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

Borehole ID: **NC-EWDP- 29P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 320 to 790 Start Date: 6/29/2003 End Date: 6/30/2003

Logged Date	Logged By	Checked Date	Checked By	Sample Number	Depth Interval (feet/bgs) From	Depth Interval (feet/bgs) To	Drilling/Coring Data: Liquid Drilling Fluid Injection Rate (gpm)	Drilling / Coring Rate (ft/min)	Water Production (gpm)	Sample Recovery (gal)	Sample Density Data: Borehole Diameter (inch)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
06/29/03	EJH	11/25/03	BW	29P-320-325	320.00	325.00	0.0	1.1	0.0	3.0	6.3	0.85	28.80	27.95	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-325-330	325.00	330.00	0.0	1.1	0.0	7.0	6.3	0.85	35.10	34.25	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-330-335	330.00	335.00	0.0	1.1	0.0	6.0	6.3	0.85	32.45	31.60	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-335-340	335.00	340.00	0.0	1.1	0.0	6.0	6.3	0.85	33.15	32.30	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-340-345	340.00	345.00	0.0	1.2	0.0	5.0	6.3	0.85	27.30	26.45	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-345-350	345.00	350.00	0.0	1.2	0.0	3.5	6.3	0.85	19.80	18.95	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-350-355	350.00	355.00	0.0	1.2	0.0	5.0	6.3	0.85	26.05	25.20	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-355-360	355.00	360.00	0.0	1.2	0.0	5.0	6.3	0.85	27.00	26.15	10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-360-365	360.00	365.00	1.5	1.5	2.0	4.0	6.3				10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-365-370	365.00	370.00	1.5	1.5	2.0	3.0	6.3				10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-370-375	370.00	375.00	1.5	1.5	2.0	2.5	6.3				10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-375-380	375.00	380.00	1.5	1.5	2.0	2.0	6.3				10YR 4/2
06/29/03	EJH	11/25/03	BW	29P-380-385	380.00	385.00	1.5	2.2	2.0	1.0	6.3				10YR 5/4
06/29/03	EJH	11/25/03	BW	29P-385-390	385.00	390.00	1.5	2.2	2.0	2.0	6.3				10YR 5/4
06/29/03	EJH	11/25/03	BW	29P-390-395	390.00	395.00	1.5	2.2	2.0	1.0	6.3				10YR 5/4
06/29/03	EJH	11/25/03	BW	29P-395-400	395.00	400.00	1.5	2.2	2.0	3.0	6.3				10YR 5/4
06/30/03	EJH	11/25/03	BW	29P-400-405	400.00	405.00	1.5	2.2	2.0	2.0	6.3				10R 4/6
06/30/03	EJH	11/25/03	BW	29P-405-410	405.00	410.00	1.5	2.2	2.0	2.0	6.3				10R 4/6
06/30/03	EJH	11/25/03	BW	29P-410-415	410.00	415.00	1.5	2.2	2.0	3.0	6.3				10R 4/6
06/30/03	EJH	11/25/03	BW	29P-415-420	415.00	420.00	1.5	2.2	2.0	3.0	6.3				10R 4/6
06/30/03	EJH	11/25/03	BW	29P-420-425	420.00	425.00	1.5	1.0	2.0	4.0	6.3				10R 4/6
06/30/03	EJH	11/25/03	BW	29P-425-430	425.00	430.00	1.5	1.0	2.0	4.0	6.3				N1
06/30/03	EJH	11/25/03	BW	29P-430-435	430.00	435.00	1.5	1.0	2.0	4.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-435-440	435.00	440.00	1.5	1.0	3.9	4.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-440-445	440.00	445.00	1.5	1.5	3.9	3.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-445-450	445.00	450.00	1.5	1.5	3.9	3.0	6.3				n1

