Appendix H

Borehole Logs

APPENDIX H BOREHOLE LOGS

This attachment presents profiles and logs of the boreholes drilled at Material Disposal Area H. The profiles depict the subsurface trajectories of the boreholes relative to adjacent subsurface disposal units, the stratigraphic units that were encountered during drilling, the location of samples taken from the core, and the pore-gas sample and monitoring-port locations, where applicable. Footages on the logs are length along each borehole.

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1023 TA/OU: 54/1148 MDA: H Page: 1 of 5

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 10 cuttings 29 core Start Date: 6/23/95 Time: 13:50 End Date: 6/28/95 Time: 13:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 259.7 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
0					At 2.5 ft TUFF, light brown, weathered		Qal	n/a	
5			2.89	0–9.0 ft surface cuttings in 10 boxes.	At 5.0 ft TUFF, pinkish gray 5YR 8/1 churned-up material		Unit 2, Tshirege Member, Bandelier Tuff		
10	10/92%	95-0282	167.94	1/9.0–13.2 ft	9.0–10.0 ft TUFF, pinkish gray 5YR 8/1, lithics 10–15%, up to 4 cm				
15	11/100%	95-0284	650.62 746.86	2/13.2–24.4 ft	18.0–19.2 ft PUMICE lapilli, devitrified, nonwelded, equant, light gray sugary texture				At 17.0 ft, well-oxidized core fracture
20	12/100%		803.07						
25	13/100%			3/24.4–33.6 ft	At 25.0 ft TUFF, material is slightly welded, dark red brown, pumice up to 5 cm				
30	14/100%	95-0286	897.38						
35	15/96%		756.22	4/36.6–43.0 ft	At 34.7 ft TUFF, contact with unit Iv, grayish pink 5R 8/2, larger pumice up to 2 cm, devitrified, oxidized interval sampled in unit 2a at contact. 2–3 cm-thick phenocryst-rich deposit in a fine ash matrix. Phenocrysts comprise 40–50% of the ash layers which alternate gray and light brown, N8 and 5YR 5/6, respectively.		Unit Iv		At 34.7 ft, unit 1u(u3), a slight elevation in beta/gamma readings
40	16/100%	95-0288	188.65						
45	17/100%		198.24	5/43.0–52.5 ft					
50	18/100%	95-0290	120.15						
55	19/100%		225.02	6/52.5–61.5 ft					
60	20/100%	95-0292	101.35		At 60.0 ft Same as above (SAA)				At 60 ft, ending depth of shafts

* n/a = not applicable.

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1023 TA/OU: 54/1148 MDA: H Page: 2 of 5

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 10 cuttings 29 core Start Date: 6/23/95 Time: 13:50 End Date: 6/28/95 Time: 13:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a TD: 259.7 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology		Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
60	20/Cont.			6/Cont.						
	21/100%		119.13	7/61.5–65.3 ft					n/a	
65				8/65.3–67.0 ft						
	22/100%	95-0294	103.89	9/67.0–76.5 ft						
70										
	23/100%		68.17							
75					At 77.5 ft	TUFF, color change to a redder material grayish orange pink 5YR 7/2, smaller pumice				At 77.5 ft, possible colonnade no unit 1u(u2).
	24/100%		43.91	10/76.5–90.0 ft						
80										
	25/100%	95-0298	16.02			TUFF, grayish pink 5R 8/2, slightly indurated, wafered, slightly to nonwelded, devitrified. Pumice lapilli are 5%, 0.1–4.0 cm, the average is 1.0 cm, equant to 2:1. Elongated vapor-phase alteration product along relict tube structures, medium light gray to brownish gray.		Unit Iv, Tshirege Member, Bandelier Tuff		
85										
	26/7%									
90	27/100%				91.0–96.0 ft					
	28/100%			11/90.0–98.5 ft						
95										
	29/100%									
100				12/98.5–107.1 ft	At 101.0 ft	SAA, grayish orange pink 10R 8/2				
	30/100%									
105						At 108.ft TUFF, pinkish gray 5YR 8/1, slightly wafered and devitrified. Pumices are 20% 0.5–5.0 cm, average is 2.0 cm, nonwelded iron rich, grayish brown, 5YR 3/2 with local dark reddish 10R 3/4 iron concentrations. At 111.0 ft SAA, matrix dacite lithics up to 6 cm				
	31/100%			13/107.1–116.0 ft	At 108.0 ft					At 108.0 ft, also fine-grained light gray devitrified pumice 5%, 0.5–2.0 cm, average is 1.0 cm
110					At 111.0 ft					
	32/100%									
115										
	33/100%			14/116.0–125.2 ft						
120										

