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Table A. Thickness Measurements, Ages, and Apparent Accumulation Rates of Rock Varnishes in the Western United State Drylands

	Sample Site and Geomorphic Setting	Sample Number	Latitude (N)	Longitude (W)	Section Number	Age (ky)	Thickness[1] (μm)	Growth Rate (μm/ky)
1	Grand Canyon debris flow deposit, AZ	93-LVA FLS 20	35°04`01``	107°42`50``	#1	1.5	**60**	40.0
					#2(1)[2]	1.5	45	30.0
					#2(2)	1.5	35	23.3
2	McCartys lava flow, Zuni-Bandera VF, NW	98-McCartys-1	35°04`01``	107°42`50``	#1	3.0	**52**	17.3
3	Carrizozo lava flow, NM	99-Carrizozo-1	33°41`02``	105°55`16``	#1	7.0	**100**	14.3
4	Bandera lava flow, Zuni-Bandera VF, NM	99-Bandera-1	34°59`35``	108°05`48``	#1(1)	11.0	**130**	11.8
					#1(2)	11.0	112	10.2
					#2(1)	11.0	114	10.4
					#2(2)	11.0	96	8.7
					#3(1)	11.0	76	6.9
					#3(2)	11.0	80	7.3
5	Silver Lake, A shoreline, Mojave Desert, CA	98-Silver Lake-2	35°20`07``	116°08`07``	#1(1)	12.5	90	7.2
					#1(2)	12.5	72	5.8
					#1(3)	12.5	78	6.2
					#2(1)	12.5	86	6.9
					#2(2)	12.5	86	6.9
					#3(1)	12.5	90	7.2
					#3(2)	12.5	86	6.9
					#3(3)	12.5	58	4.6
		98-Silver Lake-3	35°20`07``	116°08`07``	#1(1)	12.5	**212**	17.0
					#1(2)	12.5	68	5.4
					#2(1)	12.5	144	11.5
					#2(2)	12.5	160	12.8
					#2(3)	12.5	92	7.4
6	Coyote Lake shoreline, Mojave Desert, CA	98-Coyote-1	n.m.[3]	n.m.	#1	13.4	66	4.9
		98-Coyote-1			#2	13.4	**68**	5.1
		98-Coyote-3			#1	13.4	42	3.1
7	Alluvial fan, Las Vegas Valley, NV	98-Las Vegas-1C	36°17`03``	115°15`47``	#1(1)	13.5	80	5.9
					#1(2)	13.5	70	5.2
					#1(3)	13.5	34	2.5
					#1(4)	13.5	40	3.0
					#2(1)	13.5	52	3.9
					#2(2)	13.5	32	2.4
					#3	13.5	68	5.0
		98-Las Vegas-1G	36°17`03``	115°15`47``	#1(1)	13.5	36	2.7
					#1(2)	13.5	48	3.6
					#2(1)	13.5	**92**	6.8
					#2(2)	13.5	26	1.9
					#2(3)	13.5	16	1.2
					#2(4)	13.5	46	3.4
		98-Las Vegas-3	36°18`51``	115°17`29``	#1	13.5	52	3.9
					#2	13.5	60	4.4
					#3	13.5	40	3.0
		98-Las Vegas-4	36°18`51``	115°17`29``	#1(1)	13.5	38	2.8
					#1(2)	13.5	48	3.6
					#1(3)	13.5	52	3.9
					#1(4)	13.5	26	1.9
					#2(1)	13.5	42	3.1
					#2(2)	13.5	26	1.9
					#2(3)	13.5	48	3.6
					#3(1)	13.5	42	3.1
					#3(2)	13.5	36	2.7
					#3(3)	13.5	70	5.2
					#3(4)	13.5	52	3.9
					#4	13.5	10	0.7
8	Aberdeen lava flow, Owens Valley, CA	96-Aberdeen-1	36°57`27``	118°15`36``	#1	13.6	112	8.2
					#2	13.6	102	7.5
					#3	13.6	**138**	10.1
					#4	13.6	112	8.2