Sample Number	Moisture Content: NA	DRY	MOIST	WET	HCL Reaction: NONE	WEAK	STRONG	Rock Unit – Tuff – Deposition: ASHFALL	ASHFLOW	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/NONPOROUS	OPEN/POROUS	OTHER
29P-320-325		✓			✓				✓		✓					✓														✓				✓					✓		
29P-325-330		✓			✓				✓		✓					✓													✓					✓					✓		
29P-330-335		✓			✓				✓		✓					✓													✓					✓					✓		
29P-335-340		✓			✓				✓		✓					✓													✓					✓					✓		
29P-340-345			✓		✓				✓		✓					✓													✓					✓					✓		
29P-345-350		✓			✓				✓		✓					✓													✓					✓					✓		
29P-350-355		✓			✓				✓		✓					✓													✓					✓					✓		
29P-355-360			✓		✓				✓		✓					✓													✓					✓					✓		
29P-360-365				✓	✓				✓		✓					✓													✓					✓					✓		
29P-365-370				✓	✓				✓		✓					✓													✓					✓						✓	
29P-370-375				✓	✓				✓			✓					✓												✓					✓						✓	
29P-375-380				✓	✓				✓				✓				✓														✓			✓					✓		
29P-380-385				✓	✓			✓						✓		✓														✓				✓						✓	
29P-385-390				✓	✓			✓						✓		✓														✓				✓						✓	
29P-390-395				✓	✓			✓						✓		✓														✓				✓						✓	
29P-395-400				✓	✓			✓						✓		✓														✓				✓						✓	
29P-400-405				✓	✓			✓						✓		✓														✓				✓						✓	
29P-405-410				✓	✓				✓					✓	✓															✓				✓						✓	
29P-410-415				✓	✓				✓				✓		✓														✓					✓						✓	
29P-415-420				✓	✓				✓				✓		✓														✓					✓						✓	
29P-420-425				✓	✓				✓			✓			✓														✓					✓					✓		
29P-425-430				✓	✓				✓		✓				✓														✓					✓					✓		
29P-430-435				✓	✓				✓		✓				✓														✓					✓					✓		
29P-435-440				✓	✓				✓		✓				✓														✓					✓					✓		
29P-440-445				✓	✓				✓		✓				✓														✓					✓					✓		
29P-445-450				✓	✓				✓		✓				✓														✓					✓					✓		

Sample Number	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)
29P-320-325	2	5GY 3/2	3				1	CL	2	1	10Y 6/2	3			
29P-325-330	2	5GY 3/2	3				1	CL	2	1	10Y 6/2	3			
29P-330-335	2	5GY 3/2	3				1	CL	3	1	10Y 6/2	3			
29P-335-340	2	5GY 3/2	3				1	CL	3	1	10Y 6/2	3	1	10YR 6/2	2
29P-340-345	1	5GY 3/2	3	1	CL	2	1	CL	3				1	10YR 6/2	3
29P-345-350	1	5GY 3/2	3	1	CL	3	1	CL	3						
29P-350-355	1	5GY 3/2	3	2	CL	3	1	CL	2						
29P-355-360	1	5GY 3/2	3	1	CL	2	1	CL	2	5	10Y 6/2	4			
29P-360-365							1	CL	3	3	10Y 6/2	2			
29P-365-370										5	5YR 3/4	4			
29P-370-375				1	CL	3				2	5YR 3/4	3			
29P-375-380				1	N9	3				2	5YR 3/4	3			
29P-380-385	1	10YR 2/2	3	1	CL	3	2	CL	4	8	10YR 5/4	4	2	5YR 3/4	2
29P-385-390	1	10YR 2/2	3	1	CL	3	2	CL	4	20	10YR 5/4	12	2	5YR 3/4	3
29P-390-395	1	10YR 2/2	3	1	CL	3	2	CL	4	20	10YR 5/4	3	2	N5	8
29P-395-400	1	10YR 2/2	3	1	CL	3	2	CL	4	10	10YR 5/4	3	2	5YR 3/4	2
29P-400-405	1	10Y 5/4	3	1	N8	3	5	CL	4	8	10YR 4/2	10	1	10Y 6/2	3
29P-405-410	1	10Y 5/4	3				5	CL	4	5	10YR 4/2	5	2	10Y 6/2	2
29P-410-415	2	10Y 5/4	3	1	N8	2	3	CL	4				2	10Y 6/2	3
29P-415-420	1	10Y 5/4	3	1	CL	3	1	CL	4				3	N5	3
29P-420-425							3	CL	3						
29P-425-430							3	CL	4						
29P-430-435							2	CL	3						
29P-435-440							4	CL	3						
29P-440-445							5	CL	3						
29P-445-450							8	CL	3						