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1023 TA/OU: 54/1148 MDA: H Page: 3 of 5

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 10 cuttings 29 core Start Date: 6/23/95 Time: 13:50 End Date: 6/28/95 Time: 13:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a TD: 259.7 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Construction	Notes
120	34/100%			14/Cont.	TUFF, 0.5 cm dacite, lithics in core matrix are redder, grayish pink to grayish orange pink 10R 8/2		Qbt lv	n/a	
125	35/100%			15/125.2–135.4 ft	At 126.0 ft				At 126.0 ft, collonnade subunit
130	36/100%				At 130.0 ft At 131.0 ft Dacite lithics 5% of core, pumices are very iron rich, at 131.0 ft lithics up to 10% locally		Qbt lv(c)		
	37/100%				At 135.0 ft				
135	38/100%			16/135.4–145.9 ft	At 135.0 ft TUFF, moderately indurated core, pumices are light yellowish brown iron oxides in matrix pits, probably after phenocrysts falling out				
140	39/100%								
145	40/100%			17/145.9–154.2 ft	At 146.0 ft TUFF, matrix color change to light brown 5YR 6/4, matrix is moderate orange reddish orange 10R 6/6, well-indurated, slightly welded. Pumice lapilli are 15%, 1:2 elongate grayish pink 5R 8/2 silky luster on fully inflated tube strucxtures. Lithics are 5%, 0.5–1.0 mm dacite with local oxidation pits. Local dark gray vitric pumice, up to 4 mm, also 2% matrix patches after magnetite (?), silicate mineral.		Qbt 1g		At 146.0 ft, first appearance of vitric pumice
150	41/100%								
155	42/100%			18/154.2–164.5 ft					
160	43/100%								
165	44/100%			19/164.5–174.1 ft					
170	45/100%								
175	46/100%			20/174.1–184.6 ft					
180	47/100%								

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1023 TA/OU: 54/1148 MDA: H Page: 4 of 5

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 10 cuttings 29 core Start Date: 6/23/95 Time: 13:50 End Date: 6/28/95 Time: 13:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a TD: 259.7 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
180	47/Cont.			20/Cont.	183.0–189.0 ft TUFF, moderate orange pink 10R 7/4 nonindurated, nonwelded ash, 10–20% rounded clasts 10–18% are intermediate red, dark gray volcanics. Pumice is silky white/pale gray with quartz phenocrysts. At 189.0 ft begins a gradual transition of color to a paler orange, gray pink 5R 8/2.		Unit 1g	n/a	
	48/100%		0.00						
185	49/100%		0.00	21/184.6–193.5 ft					
	50/100%		0.00						
190			0.16						
	51/100%		0.00						
195			0.00	22/193.5–202.0 ft					
	52/100%		0.03						
200			0.00						
	53/100%		0.00	23/202.0–211.0 ft					
205			0.39		At 207.0 ft Appearance of silky golden pumice, 1–2 cm				
	54/100%		0.03						
210			0.00						
	55/100%		0.00	24/211.0–220.5 ft					
215			0.00		216.0–221.0 ft PUMICE, golden color common up to 15%, with 3–5 cm length, a decrease in appearance of later intermediate volcanic lithics to 1%				
	56/100%		0.98						
220			0.08						
	57/100%		0.00	25/220.5–229.3 ft					
225			0.00						
	58/100%		0.13						
230			0.00	26/229.3–238.3 ft					
	59/100%		0.00						
235			0.00						
	60/100%		0.00						
240				27/238.3–247.0 ft					

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1023 TA/OU: 54/1148 MDA: H Page: 5 of 5

