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## APPENDIX I

### Rock Magnetic Properties of the Serpentinite Samples Collected in This Study

Site refers to sampled locations; Name is the name of cored specimen; Sus is the measured susceptibility of the specimen; Dec (°), Inc (°) and Int ( $\mu$ G) represent direction and intensity of measured natural remanent magnetisation; Q value gives the Koenigsberger ratio; Easting/Northing represent the geographic location of each site in AMG56.

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
NUNDLE	SP01A1A	2457.516	287.44	21.24	1410.8	0.57	327790	6515576
SITE1	SP01A2A	3663.537	296.95	14.1	1138	0.31	327790	6515576
	SP02A1A	4341.22	303.76	-17.55	530.91	0.12	327790	6515576
	SP02A2A	3892.637	290.63	-20.82	594.32	0.15	327790	6515576
SITE2	SP03A1A	3037.819	353.18	-21.84	6153.6	2.03	327781	6515596
	SP03A1B	2806.693	354.61	-8.94	7063	2.52	327781	6515596
	SP03A2A	4203.458	184.17	28.09	4739.1	1.13	327781	6515596
	SP03A2B	4370.834	182.36	25.25	3848.9	0.88	327781	6515596
	SP03A3A	3188.978	4.55	-8.85	4590.1	1.44	327781	6515596
	SP03A3B	3388.498	4.4	-9.82	5046.1	1.49	327781	6515596
	SP03A4A	5320.168	347.9	-40.05	2433.6	0.46	327781	6515596
	SP03A4B	5477.908	346.84	-40.24	2651.8	0.48	327781	6515596
	SP03A4C	5515.455	345.92	-31	2932.7	0.53	327781	6515596
	SP04A1A	3566.053	355.15	-15.12	27677	7.76	327781	6515596
SITE3	SP04A1B	3575.751	351.53	-12.6	28731	8.03	327781	6515596
	SP04A1C	3356.735	353.1	-21.81	17055	5.08	327781	6515596
	SP04A2A	3652.549	353.67	-14.66	31349	8.58	327781	6515596
	SP04A2B	3744.355	354.36	-13.14	22263	5.95	327781	6515596
	SP04A2C	3650.435	352.47	-12.14	19508	5.34	327781	6515596
	SP04A3A	3890.601	351.83	-19.81	24321	6.25	327781	6515596
	SP04A3B	4310.272	352.7	-17.66	26060	6.05	327781	6515596
	SP04A3C	3811.928	351.43	-10.82	21022	5.51	327781	6515596
	SP05A1A	3997.778	234.94	7.51	1971.5	0.49	327776	6515666
	SP06A1A	3324.632	196.57	11.81	2204.6	0.66	327776	6515666
SITE4	SP07A1A	3420.791	212.26	16.31	2963.1	0.87	327776	6515666
	SP07A1B	4207.452	234.19	16.5	3198.3	0.76	327776	6515666
SITE5	SP08A1A	5342.94	321.9	-30.45	1826	0.34	327732	6515826
	SP09A1A	5775.653	126.93	-50.35	10175	1.76	327732	6515826
SITE6	SP10A1A	12480.67	25.35	0.63	21267	1.7	327686	6515839
	SP11A1A	3261.208	68.65	-3.97	6374.5	1.95	327686	6515839
SITE6	SP13A1A	5630.59	340.42	-60.01	1920.8	0.34	327654	6515895
	SP14A1A	6209.549	329.2	-64.28	1019.6	0.32	327654	6515895
	SP15A1A	4598.734	349.91	-57.49	1554.3	0.34	327654	6515895