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Borehole ID: **NC-EWDP-29P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 320 to 790 Start Date: 6/29/2003 End Date: 6/30/2003

Logged Date	Logged By	Checked Date	Checked By	Sample Number	Depth Interval (feet/bgs) From	To	Drilling/Coring Data: Liquid Drilling Fluid Injection Rate (gpm)	Drillng / Coring Rate (ft/min)	Water Production (gpm)	Sample Recovery (gal)	Sample Density Data: Borehole Diameter (inch)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
06/30/03	EJH	11/25/03	BW	29P-450-455	450.00	455.00	1.5	1.5	3.9	3.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-455-460	455.00	460.00	1.5	1.5	3.9	3.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-460-465	460.00	465.00	1.5	1.4	3.9	2.5	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-465-470	465.00	470.00	1.5	1.4	3.9	3.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-470-475	470.00	475.00	1.5	1.4	3.9	2.5	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-475-480	475.00	480.00	1.5	1.4	3.9	3.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-480-485	480.00	485.00	1.5	1.4	17.6	2.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-485-490	485.00	490.00	1.5	1.4	17.6	2.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-490-495	490.00	495.00	1.5	1.4	17.6	2.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-495-500	495.00	500.00	1.5	1.4	17.6	2.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-500-505	500.00	505.00	1.5	0.6	25.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-505-510	505.00	510.00	1.5	0.6	25.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-510-515	510.00	515.00	1.5	0.6	25.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-515-520	515.00	520.00	1.5	0.6	25.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-520-525	520.00	525.00	1.5	0.6	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-525-530	525.00	530.00	1.0	0.6	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-530-535	530.00	535.00	1.0	0.6	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-535-540	535.00	540.00	1.0	0.6	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-540-545	540.00	545.00	1.0	0.8	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-545-550	545.00	550.00	1.0	0.8	30.0	3.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-550-555	550.00	555.00	1.0	0.8	30.0	3.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-555-560	555.00	560.00	1.0	0.8	30.0	4.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-560-565	560.00	565.00	1.0	0.6	30.0	3.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-565-570	565.00	570.00	1.0	0.6	30.0	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-570-575	570.00	575.00	1.0	0.6	30.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-575-580	575.00	580.00	1.0	0.6	30.0	5.0	6.3				5YR 3/4

