

# **SUPPLEMENTARY INFORMATION**

## **Nawarla Gabarnmang, a 45,180±910 cal BP Site in Jawoyn Country, Southwest Arnhem Land Plateau**

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**Table S1** Details of excavation, Nawarla Gabarnmang Square A.

XU	SU	Mean Depth Below Surface at Base (cm)	Mean Thickness (cm)	Area (m <sup>2</sup> )	Weight (kg)	Volume (litres)	>2.1mm Non-Cultural Sediments (g)	>2.1mm Cultural Sediments (g)	% of Total Sediments >2.1mm (by weight)	pH	Bone		Bivalve Shell		Charcoal (g)	Facetted Red Ochre Crayons with Striations		Flaked Stone Artefacts	
											(g)	(#)	(g)	(#)		(g)	(#)	(g)	
1	1	1.9	1.9	0.28	5.0	4.5	580.7	1022.1	32.1	4.33	24.4				788.78			193	208.96
2	1+2	3.9	2.0	0.28	5.4	5.0	254.4	546.4	14.8	4.31	4.9	3	0.08		418.93			231	122.56
3	2	5.0	1.1	0.29	7.2	6.0	467.5	617.9	15.1	4.14	3.0				368.70			400	243.32
4	2+3	6.7	1.7	0.30	6.6	5.0	562.5	344.0	13.7	3.80	0.4				161.28			454	182.33
5	3	8.7	2.0	0.31	9.0	7.5	1018.2	581.6	17.8	3.78	0.1				217.06			945	364.40
6	3	10.5	1.8	0.31	9.6	7.5	327.7	400.3	7.6	5.57					170.03			372	230.30
7	3	12.0	1.5	0.32	7.6	6.5	276.6	260.9	7.1	3.89					114.41			606	146.50
8	3	14.0	2.0	0.32	9.2	6.5	190.5	256.5	4.9	3.90					97.88			641	158.62
9	3	15.4	1.4	0.35	8.5	8.0	424.6	87.1	6.4	3.90					12.34			519	74.77
10	3+4	16.6	1.2	0.36	8.5	6.5	107.0	64.6	2.0	3.93					6.41			360	58.23
11	3+4	17.8	1.2	0.36	7.4	6.0	172.9	150.4	4.4	3.76	<0.1				41.73			333	108.65
12	3+4	19.2	1.4	0.37	6.4	5.5	239.9	83.6	5.1	3.92					30.25			246	53.36
13	3+4	20.3	1.1	0.37	9.8	8.0	208.9	552.3	7.8	4.20					29.38			263	522.94
14	3+4	20.9	0.6	0.38	6.2	4.0	840.1	84.3	14.9	3.75					22.09			134	62.16
15	3+4	22.5	1.6	0.38	9.6	8.5	299.2	287.1	6.1	3.92					27.95			195	259.12
16	4	24.0	1.5	0.38	7.2	5.0	186.0	363.6	7.6	3.79					16.49			40	347.09
17	4	25.5	1.5	0.40	9.8	7.5	923.2	911.6	18.7	3.98					27.59			123	883.96
18	4	26.9	1.4	0.40	6.0	4.0	877.8	141.0	17.0	3.97					13.50			63	127.53
19	4	27.8	0.9	0.40	7.0	5.0	395.4	287.3	9.8	3.74					13.55			135	273.77
20	4	29.8	2.0	0.40	9.4	7.0	4055.3	206.0	45.3	3.91					21.14			153	184.88
21	4+5	31.3	1.5	0.29	8.2	6.5	2237.0	152.3	29.1	3.81					13.51			140	138.76
22	4+5	33.4	2.1	0.25	6.6	4.5	1093.2	286.4	20.9	3.88					11.07			86	275.37
23	4+5	35.5	2.1	0.25	6.8	5.0	707.1	1139.6	27.2	3.91					11.37			113	1128.20
24	4+5	37.4	1.9	0.25	8.4	6.0	2789.6	78.7	34.1	3.92					4.68			117	74.01
25	4+5	39.0	1.6	0.25	5.2	4.0	935.1	34.5	18.6	3.89					5.77			131	28.75
26	4+5	41.9	2.9	0.24	8.4	6.5	1539.1	217.7	20.9	3.78					8.94	1	6.70	219	202.08
27	4+5	44.5	2.6	0.24	7.0	4.5	2374.7	1039.8	48.8	3.77					7.83			222	1032.00
28	4+5	46.4	1.9	0.18	8.2	5.0	1938.8	728.1	32.5	3.72					15.40			218	712.74
29	5	47.7	1.3	0.17	4.0	4.0	662.7	170.6	20.8	3.80					11.49			153	159.09
30	5	50.4	2.7	0.17	6.2	4.5	1899.6	317.0	35.8	3.74					28.48			165	288.48

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											(g)	(#)	(g)		(#)	(g)	(#)	(g)
31	5	51.8	1.4	0.15	5.0	4.0	613.7	137.6	15.0	3.71				15.14			173	122.43
32	5	55.3	3.5	0.15	6.0	4.5	1336.9	251.8	26.5	3.79				4.51			137	247.32
33	5	57.4	2.1	0.15	5.6	4.0	1307.8	127.1	25.6	3.77				1.72			104	125.39
34	5	60.4	3.0	0.15	5.6	3.0	2398.2	94.7	44.5	3.91				0.21			33	94.44
35	5	61.4	1.0	0.12	3.0	1.5	1277.3	106.8	46.1	3.96				0.36			16	106.42
36	5	66.2	4.8	0.11	4.0	2.0	1967.6	69.3	50.9	4.03				0.17			43	69.13
Total		66.2	1.8		253.6	193.0	37,486.7	12,200.6	19.6		32.77	3	0.08	2740.14	1	6.70	8476	9418.06