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
ATTUNGA	SP16A1A	6707.574	339.66	-70.4	3133.7	0.47	300232	6585583
SITE1	SP17A1A	6818.354	17.02	-55	2067.6	0.3	300232	6585583
	SP17A1B	5995.59	42.6	-58.23	2319.1	0.39	300232	6585583
	SP17A1C	8252.765	25.63	-46.19	1978.9	0.24	300232	6585583
	SP18A1A	6032.417	1.17	-59.67	3347.2	0.55	300232	6585583
	SP18A1B	7316.237	265.8	-37.47	1811.5	0.25	300232	6585583
	SP19A1A	7919.79	312.18	-69.77	1412.1	0.18	300232	6585583
	SP20A1A	5539.86	18.92	-69.36	1531	0.28	300232	6585583
	SP21A1A	6647.53	325.93	-71.56	1829.9	0.28	300232	6585583
SITE2	SP22A1A	5136.813	351.36	-73.17	3442.3	0.67	300232	6585583
	SP23A1A	5162.307	343.46	-34.28	2546.9	0.49	300098	6585501
	SP23A1B	5695.295	60.22	-76.37	3136.2	0.55	300098	6585501
	SP24A1A	3265.792	103.03	-61.9	2443.6	0.75	300098	6585501
	SP25A1A	5529.119	319.77	-86.3	4792.3	0.87	300098	6585501
SITE3	SP26A1A	5034.517	331.73	-69.51	2071.8	0.41	300098	6585501
	SP27A1A	4586.458	1.93	-46.78	1631.8	0.36	300787	6586753
	SP27A1B	4896.417	338.08	-49.4	1424.9	0.29	300787	6586753
	SP27A2A	4100.039	349.64	-37.86	1522.1	0.37	300787	6586753
	SP27A2B	3848.39	1.15	-51.01	1359.1	0.35	300787	6586753
	SP27A3A	4007.972	4.36	-48.3	1568	0.39	300787	6586753
	SP27A3B	5158.295	5.34	-52.24	1963.8	0.38	300787	6586753
	SP28A1A	15.48	165.36	22.72	0.066933	0	300787	6586753
SITE4	SP28A1B	15.149	29.38	11.2	0.22802	0.02	300787	6586753
	SP28A2A	15.466	242.84	-49.7	0.097523	0.01	300787	6586753
	SP29A1A	1589.015	70.27	-68.24	491.1	0.31	300851	6586678
	SP29A1B	1294.183	89.34	-63.41	480.48	0.37	300851	6586678
	SP29A1C	1494.425	79.19	-51.06	456.5	0.31	300851	6586678
	SP29A2A	3666.364	116.21	-48.03	969.36	0.26	300851	6586678
	SP29A2B	9041.634	114.37	-35.14	4483	0.5	300851	6586678
	SP29A2C	1191.154	108.58	-46.62	1596.2	1.34	300851	6586678
	SP29A3A	1370.037	69.94	-38.44	528.76	0.39	300851	6586678
	SP29A3B	4920.439	103.82	-45.49	558.25	0.11	300851	6586678
	SP29A4A	5816.903	122.5	-49.48	1676.2	0.29	300851	6586678
	SP29A4B	9341.354	107.6	-47.92	3342.6	0.36	300851	6586678
	SP29A5A	6849.806	102.46	-46.03	1781.3	0.26	300851	6586678
SITE4.	SP29A5B	7819.842	99.94	-34.93	2560.9	0.33	300851	6586678
	SP29A5C	8558.684	100.56	-34.32	3020.2	0.35	300851	6586678
	SP30A1A	2749.037	134.57	-66.56	1556.6	0.57	300851	6586678
SITE4.	SP30A1B	3696.876	117.96	-68.55	1657.1	0.45	300851	6586678

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
SITE4	SP30A1C	3523.087	125	-70.26	1588.3	0.45	300851	6586678
	SP30A2A	2170.465	119.94	6.92	1538.8	0.71	300851	6586678
	SP30A2B	1480.997	130.94	12.92	569.74	0.38	300851	6586678
	SP30A3A	1660.512	147.29	-43.34	727.99	0.44	300851	6586678
	SP30A3B	3721.144	131.46	-50.82	1790	0.48	300851	6586678
	SP30A4A	2459.838	124.59	-45.17	1034.1	0.42	300851	6586678
MANILLA	SP31A1A	3093.644	143.71	44.99	2539	0.82	296565	6608712
SITE1	SP31A1B	3193.072	129.09	55.05	1967.5	0.62	296565	6608712
	SP31A1C	3551.994	142.66	55.86	966.22	0.27	296565	6608712
	SP31A1D	3644.185	153.76	40.76	1644.8	0.45	296565	6608712
	SP31A2A	3064.387	137.41	-27.25	252.63	0.08	296565	6608712
	SP31A2B	3103.221	134.99	50.15	787.57	0.25	296565	6608712
	SP31A2C	2298.07	137.09	60.05	1498.7	0.65	296565	6608712
	SP31A3A	2941.085	163.26	48.18	1905.9	0.65	296565	6608712
	SP31A3B	3107.624	147.64	54.95	2258.4	0.73	296565	6608712
	SP31A4A	3333.836	145.32	41.83	1007	0.3	296565	6608712
	SP31A4B	3178.594	149.53	51.97	2069.4	0.65	296565	6608712
	SP31A4C	3338.394	147.28	51.74	1786.6	0.54	296565	6608712
	SP32A1A	2423.897	187.66	-59.15	218.27	0.09	296565	6608712
	SP32A1B	1937.062	200.94	-66.14	356.47	0.18	296565	6608712
	SP32A2A	2467.684	251.03	-24.53	193.95	0.08	296565	6608712
	SP32A2B	2408.366	357.22	-44.65	67.818	0.03	296565	6608712
	SP32A3A	2318.071	281.04	0.19	433.27	0.19	296565	6608712
	SP32A3B	2583.355	279.93	-22.74	276.21	0.11	296565	6608712
	SP33A1A	3026.626	113.83	-47.05	538.56	0.18	296565	6608712
	SP33A2A	2924.614	96.02	-40.61	551.32	0.19	296565	6608712
	SP33B1A	3246.356	103.22	-36.5	742.85	0.23	296565	6608712
	SP33B1B	3133.379	115.52	-47.95	653.4	0.21	296565	6608712
	SP33B2A	3240.808	106.77	-36.97	599.84	0.19	296565	6608712
	SP33B2B	3909.991	104.15	-41.23	752.86	0.19	296565	6608712
	SP33B2C	3514.227	80.45	-40.36	470.7	0.13	296565	6608712
	SP34A1A	3385.493	58.14	-53.69	785.75	0.23	296565	6608712
	SP34A1B	3194.368	54.44	-50.6	802.91	0.25	296565	6608712
	SP34A2A	3618.193	62.89	-65.67	838.63	0.23	296565	6608712
	SP34A2B	3233.548	69.29	-58.48	666	0.21	296565	6608712
	SP34A3A	2631.906	84.77	-48.13	516.11	0.2	296565	6608712
	SP34A3B	2682.499	83.17	-44.43	588.45	0.22	296565	6608712
	SP34A3C	3033.222	86.24	-45.6	711.04	0.23	296565	6608712
SITE1	SP34A4A	3379.428	58.74	-62.84	796.06	0.24	296565	6608712