Sample Number	Moisture Content: NA	DRY	MOIST	WET	HCL Re-action: NONE	WEAK	STRONG	Rock Unit – Tuff – Deposition: ASHFALL	ASHFLOW	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/NONPOROUS	OPEN/POROUS	OTHER
29P-450-455				✓	✓				✓		✓				✓														✓					✓					✓		
29P-455-460				✓	✓				✓		✓				✓														✓					✓					✓		
29P-460-465				✓	✓				✓		✓				✓														✓					✓					✓		
29P-465-470				✓	✓				✓		✓				✓														✓					✓					✓		
29P-470-475				✓	✓				✓		✓				✓														✓					✓					✓		
29P-475-480				✓	✓				✓		✓				✓														✓					✓					✓		
29P-480-485				✓	✓				✓		✓				✓														✓					✓					✓		
29P-485-490				✓	✓				✓		✓				✓														✓					✓					✓		
29P-490-495				✓	✓				✓		✓				✓														✓					✓					✓		
29P-495-500				✓	✓				✓		✓				✓														✓					✓					✓		
29P-500-505				✓	✓				✓			✓				✓													✓					✓					✓		
29P-505-510				✓	✓				✓			✓				✓													✓					✓					✓		
29P-510-515				✓	✓				✓			✓				✓													✓					✓					✓		
29P-515-520				✓	✓				✓		✓					✓													✓							✓			✓		
29P-520-525				✓	✓				✓		✓							✓											✓					✓					✓		
29P-525-530				✓	✓				✓		✓					✓													✓							✓			✓		
29P-530-535				✓	✓				✓		✓					✓													✓					✓					✓		
29P-535-540				✓	✓				✓		✓					✓													✓					✓					✓		
29P-540-545				✓	✓				✓		✓					✓													✓					✓					✓		
29P-545-550				✓	✓				✓		✓					✓													✓							✓			✓		
29P-550-555				✓	✓				✓		✓							✓											✓							✓			✓		
29P-555-560				✓	✓				✓		✓					✓													✓							✓			✓		
29P-560-565				✓	✓				✓		✓					✓													✓					✓					✓		
29P-565-570				✓	✓				✓		✓							✓											✓					✓					✓		
29P-570-575				✓	✓				✓		✓								✓										✓					✓					✓		
29P-575-580				✓	✓				✓		✓					✓													✓					✓					✓		

Sample Number	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)
29P-450-455							5	CL	4						
29P-455-460							5	CL	3						
29P-460-465	1	N1	3				4	CL	3						
29P-465-470							3	CL	3						
29P-470-475							3	CL	3						
29P-475-480							3	CL	3						
29P-480-485							3	CL	3						
29P-485-490							3	CL	3						
29P-490-495							3	CL	3						
29P-495-500							3	CL	3						
29P-500-505				1	N9	3	2	CL	3						
29P-505-510	1	BRONZE	1	1	N9	2	2	CL	3				1	N5	10
29P-510-515	1	BRONZE	1	1	N9	3	2	CL	2				1	N5	6
29P-515-520	2	BRONZE	2	1	N9	3	3	CL	3				2	N5	8
29P-520-525	2	BRONZE	1	1	N9	3	2	CL	3				1	N5	2
29P-525-530							2	CL	3				1	N5	3
29P-530-535				1	N9	2	3	CL	3				1	N5	3
29P-535-540	1	BRONZE	2				2	CL	2						
29P-540-545				1	N9	2	1	CL	2						
29P-545-550				1	N9	3	1	CL	2				1	N5	5
29P-550-555				1	N9	3	1	CL	2				1	N4	10
29P-555-560				1	N9	2	1	CL	2						
29P-560-565							2	CL	3						
29P-565-570							3	CL	3				1	N4	3
29P-570-575							3	CL	3				1	N4	2
29P-575-580	1	BRONZE	1				2	CL	3				2	N4	3

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

Borehole ID: **NC-EWDP- 29P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 320 to 790 Start Date: 6/29/2003 End Date: 6/30/2003

