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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

Logged		Checked		Sample Number	Depth Interval (feet/bgs)		Drilling/Coring Data				Sample Density Data				Munsell Color Symbol	Moisture Content				HCL Reaction			Rock Unit: Tuff									Rock Unit: Sedimentary								Rock Unit: Carbonate			Rock Unit: Other	Weathering				Structure				Matrix		Phenocrysts: Mafics			Phenocrysts: Quartz			Phenocrysts: Feldspar			Clasts: Pumice			Clasts: Lithics		
																NA	DRY	MOIST	WET	NONE	WEAK	STRONG	Deposition: ASH FALL	Deposition: ASH FLOW	Deposition: REWORKED	Welding: DENSE	Welding: MODERATE	Welding: WEAK	Welding: NONE	Alteration: VITRIC	Alteration: DEVITRIFIED	Alteration: MATRIX	Alteration: VAPOR PHASE	Alteration: SPHERULITIC	CLAYSTONE	MUDSTONE	SILTSTONE	SANDSTONE	CONGLOMERATE	CHERT	LIMESTONE	DOLOMITE	OTHER	FRESH	SLIGHT	MODERATE	HIGH	DECOMPOSED	NONE OBSERVED	STRAIFIED	LAMINATED	FRACTURED	OTHER	DENSE/NONPOROUS	OPEN/POROUS	OTHER	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)
Date	By	Date	By		From	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)																																																								
12/14/02	EJH	01/15/03	BW	BCS00042567	165.00	170.00	0.0	2.5	0.0	5.0	6.5	1.20	17.25	16.05	5YR 5/6		✓				✓			✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	3	2	10R 3/4	12
12/14/02	EJH	01/15/03	BW	BCS00042568	170.00	175.00	0.0	2.5	0.0	5.0	6.5	1.20	18.40	17.20	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	3	1	10R 3/4	3
12/14/02	EJH	01/15/03	BW	BCS00042569	175.00	180.00	0.0	2.5	0.0	5.0	6.5	1.20	22.10	20.90	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	3	1	10R 3/4	4
12/14/02	EJH	01/15/03	BW	BCS00042570	180.00	185.00	0.0	4.0	0.0	4.0	6.5	1.20	15.35	14.15	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	4	1	10R 3/4	6
12/14/02	EJH	01/15/03	BW	BCS00042571	185.00	190.00	0.0	4.0	0.0	6.0	6.5	1.20	19.90	18.70	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	4	1	10R 3/4	10
12/14/02	EJH	01/15/03	BW	BCS00042572	190.00	195.00	0.0	4.0	0.0	5.0	6.5	1.20	14.95	13.75	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	3	1	10R 3/4	4
12/14/02	EJH	01/15/03	BW	BCS00042573	195.00	200.00	0.0	4.0	0.0	6.0	6.5	1.20	18.30	17.10	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	N9	2	1	10R 3/4	3
12/13/02	EJH	01/15/03	BW	BCS00042574	200.00	205.00	0.0	6.7	0.0	7.0	6.5	1.20	22.75	21.55	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	2	10YR 2/2	5
12/13/02	EJH	01/15/03	BW	BCS00042575	205.00	210.00	0.0	6.7	0.0	5.0	6.5	1.20	17.35	16.15	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	10YR 8/2	4	2	10YR 2/2	5
12/13/02	EJH	01/15/03	BW	BCS00042576	210.00	215.00	0.0	6.7	0.0	4.0	6.5	1.20	15.50	14.30	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	10YR 8/2	4	1	10YR 2/2	4
12/13/02	EJH	01/15/03	BW	BCS00042577	215.00	220.00	0.0	6.7	0.0	4.0	6.5	1.20	14.85	13.65	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	10YR 8/2	4	2	10YR 2/2	12
12/13/02	EJH	01/15/03	BW	BCS00042578	220.00	225.00	0.0	4.0	0.0	2.0	6.5	1.20	8.60	7.40	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	2	10YR 8/2	12	1	10YR 2/2	4
12/13/02	EJH	01/15/03	BW	BCS00042579	225.00	230.00	0.0	4.0	0.0	4.0	6.5	1.20	14.55	13.35	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	1	10YR 2/2	4
12/13/02	EJH	01/15/03	BW	BCS00042580	230.00	235.00	0.0	4.0	0.0	3.0	6.5	1.20	9.85	8.65	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	1	10YR 2/2	6
12/13/02	EJH	01/15/03	BW	BCS00042581	235.00	240.00	0.0	4.0	0.0	3.0	6.5	1.20	9.60	8.40	5YR 5/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	1	10YR 2/2	2
12/14/02	EJH	01/15/03	BW	BCS00042582	240.00	245.00	0.0	2.5	0.0	1.5	6.5	1.20	5.60	4.40	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	3	N9	15	2	10YR 2/2	4
12/14/02	EJH	01/15/03	BW	BCS00042583	245.00	250.00	0.0	2.5	0.0	1.5	6.5	1.20	7.85	6.65	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	N9	4	1	10YR 2/2	6
12/14/02	EJH	01/15/03	BW	BCS00042584	250.00	255.00	0.0	2.5	0.0	2.0	6.5	1.20	9.50	8.30	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	2	N9	10	1	10YR 2/2	3
12/14/02	EJH	01/15/03	BW	BCS00042585	255.00	260.00	0.0	2.5	0.0	2.0	6.5	1.20	9.20	8.00	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	N9	3	1	10YR 2/2	4
12/14/02	EJH	01/15/03	BW	BCS00042586	260.00	265.00	0.0	5.0	0.0	1.5	6.5	1.20	7.50	6.30	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	N9	3	1	10YR 2/2	8
12/14/02	EJH	01/15/03	BW	BCS00042587	265.00	270.00	0.0	5.0	0.0	2.0	6.5	1.20	8.20	7.00	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	3	N9	3	1	10YR 2/2	4
12/14/02	EJH	01/15/03	BW	BCS00042588	270.00	275.00	0.0	5.0	0.0	2.0	6.5	1.20	8.25	7.05	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	5YR 8/4	2	1	10YR 2/2	6
12/14/02	EJH	01/15/03	BW	BCS00042589	275.00	280.00	0.0	5.0	0.0	2.5	6.5	1.20	10.25	9.05	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	BRONZE	2	1	COLOR LESS	3	1	COLOR LESS	3	1	5YR 8/4	4	1	10YR 2/2	4
12/14/02	EJH	01/15/03	BW	BCS00042590	280.00	285.00	0.0	4.0	0.0	2.5	6.5	1.20	13.10	11.90	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	2	N9	3	1	10YR 2/2	5
12/14/02	EJH	01/15/03	BW	BCS00042591	285.00	290.00	0.0	4.0	0.0	3.0	6.5	1.20	12.95	11.75	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	BRONZE	3	1	COLOR LESS	3	1	COLOR LESS	3	1	N9	3	1	10YR 2/2	10
12/14/02	EJH	01/15/03	BW	BCS00042592	290.00	295.00	0.0	4.0	0.0	4.0	6.5	1.20	17.15	15.95	10YR 6/6		✓			✓				✓				✓		✓																✓			✓					✓	1	BRONZE	2	1	COLOR LESS	3	1	COLOR LESS	3	1	5YR 8/4	3	5	10YR 2/2	12

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
12/14/02	EJH	01/15/03	BW	BCS00042593	295.00	300.00	0.0	4.0	0.0	5.0	6.5	1.20	18.45	17.25	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042594	300.00	305.00	0.0	3.3	0.0	5.0	6.5	1.20	17.35	16.15	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042595	305.00	310.00	0.0	3.3	0.0	5.0	6.5	1.20	16.90	15.70	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042596	310.00	315.00	0.0	3.3	0.0	4.0	6.5	1.20	14.30	13.10	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042597	315.00	320.00	0.0	3.3	0.0	5.0	6.5	1.20	15.85	14.65	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042598	320.00	325.00	0.0	4.0	0.0	5.0	6.5	1.20	18.00	16.80	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042599	325.00	330.00	0.0	4.0	0.0	5.0	6.5	1.20	16.50	15.30	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042600	330.00	335.00	0.0	4.0	0.0	5.0	6.5	1.20	17.05	15.85	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042601	335.00	340.00	0.0	4.0	0.0	5.0	6.5	1.20	17.30	16.10	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042602	340.00	345.00	0.0	3.3	0.0	2.5	6.5	1.20	9.10	7.90	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042603	345.00	350.00	0.0	3.3	0.0	5.0	6.5	1.20	15.45	14.25	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042604	350.00	355.00	0.0	3.3	0.0	5.0	6.5	1.20	14.95	13.75	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042605	355.00	360.00	0.0	3.3	0.0	5.0	6.5	1.20	18.30	17.10	10YR 6/6
12/14/02	EJH	01/15/03	BW	BCS00042606	360.00	365.00	0.0	6.7	0.0	3.0	6.5	1.20	9.55	8.35	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042607	365.00	370.00	0.0	6.7	0.0	2.5	6.5	1.20	8.25	7.05	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042608	370.00	375.00	0.0	6.7	0.0	3.0	6.5	1.20	10.90	9.70	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042609	375.00	380.00	0.0	6.7	0.0	5.0	6.5	1.20	16.70	15.50	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042610	380.00	385.00	0.0	1.5	0.0	4.0	6.5	1.20	14.25	13.05	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042611	385.00	390.00	0.0	1.5	0.0	5.0	6.5	1.20	17.00	15.80	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042612	390.00	395.00	0.0	1.5	0.0	5.5	6.5	1.20	23.50	22.30	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042613	395.00	400.00	0.0	1.5	0.0	5.0	6.5	1.20	20.35	19.15	5YR 8/4
12/14/02	EJH	01/15/03	BW	BCS00042614	400.00	405.00	0.0	3.3	0.0	4.5	6.5	1.20	16.15	14.95	5YR 3/4
12/14/02	EJH	01/15/03	BW	BCS00042615	405.00	410.00	0.0	3.3	0.0	4.0	6.5	1.20	14.20	13.00	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042616	410.00	415.00	0.0	3.3	0.0	4.0	6.5	1.20	15.00	13.80	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042617	415.00	420.00	0.0	3.3	0.0	3.5	6.5	1.20	11.95	10.75	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042618	420.00	425.00	0.0	4.0	0.0	3.5	6.5	1.20	14.45	13.25	5YR 6/1

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
BCS00042593		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042594		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042595		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042596		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042597		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042598		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042599		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042600		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042601		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042602		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042603		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042604		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042605		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042606		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042607		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042608		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042609		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042610		✓			✓				✓					✓		✓														✓				✓						✓	
BCS00042611		✓			✓				✓					✓		✓														✓				✓							✓
BCS00042612		✓			✓				✓					✓		✓																✓		✓							✓
BCS00042613		✓			✓				✓					✓		✓																✓		✓							✓
BCS00042614		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042615			✓		✓				✓					✓		✓													✓					✓						✓	
BCS00042616		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042617		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042618		✓			✓				✓					✓		✓													✓					✓						✓	

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)
BCS00042593	1	N2	1	1	COLOR LESS	3	1	COLOR LESS	3	1	N9	5	5	10YR 2/2	8
BCS00042594	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	3	5	VARIED	10
BCS00042595	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	8	VARIED	10
BCS00042596	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	8	VARIED	5
BCS00042597	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	10	VARIED	10
BCS00042598	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	2	20	VARIED	20
BCS00042599	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	3	20	VARIED	20
BCS00042600	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	20	VARIED	15
BCS00042601	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	5YR 8/4	3	20	VARIED	10
BCS00042602	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	20	VARIED	5
BCS00042603	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	20	VARIED	10
BCS00042604	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	20	VARIED	10
BCS00042605	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	20	VARIED	10
BCS00042606	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	50	10YR 8/2	20	3	VARIED	3
BCS00042607	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	20	10YR 8/2	10	3	VARIED	2
BCS00042608	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	5	3	VARIED	10
BCS00042609	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	3	VARIED	6
BCS00042610	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	2	10YR 8/2	10	1	VARIED	2
BCS00042611	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042612	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042613	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042614	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	10	10YR 8/2	4	1	N2	3
BCS00042615	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	4	0	N/A	0
BCS00042616	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	4	0	N/A	0
BCS00042617	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	4	0	N/A	0
BCS00042618	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	4	1	N2	2

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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)	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
12/14/02	EJH	01/15/03	BW	BCS00042619	425.00	430.00	0.0	4.0	0.0	3.5	6.5	1.20	16.45	15.25	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042620	430.00	435.00	0.0	4.0	0.0	4.0	6.5	1.20	17.80	16.60	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042621	435.00	440.00	0.0	4.0	0.0	4.5	6.5	1.20	17.80	16.60	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042622	440.00	445.00	0.0	5.0	0.0	4.0	6.5	1.20	13.45	12.25	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042623	445.00	450.00	0.0	5.0	0.0	5.0	6.5	1.20	18.60	17.40	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042624	450.00	455.00	0.0	5.0	0.0	5.0	6.5	1.20	20.30	19.10	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042625	455.00	460.00	0.0	5.0	0.0	5.0	6.5	1.20	19.40	18.20	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042626	460.00	465.00	0.0	3.3	0.0	5.0	6.5	1.20	17.00	15.80	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042627	465.00	470.00	0.0	3.3	0.0	5.0	6.5	1.20	22.80	21.60	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042628	470.00	475.00	0.0	3.3	0.0	5.0	6.5	1.20	25.20	24.00	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042629	475.00	480.00	0.0	3.3	0.0	4.0	6.5	1.20	17.75	16.55	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042630	480.00	485.00	0.0	2.2	0.0	3.0	6.5	1.20	16.55	15.35	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042631	485.00	490.00	0.0	2.2	0.0	3.0	6.5	1.20	16.60	15.40	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042632	490.00	495.00	0.0	2.2	0.0	3.5	6.5	1.20	21.85	20.65	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042633	495.00	500.00	0.0	2.2	0.0	3.0	6.5	1.20	15.90	14.70	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042634	500.00	505.00	0.0	1.4	0.0	4.0	6.5	1.20	16.00	14.80	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042635	505.00	510.00	0.0	1.4	0.0	4.0	6.5	1.20	15.95	14.75	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042636	510.00	515.00	0.0	1.4	0.0	2.0	6.5	1.20	10.35	9.15	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042637	515.00	520.00	0.0	1.4	0.0	1.5	6.5	1.20	6.35	5.15	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042638	520.00	525.00	0.0	1.7	0.0	1.5	6.5	1.20	6.70	5.50	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042639	525.00	530.00	0.0	1.7	0.0	1.5	6.5	1.20	6.00	4.80	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042640	530.00	535.00	0.0	1.7	0.0	2.0	6.5	1.20	9.05	7.85	5YR 6/1
12/14/02	EJH	01/15/03	BW	BCS00042641	535.00	540.00	5.5	1.7	1.0	0.2	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042642	540.00	545.00	5.5	2.2	1.0	4.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042643	545.00	550.00	5.5	2.2	1.0	4.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042644	550.00	555.00	5.5	2.2	1.0	3.0	6.5				N6