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
SITE1	SP34A4B	3041.017	79.09	-46.01	898.48	0.3	296565	6608712
	SP34A5A	3554.085	51.89	-58.38	773.69	0.22	296565	6608712
	SP34A5B	4452.532	48.49	-58.59	999.96	0.22	296565	6608712
SITE2	SP35A1A	195.665	320.4	-73.56	108.14	0.55	296661	6606614
	SP35A1B	336.125	333.63	-80.93	154.07	0.46	296661	6606614
	SP35A1C	647.875	294.97	-73.94	148.57	0.23	296661	6606614
	SP35A2A	552.302	281.37	-83.79	222.17	0.4	296661	6606614
	SP35A3A	114.736	261.49	-79.48	81.212	0.71	296661	6606614
	SP35A3B	1083.248	295.29	-59.61	592.86	0.55	296661	6606614
	SP36A1A	318.917	296.7	-73.66	238.64	0.75	296661	6606614
	SP36A1B	663.52	305.14	-60.86	404.48	0.61	296661	6606614
	SP36A2A	508.905	340.53	-70.92	233.68	0.46	296661	6606614
	SP36A2B	825.383	186.96	-88.43	314.09	0.38	296661	6606614
BARRABA	SP36A3A	561.991	293.92	-70.86	364.42	0.65	296661	6606614
	SP36A3B	1207.042	291.93	-70.04	1104.9	0.92	296661	6606614
	SP37A1A	2137.722	333.93	1.64	1317.3	0.62	281148	6634453
SITE1	SP37A1B	1656.655	339.84	-6.13	968.3	0.58	281148	6634453
	SP37A2A	1876.978	328.05	-21.4	1127.2	0.6	281148	6634453
	SP37A2B	1088.793	335.79	-34.5	597.88	0.55	281148	6634453
	SP37A3A	1806.694	333.48	-27.18	865.66	0.48	281148	6634453
	SP37A4A	1747.486	335	-26.98	829.88	0.47	281148	6634453
	SP38A1A	16.04	313.37	-20.1	0.19096	0.01	281148	6634453
	SP38A1B	16.868	29.11	-23.37	0.11261	0.01	281148	6634453
	SP38A1C	21.109	316.89	43.77	0.061731	0	281148	6634453
	SP38A2A	16.477	320.77	25.19	0.044227	0	281148	6634453
	SP38A2B	19.712	354.74	-4.45	0.1337	0.01	281148	6634453
	SP38A2C	19.448	350.68	-9.79	0.21734	0.01	281148	6634453
	SP38A3A	15.348	30.31	-28.05	0.12693	0.01	281148	6634453
	SP38A3B	18.261	288.77	23.64	0.17442	0.01	281148	6634453
	SP38A4A	15.776	349.64	29.4	0.15796	0.01	281148	6634453
	SP38A4B	18.356	335.31	0.39	0.27371	0.01	281148	6634453
	SP38A4C	21.308	303.87	-17.4	0.15406	0.01	281148	6634453
	SP39A1A	21.106	319.51	9.25	0.31121	0.01	281148	6634453
	SP39A1B	21.157	319.71	2.93	0.35959	0.02	281148	6634453
	SP39A2A	19.48	7.93	48.4	0.090545	0	281148	6634453
	SP39A2B	21.463	288.22	50.75	0.14843	0.01	281148	6634453
	SP39A3A	18.76	270.4	-5.27	0.21931	0.01	281148	6634453
	SP39A3B	20.876	297.36	1.59	0.32271	0.02	281148	6634453
	SP39A4A	22.21	271.81	-45.82	0.12344	0.01	281148	6634453