Logged Date	Logged By	Checked Date	Checked By	Sample Number	Depth Interval (feet/bgs) From	Depth Interval (feet/bgs) To	Liquid Drilling Fluid Injection Rate (gpm)	Drilling / Coring Rate (ft/min)	Water Production (gpm)	Sample Recovery (gal)	Borehole Diameter (inch)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
06/30/03	EJH	11/25/03	BW	29P-580-585	580.00	585.00	1.0	0.8	30.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-585-590	585.00	590.00	1.0	0.8	30.0	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-590-595	590.00	595.00	1.0	0.8	30.0	1.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-595-600	595.00	600.00	1.0	0.8	30.0	2.5	6.3				10YR 2/2
06/30/03	EJH	11/25/03	BW	29P-600-605	600.00	605.00	1.0	1.3	30.0	2.5	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-605-610	605.00	610.00	1.0	1.3	30.0	2.0	6.3				n1
06/30/03	EJH	11/25/03	BW	29P-610-615	610.00	615.00	1.0	1.3	30.0	1.5	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-615-620	615.00	620.00	1.0	1.3	30.0	2.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-620-625	620.00	625.00	1.0	2.2	30.0	3.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-625-630	625.00	630.00	1.0	2.2	30.0	4.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-630-635	630.00	635.00	1.0	2.2	30.0	2.5	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-635-640	635.00	640.00	1.0	2.2	30.0	2.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-640-645	640.00	645.00	1.0	2.9	42.9	2.0	6.3				10YR 5/4
06/30/03	EJH	11/25/03	BW	29P-645-650	645.00	650.00	1.0	2.9	42.9	2.5	6.3				10R 5/4
06/30/03	EJH	11/25/03	BW	29P-650-655	650.00	655.00	1.0	2.9	42.9	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-655-660	655.00	660.00	1.0	2.9	42.9	2.5	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-660-665	660.00	665.00	1.0	2.9	42.9	2.0	6.3				10YR 5/4
06/30/03	EJH	11/25/03	BW	29P-665-670	665.00	670.00	1.0	2.9	42.9	2.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-670-675	670.00	675.00	1.0	2.9	42.9	2.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-675-680	675.00	680.00	1.0	2.9	42.9	2.0	6.3				5YR 4/4
06/30/03	EJH	11/25/03	BW	29P-680-685	680.00	685.00	1.0	4.0	42.9	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-685-690	685.00	690.00	1.0	4.0	42.9	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-690-695	690.00	695.00	1.0	4.0	42.9	2.0	6.3				5YR 3/4
06/30/03	EJH	11/25/03	BW	29P-695-700	695.00	700.00	1.0	4.0	42.9	2.0	6.3				10YR 7/4
06/30/03	EJH	11/25/03	BW	29P-700-705	700.00	705.00	1.0	2.9	42.9	2.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-705-710	705.00	710.00	1.0	2.9	42.9	3.0	6.3				10YR 4/2

Sample Number	Moisture: NA	Moisture: DRY	Moisture: MOIST	Moisture: WET	HCL: NONE	HCL: WEAK	HCL: STRONG	Tuff Deposition: ASHFALL	Tuff Deposition: ASHFLOW	Tuff Deposition: REWORKED	Welding: DENSE	Welding: MODERATE	Welding: WEAK	Welding: NONE	Alteration: VITRIC	Alteration: DEVITRIFIED	Alteration: MATRIX	Alteration: VAPOR PHASE	Alteration: SPHERULITIC
29P-580-585				✓	✓				✓		✓					✓			
29P-585-590				✓	✓				✓		✓							✓	
29P-590-595				✓	✓				✓		✓							✓	
29P-595-600				✓	✓				✓		✓				✓				
29P-600-605				✓	✓				✓		✓				✓				
29P-605-610				✓	✓				✓		✓				✓				
29P-610-615				✓	✓				✓		✓				✓				
29P-615-620				✓	✓				✓		✓				✓				
29P-620-625				✓	✓				✓		✓				✓				
29P-625-630				✓	✓				✓		✓				✓				
29P-630-635				✓	✓				✓		✓				✓				
29P-635-640				✓	✓				✓		✓				✓				
29P-640-645				✓	✓			✓						✓		✓			
29P-645-650				✓	✓			✓						✓		✓			
29P-650-655				✓	✓			✓						✓		✓			
29P-655-660				✓	✓			✓						✓		✓			
29P-660-665				✓	✓			✓						✓		✓			
29P-665-670				✓	✓			✓						✓		✓			
29P-670-675				✓	✓			✓						✓		✓			
29P-675-680				✓	✓			✓						✓		✓			
29P-680-685				✓	✓			✓						✓		✓			
29P-685-690				✓	✓			✓						✓		✓			
29P-690-695				✓	✓			✓						✓		✓			
29P-695-700				✓	✓			✓						✓		✓			
29P-700-705				✓			✓												
29P-705-710				✓			✓												