Sample Number	Moisture: NA	DRY	MOIST	WET	HCL Reaction: NONE	WEAK	STRONG	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
BCS00042619		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042620		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042621		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042622		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042623		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042624		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042625		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042626		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042627		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042628		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042629		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042630			✓		✓				✓					✓		✓													✓					✓						✓	
BCS00042631			✓		✓				✓					✓		✓													✓					✓						✓	
BCS00042632			✓		✓				✓					✓		✓													✓					✓						✓	
BCS00042633		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042634		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042635		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042636		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042637		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042638		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042639		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042640		✓			✓				✓					✓		✓													✓					✓						✓	
BCS00042641				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042642				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042643				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042644				✓	✓				✓					✓		✓													✓					✓						✓	

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)
BCS00042619	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	5	10YR 8/2	4	0	N/A	0
BCS00042620	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	4	10YR 8/2	4	0	N/A	0
BCS00042621	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	4	0	N/A	0
BCS00042622	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	2	10YR 8/2	4	0	N/A	0
BCS00042623	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	4	0	N/A	0
BCS00042624	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	0	N/A	0
BCS00042625	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	0	N/A	0
BCS00042626	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	0	N/A	0
BCS00042627	1	BRONZE	3	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042628	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042629	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	0	N/A	0
BCS00042630	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	1	VARIED	2
BCS00042631	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	1	VARIED	2
BCS00042632	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	1	VARIED	2
BCS00042633	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	10YR 8/2	5	1	VARIED	2
BCS00042634	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042635	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042636	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042637	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042638	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042639	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042640	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	1
BCS00042641	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042642	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042643	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042644	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	4	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
12/14/02	EJH	01/15/03	BW	BCS00042645	555.00	560.00	5.5	2.2	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042646	560.00	565.00	5.5	2.9	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042647	565.00	570.00	5.5	2.9	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042648	570.00	575.00	5.5	2.9	1.0	3.5	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042649	575.00	580.00	5.5	2.9	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042650	580.00	585.00	5.5	2.0	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042651	585.00	590.00	5.5	2.0	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042652	590.00	595.00	5.5	2.0	1.0	2.5	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042653	595.00	600.00	5.5	2.0	1.0	2.5	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042654	600.00	605.00	1.0	2.2	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042655	605.00	610.00	1.0	2.2	1.0	2.5	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042656	610.00	615.00	1.0	2.2	1.0	3.0	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042657	615.00	620.00	1.0	2.2	1.0	2.5	6.5				N6
12/14/02	EJH	01/15/03	BW	BCS00042658	620.00	625.00	1.0	2.9	1.0	3.0	6.5				n8
12/14/02	EJH	01/15/03	BW	BCS00042659	625.00	630.00	1.0	2.9	1.0	2.5	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042660	630.00	635.00	1.0	2.9	1.0	3.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042661	635.00	640.00	1.0	2.9	1.0	3.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042662	640.00	645.00	0.5	4.0	1.0	3.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042663	645.00	650.00	0.5	4.0	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042664	650.00	655.00	0.5	4.0	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042665	655.00	660.00	0.5	4.0	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042666	660.00	665.00	0.5	3.3	1.0	2.5	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042667	665.00	670.00	0.5	3.3	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042668	670.00	675.00	0.5	3.3	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042669	675.00	680.00	0.5	3.3	1.0	2.0	6.5				N8
12/14/02	EJH	01/15/03	BW	BCS00042670	680.00	685.00	0.5	2.9	1.0	2.0	6.5				N8

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
BCS00042645				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042646				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042647				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042648				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042649				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042650				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042651				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042652				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042653				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042654				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042655				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042656				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042657				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042658				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042659				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042660				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042661				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042662				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042663				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042664				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042665				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042666				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042667				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042668				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042669				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00042670				✔	✔				✔					✔		✔													✔					✔						✔	

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)
BCS00042645	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042646	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	N6	4	1	5YR 3/4	3
BCS00042647	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042648	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042649	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	N6	4	0	N/A	0
BCS00042650	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042651	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042652	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042653	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	1	5YR 6/1	3	0	N/A	0
BCS00042654	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	3	2	N8	2
BCS00042655	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	3	2	N8	2
BCS00042656	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	3	5	N2	3
BCS00042657	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	0	N/A	0	1	N2	2
BCS00042658	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	10YR 8/2	3	10	10YR 6/2	5
BCS00042659	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	10	2	10YR 2/2	10
BCS00042660	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	12	4	10YR 2/2	12
BCS00042661	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	3	5	10YR 2/2	8
BCS00042662	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	2	N8	8	5	10YR 2/2	15
BCS00042663	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	5	10	10YR 2/2	12
BCS00042664	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	2	5	10YR 2/2	2
BCS00042665	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	3	5	N2	10
BCS00042666	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	2	4	N4	3
BCS00042667	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	N8	2	2	N1	6
BCS00042668	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	10	10YR 8/2	2	2	N3	8
BCS00042669	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	5	10YR 8/2	2	2	N3	3
BCS00042670	0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	3	10YR 8/2	2	2	N3	12

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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	Moisture Content: NA	DRY	MOIST	WET	HCL Reaction: NONE	WEAK	STRONG	Tuff Deposition: ASHFALL	ASHFLOW	REWORKED	Tuff Welding: DENSE	MODERATE	WEAK	NONE	Tuff 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	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)	Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
12/14/02	EJH	01/15/03	BW	BCS00042671	685.00	690.00	0.5	2.9	1.0	2.0	6.5				N8				✓	✓				✓					✓		✓													✓					✓						✓		1	BRONZE	1	1	COLOR LESS	3	2	COLOR LESS	3	2	10YR 8/2	4	1	N1	3
12/14/02	EJH	01/15/03	BW	BCS00042672	690.00	695.00	0.5	2.9	1.0	2.0	6.5				N8				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	10YR 8/2	3	3	N1	20
12/14/02	EJH	01/15/03	BW	BCS00042673	695.00	700.00	0.5	2.9	1.0	2.0	6.5				N8				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	2	COLOR LESS	3	1	10YR 8/2	2	3	N1	12
12/14/02	EJH	01/15/03	BW	BCS00042674	700.00	705.00	0.5	2.5	1.0	2.0	6.5				5YR 6/1				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	1	5YR 6/1	5	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042675	705.00	710.00	0.5	2.5	1.0	2.0	6.5				5YR 6/1				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	1	5YR 6/1	5	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042676	710.00	715.00	0.5	2.5	1.0	3.0	6.5				5YR 6/1				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	10	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042677	715.00	720.00	0.5	2.5	1.0	4.0	6.5				5YR 6/1				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	10	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042678	720.00	725.00	0.5	3.3	1.0	3.0	6.5				10YR 2/2				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	10	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042679	725.00	730.00	0.5	3.3	1.0	2.0	6.5				10YR 2/2				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	15	2	10YR 2/2 / N1	3
12/14/02	EJH	01/15/03	BW	BCS00042680	730.00	735.00	0.5	3.3	1.0	1.5	6.5				10YR 2/2				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	15	1	VARIED	3
12/14/02	EJH	01/15/03	BW	BCS00042681	735.00	740.00	0.5	3.3	1.0	2.0	6.5				10YR 2/2				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	20	1	VARIED	3
12/15/02	EJH	01/15/03	BW	BCS00042682	740.00	745.00	0.5	2.0	1.0	2.0	6.5				5YR 5/6				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	20	3	VARIED	3
12/15/02	EJH	01/15/03	BW	BCS00042683	745.00	750.00	0.5	2.0	1.0	3.0	6.5				5YR 5/6				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	20	3	VARIED	3
12/15/02	EJH	01/15/03	BW	BCS00042684	750.00	755.00	0.5	2.0	1.0	4.0	6.5				5YR 5/6				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	10	5YR 6/1	20	5	VARIED	3
12/15/02	EJH	01/15/03	BW	BCS00042685	755.00	760.00	0.5	2.0	1.0	3.0	6.5				5YR 5/6				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/15/02	EJH	01/15/03	BW	BCS00042686	760.00	765.00	0.5	1.3	2.5	3.0	6.5				10R 5/4				✓	✓				✓					✓			✓															✓		✓							✓	0	N/A	0	15	COLOR LESS	2	15	COLOR LESS	3	0	N/A	0	0	N/A	0
12/15/02	EJH	01/15/03	BW	BCS00042687	765.00	770.00	0.5	1.3	2.5	4.0	6.5				10R 5/4				✓	✓				✓					✓			✓															✓		✓							✓	0	N/A	0	15	COLOR LESS	2	15	COLOR LESS	3	0	N/A	0	0	N/A	0
12/15/02	EJH	01/15/03	BW	BCS00042688	770.00	775.00	0.5	1.3	2.5	5.0	6.5				10R 5/4				✓	✓				✓					✓			✓															✓		✓							✓	0	N/A	0	20	COLOR LESS	2	20	COLOR LESS	3	0	N/A	0	0	N/A	0
12/15/02	EJH	01/15/03	BW	BCS00042689	775.00	780.00	0.5	1.3	2.5	4.0	6.5				10R 5/4				✓	✓				✓					✓			✓															✓		✓							✓	0	N/A	0	20	COLOR LESS	2	20	COLOR LESS	3	0	N/A	0	0	N/A	0
12/15/02	EJH	01/15/03	BW	BCS00042690	780.00	785.00	0.5	2.5	2.5	4.0	6.5				5YR 7/2				✓	✓				✓					✓			✓														✓			✓						✓		0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	3	1	5YR 7/2	4	3	VARIED	4
12/15/02	EJH	01/15/03	BW	BCS00042691	785.00	790.00	0.5	2.5	2.5	4.0	6.5				5YR 7/2				✓	✓				✓					✓			✓													✓				✓						✓		0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	5YR 7/2	4	3	VARIED	4
12/15/02	EJH	01/15/03	BW	BCS00042692	790.00	795.00	0.5	2.5	2.5	4.0	6.5				10YR 6/2				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	5YR 7/2	4	3	VARIED	4
12/15/02	EJH	01/15/03	BW	BCS00042693	795.00	800.00	0.5	2.5	2.5	4.0	6.5				10YR 6/2				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	3	1	5YR 7/2	4	3	VARIED	4
12/15/02	EJH	01/15/03	BW	BCS00042694	800.00	805.00	0.5	1.4	2.5	4.0	6.5				10YR 6/2				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	10YR 6/2	4	3	5YR 5/6	3
12/15/02	EJH	01/15/03	BW	BCS00042695	805.00	810.00	0.5	1.4	2.5	3.0	6.5				10YR 6/2				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	10YR 6/2	4	3	VARIED	3
12/15/02	EJH	01/15/03	BW	BCS00042696	810.00	815.00	0.5	1.4	2.5	3.0	6.5				10YR 6/2				✓	✓				✓					✓		✓													✓					✓						✓		0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	5

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
12/15/02	EJH	01/15/03	BW	BCS00042697	815.00	820.00	0.5	1.4	2.5	3.0	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042698	820.00	825.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042699	825.00	830.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042700	830.00	835.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042701	835.00	840.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042702	840.00	845.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042703	845.00	850.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042704	850.00	855.00	0.5	2.0	9.4	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042705	855.00	860.00	0.5	2.0	22.7	2.5	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042706	860.00	865.00	0.5	1.8	22.7	2.0	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042707	865.00	870.00	0.5	1.8	22.7	2.0	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042708	870.00	875.00	0.5	1.8	22.7	2.0	6.5				10YR 6/2
12/15/02	EJH	01/15/03	BW	BCS00042709	875.00	880.00	0.5	1.8	22.7	2.0	6.5				5YR 3/2
12/15/02	EJH	01/15/03	BW	BCS00042710	880.00	885.00	0.5	1.0	22.7	2.5	6.5				5YR 3/2
12/15/02	EJH	01/15/03	BW	BCS00042711	885.00	890.00	0.5	1.0	22.7	2.5	6.5				5YR 3/2
12/15/02	EJH	01/15/03	BW	BCS00042712	890.00	895.00	0.5	1.0	22.7	3.0	6.5				5YR 3/2
12/15/02	EJH	01/15/03	BW	BCS00042713	895.00	900.00	0.5	1.0	22.7	3.0	6.5				5YR 3/2
12/15/02	EJH	01/15/03	BW	BCS00042714	900.00	905.00	0.5	0.9	22.7	3.0	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042715	905.00	910.00	0.5	0.9	22.7	3.0	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042716	910.00	915.00	0.5	0.9	22.7	4.0	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042717	915.00	920.00	0.5	0.9	42.0	3.5	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042718	920.00	925.00	0.5	0.6	42.0	4.0	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042719	925.00	930.00	0.5	0.6	42.0	3.5	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042720	930.00	935.00	0.5	0.6	42.0	3.5	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042721	935.00	940.00	0.5	0.6	42.0	3.5	6.5				5Y 4/1
12/15/02	EJH	01/15/03	BW	BCS00042722	940.00	945.00	0.5	0.6	42.0	3.5	6.5				5YR 3/4