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
SITE1	SP39A4B	22.395	295.91	-20.06	0.21004	0.01	281148	6634453
SITE2	SP40A1A	2726.71	49.87	-55.28	1168.8	0.43	281148	6634453
	SP40A2A	2298.088	59.62	-58.07	934.28	0.41	281148	6634453
	SP40A2B	2500.676	52.95	-56.06	969.27	0.39	281148	6634453
SITE3	SP41A1A	1557.414	1.9	-30.23	671.07	0.43	281281	6634475
	SP41A1B	1076.178	359.42	-29.54	600.4	0.56	281281	6634475
	SP41A1C	992.075	0.74	-50.97	690.78	0.7	281281	6634475
	SP41A2A	2257.484	353.83	-44.88	1595.6	0.71	281281	6634475
	SP41A2B	2020.655	357.61	-30.48	972.38	0.48	281281	6634475
	SP41A2C	2156.898	352.41	-32.18	921.38	0.43	281281	6634475
	SP41A3A	1403.602	347.72	-29.68	522.58	0.37	281281	6634475
	SP41A3B	1761.909	354.69	-26.86	587.32	0.33	281281	6634475
	SP41A3C	1060.299	5.96	-34.54	426.27	0.4	281281	6634475
	SP41A4A	2325.782	355.39	-41.87	995.38	0.43	281281	6634475
	SP41A4B	1788.864	355.67	-21.97	753.5	0.42	281281	6634475
	SP41A4C	1748.831	357.83	-23.6	812.25	0.46	281281	6634475
	SP41A5A	2293.48	346.99	-44.46	701.04	0.31	281281	6634475
	SP41A5B	2419.635	351.06	-42.61	845.66	0.35	281281	6634475
	SP41A5C	1338.431	1.58	-49.13	625.81	0.47	281281	6634475
	SP42A1A	3186.83	358.86	-37.19	2911.5	0.91	281281	6634475
	SP42A1B	1668.768	350.17	-51.19	1842.4	1.1	281281	6634475
	SP42A2A	5937.728	343.89	-41.28	4891.5	0.82	281281	6634475
	SP42A2B	3140.745	334	-46.77	2125.2	0.68	281281	6634475
	SP42A3A	5244.506	356.58	-46.03	3709.3	0.71	281281	6634475
	SP42A3B	1435.037	2.31	-40.04	1270.1	0.89	281281	6634475
	SP42A3C	2516.521	355.06	-45.58	2501.6	0.99	281281	6634475
	SP42A4A	6208.689	354.92	-44.24	3992.6	0.64	281281	6634475
	SP42A4B	2904.731	16.86	-51.11	2561.5	0.88	281281	6634475
	SP42A4C	1743.748	333.34	-42.95	1830	1.05	281281	6634475
	SP42A5A	3245.872	26.23	-46.69	2574.9	0.79	281281	6634475
	SP42A5B	1089.976	330.24	-45.98	414.23	0.38	281281	6634475
	SP43A1A	6075.605	272.39	-65.87	2077.9	0.34	281281	6634475
	SP43A1B	5015.476	266.6	-63.6	1318.3	0.26	281281	6634475
	SP43A1C	3381.407	290.38	-70.29	1059.3	0.31	281281	6634475
	SP43A2A	6899.976	264.87	-56.95	2744.6	0.4	281281	6634475
	SP43A2B	5028.378	262.1	-59.71	1576.9	0.31	281281	6634475
	SP43A3A	2664.309	257.99	-47.52	952.49	0.36	281281	6634475
	SP43A3B	3977.157	267.24	-51.57	1421.8	0.36	281281	6634475
SITE4	SP44A1A	5320.923	318.83	-55.94	1573.7	0.3	283093	6634579

