

APPENDIX: OSL FIELD AND LABORATORY RESULTS FROM RAMAT BARNE‘A

NAOMI PORAT

Site	Lab code (EZZ)	Description	Depth (m)	K (%)	U (ppm)	Th (ppm)	Ext. $\alpha$ ( $\mu\text{Gy/a}$ )	Ext. $\beta$ ( $\mu\text{Gy/a}$ )	Ext. $\gamma$ + Cosmic ( $\mu\text{Gy/a}$ )	Dose rate ( $\mu\text{Gy/a}$ )	No. of discs	O-D (%)	De (Gy) (CAM)	Age (ka) (CAM)*
97	20	South side, between two stones	0.55	0.55	1.8	4.6	8	713	334	1055 $\pm$ 32	16/19	47	3.5 $\pm$ 0.2	3.3 $\pm$ 0.2
97	21	North side, between bedrock and lower stones	0.50	0.21	1.6	1.8	6	382	320	707 $\pm$ 27	18/19	21	6.8 $\pm$ 0.3	9.7 $\pm$ 0.6
97	22	Stones circle, below a stone	0.30	0.56	1.7	4.4	6	702	352	1063 $\pm$ 33	17/19	71	0.9 $\pm$ 0.1	0.8 $\pm$ 0.1
102	23	Below a stone	0.75	0.27	1.5	2.4	6	432	362	800 $\pm$ 30	18/19	27	10.4 $\pm$ 0.5	13.0 $\pm$ 0.8
102	24	Above a paving stone at the base of the fill	0.60	0.45	1.9	4.9	9	665	380	1053 $\pm$ 33	16/18	30	6.6 $\pm$ 0.3	6.2 $\pm$ 0.3
103	25	Outside, between the lowest stones	0.85	0.48	2.3	4.4	10	724	296	1030 $\pm$ 32	15/19	36	8.9 $\pm$ 0.3	8.6 $\pm$ 0.4
103	26	Inside, between the lowest stones	0.40	0.67	1.9	5.3	9	824	282	1151 $\pm$ 33	17/19	33	5.3 $\pm$ 0.3	4.8 $\pm$ 0.3
105	27	North side, base of fill, between stones	0.40	0.66	1.9	5.9	10	831	308	1149 $\pm$ 34	16/19	35	6.2 $\pm$ 0.4	5.4 $\pm$ 0.3
106	28	Fill, between stones	0.35	0.42	1.6	3.6	7	575	310	892 $\pm$ 29	14/18	29	4.0 $\pm$ 0.2	4.5 $\pm$ 0.2
108	29	Below stones	0.85	0.51	1.9	4.9	9	705	354	1068 $\pm$ 33	18/19	22	9.2 $\pm$ 0.3	8.7 $\pm$ 0.4
108	30	Between two low stones	0.60	0.54	1.8	4.5	8	704	354	1066 $\pm$ 33	16/19	20	5.1 $\pm$ 0.2	4.8 $\pm$ 0.2

Notes: Quartz, grain size 88–125  $\mu\text{m}$ . Depth includes stone cover. Time-averaged water contents were estimated at 3 $\pm$ 2%, reflecting aridity and seasonal variations. Alpha and beta dose rates were calculated from the radioactive elements and the gamma and cosmic dose measured in the field using a portable gamma counter. O-D (over dispersion) is a measure of the scatter within the sample. De average and errors were calculated using the central age model (Galbraith et al. 1999).

\*Minimum ages are marked in bold, and maximum ages—in italics.

REFERENCE

Galbraith R.F., Roberts R.G., Laslett G.M., Yoshida H. and Olley J.M. 1999. Optical Dating of Single and Multiple Grains of Quartz from Jinnium Rock Shelter, Northern Australia: Part I, Experimental Design and Statistical Models. *Archaeometry* 41:339–364.