Sample Number	Moisture Content: NA	DRY	MOIST	WET	HCL Reaction: NONE	WEAK	STRONG	Tuff Deposition: ASHFALL	ASHFLOW	REWORKED	Welding: DENSE	MODERATE	WEAK	NONE	Alteration: VITRIC	DEVITRIFIED	MATRIX	VAPOR PHASE	SPHERULITIC
BCS00042697				✓	✓				✓					✓		✓			
BCS00042698				✓	✓				✓					✓		✓			
BCS00042699				✓	✓				✓					✓		✓			
BCS00042700				✓	✓				✓					✓		✓			
BCS00042701				✓	✓				✓					✓		✓			
BCS00042702				✓	✓				✓					✓		✓			
BCS00042703				✓	✓				✓					✓		✓			
BCS00042704				✓	✓				✓					✓		✓			
BCS00042705				✓	✓				✓					✓		✓			
BCS00042706				✓	✓				✓					✓		✓			
BCS00042707				✓	✓				✓					✓		✓			
BCS00042708				✓	✓				✓					✓		✓			
BCS00042709				✓	✓				✓			✓				✓			
BCS00042710				✓	✓				✓			✓						✓	
BCS00042711				✓	✓				✓			✓						✓	
BCS00042712				✓	✓				✓			✓						✓	
BCS00042713				✓	✓				✓			✓						✓	
BCS00042714				✓	✓				✓		✓					✓			
BCS00042715				✓	✓				✓		✓					✓			
BCS00042716				✓	✓				✓		✓					✓			
BCS00042717				✓	✓				✓		✓					✓			
BCS00042718				✓	✓				✓		✓					✓			
BCS00042719				✓	✓				✓		✓					✓			
BCS00042720				✓	✓				✓		✓					✓			
BCS00042721				✓	✓				✓		✓					✓			
BCS00042722				✓	✓				✓		✓					✓			

Sample Number	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
BCS00042697										✓					✓						✓	
BCS00042698										✓					✓						✓	
BCS00042699										✓					✓						✓	
BCS00042700										✓					✓						✓	
BCS00042701										✓					✓						✓	
BCS00042702										✓					✓						✓	
BCS00042703										✓					✓						✓	
BCS00042704										✓					✓						✓	
BCS00042705										✓					✓						✓	
BCS00042706										✓					✓						✓	
BCS00042707										✓					✓						✓	
BCS00042708											✓				✓						✓	
BCS00042709											✓				✓					✓		
BCS00042710										✓					✓					✓		
BCS00042711										✓					✓					✓		
BCS00042712										✓					✓					✓		
BCS00042713										✓					✓					✓		
BCS00042714										✓					✓					✓		
BCS00042715										✓					✓					✓		
BCS00042716										✓					✓					✓		
BCS00042717										✓					✓					✓		
BCS00042718										✓					✓					✓		
BCS00042719										✓					✓					✓		
BCS00042720										✓					✓					✓		
BCS00042721										✓					✓					✓		
BCS00042722										✓					✓					✓		

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)
BCS00042697	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	10YR 6/2	3	3	VARIED	3
BCS00042698	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	10
BCS00042699	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	2
BCS00042700	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	4
BCS00042701	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	20
BCS00042702	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	10
BCS00042703	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	12
BCS00042704	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	12
BCS00042705	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	5
BCS00042706	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	8
BCS00042707	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	3
BCS00042708	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0	3	VARIED	5
BCS00042709	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042710	1	BRONZE	2	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042711	1	BRONZE	4	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042712	1	BRONZE	3	0	N/A	0	1	COLOR LESS	2	1	10YR 8/2	4	0	N/A	0
BCS00042713	1	BRONZE	2	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042714	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042715	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042716	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042717	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042718	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042719	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042720	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042721	1	BRONZE	1	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042722	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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: Bore-hole Diameter (inch)	Tare Weight (kg)	Sample Plus Tare Weight (kg)	Sample Weight (kg)	Munsell Color Symbol
12/15/02	EJH	01/15/03	BW	BCS00042723	945.00	950.00	0.5	0.6	42.0	3.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042724	950.00	955.00	0.5	0.6	42.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042725	955.00	960.00	0.5	0.6	42.0	3.0	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042726	960.00	965.00	0.5	1.1	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042727	965.00	970.00	0.5	1.1	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042728	970.00	975.00	0.5	1.1	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042729	975.00	980.00	0.5	1.1	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042730	980.00	985.00	0.5	1.0	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042731	985.00	990.00	0.5	1.0	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042732	990.00	995.00	0.5	1.0	50.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042733	995.00	1000.00	0.5	1.0	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042734	1000.00	1005.00	0.5	1.3	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042735	1005.00	1010.00	0.5	1.3	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042736	1010.00	1015.00	0.5	1.3	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042737	1015.00	1020.00	0.5	1.3	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042738	1020.00	1025.00	0.5	1.1	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042739	1025.00	1030.00	0.5	1.1	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042740	1030.00	1035.00	0.5	1.1	48.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042741	1035.00	1040.00	0.5	1.1	65.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042742	1040.00	1045.00	0.5	0.8	65.0	3.0	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042743	1045.00	1050.00	0.5	0.8	65.0	3.0	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042744	1050.00	1055.00	0.5	0.8	65.0	2.5	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042745	1055.00	1060.00	0.5	0.8	65.0	3.0	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042746	1060.00	1065.00	0.5	1.3	65.0	2.0	6.5				5YR 3/4
12/15/02	EJH	01/15/03	BW	BCS00042747	1065.00	1070.00	0.5	1.3	65.0	2.0	6.5				10YR 5/4
12/15/02	EJH	01/15/03	BW	BCS00042748	1070.00	1075.00	0.5	1.3	65.0	1.0	6.5				10YR 5/4

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
BCS00042723				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042724				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042725				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042726				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042727				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042728				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042729				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042730				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042731				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042732				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042733				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042734				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042735				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042736				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042737				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042738				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042739				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042740				✓	✓				✓		✓				✓															✓				✓					✓		
BCS00042741				✓	✓				✓		✓				✓																✓			✓					✓		
BCS00042742				✓	✓				✓		✓								✓													✓		✓					✓		
BCS00042743				✓	✓				✓					✓				✓														✓		✓					✓		
BCS00042744				✓	✓				✓					✓				✓														✓		✓					✓		
BCS00042745				✓	✓				✓					✓		✓															✓			✓						✓	
BCS00042746				✓	✓				✓					✓		✓															✓			✓						✓	
BCS00042747				✓	✓			✓						✓	✓														✓					✓						✓	
BCS00042748				✓	✓			✓						✓	✓														✓					✓						✓	

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)
BCS00042723	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042724	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042725	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042726	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042727	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042728	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042729	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042730	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042731	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042732	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042733	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042734	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042735	0	N/A	0	0	N/A	0	1	COLOR LESS	3	1	N6	20	0	N/A	0
BCS00042736	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042737	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042738	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042739	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042740	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042741	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042742	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042743	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042744	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	VARIED	4
BCS00042745	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	VARIED	4
BCS00042746	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	VARIED	4
BCS00042747	0	N/A	0	0	N/A	0	1	COLOR LESS	2	30	5Y 7/2 / 5YR 8/4	2	1	5YR 2/2	5
BCS00042748	0	N/A	0	0	N/A	0	1	COLOR LESS	2	30	5Y 7/2 / 5YR 8/4	2	1	5YR 2/2	10

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

Checkbox groups on the form: 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). Checked boxes are listed below.

Logged Date	Logged By	Checked Date	Checked By	Sample Number	Depth From (feet/bgs)	Depth To (feet/bgs)	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	Moisture Content	HCL Reaction	Tuff Deposition	Tuff Welding	Tuff Alteration	Sedimentary	Carbonate	Other	Weathering	Structure	Matrix	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)	Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
12/15/02	EJH	01/15/03	BW	BCS00042749	1075.00	1080.00	0.5	1.3	65.0	1.5	6.5				10YR 5/4	WET	NONE	ASHFALL	NONE	VITRIC				FRESH	NONE OBSERVED	OPEN/POROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	20	5Y 7/2 / 5YR 8/4	2	1	5YR 2/2	5
12/15/02	EJH	01/15/03	BW	BCS00042750	1080.00	1085.00	0.5	1.0	54.0	2.0	6.5				10YR 5/4	WET	NONE	ASHFALL	NONE	DEVITRIFIED				FRESH	NONE OBSERVED	OPEN/POROUS	1	BRONZE	2	0	N/A	0	1	COLOR LESS	2	10	N9	5	1	VARIED	2
12/15/02	EJH	01/15/03	BW	BCS00042751	1085.00	1090.00	0.5	1.0	54.0	2.0	6.5				10R 3/4	WET	NONE	ASHFALL	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	15	COLOR LESS	2	15	COLOR LESS	2	30	10R 7/4	2	1	VARIED	2
12/15/02	EJH	01/15/03	BW	BCS00042752	1090.00	1095.00	0.5	1.0	54.0	2.5	6.5				10R 3/4	WET	NONE	ASHFALL	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	15	COLOR LESS	2	10	COLOR LESS	2	30	10R 7/4	2	1	VARIED	2
12/15/02	EJH	01/15/03	BW	BCS00042753	1095.00	1100.00	0.5	1.0	54.0	4.0	6.5				10R 3/4	WET	NONE	ASHFALL	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	15	COLOR LESS	2	10	COLOR LESS	2	30	10R 7/4	2	1	VARIED	2
12/16/02	EJH	01/15/03	BW	BCS00042754	1100.00	1105.00	0.5	1.1	54.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	10	COLOR LESS	2	10	COLOR LESS	2	30	10R 3/4	2	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042755	1105.00	1110.00	0.5	1.1	54.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	10	COLOR LESS	2	10	COLOR LESS	2	30	10R 3/4	2	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042756	1110.00	1115.00	0.5	1.1	54.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	1	BRONZE	2	10	COLOR LESS	2	10	COLOR LESS	2	30	10R 3/4	2	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042757	1115.00	1120.00	0.5	1.1	54.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042758	1120.00	1125.00	0.5	0.8	57.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042759	1125.00	1130.00	0.5	0.8	57.0	2.5	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042760	1130.00	1135.00	0.5	0.8	57.0	3.0	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042761	1135.00	1140.00	0.5	0.8	57.0	3.0	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042762	1140.00	1145.00	0.5	0.6	57.0	3.0	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042763	1145.00	1150.00	0.5	0.6	57.0	3.0	6.5				5YR 5/2	WET	NONE	ASHFLOW	WEAK	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042764	1150.00	1155.00	0.5	0.6	57.0	3.5	6.5				10R 6/3 / 5YR 5/6	WET	NONE	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042765	1155.00	1160.00	0.5	0.6	57.0	3.5	6.5				10R 6/3 / 5YR 5/6	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	2	COLOR LESS	2	5	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042766	1160.00	1165.00	0.5	0.8	51.0	2.5	6.5				10R 6/3 / 5YR 5/6	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	2	COLOR LESS	2	5	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042767	1165.00	1170.00	0.5	0.8	51.0	2.5	6.5				10R 6/3 / 5YR 5/6	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	2	COLOR LESS	2	5	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042768	1170.00	1175.00	0.5	0.8	51.0	2.5	6.5				10R 6/3 / 5YR 5/6	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	2	COLOR LESS	2	5	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042769	1175.00	1180.00	0.5	0.8	51.0	2.5	6.5				5YR 5/6	WET	NONE	ASHFLOW	DENSE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042770	1180.00	1185.00	0.5	1.0	51.0	2.0	6.5				5YR 5/6	WET	NONE	ASHFLOW	DENSE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042771	1185.00	1190.00	0.5	1.0	51.0	2.5	6.5				5YR 5/6	WET	NONE	ASHFLOW	DENSE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042772	1190.00	1195.00	0.5	1.0	51.0	2.0	6.5				5YR 5/6	WET	NONE	ASHFLOW	DENSE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042773	1195.00	1200.00	0.5	1.0	51.0	2.0	6.5				5YR 5/6	WET	NONE	ASHFLOW	DENSE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042774	1200.00	1205.00	0.5	1.1	64.0	2.5	6.5				5YR 5/6	WET	NONE	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE/NONPOROUS	0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

Logged		Checked		Sample Number	Depth Interval (feet/bgs)		Drilling/Coring Data				Sample Density Data				Munsell Color Symbol	Moisture Content				HCL Reaction			Rock Unit: Tuff										Rock Unit: Sedimentary							Rock Unit: Carbonate			Rock Unit: Other	Weathering				Structure				Matrix		Phenocrysts									Clasts					
																							Tuff										Sedimentary							Carbonate																Phenocrysts									Clasts					
																							Deposition		Welding			Alteration																												Mafics			Quartz			Feldspar			Pumice			Lithics		
Date	By	Date	By		From	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)		NA	DRY	MOIST	WET	NONE	WEAK	STRONG	ASH FALL	ASH FLOW	REWORKED	DENSE	MODERATE	WEAK	NONE	VITRIC	DEVITRIFIED	MATRIX	VAPOR PHASE	SPHERULITIC	CLAYSTONE	MUDSTONE	SILTSTONE	SANDSTONE	CONGLOMERATE	CHERT	LIMESTONE	DOLOMITE	OTHER	FRESH	SLIGHT	MODERATE	HIGH	DECOMPOSED	NONE OBSERVED	STRAIFIED	LAMINATED	FRACTURED	OTHER	DENSE/NONPOROUS	OPEN/POROUS	OTHER	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)
12/16/02	EJH	01/15/03	BW	BCS00042775	1205.00	1210.00	0.5	1.1	64.0	2.5	6.5				5YR 5/6				✓	✓			✓			✓						✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042776	1210.00	1215.00	0.5	1.1	64.0	2.5	6.5				5YR 5/6				✓	✓			✓			✓						✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042777	1215.00	1220.00	0.5	1.1	64.0	2.5	6.5				5YR 5/6				✓	✓			✓			✓						✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042778	1220.00	1225.00	0.5	0.8	64.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042779	1225.00	1230.00	0.5	0.8	64.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042780	1230.00	1235.00	0.5	0.8	64.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042781	1235.00	1240.00	0.5	0.8	64.0	3.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042782	1240.00	1245.00	0.5	1.1	66.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042783	1245.00	1250.00	0.5	1.1	66.0	3.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042784	1250.00	1255.00	0.5	1.1	66.0	3.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042785	1255.00	1260.00	0.5	1.1	66.0	3.0	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042786	1260.00	1265.00	0.5	1.0	66.0	2.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042787	1265.00	1270.00	0.5	1.0	66.0	3.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042788	1270.00	1275.00	0.5	1.0	66.0	3.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042789	1275.00	1280.00	0.5	1.0	66.0	2.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042790	1280.00	1285.00	0.5	0.6	70.0	2.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042791	1285.00	1290.00	0.5	0.6	70.0	2.0	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042792	1290.00	1295.00	0.5	0.6	70.0	2.0	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042793	1295.00	1300.00	0.5	0.6	70.0	2.0	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
12/16/02	EJH	01/15/03	BW	BCS00042794	1300.00	1305.00	0.5	0.4	70.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	2
12/16/02	EJH	01/15/03	BW	BCS00042795	1305.00	1310.00	0.5	0.4	70.0	2.5	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	2
12/16/02	EJH	01/15/03	BW	BCS00042796	1310.00	1315.00	0.5	0.4	70.0	2.0	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	5
12/16/02	EJH	01/15/03	BW	BCS00042797	1315.00	1320.00	0.5	0.4	70.0	2.5	6.5				5YR 5/6				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	2
12/16/02	EJH	01/15/03	BW	BCS00042798	1320.00	1325.00	0.5	0.3	70.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	2
12/16/02	EJH	01/15/03	BW	BCS00042799	1325.00	1330.00	0.5	0.3	70.0	2.5	6.5				5YR 5/6				✓	✓			✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	5YR 3/4	2
12/16/02	EJH	01/15/03	BW	BCS00042800	1330.00	1335.00	0.5	0.3	70.0	2.5	6.5				5YR 7/2				✓		✓		✓		✓							✓											✓				✓					✓			0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N2	4