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
SITE4	SP44A2A	5712.504	293.6	-51.71	1794.2	0.31	283093	6634579
	SP44A2B	4836.278	330.86	-50.15	1109.1	0.23	283093	6634579
	SP44A3A	4990.468	304.32	-61.68	2587.1	0.52	283093	6634579
	SP44A3B	5349.902	307.32	-49.98	2458.3	0.46	283093	6634579
	SP44A3C	4581.157	351.83	-46.19	1624.6	0.35	283093	6634579
	SP44A4B	5169.217	281.08	-60.81	1525.4	0.3	283093	6634579
	SP44A4C	3989.548	1.24	-41.57	1073	0.27	283093	6634579
	SP44A5A	5030.733	243.66	-50.74	1632.8	0.32	283093	6634579
	SP44A5B	4626.249	308.65	-48.08	1775.6	0.38	283093	6634579
	SP44A5C	3619.326	344.7	-20	1238.7	0.34	283093	6634579
	SP45A1A	169.284	2.62	-47.82	164.5	0.97	283093	6634579
	SP45A1B	113.987	15.9	-54.98	88.271	0.77	283093	6634579
	SP45A1C	203.7	327.66	-21.49	88.368	0.43	283093	6634579
	SP45A2A	165.273	348.1	-60.31	143.9	0.87	283093	6634579
	SP45A2B	117.016	10.34	-56.95	78.105	0.67	283093	6634579
	SP45A2C	92.016	302.69	39.77	27.679	0.3	283093	6634579
	SP45A3A	133.252	16.44	-59.86	199.72	1.5	283093	6634579
	SP45A3B	101.782	21.17	-64.85	62.747	0.62	283093	6634579
	SP45A3C	775.366	250.88	64.64	577.47	0.74	283093	6634579
	SP45A4A	144.706	18.36	-42.99	150.04	1.04	283093	6634579
	SP45A4B	102.913	20.81	-59.62	117.75	1.14	283093	6634579
	SP45A5A	199.989	344.64	-8.92	108.82	0.54	283093	6634579
	SP45A5B	119.827	27.48	-59.54	178.38	1.49	283093	6634579
	SP45A5C	1929.371	310.44	-14.03	1319.7	0.68	283093	6634579
BINGARA	SP46A1A	4337.291	359.76	-49.09	1063.3	0.25	272721	6665432
SITE1	SP46A2A	4507.066	5.89	-49.86	1113.5	0.25	272721	6665432
	SP46A3A	4064.308	13.93	-41.84	1413.3	0.35	272721	6665432
	SP48A1A	2316.843	217.41	41.29	1252.3	0.54	272721	6665432
	SP48A2A	3500.458	201.59	41.65	2323.5	0.66	272721	6665432
	SP48A3A	3038.758	219.07	32.77	1378.5	0.45	272721	6665432
	SP48A4A	3844.84	211.55	19.4	2592	0.67	272721	6665432
	SP48A5A	3805.655	216.59	16.71	1302	0.34	272721	6665432
	SP48A5B	3126.177	214.23	27.26	1617.5	0.52	272721	6665432
SITE2	SP49A1A	3677.043	59.84	-31.42	862.74	0.23	270134	6663669
	SP49A1B	3304.173	81.03	2.38	794.62	0.24	270134	6663669
	SP49A1C	6571.008	53.73	-48.04	3581.2	0.55	270134	6663669
	SP49A2A	8478.835	11.33	-47.39	3105.3	0.37	270134	6663669
	SP49A2B	4222.794	58.76	-22.15	964.24	0.23	270134	6663669
	SP49A2C	6720.361	58.29	-23.75	2443.9	0.36	270134	6663669

SITE	NAME	SUS	DEC	INC	INT	Q VALUE	EASTING	NORTHING
SITE2	SP49A2D	16735.69	34.35	-49.65	14346	0.86	270134	6663669
	SP49A3A	2376.345	52.57	14.92	377.06	0.16	270134	6663669
	SP49A3B	3140.899	65.13	-20.68	621.86	0.2	270134	6663669
	SP49A3C	2670.195	62.19	-17.33	503.45	0.19	270134	6663669
	SP49A4A	3357.779	50.4	-19.68	623.19	0.19	270134	6663669
	SP49A4B	3867.853	56.05	-10.9	1042.2	0.27	270134	6663669
	SP49A4C	3676.021	67.54	-10.56	716.18	0.19	270134	6663669
	SP50A1A	3389.079	161.83	31.84	972.99	0.29	270134	6663669
	SP50A1B	3228.331	134.57	33.24	721.74	0.22	270134	6663669
	SP50A1C	3349.23	114.11	35.28	469.64	0.14	270134	6663669
	SP50A2A	2792.921	122.74	48.52	714.31	0.26	270134	6663669
	SP50A2B	2937.66	118.32	32.29	595.34	0.2	270134	6663669
	SP50A3A	2905.135	46.06	36.46	235.28	0.08	270134	6663669
	SP50A3B	3044.411	110.12	21.88	635.58	0.21	270134	6663669
	SP50A4A	3126.582	142.09	-2.51	408.35	0.13	270134	6663669
	SP50A4B	3186.6	131.93	13.32	340.41	0.11	270134	6663669
	SP50A5A	4395.505	90.28	-8.54	690.49	0.16	270134	6663669
	SP51A1A	2811.418	37.23	-28.73	596.39	0.21	270134	6663669
	SP51A1B	3208.587	64.29	-12.96	993.43	0.31	270134	6663669
	SP51A1C	2951.148	57.47	12.6	613.71	0.21	270134	6663669
	SP51A2A	2545.534	22.3	-23.38	1052	0.41	270134	6663669
	SP51A2C	3303.366	30.26	-15.11	648.22	0.2	270134	6663669
	SP51A3A	3893.493	27.93	-41.04	1032.7	0.27	270134	6663669
SITE2	SP51A3C	5191.03	22.73	-13.58	1722.8	0.33	270134	6663669

## APPENDIX II

### DENSITY OF HAND SAMPLES AND CORE SAMPLES COLLECTED IN THIS STUDY

(A) Density of the Hand Samples. Sample name refers to sample mnemonic; Easting/Northing represent the geographical location of each sample; Rock description refers to the rock type; Comments provides information on the age and formation of samples; Woolomin refers to the Woolomin Association; Sandon represents the Sandon Association.