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 10 cuttings 29 core Start Date: 6/23/95 Time: 13:50 End Date: 6/28/95 Time: 13:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 259.7 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
240	61/100%		0.08	27/Cont.			Qbt 1g	n/a	
			0.08						
245			0.13						
	62/100%		0.51	28/247.0–255.7 ft					
250			0.14						
	63/100%		0.00						
255			0.14		254.5–255.7 ft "Salt and Pepper" surge bed/pumice bed, white silky pumice 1–4 cm, 20–30% supported by quartz phenocrysts 50–60%, and fine grains of red and black intermediate volcanics (<3 mm)		Tsankawi Pumice Bed		
	64/50%		0.00						
	65/100%			29/255.7–259.7 ft			Cerro Toledo Interval		
	66/30%		2.25						
260									At 255.7 ft, rusty oxidized clay with intermediate black volcanic clasts
265					TD = 259.7 ft				
270									
275									
280									
285									
290									
295									
300									

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1024 TA/OU: 54/1148 MDA: H Page: 1 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 9 cuttings 10 core Start Date: 6/29/95 Time: 15:30 End Date: 7/5/95 Time: 15:00

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 60.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology		Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
0				0–8.0 ft surface cuttings in 9 boxes.				Qal	n/a	
5			2.57							
		95-0321	7.49	1/8.0–16.0 ft						
10					10.0–15.0 ft	TUFF, pink 5R 8/2, slightly welded. Pumice lapilli are elongate, devitrified 25%, up to 3 cm. Quartz phenocrysts up to 10%, 1.5 mm doubly terminated, lithics 3% up to 1 cm.		Unit 2, Tshirege Member, Bandelier Tuff		
			57.40							
15	12/100%			2/16.0–25.0 ft						
		95-0323	81.47							
20	13/100%		86.55							
25					At 25.0 ft	Same as above (SAA) grayish pink 5R 8/2 slightly welded				
	14/100%	95-0325	104.33	3/25.0–31.0 ft						
30	15/100%			4/33.0–41.0 ft						
			297.93							
35	16/100%	95-0327	233.88		At 37.0 ft	SAA, contact with unit Iv, grayish pink 5R 8/2 pumice are smaller and fewer, up to 0.5 cm and 10%		Qbt Iv		
40	17/100%		380.02	5/41.0–53.5 ft						
45	18/100%		578.65							
50					At 50.0 ft	Similiar to unit 2b, slightly welded, pumice up to 25%, elongate, lithics, 5%, dacite				
	19/100%	95-0329	773.70							
55				6/53.5–61.0 ft						
	20/100%		2044.79							
60					At 60.0 ft	TUFF, SAA, grayish pink 5R 8/2, nonwelded, pulverized				At 60 ft, ending depth of shafts

* n/a = not applicable.

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1024 TA/OU: 54/1148 MDA: H Page: 2 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 9 cuttings 8 core Start Date: 6/29/95 Time: 15:30 End Date: 7/5/95 Time: 15:00

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 90.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
60	21/100%	95-0331	1395.17	7/60.1–68.0 ft			Unit Iv, Tshirege Member, Bandelier Tuff	n/a	
65	22/100%		832.63	8/68.0–79.0 ft					
70	23/100%	95-0333	609.66						
75	24/100%		226.61						
80	25/100%		49.89	9/79.0–85.7 ft					
85	26/100%	95-0337	5.93	10/85.7–90.0 ft	At 85.0 ft TUFF with gray lithics of andesite				
90					TD = 90.0 ft				
95									
100									
105									
110									
115									
120									

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1025 TA/OU: 54/1148 MDA: H Page: 1 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 9 cuttings 8 core Start Date: 7/6/95 Time: 8:00 End Date: 7/6/95 Time: 14:00

