

LANL / ER / OU 1157

ENTERED

7 - 17 - 95

LANL
ENVIRONMENTAL RESTORATION
FU-5
OU 1157
MDA-C
RFI BOREHOLES
CORE SAMPLE LOG
BORE LOGS
CAROL LADELF
DRILLER: TONTO

(TR-50) (MDA C, 50-009)



8749

LOS ALAMOS NATIONAL LABORATORY ENVIRONMENTAL RESTORATION PROGRAM

SAMPLE MANAGEMENT FACILITY

CORE SAMPLE LOG

Borehole ID 50-9100 TA/OU 50/1147 Drill Depth From 0 To 60 Page 1 of 4

Driller Touto Box #(s) 29 Start Date/Time 7/17/95 10:30 End Date/Time 7/31/95 12:00

Drilling Equip./Method Longyear 44/Air Core Sampling Equip./Method Wire-line Core/Core Barrel Sampling

7/17/95
7/18/95
7/18/95
7/19/95

Depth (Feet)	Recovery (feet per feet %)	Field Borehole Analytical Sample Number	Field Screening Results	Top/Bottom of Core in Box	Lithology - Petrology - Soil	Graphic Log	Lithologic Unit	Notes
0	100	0360	See Field Screening Logs		0.0-0.5 Pale brown SYR 5/2 organic soil: silt, sand, roots		fill	
0-5		0361			0.5-2.0 SAA but not as organic, = fill			
0-10		0362		10.0-18.2	5.0 Pale yellowish brown 10 YR 6/2, crusted tuff, hot cuttings.			
10-15		0363			Lt. 10-16.5 Pale red SR 6/2 non welded, dehydrated, indurated, ash flow tuff. Pumice are weathered out and indistinct where present 1-2 cm, 15% of rock, sugary dehydrated texture, relict tube structures.			
15-20		0364		18.2-29.0	16.5-21.3 Pale red SR 6/2 SAA, but very moist, 20% dk gray organic like patches in clayey matrix. black is 10% of matrix. Matrix is oxidized w/ Limonite color			Local FeOx as Goethite
20-25		0365		29.0-37.3	21.3-42.5 Lt pale red SR 6/2 SAA 10-16.5 no moist like 16.5-21.3. Still oxidized but pumices more distinct. very coarse sandy dehydrated pumice 1-2 cm.			clay on face w/ 19.1' black thin patches like metallic luster roots in frac go to black FeOx carbonaceous material oxidized structure
25-30		0366		37.3-53.5	Lt pale red SR 6/2 slightly welded, SAA tuff well oxidized, pumice up to 2 cm x 4 cm. Lt gray, very coarse, dehydrated. Pumice in matrix, 10% each.			core is well oxidized both natural unit 2b and 2nd day along horis. fractures
30-35		0367			A+36.5, clay content in core increases, very moist			
35-40		0368			42.5 Pale red 10R 6/2, friable, less indurated tuff pumices are 5 cm (cont) Lt gray, dehydrated.			Larry reported he lost a tin
40-45		0369						
45-50		0370						
50-55		0371		53.5-65.0	52.5 Grayish pink SR 8/2 non-indurated volcanic tuff, very soft, very dry. Unit 2a			

Prepared By Jan Marin Date 7/17/95-7/31/95 Checked By _____ Date _____

R.1

Sample # 0201 = Radvan (gross alpha, beta, and gamma; moisture; tritium) + Chemvan (VOCs and PCBs) + matrix potential analyses.

Sample # 0202 = Contract Lab samples (SVOCs, Tritium, TAL metals, cyanide, and Gamma Spectroscopy [for Isotopic Am-241, Pu, Th, U, and Sr-90]) in addition to the Radvan, Chemvan, and Matrix Potential sample

LOS ALAMOS NATIONAL LABORATORY ENVIRONMENTAL RESTORATION PROGRAM

SAMPLE MANAGEMENT FACILITY

CORE SAMPLE LOG

Borehole ID 50-9100 TA/OU 50/1147 Drill Depth From 180 To 210 Page 4 of 4

Driller Tonto Box #(s) 29 Start Date/Time 7/17/95 ^{10:30} End Date/Time 7/31/95 ^{12:00}

Drilling Equip./Method Longyear 44/Air Core Sampling Equip./Method Wire-line Core/Core Barrel Sampling

Depth (Feet)	Recovery (feet per feet %)	Field Borehole Analytical Sample Number	Field Screening Results	Top/Bottom of Core in Box	Lithology - Petrology - Soil	Graphic Log	Lithologic Unit	Notes
18.0	42 / 51.510	RDWAMP 0399	See Field Screening Logs		Greyish orange pink STR 712, non indurated, well welded, disaggregate and flow tuff. pumice are elongate up to 3cm and holding together in groundup matrix. Pumice an devit. though with a possible glassy rathole. Not visible under the binocular scope. Have 0.5mm black equant detrital in pumice 3% altering to dk brown soe chite-like Fe Ox.		Tshirege Member Unit IV	at 187.5 'pumice' are holding together in disaggregated rock devit surface texture, but suspect vitric under weath.
5	43 / 51.613	RDWAMP 0400		18.8 - 198.0				
19.0	44 / 51.510	RDWAMP 0401						
5	45 / 51.510	RDWAMP 0402		19.0 - 198.0	at 200' still devitrified pumice, Lt grey and chocolate brown where Fe Ox present & 40% ch pumice.		Tshirege Member Unit IV	
20.0	46 / 51.510	RDWAMP 0402		19.0 - 205.0				
5	47 / 51.510	RDWAMP 0401		20.0 - 210.0	TD: 210.0 in devitrified rock tuff. Tshirege Member Unit IV Bandedier Tuff		Tshirege Member Unit IV	
21.0	TD = 210.0'							
5					Stratigraphy at TA-50, MDA-C will follow Lanniman and Wohletz		Tshirege Member Unit IV	
0								