#### TAMWORTH BELT

Sample Name	Easting	Northing	Rock description	Density (tm <sup>-3</sup> )	Comments
D01	0265093	6572457	Mudstone	2.71	Devonian
D02	0265056	6572233	Mudstone	2.69	Devonian
D03	0265015	6572154	Mudstone	2.693	Devonian
G16	0317738	6512024	Mudstone	2.598	Devonian (W)
G17	0313852	6511918	Mudstone	2.716	Devonian
GN07	0326206	6516081	Mudstone	2.643	Devonian(W)
GN09A	0326812	6516274	Mudstone	2.761	Devonian
GN10	0326812	6516274	Mudstone	2.7155	Devonian
GN11	0323691	6517467	Mudstone	2.677	Devonian
GQ03	0312657	6513076	Mudstone	2.657	Devonian
GT15	0293706	6602307	Mudstone	2.67	Devonian
GB50	0252737	6625764	Mudstone	2.631	Carboniferous
G5	0326068	6516163	Mudstone	2.696	Carboniferous
GQ01	0290826	6509155	Volcanic breccia	2.478	Carboniferous
D05	0264992	6572065	Deformed volcanic breccia	2.682	Devonian
GN08	0326098	6516158	Volcanic breccia	2.794	Devonian
GB54	0272769	6637781	Volcanic breccia	2.756	Devonian
GT01	0260700	6571396	Volcanic breccia	2.716	Devonian
GT10	0262199	6571801	Volcanic breccia	2.745	Devonian
GT10A	0262199	6571801	Volcanic breccia	2.828	Devonian
GN03	0326962	6515883	Volcanic rock dolerite	3.26	Devonian
GN04	0326962	6515883	Volcanic rock dolerite	3.018	Devonian
GN07A	0326206	6516081	Volcanic rock dolerite	2.892	Devonian
GN09	0326812	6516274	Volcanic rock dolerite	2.945	Devonian
G15	0318434	6513017	Volcanic rock dolerite	2.811	Devonian
D04	0264966	6572090	Sandstone	2.529	Devonian

Sample Name	Easting	Nothing	Rock description	Density (tm <sup>-3</sup> )	Comments
GT11	0281055	6585836	Sandstone	2.559	Devonian
GT11	0281055	6585836	Sandstone	2.559	Devonian
G9	0302916	6514601	Sandstone	2.62	Devonian
G10	0307063	6521366	Sandstone	2.511	Devonian
G18	0289281	6509568	Sandstone	2.382	Devonian (Weathered)
G11	0315243	6519473	Sandstone	2.56	Devonian
G14	0319150	6513636	Sandstone	2.635	Devonian
GB55	0279166	6636019	Siltstone	2.675	Devonian
G6	0323199	6517702	Siltstone	2.57	Devonian
GB319	0278430	6636486	Deformed siltstone	2.646	Devonian
GQ02	0301396	6514645	Siltstone	2.63	Devonian
D06	0264905	6571856	Limestone	2.67	Devonian
G21	02755770	6512963	Sandstone	2.521	Carboniferous
GB51	0250433	6625007	Sandstone	2.594	Carboniferous
GB52	0249711	6625931	Sandstone	2.524	Carboniferous
G20	0300785	6514186	Sandstone	2.538	Carboniferous
GB301	0240923	6619776	Sandstone	2.429	Carboniferous
GB318	0280490	6634697	Deformed siltstone	2.59	Carboniferous
G8	0321160	6516064	Slate	2.621	Devonian
G12	0315693	6520320	Slate	2.706	Devonian
GT11A	0281055	6585836	Cherty argillite	2.613	Devonian
GN02	0327876	6516271	Cherty argillite	2.684	Devonian
GN07ab	0326206	6516081	Dyke	3.05	
G13	0318019	6521461	Dyke felsic	2.624	Devonian
G7	0322225	6517082	Meta-volcanic	2.695	Devonian
GB320	0271000	6528373	Pebble of conglomerate	2.93	Carboniferous
GB300	0241469	6620156	Pebble of conglomerate felsic	2.578	Carboniferous

## TABLELANDS COMPLEX

Sample Name	Easting	Nothing	Rock description	Density tm <sup>-3</sup>	Comments
G1	0356500	6526456	Tertiary volcanic rock	2.91	
G2	0335508	6518541	Tertiary volcanic rock	2.765	
G3	0335513	6518537	Tertiary volcanic rock	2.822	
G4	0342483	6514608	Tertiary volcanic rock	2.8	
GN01	0332122	6515570	Tertiary volcanic rock	2.941	

