

TABLE 1. RADIOCARBON DATES FOR GULF OF OMAN CORE M5-422

Depth (cm)	Raw ^{14}C age	Std. Dev.	Corr. ^{14}C age	Calendar age (yr B.P.)	Species Analyzed	Lab
10–15	2380	85	1820	1932 (1720) 1534	<i>G. sacculifer</i> , AMS	WHOI
50–60	3610	580	3050	4522 (3255) 1990	Bulk >150 μm , Conv.	Kiel
56–58	3940	35	3380	3693 (3626) 3477	<i>G. sacculifer</i> , AMS	WHOI
62–64	4130	40	3570	3970 (3841) 3719	<i>G. sacculifer</i> , AMS	LLNL
64–65	3970	70	3410	3835 (3680, 3677, 3635) 3470	<i>G. sacculifer</i> , AMS	LLNL
68–70	4280	35	3720	4147 (4081, 4025, 3997) 3928	<i>G. sacculifer</i> , AMS	WHOI
74–76	4370	80	3810	4416 (4221, 4207, 4153) 3930	<i>G. sacculifer</i> , AMS	LLNL
80–82	4820	40	4260	4867 (4835) 4651	<i>G. sacculifer</i> , AMS	LLNL
100–110	5490	280	4930	6293 (5651) 4873	Bulk >150 μm , Conv.	Kiel
140–150	10850	600	10290	13415 (12135) 10032	Bulk >150 μm , Conv.	Kiel
149–152	11400	50	10840	12905 (12766) 12617	<i>G. sacculifer</i> , AMS	WHOI
190–200	21700	1500	21140	24671	Bulk >150 μm , Conv.	Kiel

Note: Analytical laboratory abbreviations: WHOI (Woods Hole Oceanographic Institution); Kiel (University of Kiel); LLNL (Lawrence Livermore National Laboratory). Raw accelerator mass spectrometer (AMS) radiocarbon ages (Raw ^{14}C age) were corrected using a –560 yr reservoir correction (Corr. ^{14}C age) and then converted to calendar ages using the Calib 3.0.3 calibration routines (Stuiver and Reimer, 1993). Calendar ages are listed in parentheses and are bracketed by the 2σ age range values. On four samples (50–60 cm, 100–110 cm, 140–150 cm, and 190–200 cm) conventional radiocarbon ages were determined using the >150 μm bulk fraction.

TABLE 2. RADIogenic ISOTOPE (ϵNd and $^{87}\text{Sr}/^{86}\text{Sr}$) VALUES OF EXTRACTED TERRIGINOUS FRACTIONS

Sample	Description	$^{87}\text{Sr}/^{86}\text{Sr}$	ϵNd
M5-422	Core top (0 cm)	0.71454	-6.4
M5-422	10–12 cm	0.71462	-6.1
M5-422	42–44 cm	0.71446	-5.9
M5-422	58–60 cm	0.71447	
M5-422	66–68 cm (*)	0.71288	-4.9
M5-422	68–70 cm (*)	0.71236	-5.0
M5-422	70–72 cm	0.71425	-5.7
M5-422	90–92 cm	0.71400	-5.5
M5-422	149–152 cm	0.71279	-6.4
Tell Leilan	Abu Hgeira; 46–49	0.71120	-4.9
Baghdad	Iraqi air fall 8/95	0.70864	-5.5
Baghdad	Iraqi air fall 8/95	0.70819	-5.5

Note: Extraction procedure described in Sirocko et al. (1993) from selected samples of core M5-422, Tell Leilan–Abu Hgeira, and samples of atmospheric mineral dust fallout collected in Baghdad, Iraq. Core M5-422 depth levels followed by an asterisk correspond to the eolian dust peak dated as 4025–3625 calendar yr B.P. Samples were analyzed by thermal ionization mass spectrometry (VG Sector 55) and 2σ analytical precisions for ϵNd and $^{87}\text{Sr}/^{86}\text{Sr}$ were 0.5 and 0.000025, respectively.

TABLE 3. MAJOR ELEMENT OXIDE GEOCHEMISTRY OF VOLCANIC ASH SHARDS FROM TELL LEILAN AND CORE M5-422

Oxide	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	MnO	MgO	CaO	BaO	Na_2O	K_2O	F	Cl
M5-422	76.33	0.20	12.07	1.61	0.04	0.07	0.57	0.05	2.35	6.51	0.14	0.05
2 σ error	1.84	0.14	0.66	1.14	0.08	0.06	0.4	0.08	1.1	1.22	0.2	0.06
Tell Leilan	75.38	0.10	13.24	1.22	0.05	0.03	0.76	n/a	4.39	4.45	n/a	0.38
2 σ error	0.58	0.09	0.32	0.26	0.06	0.08	0.11	n/a	0.31	0.14	n/a	n/a

Note: Comparison between major element oxide geochemistry of volcanic ash shards from Tell Leilan (originally published in Weiss et al., 1993) and from the 68 cm level within core M5-422 (Gulf of Oman), 2 σ analytical errors were calculated from the multiple shard analyses (where n/a means not available).