Sample Number	Sedimentary: CLAYSTONE	Sedimentary: MUDSTONE	Sedimentary: SILTSTONE	Sedimentary: SANDSTONE	Sedimentary: CONGLOMERATE	Sedimentary: CHERT	Carbonate: LIMESTONE	Carbonate: DOLOMITE	OTHER	Weathering: FRESH	Weathering: SLIGHT	Weathering: MODERATE	Weathering: HIGH	Weathering: DECOMPOSED	Structure: NONE OBSERVED	Structure: STRATIFIED	Structure: LAMINATED	Structure: FRACTURED	Structure: OTHER	Matrix: DENSE/NONPOROUS	Matrix: OPEN/POROUS	Matrix: OTHER
29P-580-585										✓					✓					✓		
29P-585-590										✓					✓					✓		
29P-590-595										✓					✓					✓		
29P-595-600										✓					✓					✓		
29P-600-605										✓					✓					✓		
29P-605-610										✓					✓					✓		
29P-610-615										✓					✓					✓		
29P-615-620										✓						✓				✓		
29P-620-625										✓						✓				✓		
29P-625-630										✓						✓				✓		
29P-630-635										✓						✓				✓		
29P-635-640										✓						✓				✓		
29P-640-645										✓					✓					✓		
29P-645-650											✓				✓							✓
29P-650-655											✓				✓							✓
29P-655-660											✓				✓							✓
29P-660-665											✓				✓							✓
29P-665-670											✓				✓							✓
29P-670-675											✓				✓							✓
29P-675-680											✓				✓							✓
29P-680-685											✓				✓							✓
29P-685-690											✓				✓							✓
29P-690-695											✓				✓							✓
29P-695-700											✓				✓							✓
29P-700-705				✓											✓						✓	
29P-705-710				✓											✓						✓	

Sample Number	Phenocrysts Mafics % by Vol.	Mafics Munsell Color Symbol	Mafics Max. Size (mm)	Quartz % by Vol.	Quartz Munsell Color Symbol	Quartz Max. Size (mm)	Feldspar % by Vol.	Feldspar Munsell Color Symbol	Feldspar Max. Size (mm)	Clasts Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
29P-580-585	1	BRONZE	1				2	CL	2						
29P-585-590	1	BRONZE	1	1	CL	3	1	CL	2				1	N6	4
29P-590-595	1	BRONZE	1	1	CL	3	1	CL	2				1	N6	2
29P-595-600							1	CL	2						
29P-600-605															
29P-605-610															
29P-610-615							1	CL	2						
29P-615-620							1	CL	3	1	5Y 8/4	2			
29P-620-625							1	CL	2	1	5Y 8/4	5			
29P-625-630							1	CL	2	1	5Y 8/4	10			
29P-630-635							1	CL	2	1	5Y 8/4	8			
29P-635-640							1	CL	2	1	5Y 8/4	10			
29P-640-645	2	N1	2				1	CL	2	1	5YR 7/2	4			
29P-645-650	3	N1	3				1	CL	2	2	5YR 7/2	3			
29P-650-655	5	N1	3	1	N7	2	1	CL	2	1	5YR 7/2	3			
29P-655-660	5	N1	3				1	CL	2						
29P-660-665	5	N1	3	1	N7	2	1	CL	2						
29P-665-670	5	N1	3	3	N7	2	1	CL	2						
29P-670-675	5	N1	3	2	N7	2	1	CL	2						
29P-675-680	5	N1	3	1	N7	2	1	CL	2						
29P-680-685	5	N1	4	10	N9	4	1	CL	2						
29P-685-690	5	N1	3	10	N9	4	1	CL	2						
29P-690-695	5	N1	4	5	N9	2	1	CL	2						
29P-695-700	5	N1	3				1	CL	2						
29P-700-705	1	N1	3												
29P-705-710	1	N1	2												