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 90.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
0–5	1/100%		3.27	0–9.0 ft surface cuttings in 9 boxes.	0.0–3.3 ft TOPSOIL, brown, fine grained, with pale pink gray clast of tuff present		Qal	n/a	
5–10		95-0339	5.28		10.0–15.0 ft TUFF, grayish pink 5R 8/2, unconsolidated. Pumice lapilli are devitrified, 10%, slightly welded, up to 2 cm.		Unit 2, Tshirege Member, Bandelier Tuff		
10–15	2/85%		37.29	1/9.0–16.0 ft					
15–20	3/100% 4/86%	95-0341	481.26	2/16.0–23.0 ft					
20–25	5/88%		1247.69						
25–30	6/70%	95-0343	1981.10	3/23.0–32.2 ft					
30–35	7/60%		4496.81		TUFF, reddish brown to light grayish white tuff, 2b/2a contact. At 34.5 ft At 36.0 ft				
35–40	8/12%		6014.38		At 36.0 ft possible surge, an increase in the percentage of phenocrysts visible		Unit Iv		
40–45	9/30%	95-0345	1154.72	4/32.2–51.0 ft					
45–50	10/60%		4933.14						
50–55	11/94%	95-0347	2434.69	5/51.0–57.9 ft	Same as above, pinkish gray 5YR 8/1 nonwelded pumice, devitrified, equant up to 3 cm, sugary texture, quartz and potassium feldspar. Lithics are 5%, up to 2 cm, dacite.				
55–60	12/70%		2493.63	6/57.9–68.4 ft	At 60.0 ft				At 60 ft, ending depth of shafts

* n/a = not applicable.

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1025 TA/OU: 54/1148 MDA: H Page: 2 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) 9 cuttings 8 core Start Date: 7/6/95 Time: 08:00 End Date: 7/6/95 Time: 14:30

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a TD: 90.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
60									
	13/84%	95-0349	2056.21	6/Cont.			Qbt lv	n/a	
65			1115.67						
	14/96%								
70		95-0351	343.48						
	15/74%			7/68.4–79.5 ft					
75			205.20						
	16/70%								
80			64.32						
	17/80%			8/79.5–90.0 ft					
85									
	18/75%	95-0355 95-0356	231.81						
90					TD = 90.0 ft				
95									
100									
105									
110									
115									
120									

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1026 TA/OU: 54/1148 MDA: H Page: 1 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) NA cuttings NA core Start Date: 6/27/95 Time: 16:00 End Date: 6/29/95 Time: 10:00

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a* TD: 90.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
0	1/100%				0–0.7 ft TOPSOIL, light brown 5YR 6/4.		Qal	n/a	
	2/100%								
	3/100%		0.59		2.5–3.0 ft TUFF, grayish pink 5YR 8/2, weathered and pulverized		Unit 2, Tshirege Member, Bandelier Tuff		
5	4/100%								
	5/100%								
	6/100%	95-0318	0.46						
10			1.36		At 10.3 ft PUMICE, grayish orange pink 5YR 7/2, slightly welded elongate up to 0.5 cm to 3.0 cm, 20% phenocrysts, quartz and sanidine 15% each, lithics 50%, up to 3 cm, dark gray dacite				At 10.3 ft, strongly oxidized fracture at 30° to the core axis, $CaCO_3$, dark brown clat and trace roots.
	7/100%								
15	8/100%								
	9/100%	95-0300	1.49						
20									At 13.5 ft, regrouted borehole
	10/100%		11.40						
25									At 16.7 ft, iron oxide coated fracture. Fracture is 35° to the core axis.
	11/100%	95-0302	3.21						
30									
	12/100%		6.13		At 34.4 ft				At 34.4 ft, fracture present and the contact with unit 2b/2a, core loss
35									
	13/100%				PUMICE, pinkish gray 5YR 8/1, nonwelded, devitrified, up to 3 cm, equant		Qbt lv		
40		95-0304	3.79						
	14/100%								
45			1.55						At 46.5 ft, fracture at 30° to the core axis
		95-0306	2.87						
	15/100%								
50			2.43						
	16/100%								
55					At 56.5 ft PUMICE, high phenocryst content, up to 30%, slightly welded				
	17/100%	95-0308	3.20						
60									At 60 ft, ending depth of shafts

* n/a = not applicable.

LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT
PRS 54-004
BOREHOLE LOG

BOREHOLE ID: 54-1026 TA/OU: 54/1148 MDA: H Page: 2 of 2

Drilling Co.: Tonto Environmental Drilling Inc. Core Box #(s) NA cuttings NA core Start Date: 6/27/95 Time: 16:00 End Date: 6/29/95 Time: 10:00

Drilling Equip./Method: Ingersoll-Rand track-mounted air core with total dust suppression Sampling Method: Continuous 5.0-ft core barrel

Driller: Larry Thoren Geologist: Jon Marin, Rene Evans ERM/Golder Declination: 90° Bearing: n/a TD: 90.0 ft

Depth (ft)	Core Run # Core Recovery %	Analytical Sample Number 0550-	MRAL Screening Tritium (pCi/g)	Core Box # From - To (ft)	Lithology	Graphic Log	Lithologic Unit	Monitor Well Construction	Notes
60	17/Cont.				At 60.0 ft TUFF, very light gray powder. Pumices are devitrified and equant up to 5 cm.		Qbt lv	n/a	At 60.0 ft, lost air and core recovery
65	18/100%		6.28						
		95-0310	5.42						
70	19/100%								
	20/100%		3.55						
75		95-0312	2.90						
80	21/100%		2.18						
85	22/100%				At 85.0 ft TUFF, very light gray and powdery. Pumices are devitrified, up to 3 cm, equant, light gray.				
90	23/100%	95-0316	2.24						
95					TD = 90.0 ft				
100									
105									
110									
115									
120									