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

Logged Date	Logged By	Checked Date	Checked By	Sample Number	Depth From (feet/bgs)	Depth To (feet/bgs)	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	Moisture Content	HCL Reaction	Tuff Deposition	Tuff Welding	Tuff Alteration	Sedimentary	Carbonate	Other	Weathering	Structure	Matrix
12/16/02	EJH	01/15/03	BW	BCS00042801	1335.00	1340.00	0.5	0.3	70.0	3.0	6.5				5YR 7/2	WET	WEAK	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042802	1340.00	1345.00	0.5	0.4	70.0	2.5	6.5				5YR 7/2	WET	WEAK	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042803	1345.00	1350.00	0.5	0.4	70.0	2.5	6.5				5YR 7/2	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042804	1350.00	1355.00	0.5	0.4	70.0	2.5	6.5				5YR 7/2	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042805	1355.00	1360.00	0.5	0.4	70.0	2.5	6.5				5YR 7/2	WET	NONE	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042806	1360.00	1365.00	1.0	0.3	73.0	3.0	6.5				5YR 7/2	WET	NONE	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042807	1365.00	1370.00	1.0	0.3	73.0	2.5	6.5				5YR 7/2	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042808	1370.00	1375.00	1.0	0.3	73.0	3.0	6.5				5YR 7/2	WET	WEAK	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042809	1375.00	1380.00	1.0	0.3	73.0	3.0	6.5				5YR 7/2	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042810	1380.00	1385.00	1.0	0.5	73.0	2.0	6.5				5YR 7/2	WET	WEAK	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042811	1385.00	1390.00	1.0	0.5	73.0	2.5	6.5				5YR 7/2	WET	WEAK	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042812	1390.00	1395.00	1.0	0.5	73.0	2.0	6.5				5YR 7/2	WET	WEAK	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042813	1395.00	1400.00	1.0	0.5	73.0	2.5	6.5				5YR 7/2	WET	NONE	ASHFLOW	DENSE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042814	1400.00	1405.00	1.3	0.5	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042815	1405.00	1410.00	1.3	0.5	77.0	2.5	6.5				5YR 4/4	WET	NONE	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042816	1410.00	1415.00	1.3	0.5	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042817	1415.00	1420.00	1.3	0.5	77.0	2.5	6.5				5YR 4/4	WET	NONE	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042818	1420.00	1425.00	1.3	0.8	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042819	1425.00	1430.00	1.3	0.8	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042820	1430.00	1435.00	1.3	0.8	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042821	1435.00	1440.00	1.3	0.8	77.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042822	1440.00	1445.00	1.3	0.7	88.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042823	1445.00	1450.00	1.3	0.7	88.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	VAPOR PHASE				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042824	1450.00	1455.00	1.3	0.7	88.0	2.5	6.5				5YR 4/4	WET	NONE	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042825	1455.00	1460.00	1.3	0.7	88.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS
12/17/02	EJH	01/15/03	BW	BCS00042826	1460.00	1465.00	0.8	0.7	88.0	2.5	6.5				5YR 4/4	WET	WEAK	ASHFLOW	MODERATE	DEVITRIFIED				FRESH	NONE OBSERVED	DENSE / NONPOROUS

Sample Number	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)	Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
BCS00042801	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00042802	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042803	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N6	2
BCS00042804	1	BRONZE	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N6	2
BCS00042805	1	BRONZE	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042806	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4 / N2	2
BCS00042807	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042808	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042809	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042810	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042811	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042812	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042813	0	N/A	0	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00042814	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042815	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042816	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042817	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	1	N6	10	0	N/A	0
BCS00042818	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042819	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042820	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	1	N6	8	0	N/A	0
BCS00042821	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	1	N5	2
BCS00042822	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N5	2
BCS00042823	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N5	2
BCS00042824	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042825	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042826	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
12/17/02	EJH	01/15/03	BW	BCS00042827	1465.00	1470.00	0.8	0.7	88.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042828	1470.00	1475.00	0.8	0.7	88.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042829	1475.00	1480.00	0.8	0.7	88.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042830	1480.00	1485.00	0.8	0.6	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042831	1485.00	1490.00	0.8	0.6	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042832	1490.00	1495.00	0.8	0.6	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042833	1495.00	1500.00	0.8	0.6	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042834	1500.00	1505.00	0.5	0.7	91.0	2.0	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042835	1505.00	1510.00	0.5	0.7	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042836	1510.00	1515.00	0.5	0.7	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042837	1515.00	1520.00	0.5	0.7	91.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042838	1520.00	1525.00	0.5	0.5	100.0	2.0	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042839	1525.00	1530.00	0.5	0.5	100.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042840	1530.00	1535.00	0.5	0.5	100.0	2.5	6.5				5YR 4/4
12/17/02	EJH	01/15/03	BW	BCS00042841	1535.00	1540.00	0.5	0.5	100.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042842	1540.00	1545.00	0.5	0.7	100.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042843	1545.00	1550.00	0.5	0.7	100.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042844	1550.00	1555.00	0.5	0.7	100.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042845	1555.00	1560.00	0.5	0.7	100.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042846	1560.00	1565.00	0.5	0.7	77.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042847	1565.00	1570.00	0.5	0.7	77.0	3.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042848	1570.00	1575.00	0.5	0.7	77.0	3.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042849	1575.00	1580.00	0.5	0.7	77.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042850	1580.00	1585.00	0.5	0.6	77.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042851	1585.00	1590.00	0.5	0.6	77.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042852	1590.00	1595.00	0.5	0.6	77.0	2.5	6.5				5YR 4/4

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	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
BCS00042827				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00042828				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042829				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00042830				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042831				✓		✓			✓			✓						✓											✓					✓					✓		
BCS00042832				✓		✓			✓			✓						✓											✓					✓					✓		
BCS00042833				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042834				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00042835				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042836				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042837				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00042838				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042839				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042840				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00042841				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042842				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042843				✓		✓			✓		✓							✓											✓					✓					✓		
BCS00042844				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042845				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042846				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042847				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042848				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042849				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042850				✓		✓			✓		✓							✓											✓					✓					✓		
BCS00042851				✓		✓			✓		✓							✓											✓					✓					✓		
BCS00042852				✓		✓			✓		✓							✓											✓					✓					✓		

Sample Number	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)	Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
BCS00042827	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042828	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042829	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042830	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042831	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042832	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042833	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042834	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042835	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042836	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	12	0	N/A	0
BCS00042837	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042838	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042839	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042840	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042841	0	N/A	0	0	N/A	0	1	COLOR LESS	4	0	N/A	0	0	N/A	0
BCS00042842	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042843	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042844	0	N/A	0	0	N/A	0	1	COLOR LESS	4	0	N/A	0	0	N/A	0
BCS00042845	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042846	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042847	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	N6	6	0	N/A	0
BCS00042848	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042849	0	N/A	0	0	N/A	0	2	COLOR LESS	3	0	N/A	0	1	N5	4
BCS00042850	0	N/A	0	0	N/A	0	1	COLOR LESS	3	0	N/A	0	0	N/A	0
BCS00042851	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042852	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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)	
12/18/02	EJH	01/15/03	BW	BCS00042853	1595.00	1600.00	0.5	0.6	77.0	3.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042854	1600.00	1605.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042855	1605.00	1610.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042856	1610.00	1615.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042857	1615.00	1620.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042858	1620.00	1625.00	0.5	0.6	97.0	2.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042859	1625.00	1630.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042860	1630.00	1635.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042861	1635.00	1640.00	0.5	0.6	97.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042862	1640.00	1645.00	0.5	0.4	95.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042863	1645.00	1650.00	0.5	0.4	95.0	3.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042864	1650.00	1655.00	0.5	0.4	95.0	3.0	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042865	1655.00	1660.00	0.5	0.4	95.0	2.5	6.5				5YR 4/4
12/18/02	EJH	01/15/03	BW	BCS00042866	1660.00	1665.00	0.5	0.3	95.0	2.5	6.5				5YR 4/4
12/19/02	EJH	01/15/03	BW	BCS00042867	1665.00	1670.00	0.5	0.3	95.0	2.0	6.5				5YR 4/4
12/19/02	EJH	01/15/03	BW	BCS00042868	1670.00	1675.00	0.5	0.3	95.0	2.0	6.5				5YR 4/4
12/19/02	EJH	01/15/03	BW	BCS00042869	1675.00	1680.00	0.5	0.3	95.0	3.0	6.5				5YR 4/4
12/19/02	EJH	01/15/03	BW	BCS00042870	1680.00	1685.00	0.5	0.4	92.0	2.5	6.5				5YR 4/4
12/19/02	EJH	01/15/03	BW	BCS00042871	1685.00	1690.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/15/03	BW	BCS00042872	1690.00	1695.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/15/03	BW	BCS00042873	1695.00	1700.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/16/03	BW	BCS00042874	1700.00	1705.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/16/03	BW	BCS00042875	1705.00	1710.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/16/03	BW	BCS00042876	1710.00	1715.00	0.5	0.4	92.0	2.5	6.5				5YR 4/6
12/19/02	EJH	01/16/03	BW	BCS00042877	1715.00	1720.00	0.5	0.4	132.0	3.0	6.5				5YR 4/6
01/08/03	EJH	01/16/03	BW	BCS00042878	1720.00	1725.00	0.5	0.5	132.0	1.5	6.0				5YR 5/6 / N1

Sample Number	Moisture Content: NA	Moisture: DRY	Moisture: MOIST	Moisture: WET	HCL Reaction: NONE	HCL: WEAK	HCL: STRONG	Rock Unit - Tuff - Deposition: ASHFALL	Deposition: ASHFLOW	Deposition: REWORKED	Welding: DENSE	Welding: MODERATE	Welding: WEAK	Welding: NONE	Alteration: VITRIC	Alteration: DEVITRIFIED	Alteration: MATRIX	Alteration: VAPOR PHASE	Alteration: SPHERULITIC	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
BCS00042853				✓		✓			✓		✓							✓											✓					✓					✓		
BCS00042854				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042855				✓		✓			✓		✓							✓											✓					✓					✓		
BCS00042856				✓		✓			✓			✓						✓											✓					✓					✓		
BCS00042857				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042858				✓		✓			✓			✓						✓											✓					✓					✓		
BCS00042859				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00042860				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042861				✓		✓			✓			✓						✓											✓					✓					✓		
BCS00042862				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042863				✓	✓				✓		✓							✓											✓							✓			✓		
BCS00042864				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042865				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042866				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042867				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042868				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042869				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042870				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00042871				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042872				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042873				✓	✓				✓		✓							✓											✓					✓					✓		
BCS00042874				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00042875				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042876				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042877				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00042878				✓	✓				✓		✓				✓														✓					✓					✓		

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)
BCS00042853	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N6	3
BCS00042854	0	N/A	0	1	N5	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042855	0	N/A	0	1	N5	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042856	0	N/A	0	1	N5	2	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042857	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042858	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042859	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042860	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042861	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042862	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042863	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042864	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042865	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042866	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042867	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042868	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042869	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042870	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	0	N/A	0
BCS00042871	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00042872	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00042873	0	N/A	0	0	N/A	0	1	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00042874	0	N/A	0	1	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	1	5YR 2/1	6
BCS00042875	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	5YR 2/1	2
BCS00042876	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	5YR 2/1	1
BCS00042877	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	1	5YR 2/1	1
BCS00042878	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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)	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
01/08/03	EJH	01/16/03	BW	BCS00042879	1725.00	1730.00	0.5	0.5	132.0	2.0	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042880	1730.00	1735.00	0.5	0.5	132.0	2.5	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042881	1735.00	1740.00	0.5	0.5	132.0	2.5	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042882	1740.00	1745.00	0.5	0.4	132.0	2.5	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042883	1745.00	1750.00	0.5	0.4	132.0	2.5	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042884	1750.00	1755.00	0.5	0.4	132.0	2.5	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042885	1755.00	1760.00	0.5	0.4	132.0	3.0	6.0				5GY 2/1
01/08/03	EJH	01/16/03	BW	BCS00042886	1760.00	1765.00	0.5	0.4	107.0	2.0	6.0				5YR 5/6 / n1
01/08/03	EJH	01/16/03	BW	BCS00042887	1765.00	1770.00	0.5	0.4	107.0	2.0	6.0				5YR 5/6 / N1
01/08/03	EJH	01/16/03	BW	BCS00042888	1770.00	1775.00	0.5	0.4	107.0	2.0	6.0				5YR 5/6 / 5GY 2/1
01/08/03	EJH	01/16/03	BW	BCS00042889	1775.00	1780.00	0.5	0.4	107.0	2.0	6.0				5YR 8/4
01/08/03	EJH	01/16/03	BW	BCS00042890	1780.00	1785.00	0.5	0.5	107.0	2.0	6.0				5YR 8/4
01/08/03	EJH	01/16/03	BW	BCS00042891	1785.00	1790.00	0.5	0.5	107.0	2.0	6.0				5YR 5/6
01/08/03	EJH	01/16/03	BW	BCS00042892	1790.00	1795.00	0.5	0.5	107.0	1.5	6.0				5YR 5/6
01/08/03	EJH	01/16/03	BW	BCS00042893	1795.00	1800.00	0.5	0.5	119.0	1.5	6.0				10YR 6/2
01/08/03	EJH	01/16/03	BW	BCS00042894	1800.00	1805.00	0.5	0.6	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042895	1805.00	1810.00	0.5	0.6	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042896	1810.00	1815.00	0.5	0.6	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042897	1815.00	1820.00	0.5	0.6	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042898	1820.00	1825.00	0.5	0.5	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042899	1825.00	1830.00	0.5	0.5	119.0	1.5	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042900	1830.00	1835.00	0.5	0.5	119.0	2.0	6.0				10YR 5/4
01/08/03	EJH	01/16/03	BW	BCS00042901	1835.00	1840.00	0.5	0.5	119.0	2.5	6.0				10YR 5/4
01/09/03	EJH	01/16/03	BW	BCS00042902	1840.00	1845.00	0.5	0.5	135.0	1.0	6.0				10YR 5/4
01/09/03	EJH	01/16/03	BW	BCS00042903	1845.00	1850.00	0.5	0.5	135.0	1.0	6.0				10YR 5/4
01/09/03	EJH	01/16/03	BW	BCS00042904	1850.00	1855.00	0.5	0.5	135.0	1.0	6.0				10YR 5/4