Sample Name	Easting	Nothing	Rock description	Density (tm <sup>-3</sup> )	Comments
T02	0325281	6566791	Chert	2.762	Woolomin
GM04	0300798	6586077	Chert	2.658	Woolomin
GB315	0267443	6694473	Jasper	2.696	Woolomin
GB62	0288177	6650297	Chert	2.649	Woolomin
GB63	0285945	6641876	Jasper	2.777	Woolomin
GB314	0270767	6696492	Chert	2.652	Sandon
GT12	0299523	6597162	Chert	2.611	Sandon
GT13	0298321	6597882	Chert	2.6325	Sandon
T04	0333350	6568675	Chert	2.676	Sandon
T05	0337051	6569122	Granite	2.648	Walcha
T05A	0337051	6569122	Granite	2.61	Walcha
GT21	0323535	6604046	Granite	2.68	Bundarra
GB57	0299115	6655159	Granite	2.599	Bundarra
GB59	0290837	6654932	Granite	2.60	Bundarra
GB60	0290368	6654724	Granite	2.619	Bundarra
GB66	0308422	6566935	Granite	2.65	Moonbi
GB64	0311254	6577663	Granite	2.67	Moonbi
GM01	0300805	6586653	Serpentinite	2.639	
GN05	0327650	6515887	Serpentinite	2.597	
GN06	0327772	6515578	Serpentinite	2.507	
GM05	0297470	6609086	Serpentinite	2.497	
GM06	0296584	6608672	Serpentinite	2.616	
GB56	0281149	6634458	Serpentinite	2.289	
GB317	0284341	6637507	Serpentinite	2.62	
GM01A	0300805	6586653	Serpentinite	2.356	
GM02	0300173	6585586	Serpentinite	2.581	
GB61	0288528	6653285	Sandstone	2.595	Woolomin
GM03	0300586	6585721	Mudstone	2.655	Woolomin
T01	0323437	6563557	Mudstone	2.602	Woolomin
GB316	0273961	6695625	Deformed mudstone	2.699	Woolomin
GB58	0288144	6659669	Slate/mudstone	2.46	Sandon
T03	0329123	6568087	Mudstone deform	2.481	Sandon
GT20	0305952	6599776	Sandon	2.622	Sandon

## GUNNEDAH BASIN

Sample Name	Easting	Nothing	Rock description	Density (tm <sup>-3</sup> )
GT02	0229308	6568641	Sandstone	2.473
GT04	0754567	6554179	Sandstone	2.35
GT05	0743241	6553503	Sandstone	2.074
GT08	0783981	6558032	Sandstone	2.519
GT09	0223999	6566494	Sandstone	2.48
T07	0776190	6502599	Sandstone	2.39
T06	0764923	6531818	Tertiary Volcanic Rock	2.832
GT06	0766097	6554378	Tertiary Volcanic Rock	2.617
GT03	0766398	6554365	Tertiary Volcanic Rock	2.871
GT07	0779564	6555468	Tertiary Volcanic Rock	2.926

## APPENDIX II

### (B) Density of the Core Samples from Drill Holes

**NRC01** (Drilled within the Tamworth Group of the Tamworth Belt at longitude of 151.13° and latitude -31.41° near Nundle. Depth represents the depth from the surface)

Depth (m)	Density (tm <sup>-3</sup> )	Rock description
12	2.73	Siltstone
26	2.71	Mudstone
40	2.72	Siltstone
44	2.7	Siltstone
64	2.72	Siltstone
80	2.72	Siltstone
95	2.7	Siltstone
103	2.71	Siltstone
118	2.84	Dolerite
125	2.918	Dolerite
135	2.922	Dolerite
144	2.903	Dolerite
151	2.847	Dolerite

**NRC02** (Drilled within the Tamworth Group of the Tamworth Belt at longitude of 151.13° and latitude -31.41° near Nundle. Depth represents the depth from the surface)

Depth (m)	Density (tm <sup>-3</sup> )	Rock description
5	2.62	Moderately weathered siltstone (W)
16	2.9	Dolerite
25	2.95	Dolerite
40	2.81	Dolerite, weakly altered with rare disseminated pyrite.
78	2.76	Siltstone
85	2.8	Siltstone
103	2.79	Mudstone
121	2.9	Dolerite
137	2.905	Dolerite
146	2.98	Dolerite

**NCR04** (Drilled within the Tamworth Group of the Tamworth Belt at longitude of 151.13° and latitude -31.41° near Nundle. Depth represents the depth from the surface)

Depth (m)	Density (tm <sup>-3</sup> )	Rock description
26	2.93	Dolerite
39	2.97	Dolerite
42	2.95	Dolerite
59	3.1	Dolerite
70	3.03	Dolerite
82	3.04	Dolerite
96	3.01	Dolerite
110	2.98	Dolerite
122	2.975	Dolerite
139	2.972	Dolerite
145	2.957	Dolerite

**NCR06** (Drilled within the Tamworth Group of the Tamworth Belt at longitude of 151.13° and latitude -31.41° near Nundle. Depth represents the depth from the surface)

Depth	Density (tm <sup>-3</sup> )	Rock description
19	2.92	Dolerite
27	2.93	Dolerite
40	2.91	Dolerite
90	2.9	Dolerite
103	2.92	Dolerite
120	2.93	Dolerite
123	2.92	Dolerite
139	2.93	Dolerite
150	2.928	Cherty argillite with approximately 1% blebby pyrite.