Appendix I

Stratigraphic Cross Sections Beneath MDA H

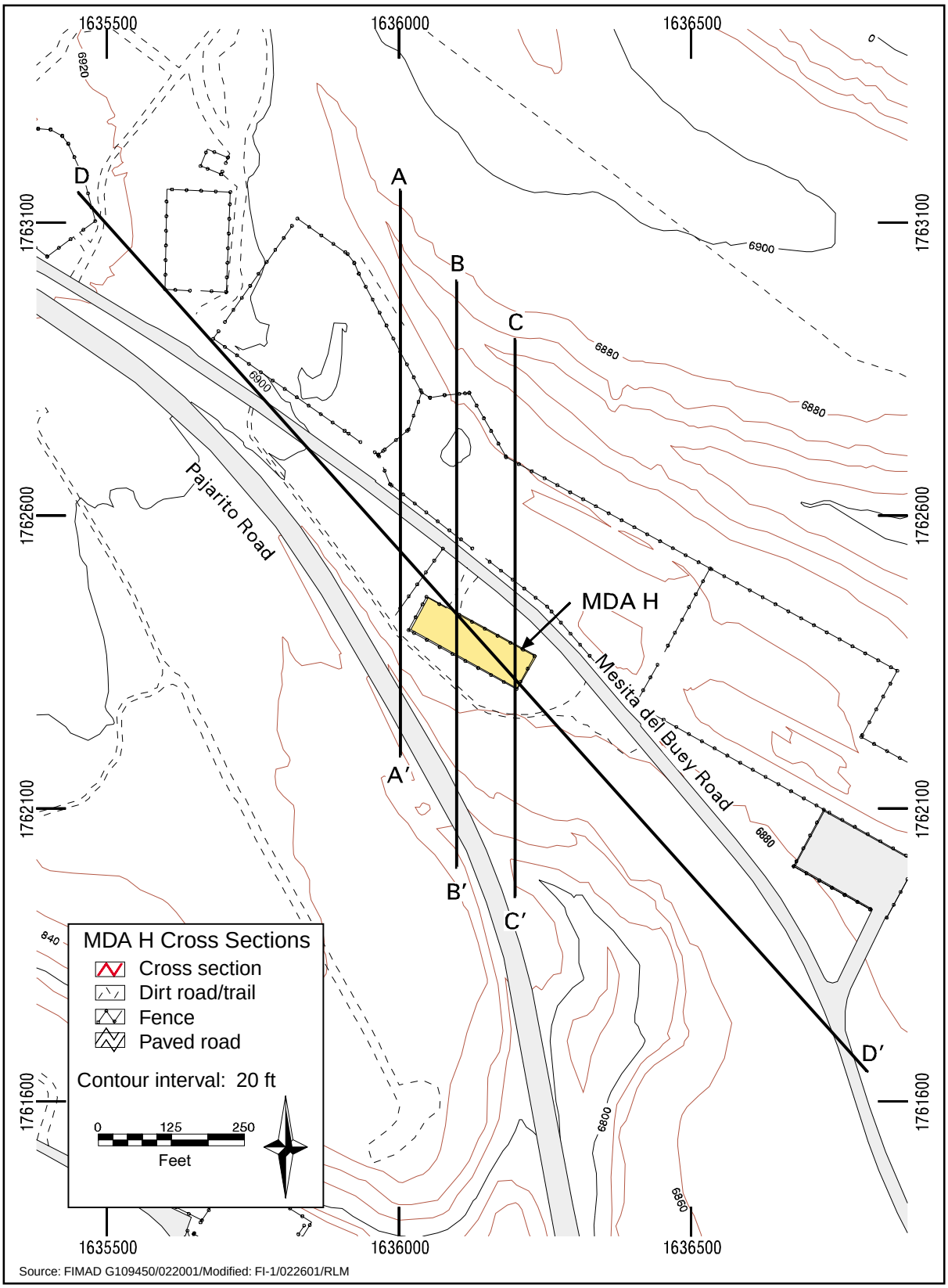

Figure I-1. Locations of stratigraphic cross sections at MDA H