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
BCS00042879				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042880				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042881				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042882				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042883				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042884				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042885				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042886				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042887				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00042888				✓	✓				✓				✓		✓														✓					✓					✓		
BCS00042889				✓	✓				✓				✓			✓													✓					✓						✓	
BCS00042890				✓	✓				✓				✓			✓													✓					✓						✓	
BCS00042891				✓	✓				✓				✓			✓													✓					✓						✓	
BCS00042892				✓	✓				✓				✓			✓													✓					✓						✓	
BCS00042893				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042894				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042895				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042896				✓	✓			✓						✓			✓														✓			✓						✓	
BCS00042897				✓	✓			✓						✓			✓															✓		✓						✓	
BCS00042898				✓	✓				✓					✓		✓															✓			✓						✓	
BCS00042899				✓	✓				✓					✓		✓														✓				✓						✓	
BCS00042900				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042901				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042902				✓	✓				✓					✓		✓														✓				✓						✓	
BCS00042903				✓	✓				✓					✓		✓														✓				✓						✓	
BCS00042904				✓	✓				✓					✓		✓														✓				✓						✓	

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)
BCS00042879	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042880	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042881	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042882	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042883	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042884	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042885	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042886	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042887	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042888	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
BCS00042889	0	N/A	0	0	N/A	0	0	N/A	0	1	5YR 5/6	5	1	N5	3
BCS00042890	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	5YR 5/6	5	2	N5	4
BCS00042891	0	N/A	0	0	N/A	0	1	COLOR LESS	2	1	5YR 5/6	5	3	N5	4
BCS00042892	0	N/A	0	0	N/A	0	0	N/A	0	1	5YR 5/6	5	4	VARIED	3
BCS00042893	0	N/A	0	0	N/A	0	0	N/A	0	10	N9	10	30	VARIED	3
BCS00042894	0	N/A	0	0	N/A	0	0	N/A	0	10	N9	5	30	VARIED	4
BCS00042895	0	N/A	0	0	N/A	0	0	N/A	0	10	N9	3	30	VARIED	3
BCS00042896	0	N/A	0	0	N/A	0	0	N/A	0	10	N9	3	40	VARIED	2
BCS00042897	0	N/A	0	0	N/A	0	0	N/A	0	10	N9	3	40	VARIED	3
BCS00042898	2	N1	3	1	COLOR LESS	3	1	COLOR LESS	2	10	N9	5	3	N4	3
BCS00042899	3	N1	4	1	COLOR LESS	2	1	COLOR LESS	2	10	N9	5	3	N4	3
BCS00042900	3	N1	4	1	COLOR LESS	2	1	COLOR LESS	2	10	N9	5	3	N4	6
BCS00042901	3	N1	4	1	COLOR LESS	2	1	COLOR LESS	2	10	N9	5	3	N4	3
BCS00042902	2	N1	4	0	N/A	0	1	COLOR LESS	2	10	N9	5	2	N4	3
BCS00042903	3	N1	4	0	N/A	0	1	COLOR LESS	2	10	N9	5	1	N4	4
BCS00042904	3	N1	4	0	N/A	0	1	COLOR LESS	2	10	N9	5	1	N4	8

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/09/03	EJH	01/16/03	BW	BCS00042905	1855.00	1860.00	0.5	0.5	135.0	1.0	6.0				10R 5/4
01/09/03	EJH	01/16/03	BW	BCS00042906	1860.00	1865.00	0.5	0.5	135.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042907	1865.00	1870.00	0.5	0.5	135.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042908	1870.00	1875.00	0.5	0.5	135.0	1.0	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042909	1875.00	1880.00	0.5	0.5	110.0	1.0	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042910	1880.00	1885.00	0.5	0.5	110.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042911	1885.00	1890.00	0.5	0.5	110.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042912	1890.00	1895.00	0.5	0.5	110.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042913	1895.00	1900.00	0.5	0.5	95.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042914	1900.00	1905.00	0.5	0.4	95.0	2.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042915	1905.00	1910.00	0.5	0.4	95.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042916	1910.00	1915.00	0.5	0.4	95.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042917	1915.00	1920.00	0.5	0.4	95.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042918	1920.00	1925.00	0.5	0.5	115.0	3.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042919	1925.00	1930.00	0.5	0.5	115.0	1.5	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042920	1930.00	1935.00	0.5	0.5	115.0	1.5	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042921	1935.00	1940.00	0.5	0.5	115.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042922	1940.00	1945.00	0.5	0.5	115.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042923	1945.00	1950.00	0.5	0.5	115.0	1.5	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042924	1950.00	1955.00	0.5	0.5	115.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042925	1955.00	1960.00	0.5	0.5	115.0	2.0	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042926	1960.00	1965.00	0.5	0.3	118.0	1.5	6.0				10YR 7/4
01/09/03	EJH	01/16/03	BW	BCS00042927	1965.00	1970.00	0.5	0.3	118.0	1.5	6.0				5YR 6/1
01/09/03	EJH	01/16/03	BW	BCS00042928	1970.00	1975.00	0.5	0.3	118.0	1.5	6.0				N7
01/09/03	EJH	01/16/03	BW	BCS00042929	1975.00	1980.00	0.5	0.3	118.0	2.0	6.0				N7
01/09/03	EJH	01/16/03	BW	BCS00042930	1980.00	1985.00	0.5	0.5	118.0	1.5	6.0				5YR 7/2

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	Sedimentary: CLAYSTONE	Sedimentary: MUDSTONE	Sedimentary: SILTSTONE	Sedimentary: SANDSTONE	Sedimentary: CONGLOMERATE	Sedimentary: CHERT	Carbonate: LIMESTONE	Carbonate: DOLOMITE	Rock Unit: 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
BCS00042905				✓	✓				✓					✓		✓														✓				✓						✓	
BCS00042906				✓	✓				✓					✓		✓														✓				✓						✓	
BCS00042907				✓	✓				✓					✓		✓															✓			✓						✓	
BCS00042908				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042909				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042910				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042911				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042912				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042913				✓	✓				✓					✓		✓																✓		✓						✓	
BCS00042914				✓	✓				✓					✓		✓															✓			✓						✓	
BCS00042915				✓	✓																		✓									✓		✓						✓	
BCS00042916				✓	✓				✓					✓		✓															✓			✓					✓		
BCS00042917				✓	✓				✓					✓		✓															✓			✓					✓		
BCS00042918				✓	✓				✓					✓		✓														✓				✓					✓		
BCS00042919				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042920				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042921				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042922				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042923				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042924				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042925				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042926				✓	✓				✓					✓		✓													✓					✓					✓		
BCS00042927				✓	✓					✓				✓		✓																✓		✓							✓
BCS00042928				✓	✓				✓					✓		✓														✓				✓							✓
BCS00042929				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042930				✓	✓				✓					✓				✓											✓					✓						✓	

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)
BCS00042905	3	N1	4	0	N/A	0	1	COLOR LESS	2	10	N9	5	1	10YR 2/2	20
BCS00042906	4	N1	4	0	N/A	0	1	COLOR LESS	2	10	N9	3	1	10YR 2/2	8
BCS00042907	4	N1	5	0	N/A	0	1	COLOR LESS	2	10	N9	3	1	10YR 2/2	4
BCS00042908	4	N1	4	1	N8	3	0	N/A	0	10	N9	2	1	10YR 2/2	3
BCS00042909	4	N1	4	1	N8	3	0	N/A	0	10	N9	3	3	VARIED	4
BCS00042910	3	N1	3	1	N8	3	0	N/A	0	10	N9	10	2	VARIED	3
BCS00042911	3	N1	3	1	N8	3	0	N/A	0	10	N9	10	1	VARIED	3
BCS00042912	3	N1	3	1	N8	3	0	N/A	0	10	N9	5	1	VARIED	3
BCS00042913	3	N1	3	1	COLOR LESS	2	1	COLOR LESS	3	10	N9	5	1	VARIED	3
BCS00042914	4	N1	3	1	COLOR LESS	2	1	COLOR LESS	3	10	N9	3	2	VARIED	3
BCS00042915	1	N1	1	0	N/A	0	0	N/A	0	5	N9	3	0	N/A	0
BCS00042916	1	N1	2	2	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	N3	1
BCS00042917	1	N1	1	2	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	N3	1
BCS00042918	0	N/A	0	1	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	VARIED	2
BCS00042919	0	N/A	0	2	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	VARIED	2
BCS00042920	0	N/A	0	2	COLOR LESS	2	2	COLOR LESS	3	0.5	5GY 7/4	3	1	VARIED	2
BCS00042921	0	N/A	0	2	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	5R 2/6	5
BCS00042922	0	N/A	0	1	COLOR LESS	2	2	COLOR LESS	3	0.5	10Y 7/4	5	1	5Y 4/1	3
BCS00042923	1	BRONZE	2	1	COLOR LESS	2	2	COLOR LESS	3	0	N/A	0	1	5Y 4/1	3
BCS00042924	0	N/A	0	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	5Y 4/1	2
BCS00042925	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	0.5	10Y 7/4	3	1	5Y 4/1	2
BCS00042926	1	N1	2	1	COLOR LESS	3	2	COLOR LESS	2	0	N/A	0	2	VARIED	3
BCS00042927	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	30	VARIED	3
BCS00042928	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	5	VARIED	2
BCS00042929	1	N1	1	1	COLOR LESS	3	2	COLOR LESS	2	0	N/A	0	3	VARIED	3
BCS00042930	1	N1	1	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/09/03	EJH	01/16/03	BW	BCS00042931	1985.00	1990.00	0.5	0.5	118.0	1.0	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042932	1990.00	1995.00	0.5	0.5	118.0	1.0	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042933	1995.00	2000.00	0.5	0.5	118.0	1.5	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042934	2000.00	2005.00	0.5	0.5	116.0	1.5	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042935	2005.00	2010.00	0.5	0.5	116.0	1.5	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042936	2010.00	2015.00	0.5	0.5	116.0	2.0	6.0				5YR 7/2
01/09/03	EJH	01/16/03	BW	BCS00042937	2015.00	2020.00	0.5	0.5	116.0	1.5	6.0				5YR 6/1
01/10/03	EJH	01/16/03	BW	BCS00042938	2020.00	2025.00	0.5	0.3	116.0	1.0	6.0				5YR 6/1
01/10/03	EJH	01/16/03	BW	BCS00042939	2025.00	2030.00	0.5	0.3	116.0	1.0	6.0				5YR 6/1
01/10/03	EJH	01/16/03	BW	BCS00042940	2030.00	2035.00	0.5	0.3	116.0	1.0	6.0				5YR 6/1
01/10/03	EJH	01/16/03	BW	BCS00042941	2035.00	2040.00	0.5	0.3	116.0	1.5	6.0				5YR 6/1
01/10/03	EJH	01/16/03	BW	BCS00042942	2040.00	2045.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042943	2045.00	2050.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042944	2050.00	2055.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042945	2055.00	2060.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042946	2060.00	2065.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042947	2065.00	2070.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042948	2070.00	2075.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042949	2075.00	2080.00	0.5	0.5	83.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042950	2080.00	2085.00	0.5	0.4	104.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042951	2085.00	2090.00	0.5	0.4	104.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042952	2090.00	2095.00	0.5	0.4	104.0	1.5	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042953	2095.00	2100.00	0.5	0.4	104.0	2.0	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042954	2100.00	2105.00	0.5	0.4	104.0	2.0	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042955	2105.00	2110.00	0.5	0.4	104.0	2.0	6.0				5R 6/2
01/10/03	EJH	01/16/03	BW	BCS00042956	2110.00	2115.00	0.5	0.4	104.0	2.5	6.0				5R 6/2

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
BCS00042931				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042932				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042933				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042934				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042935				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042936				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042937				✓	✓				✓					✓				✓											✓					✓						✓	
BCS00042938				✓	✓				✓					✓			✓														✓			✓							✓
BCS00042939				✓	✓				✓					✓			✓														✓			✓							✓
BCS00042940				✓	✓				✓					✓			✓														✓			✓							✓
BCS00042941				✓	✓				✓					✓			✓													✓				✓							✓
BCS00042942				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042943				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042944				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042945				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042946				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042947				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042948				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042949				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042950				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042951				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042952				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042953				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042954				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042955				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042956				✓	✓				✓					✓		✓													✓					✓						✓	