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

Borehole ID: **NC-EWDP- 29P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 320 to 790 Start Date: 6/29/2003 End Date: 6/30/2003

Logged		Checked		Sample Number	Depth Interval (feet/bgs)		Drilling/Coring Data				Sample Density Data				Munsell Color Symbol
Date	By	Date	By		From	To	Liquid Drilling Fluid Injection Rate (gpm)	Drillng / Coring Rate (ft/min)	Water Production (gpm)	Sample Recovery (gal)	Borehole Diameter (inch)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	
06/30/03	EJH	11/25/03	BW	29P-710-715	710.00	715.00	1.0	2.9	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-715-720	715.00	720.00	1.0	2.9	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-720-725	720.00	725.00	1.0	2.5	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-725-730	725.00	730.00	1.0	2.5	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-730-735	730.00	735.00	1.0	2.5	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-735-740	735.00	740.00	1.0	2.5	42.9	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-740-745	740.00	745.00	1.0	1.4	60.0	2.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-745-750	745.00	750.00	1.0	1.4	60.0	8.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-750-755	750.00	755.00	1.0	1.4	60.0	8.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-755-760	755.00	760.00	1.0	1.4	60.0	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-760-765	760.00	765.00	1.0	1.3	60.0	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-765-770	765.00	770.00	1.0	1.3	60.0	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-770-775	770.00	775.00	1.0	1.3	60.0	4.0	6.3				5YR 5/6
06/30/03	EJH	11/25/03	BW	29P-775-780	775.00	780.00	1.0	1.3	60.0	7.0	6.3				5YR 5/6
06/30/03	EJH	11/25/03	BW	29P-780-785	780.00	785.00	1.0	1.3	60.0	3.0	6.3				10YR 4/2
06/30/03	EJH	11/25/03	BW	29P-785-790	785.00	790.00	1.0	1.3	60.0	4.0	6.3				10YR 4/2

Sample Number	Moisture Content: NA	DRY	MOIST	WET	HCL Reaction: NONE	WEAK	STRONG	Rock Unit – Tuff – Deposition: ASHFALL	ASHFLOW	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/NONPOROUS	OPEN/POROUS	OTHER
29P-710-715				✓			✓																✓											✓						✓	
29P-715-720				✓			✓																✓											✓						✓	
29P-720-725				✓			✓																✓											✓						✓	
29P-725-730				✓			✓																✓											✓						✓	
29P-730-735				✓			✓																✓											✓						✓	
29P-735-740				✓			✓																✓											✓						✓	
29P-740-745				✓			✓																✓											✓						✓	
29P-745-750				✓			✓																✓											✓						✓	
29P-750-755				✓			✓																✓											✓						✓	
29P-755-760				✓			✓																✓											✓						✓	
29P-760-765				✓			✓																✓											✓						✓	
29P-765-770				✓			✓																✓											✓						✓	
29P-770-775				✓			✓																✓											✓						✓	
29P-775-780				✓			✓																✓											✓						✓	
29P-780-785				✓		✓																	✓											✓						✓	
29P-785-790				✓			✓																✓											✓						✓	

Sample Number	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)
29P-710-715	1	N1	2				1	CL	2						
29P-715-720	1	N1	1				1	CL	2						
29P-720-725	1	N1	1												
29P-725-730	1	N1	1												
29P-730-735	1	N1	1												
29P-735-740															
29P-740-745	2	N1	2				1	CL	2						
29P-745-750	1	N1	2				1	CL	2						
29P-750-755	1	N1	2												
29P-755-760	1	N1	2												
29P-760-765	1	N1	1												
29P-765-770	1	N1	2												
29P-770-775	1	N1	1												
29P-775-780	1	N1	1				1	CL	2						
29P-780-785	1	N1	1												
29P-785-790	1	N1	1				1	CL	2						