**Wallabadah No.1** (Drilled within Namoi Formation of the Tamworth Belt at longitude of 150.85° and latitude of -31.42° 10 km northeast of Wallabadah. Depth represents the depth from the surface)

Depth (feet)	Density (tm <sup>-3</sup> )	Rock description
80	2.61	Shale, grey, non-fissile, calcite filled high angle fractures.
91	2.57	
131	2.567	
141	2.584	
146	2.587	
158	2.629	
169	2.593	
175	2.609	
184	2.643	
192	2.528	
200	2.592	
206	2.619	
242	2.262	
366	2.609	
370	2.626	All shale
407	2.639	
423	2.635	
444	2.66	
455	2.64	
476	2.63	
578	2.609	
614	2.657	
696	2.644	
723	2.636	
775	2.638	
837	2.66	
856	2.67	
913	2.63	
962	2.636	All shale
1016	2.655	
1080	2.642	
1096	2.637	

**Wallabadah No.2** (Drilled within Namoi Formation of the Tamworth Belt at longitude of 150.91° and latitude of -31.43° 10 km northeast of Wallabadah. Depth represents the depth from the surface)

Depth (feet)	Density (tm <sup>-3</sup> )	Rock description
42	2.62	Shale
64	2.63	
86	2.59	
108	2.64	
119	2.66	
143	2.638	
155	2.646	
165	2.717	
242	2.618	
259	2.666	
270	2.664	
280	2.686	
289	2.68	
298	2.691	
317	2.67	
342	2.642	
352	2.66	All shale
370	2.644	
379	2.664	
389	2.672	
407	2.648	
429	2.665	
453	2.674	
460	2.659	
470	2.655	
480	2.68	
494	2.66	
516	2.61	
544	2.68	
557	2.67	
570	2.66	
596	2.66	
633	2.667	
647	2.688	
690	2.676	
702	2.678	All Shale

**Den Mountain** (Drilled within the Bundarra Plutonic Suite at longitude of 151.02° and latitude of -30.76° 5 km west of the Watsons village. Depth represents the depth from the surface)

Depth (feet)	Density (tm <sup>-3</sup> )	Rock description
54	2.6	Granite, massive.
80	2.66	Granite, massive, coarse grained.
150	2.62	Granite, massive.
217	2.59	Granite, massive
271	2.61	Granite, massive
289	2.62	Granite, massive
344	2.677	Granite, massive with quartz vein
504	2.903	Granite, massive with quartz vein (uncalculated)
554	2.625	Granite, massive.
588	2.602	Granite, massive
680	2.646	Granite, massive
733	2.632	Granite, massive

**Quirindi No. 1** (Drilled within the Gunnedah Basin at Longitude of 151.47° and Latitude of -30.58°, 10 km west of Quirindi. Depth represents for depth from the surface)

Depth (feet)	Density (tm <sup>-3</sup> )	Rock description
297	2.132	Sand fine fairly sorted with odd coarse grains
400	2.522	Sand very fine to fine silty
972	2.512	Shale to siltstone
1113	2.229	Sandstone
1280	2.376	Sandstone white fine
1285	2.555	Sandstone
1359	2.334	Shale brown
1468	2.581	Shale
1521	2.557	Shale
1583	2.82	Basalt dark grey to black
1623	1.886	Coal
1641	2.199	Tuff

1644	2.063	Shale, coaly
1703	2.645	Igneous rocks
1755	2.558	Igneous rocks
1783	2.368	Shale
1845	2.224	Shale
1879	1.87	Shale
1944	2.364	Shale
1962	2.125	Shale
1984		Coal
1999	2.536	Shale
2051	2.406	Clay
2069	2.74	Dolerite
2162	2.537	Sandstone
2188	2.34	Sandstone
2210	2.3	Shale
2228	2.43	Shale
2231	2.51	Shale
2314	2.66	Shale
2346	2.57	Sandstone
2365	2.4	Sandstone
2384	2.51	Shale
2409	2.51	Conglomerate
2457	2.261	Sandstone
2532	2.402	Sandstone
2554	2.499	Shale
2643	2.699	Dolerite
2689	2.409	Shale
2762	2.683	Dolerite
2772	2.758	Dolerite
2817	2.458	Shale
2824	2.426	Siltstone
2856	2.425	Sandstone
2928	2.471	Shale
2971	2.325	Sandstone
3041	2.52	Shale
3044	2.2	Shale
3077	2.912	Dolerite
3116	2.38	Sandstone
3138	2.452	Sandstone

3182	2.684	Limestone
3213	2.538	Sandstone
3222	2.523	Sandstone
3311	2.537	Shale
3390	2.611	Siltstone
3412	2.622	Shale
3440	2.622	Shale
3484	2.603	Shale
3506	2.6	Shale
3599	2.6	Shale
3666	2.61	Shale
3704	2.61	Shale
3730	2.61	Shale
3807	2.575	Siltstone

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