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)
BCS00042931	1	N1	1	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042932	1	N1	1	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042933	1	N1	1	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00042934	1	N8	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N5	2
BCS00042935	1	N8	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N5	2
BCS00042936	1	N8	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N5	3
BCS00042937	1	N8	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N5	4
BCS00042938	1	BRONZE	1	1	N8	2	0	N/A	0	0	N/A	0	1	N5	2
BCS00042939	1	BRONZE	1	0	N/A	0	0	N/A	0	0	N/A	0	1	N5	1
BCS00042940	0	N/A	0	0	NA	0	0	N/A	0	0	N/A	0	1	N5	1
BCS00042941	1	BRONZE	1	0	NA	0	1	N/A	1	0	N/A	0	1	N5	1
BCS00042942	1	BRONZE	1	0	NA	0	0	N/A	0	0	N/A	0	1	5YR 4/4	4
BCS00042943	1	BRONZE	1	0	NA	0	0	N/A	0	0	N/A	0	1	5YR 4/4	10
BCS00042944	1	BRONZE	1	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	5YR 4/4	12
BCS00042945	1	BRONZE	1	1	N8	2	0	N/A	0	0	N/A	0	1	5YR 4/4	2
BCS00042946	1	BRONZE	2	1	N8	2	0	N/A	0	1	N7	4	1	5YR 4/4	3
BCS00042947	1	BRONZE	4	1	N8	2	0	N/A	0	0	N/A	0	1	5YR 4/4	3
BCS00042948	1	BRONZE	2	1	N8	2	0	N/A	0	0	N/A	0	1	5YR 4/4	2
BCS00042949	1	BRONZE	2	1	N8	2	0	N/A	0	0	N/A	0	1	5YR 4/4	4
BCS00042950	1	BRONZE	2	1	N8	2	0	N/A	0	1	N7	3	1	5YR 4/4	4
BCS00042951	1	BRONZE	2	1	N8	2	0	N/A	0	0	N/A	0	2	5YR 4/4	4
BCS00042952	1	BRONZE	2	1	N8	2	0	N/A	0	0	N/A	0	2	5YR 4/4	6
BCS00042953	1	BRONZE	2	1	N8	2	0	N/A	0	1	N7	3	2	5YR 4/4	4
BCS00042954	1	BRONZE	1	1	N7	2	0	N/A	0	0	N/A	0	1	10R 2/2	2
BCS00042955	1	BRONZE	1	1	N7	2	1	COLOR LESS	2	0	N/A	0	2	10R 2/2	8
BCS00042956	1	BRONZE	1	1	N7	2	1	COLOR LESS	2	0	N/A	0	2	10R 4/2	20

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/10/03	EJH	01/16/03	BW	BCS00042957	2115.00	2120.00	0.5	0.4	104.0	2.0	6.0				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042958	2120.00	2125.30	0.5	0.4	119.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042959	2125.30	2130.30	0.5	0.4	119.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042960	2130.30	2135.30	0.5	0.4	119.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042961	2135.30	2140.30	0.5	0.4	67.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042962	2140.30	2145.30	0.5	0.3	67.0	2.5	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042963	2145.30	2150.30	0.5	0.3	67.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042964	2150.30	2155.30	0.5	0.3	67.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042965	2155.30	2160.30	0.5	0.3	67.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042966	2160.30	2165.30	0.5	0.3	67.0	1.5	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042967	2165.30	2170.30	0.5	0.3	67.0	2.0	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042968	2170.30	2175.30	0.5	0.3	67.0	2.5	5.8				5R 6/2
01/11/03	EJH	01/16/03	BW	BCS00042969	2175.30	2180.30	0.5	0.3	67.0	2.0	5.8				5R 6/2
01/12/03	EJH	01/16/03	BW	BCS00042970	2180.30	2185.30	0.5	0.6	76.0	1.5	5.8				5R 6/2
01/12/03	EJH	01/16/03	BW	BCS00042971	2185.30	2190.30	0.5	0.6	76.0	2.0	5.8				5R 6/2
01/12/03	EJH	01/16/03	BW	BCS00042972	2190.30	2195.30	0.5	0.6	76.0	2.0	5.8				5R 6/2
01/12/03	EJH	01/16/03	BW	BCS00042973	2195.30	2200.30	0.5	0.6	76.0	2.0	5.8				5R 6/2
01/12/03	EJH	01/16/03	BW	BCS00042974	2200.30	2205.30	0.5	0.4	76.0	1.0	5.8				5YR 7/2
01/12/03	EJH	01/16/03	BW	BCS00042975	2205.30	2210.30	0.5	0.4	76.0	2.0	5.8				5YR 7/2
01/12/03	EJH	01/16/03	BW	BCS00042976	2210.30	2215.30	0.5	0.4	76.0	2.5	5.8				5YR 7/2
01/12/03	EJH	01/16/03	BW	BCS00042977	2215.30	2220.30	0.5	0.4	76.0	2.5	5.8				10R 5/4
01/12/03	EJH	01/16/03	BW	BCS00042978	2220.30	2225.30	0.5	0.4	115.0	2.5	5.8				10R 5/4
01/12/03	EJH	01/16/03	BW	BCS00042979	2225.30	2230.30	0.5	0.4	115.0	2.5	5.8				10R 5/4
01/12/03	EJH	01/16/03	BW	BCS00042980	2230.30	2235.30	0.5	0.4	115.0	2.0	5.8				10R 5/4
01/12/03	EJH	01/16/03	BW	BCS00042981	2235.30	2240.30	0.5	0.4	115.0	2.0	5.8				10R 5/4
01/12/03	EJH	01/16/03	BW	BCS00042982	2240.30	2245.30	0.5	0.4	115.0	2.0	5.8				10R 5/4

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	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
BCS00042957				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042958				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042959				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042960				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042961				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042962				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042963				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042964				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042965				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042966				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042967				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042968				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042969				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042970				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042971				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042972				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042973				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042974				✓	✓				✓					✓		✓													✓					✓						✓	
BCS00042975				✓	✓				✓					✓		✓													✓									✓		✓	
BCS00042976				✓	✓				✓				✓			✓													✓									✓		✓	
BCS00042977				✓	✓				✓				✓			✓													✓									✓		✓	
BCS00042978				✓	✓				✓				✓			✓													✓									✓	✓		
BCS00042979				✓	✓				✓				✓			✓													✓									✓	✓		
BCS00042980				✓	✓				✓				✓			✓													✓									✓	✓		
BCS00042981				✓	✓				✓				✓			✓													✓									✓	✓		
BCS00042982				✓	✓				✓				✓			✓													✓									✓	✓		

Sample Number	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)	Pumice % by Vol.	Pumice Munsell Color Symbol	Pumice Max. Size (mm)	Lithics % by Vol.	Lithics Munsell Color Symbol	Lithics Max. Size (mm)
BCS00042957	1	BRONZE	1	1	N7	2	1	COLOR LESS	2	0	N/A	0	10	5YR 3/4	30
BCS00042958	1	BRONZE	1	1	N7	2	1	COLOR LESS	2	1	5YR 8/1	3	3	5YR 3/4	2
BCS00042959	0	N/A	0	1	N7	2	1	COLOR LESS	2	1	5YR 8/1	3	2	5YR 3/4	5
BCS00042960	0	N/A	0	1	N7	2	0	N/A	0	2	5YR 8/1	4	2	5YR 3/4	10
BCS00042961	0	N/A	0	1	N7	2	0	N/A	0	2	5YR 8/1	6	5	5YR 3/4	5
BCS00042962	0	N/A	0	1	N7	2	0	N/A	0	8	10YR 8/2	8	5	10R 4/6	4
BCS00042963	0	N/A	0	1	N7	2	1	COLOR LESS	2	5	10YR 8/2	6	5	10R 4/6	4
BCS00042964	0	N/A	0	1	N7	2	0	N/A	0	5	10YR 8/2	5	5	10R 4/6	6
BCS00042965	0	N/A	0	1	N7	2	0	N/A	0	5	10YR 8/2	5	5	10R 4/6	6
BCS00042966	0	N/A	0	1	N7	2	0	N/A	0	3	10YR 8/2	6	8	10R 4/6	4
BCS00042967	1	BRONZE	1	1	N7	2	0	N/A	0	3	10YR 8/2	5	5	10R 4/6	3
BCS00042968	1	BRONZE	1	0	N/A	0	0	N/A	0	2	10YR 8/2	3	5	10R 4/6	4
BCS00042969	1	BRONZE	1	0	N/A	0	0	N/A	0	1	10YR 8/2	3	5	10R 4/6	5
BCS00042970	1	BRONZE	1	1	N7	2	1	COLOR LESS	2	1	10YR 8/2	3	3	VARIED	3
BCS00042971	1	BRONZE	1	1	N7	2	1	COLOR LESS	3	1	10YR 8/2	3	5	VARIED	10
BCS00042972	0	N/A	0	1	N7	2	1	COLOR LESS	2	1	10YR 8/2	3	3	VARIED	3
BCS00042973	0	N/A	0	1	N7	2	1	COLOR LESS	2	1	10YR 8/2	3	5	VARIED	10
BCS00042974	0	N/A	0	1	N6	2	0	N/A	0	1	10Y 8/2	3	8	VARIED	6
BCS00042975	0	N/A	0	1	N6	3	0	N/A	0	1	10Y 8/2	4	10	VARIED	8
BCS00042976	0	N/A	0	1	N6	2	0	N/A	0	2	10YR 8/2	3	5	VARIED	5
BCS00042977	1	N1	2	1	N6	3	0	N/A	0	1	10YR 8/2	2	10	VARIED	5
BCS00042978	0	N/A	0	1	N6	2	0	N/A	0	1	10YR 8/2	2	10	VARIED	3
BCS00042979	1	N1	2	2	N6	2	0	N/A	0	1	10YR 8/2	3	15	VARIED	3
BCS00042980	0	N/A	0	2	N6	2	0	N/A	0	0	N/A	0	5	VARIED	8
BCS00042981	1	N1	1	2	N6	2	1	COLOR LESS	2	0	N/A	0	5	VARIED	6
BCS00042982	0	N/A	0	1	N6	2	0	N/A	0	1	10R 8/2 / 5Y 7/6	2	15	VARIED	4