Prepared By J. Marin Date 7/31/95 Checked By _____ Date _____

R.1

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LOS ALAMOS NATIONAL LABORATORY ENVIRONMENTAL RESTORATION PROGRAM

SAMPLE MANAGEMENT FACILITY

CORE SAMPLE LOG

Borehole ID 50-9100 TA/OU 50/1147 Drill Depth From 120 To 180 Page 3 of 4

Driller Touto Box #(s) 29 Start Date/Time 7/17/95 10:30 End Date/Time 7/31/95 12:00

Drilling Equip./Method Longyear 44/Air Core Sampling Equip./Method Wire-line Core/Core Barrel Sampling

Depth (Feet)	Recovery (feet per feet %)	Field Borehole Analytical Sample Number	Field Screening Results	Top/Bottom of Core in Box	Lithology - Petrology - Soil	Graphic Log	Lithologic Unit	Notes
12 0	34 / 5150	059-95 0384	See Field Screening Logs	11 / 120.0 - 128.9	At 121. Pumice are very indistinct < 5% of rock, < 0.5 cm, Lt grey patches of devitrified Qtz + Sanadine. FeOx patches occur.		Banded Member Bandelier Tuff	
12 25	34 / 514.71	0385		12 / 128.9 - 137.5	at 134.5 have light pink fibrous vapor phase alteration patch 0.5 cm across.			
13 0	34 / 515.31	0386	13 / 137.5 - 146.1	at 140. Qtz and Sanadine to date make up 120% each of rock; Qtz phenos up to 3mm across, Sanadine show chiller blue on cleavage faces. FeOx present in matrix and in pumices up to 2cm across.				
13 35	37 / 514.01 0.2	0387	14 / 146.1 - 155	at 155.0 pumice are finely devitrified with a faint glassy under texture.				
14 0	34 / 515.31	0388	15 / 155.0 - 170.0	at 155.0 Faint relict tube structures in devit pumice with fine grained Qtz + Sanadine, after pumice stars.				
14 45	35 / 51510	0389	16 / 170.0 - 178.0	Pumices and lithics are rimmed by thin Lt pink vapor phase alteration product. < 0.2mm to 1mm				
15 0	36 / 51510	0390	17 / 178.0 - 185.8	1mm thick vapor phase alteration rinds surrounding devitrified pumice up to 3cm.				
15 55	37 / 514.2108	0391						
16 0	38 / 511118	0392						
16 5	39 / 51114	RDVAMP 0396						
17 0	40 / 515.510	RDVAMP 0397						
17 45	41 / 515.510	RDVAMP 0398						
18 0								

Prepared By J. Marin Date 7/17/95 - 7/31/95 Checked By _____ Date _____

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LOS ALAMOS NATIONAL LABORATORY ENVIRONMENTAL RESTORATION PROGRAM

SAMPLE MANAGEMENT FACILITY

CORE SAMPLE LOG

Borehole ID 50-91 TAOU 50/1147 Drill Depth From 60 To 120 Page 2 of 4
 Driller Tonto Box #(s) 29 Start Date/Time 7/17/95 10:50 End Date/Time 7/31/95 12:00
 Drilling Equip./Method Longyear 44/Air Core Sampling Equip./Method Wire-line Core/Core Barrel Sampling

Depth (Feet)	Recovery (feet per foot %)	Field Borehole Analytical Sample Number	Field Screening Results	Top/Bottom of Core in Box	Lithology - Petrology - Soil	Graphic Log	Lithologic Unit	Notes
60	100	0522	Screening	6	Greyish orange pink STR 212 mostly unindurated, unoxidized volcanic tuff dy			
65	100	0522	Screening	6				
70	100	0373		6	21.5' Pale yellowish brown 10TR 612, slightly more indurated, slightly moist, volcanic tuff.			poor recovery
75	100	0375		7	to 1cm across.			
80	100	0376		7	soft			
85	100	0376		7	soft			
90	100	0377		8	88.0' Pale red 10R 612, slightly indurated, dehydrated volcanic tuff.			
95	100	0378		8	3AA Lt. Pale red 10R 612, slightly indurated dehydrated volcanic tuff. The matrix is bit does not disrupt the core as much as the 4 1/2" plug diamond bit. The matrix of the core is discernible, whereas with the 4 1/2" plug bit, the matrix was destroyed similar to the CME auger disruption compared to the pack sampler collected at 54-1018 Famites are very indistinct brown patches of dent 012 sandstone with FeOx in matrix Sandstone Xotals in matrix up to 1mm, 5% Matrix Greyish pink SR 612 volcanic tuff Sandstone Xotals up to 1.5mm and 7% of matrix			
100	100	0379		9				
105	100	0380		9				
110	100	0381		10				
115	100	0381		10				
120	100	0381		10				

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 In addition to the Radvan, Chemvan, and Matrix Potential samples

Prepared By J.M. Mann Date 2/17/95 - 2/31/95 Checked By _____ Date _____
 R.1