	492.50	0.50	0.60	75.00	1.50	6.50				5YR 3/4
04/07/06	EJH	05/15/06	JSW	32P-492.5-495-D	492.50	495.00	0.50	0.60	75.00	1.50	6.50				5YR 5/6
04/07/06	EJH	05/15/06	JSW	32P-495-497.5-D	495.00	497.50	0.50	0.60	75.00	1.00	6.50				VARIEGATED
04/07/06	EJH	05/15/06	JSW	32P-497.5-500-D	497.50	500.00	0.50	0.60	75.00	1.00	6.50				VARIEGATED
04/10/06	EJH	05/15/06	JSW	32P-940-945-D	940.00	945.00	0.50	1.10	43.00	3.50	6.50				5Y 6/4
04/10/06	EJH	05/15/06	JSW	32P-945-950-D	945.00	950.00	0.50	1.10	43.00	4.00	6.50				5Y 6/4
04/10/06	EJH	05/15/06	JSW	32P-950-955-D	950.00	955.00	0.50	1.10	43.00	3.50	6.50				5Y 6/4
04/10/06	EJH	05/15/06	JSW	32P-955-960-D	955.00	960.00	0.50	1.10	43.00	3.50	6.50				5Y 6/4
04/10/06	EJH	05/15/06	JSW	32P-960-965-D	960.00	965.00	0.50	0.90	150.00	3.50	6.50				7.5YR 4/1
04/10/06	EJH	05/15/06	JSW	32P-965-970-D	965.00	970.00	0.50	0.90	150.00	4.00	6.50				7.5YR 4/1
04/10/06	EJH	05/15/06	JSW	32P-970-975-D	970.00	975.00	0.50	0.90	150.00	4.00	6.50				7.5YR 4/1
04/10/06	EJH	05/15/06	JSW	32P-975-980-D	975.00	980.00	0.50	0.90	150.00	4.00	6.50				10Y 6/2
04/10/06	EJH	05/15/06	JSW	32P-980-985-D	980.00	985.00	0.50	0.80	150.00	5.00	6.50				2.5Y 6/2
04/10/06	EJH	05/15/06	JSW	32P-985-990-D	985.00	990.00	0.50	0.80	150.00	4.50	6.50				2.5Y 6/2
04/10/06	EJH	05/15/06	JSW	32P-990-995-D	990.00	995.00	0.50	0.80	150.00	4.00	6.50				2.5Y 6/2
04/10/06	EJH	05/15/06	JSW	32P-995-1000-D	995.00	1000.00	0.50	0.80	150.00	3.00	6.50				2.5Y 6/2

Sample	Moisture Content: Not Applicable	Dry	Moist	Wet	HCL Re-action: None	Weak	Strong	Rock Unit – Tuff – Deposition: Ash Fall	Ash Flow	Reworked	Welding: Dense	Moderate	Weak	None	Alteration: Vitric	Devitrified	Matrix	Vapor Phase	Spherulitic	Sedimentary: Claystone	Mudstone	Siltstone	Sandstone	Conglomerate	Chert	Carbonate: Limestone	Dolomite	Other	Weathering: Fresh	Slight	Moderate	High	Decomposed	Structure: None Observed	Stratified	Laminated	Fractured	Other	Matrix: Dense/Non-porous	Open/Porous	Other
32P-467.5-470-D				✓		✓																						✓		✓							✓		✓		
32P-470-472.5-D				✓	✓																							✓		✓							✓		✓		
32P-472.5-475-D				✓		✓																						✓			✓			✓					✓		
32P-475-477.5-D						✓																						✓			✓			✓					✓		
32P-477.5-480-D					✓																							✓			✓			✓					✓		
32P-480-482.5-D						✓																						✓			✓			✓						✓	
32P-482.5-485-D						✓																						✓			✓			✓						✓	
32P-485-487.5-D						✓																						✓			✓			✓						✓	
32P-487.5-490-D						✓																						✓			✓			✓						✓	
32P-490-492.5-D						✓																						✓			✓			✓					✓		
32P-492.5-495-D						✓																						✓				✓		✓					✓		
32P-495-497.5-D					✓																			✓								✓		✓							✓
32P-497.5-500-D						✓																		✓								✓		✓							✓
32P-940-945-D				✓	✓																	✓							✓							✓					
32P-945-950-D				✓		✓																✓							✓							✓					
32P-950-955-D				✓			✓															✓							✓							✓					
32P-955-960-D				✓			✓															✓							✓							✓					
32P-960-965-D				✓		✓																✓							✓							✓					
32P-965-970-D				✓	✓																	✓							✓							✓					
32P-970-975-D				✓		✓																✓							✓							✓					
32P-975-980-D				✓	✓																	✓							✓							✓					
32P-980-985-D				✓		✓																✓							✓							✓					
32P-985-990-D				✓		✓																✓							✓							✓					
32P-990-995-D				✓			✓															✓							✓							✓					
32P-995-1000-D				✓		✓																✓							✓							✓					

Sample	Phenocrysts – Mafics: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Quartz: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Feldspar: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Clasts – Pumice: % by Vol.	Munsell Color Symbol	Max. Size (mm)	Lithics: % by Vol.	Munsell Color Symbol	Max. Size (mm)
32P-467.5-470-D	1	5YR 5/8	2												
32P-470-472.5-D	1	5YR 5/8	2												
32P-472.5-475-D	1	10YR 2/2	2												
32P-475-477.5-D	1	10YR 2/2	2												
32P-477.5-480-D	1	10YR 2/2	2												
32P-480-482.5-D	1	10YR 2/2	2												
32P-482.5-485-D	1	10YR 2/2	2												
32P-485-487.5-D	1	10YR 2/2	2												
32P-487.5-490-D	1	10YR 2/2	2												
32P-490-492.5-D	1	10YR 2/2	2												
32P-492.5-495-D	1	N4	3												
32P-495-497.5-D													80	VARIED	10
32P-497.5-500-D													80	VARIED	20
32P-940-945-D															
32P-945-950-D															
32P-950-955-D															
32P-955-960-D															
32P-960-965-D															
32P-965-970-D															
32P-970-975-D															
32P-975-980-D															
32P-980-985-D															
32P-985-990-D															
32P-990-995-D															
32P-995-1000-D															