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

Logged		Checked		Sample Number	Depth Interval (feet/bgs)		Drilling/Coring Data				Sample Density Data				Munsell Color Symbol	Moisture Content			HCL Reaction			Rock Unit: Tuff										Rock Unit: Sedimentary							Rock Unit: Carbonate			Rock Unit: Other	Weathering					Structure				Matrix			Phenocrysts									Clasts					
																						Deposition			Welding			Alteration																																														
Date	By	Date	By		From	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)		NA	DRY	MOIST	WET	NONE	WEAK	STRONG	ASH FALL	ASH FLOW	REWORKED	DENSE	MODERATE	WEAK	NONE	VITRIC	DEVITRIFIED	MATRIX	VAPOR PHASE	SPHERULITIC	CLAYSTONE	MUDSTONE	SILTSTONE	SANDSTONE	CONGLOMERATE	CHERT	LIMESTONE	DOLOMITE	OTHER	FRESH	SLIGHT	MODERATE	HIGH	DECOMPOSED	NONE OBSERVED	STRAITIFIED	LAMINATED	FRACTURED	OTHER	DENSE/NONPOROUS	OPEN/POROUS	OTHER	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)
01/12/03	EJH	01/16/03	BW	BCS00042983	2245.30	2250.30	0.5	0.4	115.0	2.0	5.8				10R 5/4				✓	✓			✓			✓		✓														✓							✓	✓		0	N/A	0	1	N6	2	0	N/A	0	1	10R 8/2 / 5Y 7/6	3	10	VARIED	10
01/12/03	EJH	01/16/03	BW	BCS00042984	2250.30	2255.30	0.5	0.4	115.0	2.0	5.8				10YR 7/4				✓	✓			✓			✓		✓														✓							✓	✓		0	N/A	0	1	N6	2	0	N/A	0	1	10R 8/2 / 5Y 7/6	3	15	VARIED	2
01/12/03	EJH	01/16/03	BW	BCS00042985	2255.30	2260.30	0.5	0.4	115.0	2.0	5.8				10YR 7/4				✓	✓			✓			✓		✓														✓							✓	✓		0	N/A	0	1	N6	2	0	N/A	0	5	5Y 7/6	6	10	VARIED	8
01/12/03	EJH	01/16/03	BW	BCS00042986	2260.30	2265.30	0.5	0.3	125.0	1.5	5.8				10YR 7/4 / 10R 6/6				✓	✓			✓			✓		✓															✓			✓					✓		0	N/A	0	2	N6	3	0	N/A	0	2	VARIED	7	8	VARIED	4
01/12/03	EJH	01/16/03	BW	BCS00042987	2265.30	2270.30	0.5	0.3	125.0	1.5	5.8				10YR 7/4 / 10R 6/6				✓	✓			✓				✓	✓															✓			✓					✓		0	N/A	0	1	N6	3	0	N/A	0	3	5GY 7/4	5	10	VARIED	10
01/12/03	EJH	01/16/03	BW	BCS00042988	2270.30	2275.30	0.5	0.3	125.0	1.5	5.8				10YR 7/4				✓	✓			✓				✓	✓														✓						✓			✓		0	N/A	0	1	N6	3	0	N/A	0	3	5GY 7/4	5	8	VARIED	5
01/12/03	EJH	01/16/03	BW	BCS00042989	2275.30	2280.30	0.5	0.3	125.0	4.0	5.8				10R 4/6				✓	✓			✓				✓	✓																	✓					✓	✓		1	BRONZE	1	1	N6	3	0	N/A	0	0	N/A	0	10	VARIED	6
01/12/03	EJH	01/16/03	BW	BCS00042990	2280.30	2285.30	0.5	0.3	125.0	1.5	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	2	1	N4	3	3	N9	2	0	N/A	0	0	N/A	0
01/12/03	EJH	01/16/03	BW	BCS00042991	2285.30	2290.30	0.5	0.3	125.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	2	1	N4	3	3	N9	2	0	N/A	0	0	N/A	0
01/12/03	EJH	01/16/03	BW	BCS00042992	2290.30	2295.30	0.5	0.3	125.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	2	1	N4	3	3	N9	2	0	N/A	0	0	N/A	0
01/12/03	EJH	01/16/03	BW	BCS00042993	2295.30	2300.30	0.5	0.3	125.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	2	1	N4	3	3	N9	2	0	N/A	0	0	N/A	0
01/12/03	EJH	01/16/03	BW	BCS00042994	2300.30	2305.30	0.5	0.3	164.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	3	1	N3	2	3	N9	2	0	N/A	0	1	5YR 4/4	8
01/12/03	EJH	01/16/03	BW	BCS00042995	2305.30	2310.30	0.5	0.3	164.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	3	1	N3	2	3	N9	2	0	N/A	0	1	5YR 4/4	3
01/12/03	EJH	01/16/03	BW	BCS00042996	2310.30	2315.30	0.5	0.3	164.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	3	2	N3	3	3	N9	2	0	N/A	0	1	VARIED	2
01/12/03	EJH	01/16/03	BW	BCS00042997	2315.30	2320.30	0.5	0.3	164.0	2.0	5.8				10R 4/6				✓	✓			✓				✓	✓														✓					✓				✓	1	BRONZE	2	2	N3	2	3	N9	2	0	N/A	0	1	VARIED	2
01/12/03	EJH	01/16/03	BW	BCS00042998	2320.30	2325.30	0.5	0.3	164.0	1.5	5.8				10R 4/6				✓	✓			✓			✓		✓														✓					✓				✓	1	BRONZE	2	1	N3	2	3	N9	2	0	N/A	0	1	VARIED	2
01/12/03	EJH	01/16/03	BW	BCS00042999	2325.30	2330.30	0.5	0.3	164.0	2.0	5.8				5R 2/2				✓	✓			✓		✓			✓														✓					✓				✓	1	BRONZE	2	1	N3	2	3	N9	2	1	N3	3	1	VARIED	2
01/12/03	EJH	01/16/03	BW	BCS00043000	2330.30	2335.30	0.5	0.3	164.0	2.0	5.8				5R 2/2				✓	✓			✓		✓			✓														✓					✓				✓	1	BRONZE	2	1	N3	2	3	N9	2	0	N/A	0	1	VARIED	1
01/12/03	EJH	01/16/03	BW	BCS00043001	2335.30	2340.30	0.5	0.3	164.0	2.5	5.8				5R 2/2				✓	✓			✓		✓			✓														✓					✓				✓	1	BRONZE	2	1	N3	2	3	N9	2	0	N/A	0	1	VARIED	1
01/13/03	EJH	01/16/03	BW	BCS00043002	2340.30	2345.30	0.5	0.2	164.0	2.5	5.8				5R 2/2				✓		✓		✓		✓			✓														✓					✓				✓	1	BRONZE	2	1	N3	2	3	N9	2	0	N/A	0	1	VARIED	1
01/13/03	EJH	01/16/03	BW	BCS00043003	2345.30	2350.30	0.5	0.2	164.0	2.5	5.8				5R 2/2				✓		✓		✓		✓			✓														✓					✓				✓	1	BRONZE	2	1	N3	3	3	N9	2	0	N/A	0	1	VARIED	1
01/13/03	EJH	01/16/03	BW	BCS00043004	2350.30	2355.30	0.5	0.2	164.0	2.5	5.8				5R 2/2				✓	✓			✓		✓			✓														✓					✓				✓	1	BRONZE	1	1	N3	2	0	N/A	0	0	N/A	0	1	N5	1
01/13/03	EJH	01/16/03	BW	BCS00043005	2355.30	2360.30	0.5	0.2	164.0	2.5	5.8				5R 2/2				✓	✓			✓	✓				✓														✓					✓				✓	1	BRONZE	1	1	N3	2	0	N/A	0	0	N/A	0	1	VARIED	2
01/13/03	EJH	01/16/03	BW	BCS00043006	2360.30	2365.30	0.5	0.1	137.0	2.5	5.8				5R 2/2				✓		✓		✓	✓				✓														✓					✓				✓	1	BRONZE	2	2	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2
01/13/03	EJH	01/16/03	BW	BCS00043007	2365.30	2370.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4				✓		✓		✓	✓				✓														✓					✓				✓	1	BRONZE	2	2	N3	2	0	N/A	0	0	N/A	0	1	VARIED	2
01/13/03	EJH	01/16/03	BW	BCS00043008	2370.30	2375.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4				✓	✓			✓	✓				✓														✓					✓				✓	1	N/A	0	2	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/13/03	EJH	01/16/03	BW	BCS00043009	2375.30	2380.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/16/03	BW	BCS00043010	2380.30	2385.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/16/03	BW	BCS00043011	2385.30	2390.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/16/03	BW	BCS00043012	2390.30	2395.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/16/03	BW	BCS00043013	2395.30	2400.30	0.5	0.1	137.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/23/03	BW	BCS00043014	2400.30	2405.30	0.5	0.2	133.0	3.0	5.8				5YR 3/4
01/13/03	EJH	01/23/03	BW	BCS00043015	2405.30	2410.30	0.5	0.2	133.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043016	2410.30	2415.30	0.5	0.2	133.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043017	2415.30	2420.30	0.5	0.2	133.0	3.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043018	2420.30	2425.30	0.5	0.2	133.0	4.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043019	2425.30	2430.30	0.5	0.2	133.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043020	2430.30	2435.30	0.5	0.2	133.0	3.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043021	2435.30	2440.30	0.5	0.2	133.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043022	2440.30	2445.00	0.5	0.2	138.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043023	2445.00	2450.00	0.5	0.2	138.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043024	2450.00	2455.00	0.5	0.2	138.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043025	2455.00	2460.00	0.5	0.2	138.0	3.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043026	2460.00	2465.00	0.5	0.1	138.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043027	2465.00	2470.00	0.5	0.1	138.0	3.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043028	2470.00	2475.00	0.5	0.1	138.0	3.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043029	2475.00	2480.00	0.5	0.1	138.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043030	2480.00	2485.00	0.5	0.1	144.0	2.5	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043031	2485.00	2490.00	0.5	0.1	144.0	2.0	5.8				5YR 3/4
01/14/03	EJH	01/23/03	BW	BCS00043032	2490.00	2495.00	0.5	0.1	144.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043033	2495.00	2500.00	0.5	0.1	144.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043034	2500.00	2505.00	0.5	0.2	144.0	2.0	5.8				5YR 3/4

Sample Number	Munsell Color Symbol	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
BCS00043009	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043010	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043011	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043012	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043013	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043014	5YR 3/4				✔		✔			✔		✔							✔											✔					✔					✔		
BCS00043015	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043016	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043017	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043018	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043019	5YR 3/4				✔	✔				✔		✔							✔											✔					✔					✔		
BCS00043020	5YR 3/4				✔	✔				✔		✔							✔											✔					✔					✔		
BCS00043021	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043022	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043023	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043024	5YR 3/4				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043025	5YR 3/4				✔		✔			✔		✔							✔											✔					✔					✔		
BCS00043026	5YR 3/4				✔		✔			✔			✔						✔											✔					✔					✔		
BCS00043027	5YR 3/4				✔		✔			✔		✔							✔											✔					✔					✔		
BCS00043028	5YR 3/4				✔		✔			✔			✔						✔											✔					✔					✔		
BCS00043029	5YR 3/4				✔		✔			✔		✔							✔											✔					✔					✔		
BCS00043030	5YR 3/4				✔		✔			✔		✔					✔													✔					✔					✔		
BCS00043031	5YR 3/4				✔	✔				✔		✔							✔											✔					✔					✔		
BCS00043032	5YR 3/4				✔	✔				✔			✔						✔											✔					✔					✔		
BCS00043033	5YR 3/4				✔		✔			✔			✔						✔											✔					✔					✔		
BCS00043034	5YR 3/4				✔	✔				✔			✔				✔													✔					✔					✔		

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)
BCS00043009	1	N/A	0	2	N3	2	0	N/A	0	0	N/A	0	1	VARIED	2
BCS00043010	0	N/A	0	2	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2
BCS00043011	1	BRONZE	1	3	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2
BCS00043012	0	N/A	0	5	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2
BCS00043013	1	BRONZE	2	3	N3	3	0	N/A	0	0	N/A	0	1	VARIED	2
BCS00043014	1	BRONZE	2	5	N5 / N1	2	1	COLOR LESS	2	0	N/A	0	1	5YR 4/1	2
BCS00043015	0	N/A	0	5	N5 / N1	3	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043016	1	BRONZE	3	10	N5 / N1	3	2	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043017	1	BRONZE	3	10	N5 / N1	4	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043018	1	BRONZE	3	10	N5 / N1	4	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	3
BCS00043019	1	BRONZE	3	10	N5 / N1	3	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	3
BCS00043020	1	BRONZE	3	10	N5 / N1	3	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043021	1	BRONZE	0.5	10	N5 / N1	3	1	5B 7/6	2	0	N/A	0	1	10R 4/6	2
BCS00043022	1	BRONZE	1	15	N5 / N1	3	1	5B 7/6	2	0	N/A	0	1	10R 4/6	2
BCS00043023	1	BRONZE	1	15	N5 / N1	4	1	COLOR LESS	3	0	N/A	0	1	10R 4/6	2
BCS00043024	1	BRONZE	2	15	N5 / N1	3	1	COLOR LESS	3	0	N/A	0	1	10R 4/6	2
BCS00043025	1	BRONZE	2	10	N5 / N1	3	1	COLOR LESS	3	0	N/A	0	1	10R 4/6	2
BCS00043026	1	BRONZE	1	10	N5 / N1	3	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043027	1	BRONZE	1	8	N5 / N1	3	1	COLOR LESS	3	0	N/A	0	1	10R 4/6	2
BCS00043028	1	BRONZE	1	10	N5 / N1	4	2	COLOR LESS	3	0	N/A	0	1	10R 4/6	3
BCS00043029	1	BRONZE	1	10	N5 / N1	3	3	COLOR LESS	3	0	N/A	0	1	VARIED	6
BCS00043030	1	BRONZE	1	10	N5 / N1	2	2	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00043031	1	BRONZE	1	8	N5 / N1	2	2	COLOR LESS	2	0	N/A	0	1	N2	2
BCS00043032	1	BRONZE	1	8	N5 / N1	2	2	COLOR LESS	2	0	N/A	0	1	N2	3
BCS00043033	1	BRONZE	1	8	N5 / N1	2	1	COLOR LESS	2	1	10R 8/2	8	1	N2	2
BCS00043034	1	BRONZE	2	5	N6	3	1	COLOR LESS	3	0	N/A	0	1	5R 4/6	2

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/15/03	EJH	01/23/03	BW	BCS00043035	2505.00	2510.00	0.5	0.2	144.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043036	2510.00	2515.00	0.5	0.2	144.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043037	2515.00	2520.00	0.5	0.2	144.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043038	2520.00	2525.00	0.5	0.2	140.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043039	2525.00	2530.00	0.5	0.2	140.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043040	2530.00	2535.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043041	2535.00	2540.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043042	2540.00	2545.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043043	2545.00	2550.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043044	2550.00	2555.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043045	2555.00	2560.00	0.5	0.2	140.0	2.5	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043046	2560.00	2565.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/15/03	EJH	01/23/03	BW	BCS00043047	2565.00	2570.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043048	2570.00	2575.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043049	2575.00	2580.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043050	2580.00	2585.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043051	2585.00	2590.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043052	2590.00	2595.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043053	2595.00	2600.00	0.5	0.1	142.0	2.0	5.8				5YR 3/4
01/16/03	EJH	01/23/03	BW	BCS00043054	2600.00	2605.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043055	2605.00	2610.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043056	2610.00	2615.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043057	2615.00	2620.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043058	2620.00	2625.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043059	2625.00	2630.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043060	2630.00	2635.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4

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
BCS00043035				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043036				✓	✓				✓				✓			✓													✓					✓					✓		
BCS00043037				✓	✓				✓				✓			✓													✓					✓					✓		
BCS00043038				✓	✓				✓				✓					✓											✓					✓					✓		
BCS00043039				✓	✓				✓				✓					✓											✓					✓					✓		
BCS00043040				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00043041				✓	✓				✓				✓					✓											✓					✓					✓		
BCS00043042				✓	✓				✓				✓					✓											✓					✓					✓		
BCS00043043				✓	✓				✓			✓							✓										✓					✓					✓		
BCS00043044				✓	✓				✓				✓					✓											✓					✓					✓		
BCS00043045				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00043046				✓	✓				✓				✓						✓										✓					✓					✓		
BCS00043047				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00043048				✓		✓			✓			✓							✓										✓					✓					✓		
BCS00043049				✓		✓			✓			✓							✓										✓					✓					✓		
BCS00043050				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043051				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043052				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043053				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00043054				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043055				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043056				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043057				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043058				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043059				✓		✓			✓				✓			✓													✓					✓					✓		
BCS00043060				✓		✓			✓			✓				✓													✓					✓					✓		

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)
BCS00043035	1	BRONZE	2	5	N6	3	1	COLOR LESS	3	0	N/A	0	1	5R 4/6	2
BCS00043036	1	BRONZE	2	5	N6	3	1	COLOR LESS	3	0	N/A	0	1	5R 4/6	2
BCS00043037	1	BRONZE	3	5	N6	3	1	COLOR LESS	3	0	N/A	0	1	5R 4/6	2
BCS00043038	1	BRONZE	2	3	N6	3	1	COLOR LESS	2	0	N/A	0	1	VARIED	3
BCS00043039	1	BRONZE	2	3	N8	3	1	COLOR LESS	2	0	N/A	0	1	VARIED	3
BCS00043040	1	BRONZE	2	3	N8	3	2	COLOR LESS	2	0	N/A	0	1	VARIED	3
BCS00043041	1	BRONZE	2	5	N8	3	2	COLOR LESS	2	1	5YR 8/1	3	2	N4	2
BCS00043042	1	BRONZE	2	3	N8	3	1	COLOR LESS	2	0	N/A	0	2	N4	2
BCS00043043	1	BRONZE	2	3	N8	3	1	COLOR LESS	2	1	5YR 8/1	4	1	5R 4/6	6
BCS00043044	1	BRONZE	1	3	N8	2	1	COLOR LESS	2	0	N/A	0	1	5R 4/6	2
BCS00043045	1	BRONZE	2	3	N8	2	1	COLOR LESS	2	0	N/A	0	1	5R 4/6	2
BCS00043046	1	BRONZE	2	3	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	4
BCS00043047	1	BRONZE	2	3	COLOR LESS	3	1	COLOR LESS	2	1	5YR 8/1	12	3	VARIED	4
BCS00043048	1	BRONZE	2	2	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	4
BCS00043049	1	BRONZE	2	5	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	2	VARIED	3
BCS00043050	1	BRONZE	1	3	COLOR LESS	3	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043051	1	BRONZE	1	2	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043052	1	BRONZE	2	2	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043053	1	BRONZE	2	2	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043054	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	4
BCS00043055	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	3
BCS00043056	1	BRONZE	2	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	2
BCS00043057	1	BRONZE	1	1	COLOR LESS	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	3
BCS00043058	1	BRONZE	1	1	COLOR LESS / 5R 7/1	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	2
BCS00043059	1	BRONZE	1	1	COLOR LESS / 5R 7/1	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	2
BCS00043060	1	BRONZE	2	1	COLOR LESS / 5R 7/1	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	2