Table A Continued

	Sample Site and Geomorphic Setting	Sample Number	Latitude (N)	Longitude (W)	Section Number	Age (ky)	Thickness[1] (μm)	Growth Rate (μm/ky)
9	Dry Falls, Owens Valley, CA	96-Dry Fall-1	35°58`14``	117°57`30``	#1	15.9	67	4.2
		96-Dry Fall-2	35°58`17``	117°57`28``	#1	15.9	150	9.4
					#2	15.9	**202**	12.7
					#3	15.9	192	12.1
					#4	15.9	98	6.2
		94-Dry Fall-1	35°58`14``	117°57`32``	#1	15.9	131	8.2
10	Lahontan Lake shoreline at Oling House, NV	95-Oling House-5	39°39`17``	119°21`26``	#1	16.3	**239**	14.7
		94-Pyramid Lake-1	40°12`26``	119°38`54``	#1	16.3	143	8.8
		95-Pyramid Lake-3	40°12`26``	119°38`54``	#1	16.3	99	6.1
		95-Fallon-7	39°24`35``	118°36`02``	#1	16.3	84	5.2
11	Searles Lake shoreline, Mojave Desert, CA	94-Searles-1	35°25`05``	117°25`10``	#1	16.8	**244**	13.7
					#2	16.8	220	13.1
					#3	16.8	118	7.0
12	Tabernacle Hill lava flow, UT	96-Tabernacle Hill-1	35°56`00``	112°29`05``	#1	17.8	114	6.4
		98-Tabernacle Hill-14a	35°56`00``	112°31`03``	#1	17.8	**121**	6.8
13	Lone Pine Fault Scarp, Owens Calley, CA	98-Lone Pine-7A	36°36`24``	118°04`34``	#1	17.8	**56**	3.1
14	Provo shoreline at Delta, Bonnevill Lake, UT	95-Delta-1	39°07`47``	112°46`24``	#1	17.8	70	3.9
					#2	17.8	**85**	4.8
15	Organ Pipe alluvial terrace, AZ	98-Organ Pipe-4	32°05`48``	112°44`50``	#1	17.8	74	4.2
					#2	17.8	82	4.6
					#3(1)	17.8	**126**	7.1
					#3(2)	17.8	104	5.8
16	Bonneville flooded area at Inkom, ID	95-WB-19	42°47`43``	112°17`30``	#1	18.0	**192**	10.7
17	Aden lava flow, Patrillo VF, NM	98-Aden-1	32°05`02``	106°58`58``	#1(1)	18.9	233	12.3
					#1(2)	18.9	179	9.5
					#2	18.9	173	9.2
		98-Aden-3	32°05`02``	106°58`58``	#1	18.9	**241**	12.7
18	Blackhawk landslide, Mojave Desert, CA	98-Blackhawk-3	34°25`03``	116°47`24``	#1	20.7	**210**	10.1
					#2	20.7	147	7.1
					#3	20.7	142	6.9
					#4	20.7	86	4.2
19	Manix Lake shoreline, Mojave Desert, CA	98-Manix-4	n.m.	n.m.	#1(1)	21.4	92	4.3
					#1(2)	21.4	104	4.9
					#1(3)	21.4	82	3.8
					#1(4)	21.4	78	3.6
					#2(1)	21.4	80	3.7
					#2(2)	21.4	96	4.5
					#2(3)	21.4	**106**	5.0
20	Harper Lake shoreline, Mojave Desert, CA	98-Harper-2	n.m.	n.m.	#1(1)	27.5	80	2.9
					#1(2)	27.5	**120**	4.4
21	Socorro Fault Scarp, NM	98-Socorro-6	34°01`03	106°55`42``	#1(1)	40	113	2.8
					#1(2)	40	**120**	3.0
22	Red Hill lava flow, Owens Valley, CA	96-Red Hill- 5 (?)	35°58`26``	117°54`51``	#1	57.1	**110**	1.9
23	Lathrop Wells lava flow, NV	96-Lathrop Wells-2A	36°40`50``	116°30`38``	#1(1)	81	108	1.3
					#1(2)	81	122	1.5
		96-Lathrop Wells-3	36°40`50``	116°30`38``	#1	81	**160**	2.0
24	Panamint Lake shoreline, Panamint Valley, CA	95-Panamint Lake-5	35°59`48``	117°12`13``	#1(1)	95	98	1.0
					#1(2)	95	81	0.9
					#2	95	**104**	1.1
		95-Panamint Lake-6	35°59`48``	117°12`13``	#1	95	42	0.4
25	Manly Lake shoreline, Death Valley, CA	96-Shoreline Butte-13	35°55`05``	116°43`48``	#1(1)	120	**150**	1.3
					#1(2)	120	134	1.1
26	Socorro Alluvial Fan, NM	98-Socorro-1	34°01`06``	106°55`44``	#1	140	**242**	1.7
					#2	140	225	1.6
27	Six Spring alluvial fan, Death Valley, CA	91-Six Springs-1	n.m.	n.m.	#1(1)	250	**160**	0.6
					#1(2)	250	156.0	0.6
						MEAN	100	6.4
						STDEV	55	5.6
						MAX	244	40.0
						MIN	10	0.4
						N	115	115

[1]The largest thickness measurement of each varnish sample is indicated by bold number.

[2]The following numbering scheme was used: #2 is the ordinal number of thin sections prepared for a given varnish sample and (1) is the ordinal number of varnish microbasins measured on each thin section.

[3]n.m. means "not measured."