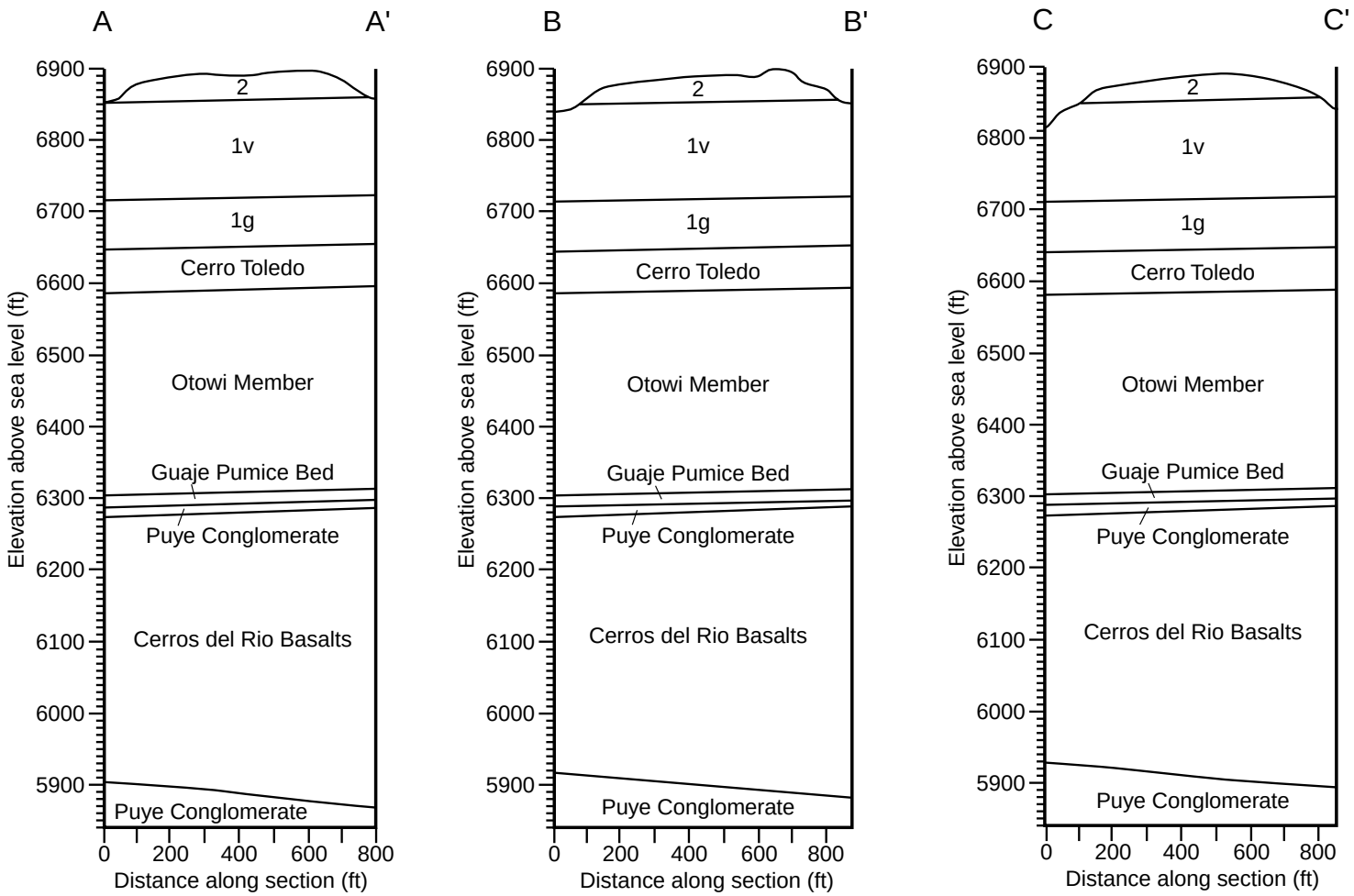

Figure I-2. Stratigraphic cross sections at MDA H

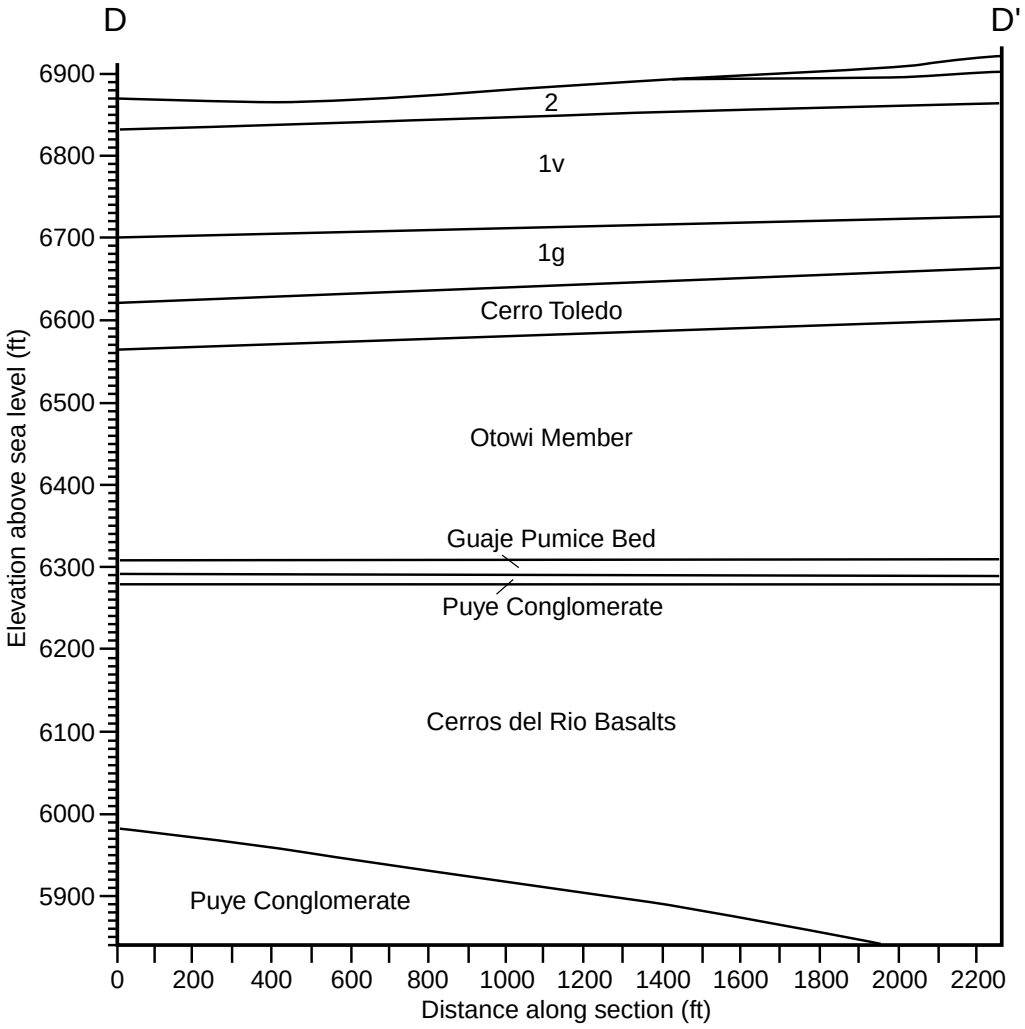

Figure I-3. Stratigraphic cross section D-D′ at MDA H