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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)	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)	Munsell Color Symbol
01/16/03	EJH	01/23/03	BW	BCS00043061	2635.00	2640.00	0.5	0.2	143.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043062	2640.00	2645.00	0.5	0.2	103.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043063	2645.00	2650.00	0.5	0.2	103.0	2.0	5.8				5YR 4/4
01/16/03	EJH	01/23/03	BW	BCS00043064	2650.00	2655.00	0.5	0.2	103.0	2.0	5.8				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043065	2655.00	2660.00	0.5	0.2	103.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043066	2660.00	2665.00	0.5	0.2	129.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043067	2665.00	2670.00	0.5	0.2	129.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043068	2670.00	2675.00	0.5	0.2	129.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043069	2675.00	2680.00	0.5	0.2	132.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043070	2680.00	2685.00	0.5	0.1	132.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043071	2685.00	2690.00	0.5	0.1	132.0	2.0	5.6				5YR 4/4
01/17/03	EJH	01/23/03	BW	BCS00043072	2690.00	2695.00	0.5	0.1	132.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043073	2695.00	2700.00	0.5	0.1	132.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043074	2700.00	2705.00	0.5	0.1	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043075	2705.00	2710.00	0.5	0.1	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043076	2710.00	2715.00	0.5	0.1	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043077	2715.00	2720.00	0.5	0.1	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043078	2720.00	2725.00	0.5	0.2	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043079	2725.00	2730.00	0.5	0.2	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043080	2730.00	2735.00	0.5	0.2	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043081	2735.00	2740.00	0.5	0.2	120.0	2.0	5.6				5YR 4/4
01/18/03	EJH	01/23/03	BW	BCS00043082	2740.00	2745.00	0.5	0.2	163.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043083	2745.00	2750.00	0.5	0.2	163.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043084	2750.00	2755.00	0.5	0.2	163.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043085	2755.00	2760.00	0.5	0.2	163.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043086	2760.00	2765.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6

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
BCS00043061				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043062				✓	✓				✓			✓						✓											✓					✓					✓		
BCS00043063				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043064				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043065				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043066				✓	✓				✓		✓				✓														✓					✓					✓		
BCS00043067				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043068				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043069				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043070				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043071				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043072				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043073				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043074				✓		✓			✓			✓				✓													✓					✓					✓		
BCS00043075				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043076				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043077				✓		✓			✓		✓					✓													✓					✓					✓		
BCS00043078				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043079				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043080				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043081				✓	✓				✓		✓					✓													✓					✓					✓		
BCS00043082				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043083				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043084				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043085				✓	✓				✓			✓				✓													✓					✓					✓		
BCS00043086				✓	✓				✓			✓				✓													✓					✓					✓		

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)
BCS00043061	1	BRONZE	2	1	COLOR LESS / 5R 7/1	2	1	COLOR LESS	2	0	N/A	0	1	N1 / 10R 4/6	2
BCS00043062	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	10YR 2/2	2
BCS00043063	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00043064	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	N4	2
BCS00043065	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	4
BCS00043066	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	3
BCS00043067	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	1	10R 4/6	2
BCS00043068	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	10R 4/6	2
BCS00043069	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	N1 / 10R 4/6	2
BCS00043070	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	N1 / 10R 4/6	2
BCS00043071	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	N1 / 10R 4/6	2
BCS00043072	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	N1 / 10R 4/6	2
BCS00043073	1	BRONZE	2	1	N8	2	1	COLOR LESS	2	0	N/A	0	2	N1 / 10R 4/6	2
BCS00043074	1	BRONZE	2	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	1	N8	2
BCS00043075	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	3
BCS00043076	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00043077	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00043078	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	1	VARIED	2
BCS00043079	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	3
BCS00043080	1	BRONZE	2	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043081	0	N/A	0	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043082	0	N/A	0	3	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	2
BCS00043083	0.5	BRONZE	1	3	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	2
BCS00043084	0.5	BRONZE	1	3	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	2
BCS00043085	0.5	BRONZE	1	3	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	2
BCS00043086	1	BRONZE	2	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	5	VARIED	3

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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
01/18/03	EJH	01/23/03	BW	BCS00043087	2765.00	2770.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043088	2770.00	2775.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043089	2775.00	2780.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043090	2780.00	2785.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043091	2785.00	2790.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043092	2790.00	2795.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/18/03	EJH	01/23/03	BW	BCS00043093	2795.00	2800.00	0.5	0.2	150.0	2.0	5.6				5YR 5/6
01/19/03	EJH	01/23/03	BW	BCS00043094	2800.00	2805.00	0.5	0.3	150.0	2.0	5.6				5YR 4/4
01/19/03	EJH	01/23/03	BW	BCS00043095	2805.00	2810.00	0.5	0.3	150.0	1.0	5.6				10Y 6/2
01/19/03	EJH	01/23/03	BW	BCS00043096	2810.00	2815.00	0.5	0.3	150.0	1.0	5.6				10Y 6/2
01/19/03	EJH	01/23/03	BW	BCS00043097	2815.00	2820.00	0.5	0.3	150.0	1.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043098	2820.00	2825.00	0.5	0.2	150.0	1.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043099	2825.00	2830.00	0.5	0.2	150.0	1.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043100	2830.00	2835.00	0.5	0.2	150.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043101	2835.00	2840.00	0.5	0.2	150.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043102	2840.00	2845.00	0.5	0.2	167.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043103	2845.00	2850.00	0.5	0.2	167.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043104	2850.00	2855.00	0.5	0.2	167.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043105	2855.00	2860.00	0.5	0.2	167.0	2.0	5.6				5YR 6/4
01/19/03	EJH	01/23/03	BW	BCS00043106	2860.00	2865.00	0.5	0.2	167.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043107	2865.00	2870.00	0.5	0.2	167.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043108	2870.00	2875.00	0.5	0.2	167.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043109	2875.00	2880.00	0.5	0.2	167.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043110	2880.00	2885.00	0.5	0.4	144.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043111	2885.00	2890.00	0.5	0.4	144.0	2.0	5.6				10YR 7/4
01/19/03	EJH	01/23/03	BW	BCS00043112	2890.00	2895.00	0.5	0.4	144.0	2.0	5.6				10YR 7/4

Sample Number	Moisture Content: NA	Moisture: DRY	Moisture: MOIST	Moisture: WET	HCL Re-action: NONE	HCL: WEAK	HCL: STRONG	Tuff Deposition: ASHFALL	Deposition: ASHFLOW	Deposition: REWORKED	Welding: DENSE	Welding: MODERATE	Welding: WEAK	Welding: NONE	Alteration: VITRIC	Alteration: DEVITRIFIED	Alteration: MATRIX	Alteration: VAPOR PHASE	Alteration: SPHERULITIC	Sedimentary: CLAYSTONE	Sedimentary: MUDSTONE	Sedimentary: SILTSTONE	Sedimentary: SANDSTONE	Sedimentary: CONGLOMERATE	Sedimentary: CHERT	Carbonate: LIMESTONE	Carbonate: DOLOMITE	Rock Unit: 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
BCS00043087				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043088				✔	✔				✔			✔				✔														✔				✔					✔		
BCS00043089				✔	✔				✔			✔				✔													✔					✔					✔		
BCS00043090				✔	✔				✔			✔				✔													✔					✔					✔		
BCS00043091				✔	✔				✔			✔				✔													✔					✔					✔		
BCS00043092				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043093				✔	✔				✔		✔					✔													✔					✔					✔		
BCS00043094				✔	✔				✔		✔					✔															✔			✔					✔		
BCS00043095				✔	✔																		✔									✔		✔						✔	
BCS00043096				✔	✔																		✔										✔	✔							✔
BCS00043097				✔	✔			✔						✔			✔															✔		✔						✔	
BCS00043098				✔	✔				✔					✔			✔														✔			✔						✔	
BCS00043099				✔	✔				✔					✔		✔														✔				✔						✔	
BCS00043100				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00043101				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043102				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043103				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043104				✔	✔				✔				✔		✔														✔					✔					✔		
BCS00043105				✔	✔				✔				✔			✔													✔					✔						✔	
BCS00043106				✔	✔				✔					✔		✔													✔					✔						✔	
BCS00043107				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043108				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043109				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043110				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043111				✔	✔				✔				✔			✔													✔					✔					✔		
BCS00043112				✔	✔				✔				✔			✔													✔					✔					✔		

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)
BCS00043087	1	BRONZE	2	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	5	VARIED	3
BCS00043088	1	BRONZE	2	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	5	VARIED	2
BCS00043089	1	BRONZE	2	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	5	VARIED	3
BCS00043090	1	N1	3	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043091	1	N1	3	5	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	3	VARIED	2
BCS00043092	1	N1	3	3	N6 / CL	2	1	COLOR LESS	2	0.5	N9	3	3	VARIED	2
BCS00043093	0.5	N1	1	2	N6 / CL	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043094	1	N9	1	3	N6	2	1	COLOR LESS	2	0	N/A	0	2	VARIED	2
BCS00043095	0	N/A	0	0	N/A	0	0	N/A	0	1	10YR 8/2	6	0	N/A	0
BCS00043096	0	N/A	0	0	N/A	0	0	N/A	0	1	10YR 8/2	4	0	N/A	0
BCS00043097	1	N9	2	1	COLOR LESS	2	1	COLOR LESS	2	0.5	10Y 8/2	3	1	10Y 8/2	3
BCS00043098	1	N9	2	1	COLOR LESS/N8	2	1	COLOR LESS	2	0	N/A	0	10	N1	4
BCS00043099	1	N9	2	1	COLOR LESS/N8	2	1	COLOR LESS	2	0	N/A	0	10	N1	4
BCS00043100	1	N9	2	1	COLOR LESS/N8	2	1	COLOR LESS	2	2	10Y 8/2	6	10	VARIED	10
BCS00043101	1	N9	2	1	COLOR LESS	2	1	COLOR LESS	2	15	10Y 8/2	8	10	VARIED	10
BCS00043102	1	N9	2	2	COLOR LESS	2	1	COLOR LESS	2	10	10Y 8/2	6	5	VARIED	6
BCS00043103	1	N9	2	3	COLOR LESS	2	1	COLOR LESS	2	5	10Y 8/2	3	5	VARIED	10
BCS00043104	1	N9	2	2	COLOR LESS/N8	2	1	COLOR LESS	2	8	10Y 8/2	4	10	VARIED	5
BCS00043105	1	N9	2	2	COLOR LESS/N8	3	1	COLOR LESS	2	5	10Y 8/2	4	30	VARIED	8
BCS00043106	1	N9	2	3	COLOR LESS/N8	3	1	COLOR LESS	2	5	10Y 8/2	5	50	VARIED	10
BCS00043107	1	N9	2	2	COLOR LESS/N8	3	2	COLOR LESS	2	4	10Y 8/2	5	15	VARIED	3
BCS00043108	1	N9	2	2	COLOR LESS/N8	3	2	COLOR LESS	2	3	10Y 8/2	3	5	VARIED	3
BCS00043109	1	N9	2	2	COLOR LESS/N8	3	2	COLOR LESS	2	3	10Y 8/2	3	5	VARIED	2
BCS00043110	1	N9	2	1	COLOR LESS/N8	3	1	COLOR LESS	2	2	10Y 8/2	2	3	VARIED	2
BCS00043111	1	N9	2	1	COLOR LESS/N8	2	1	COLOR LESS	2	3	10Y 8/2	3	5	VARIED	3
BCS00043112	1	N9	2	1	COLOR LESS/N8	2	1	COLOR LESS	2	5	10Y 8/2	4	5	VARIED	3

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

Borehole ID: **NC-EWDP-16P** (Phase 4) Driller/Drilling Company: Greg Secrist/Eklund Drilling Co. Drilling Method: Reverse Circulation Air Rotary Alluvium Depth (ft bgs): 165 to 2900 Start Date: 12/14/2002 End Date: 1/19/2003

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)	
01/19/03	EJH	01/23/03	BW	BCS00043113	2895.00	2900.00	0.5	0.4	146.0	2.0	5.6				10YR 7/4

Sample Number	Moisture Content				HCL Reaction		
	NA	DRY	MOIST	WET	NONE	WEAK	STRONG
BCS00043113				✓	✓		

Sample Number	Rock Unit: Tuff – Deposition			Welding				Alteration				
	ASHFALL	ASHFLOW	REWORKED	DENSE	MODERATE	WEAK	NONE	VITRIC	DEVITRIFIED	MATRIX	VAPOR PHASE	SPHERULITIC
BCS00043113		✓				✓			✓			

Sample Number	Rock Unit: Sedimentary						Carbonate		OTHER
	CLAYSTONE	MUDSTONE	SILTSTONE	SANDSTONE	CONGLOMERATE	CHERT	LIMESTONE	DOLOMITE	
BCS00043113									

Sample Number	Weathering					Structure					Matrix		
	FRESH	SLIGHT	MODERATE	HIGH	DECOMPOSED	NONE OBSERVED	STRATIFIED	LAMINATED	FRACTURED	OTHER	DENSE/NONPOROUS	OPEN/POROUS	OTHER
BCS00043113	✓					✓					✓		

Sample Number	Phenocrysts: Mafics			Quartz			Feldspar		
	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)
BCS00043113	1	N9	2	1	COLOR LESS/N 8	2	1	COLOR LESS	2

Sample Number	Clasts: Pumice			Lithics		
	% by Vol.	Munsell Color Symbol	Max. Size (mm)	% by Vol.	Munsell Color Symbol	Max. Size (mm)
BCS00043113	5	10Y 8/2	4	5	VARIED	3