Basement geology of the southern Thomson Orogen

D. J. Purdy[a], R. Hegarty[b] and M. P. Doublier[c]

[a]Geological Survey of Queensland, Queensland Department of Natural Resources and Mines, PO Box 15261, City East, QLD 4002, Australia

[b]Geological Survey of New South Wales, NSW Department of Planning and Environment, PO Box 344, Hunter Region MC, NSW 2310, Australia

[c]Geoscience Australia, GPO Box 378, Canberra, ACT 2601, Australia

* e-mail: david.purdy@dnrme.qld.gov.au

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Supplementary papers

Appendix 1. Compilation of U–Pb geochronology across the southern Thomson Orogen region.

Figure A1. Interpretive basement geology map of the southern Thomson Orogen. This is also included as symbolised shapefiles in an ArcGIS map package.

Appendix 1. Compilation of U–Pb geochronology across the southern Thomson Orogen region.

Drill hole/sample no.	Depth (m)	Rock type	Unit	Long.	Lat.	Age (Ma)	Type	Method	Reference
(1) F03D02	481.4–482	Metasediment	Warratta Gp.	143.9837	-30.6321	498.8 ± 3.4	MDA	SHRIMP	Armistead & Fraser (2015)
(2) F16RMD08-01	373–374	Metasediment	Warratta Gp.	143.0801	-30.1963	503 ± 6	MDA	LA-ICP-MS	Glen et al. (2010; 2013)
(3) DIO Naryilco 1	1474.3–1477.4	Metasediment	Warratta Gp.	141.7076	-28.4496	496 ± 16	MDA	SHRIMP	Purdy et al. (2016)
(4) CBRCD01/CutAD1	115.24–116.24	Metasediment	Warratta Gp.	144.3881	-30.6449	501.5 ± 6	MDA	LA-ICP-MS	Glen et al. (2010; 2013)
(5) YAN-001	85.75–87.60	Metasediment	Warratta Gp., Yancannia Fm.	142.8113	-30.2608	497 ± 13	MDA	LA-ICP-MS	Wong et al. (2018, this issue)
(6) YAN-070	Outcrop	Metasediment	Warratta Gp., Yancannia Fm.	142.7780	-30.2270	555 ± 14	MDA	LA-ICP-MS	Wong et al. (2018, this issue)
(7) YAN-081	Outcrop	Metasediment	Warratta Gp., Yancannia Fm.	142.8020	-30.2090	527 ± 18	MDA	LA-ICP-MS	Wong et al. (2018, this issue)
(8) 2005844028	Outcrop	Volcaniclastic	Warratta Gp., Easter Monday Fm.	141.9714	-29.4280	497.2 ± 2.6	Mag.	SHRIMP	Black (2006); Greenfield (2010)
(9) 2005844066	Outcrop	Volcaniclastic	Warratta Gp., Jeffereys Flat Fm.	141.8441	-29.5879	510.4 ± 3	MDA	SHRIMP	Black (2006); Greenfield (2010)
(10) F1DD02	148.1–149.05	Granite	Unnamed intrusion	143.8747	-30.5062	428.2 ± 3.1	Mag.	SHRIMP	Armistead & Fraser (2015)
(11) F1DD01	237.5–238.5	Granitic dyke	Unnamed intrusion	143.8758	-30.5062	424.5 ± 4.9	Mag.	SHRIMP	Armistead & Fraser (2015)
(12) CUTACD02	404.7–406.5	Quartz diorite	Unnamed intrusion	144.3309	-30.6425	429.1 ± 8.5	Mag.	SHRIMP	Armistead & Fraser (2015)
(13) 2006844070	Outcrop	Granodiorite	Tibooburra Granodiorite	141.9833	-29.4305	420.6 ± 3.3	Mag.	SHRIMP	Black (2007); Vickery (2010)
(14) 2006844071	Outcrop	Diorite	Dynamite Tank Granodiorite	141.8959	-29.4438	420.2 ± 3.4	Mag.	SHRIMP	Black (2007); Vickery (2010)
(15) 2006844082	Outcrop	Granodiorite	Dynamite Tank Granodiorite	141.8962	-29.4400	427.7 ± 2.3	Mag.	SHRIMP	Black (2007); Vickery (2010)
(16) 2005844029	Outcrop	Granodiorite	Warrata Gp.	141.8321	-29.5510	423.3 ± 2.1	Mag.	SHRIMP	Black (2006)
(17) 2005844030	Outcrop	Granodiorite	Warrata Gp.	141.8170	-29.5869	421.3 ± 2	Mag.	SHRIMP	Black (2006)
(18) Bellfields-1A	402.5– 404	Metasediment	Gumbercoo zone?	146.0248	-29.6095	436.3 ± 2.7	MDA	SHRIMP	Fraser et al. (2014)
(19) BRE-NGA-1	Outcrop	Granite	Brewarrina Granite	146.8437	-29.9836	420.9 ± 2.3	Mag.	SHRIMP	Bodorkos et al. (2013)
(20) DMR Woodlands	66.58–67m	Metasediment	Nangunyah zone	145.1399	-30.4984	492.7 ± 5.4	MDA	LA-ICP-MS	Glen et al. (2010; 2013)
(21) Louth DH5 (L5)	214.9	Metasediment	Nangunyah zone	145.1075	-30.6179	485.1 ± 7.4	MDA	LA-ICP-MS	Glen et al. (2010; 2013); Brunker (1968)
(22) TFB002A	403.65–405.0	Granite	Conlea porphyry	144.5795	-30.0346	398.0 ± 2.8	Mag.	SHRIMP	Fraser et al. (2014)
(23) DIO Ella 1	1278	Granite	Ella Granite	142.4226	-28.0877	425.4 ± 6.6	Mag.	SHRIMP	Draper (2006), Cross et al. (2018, this issue)

Drill hole/sample no.	Depth (m)	Rock type	Unit	Long.	Lat.	Age (Ma)	Type	Method	Reference
(24) DIO Wolgolla 1	2040.4–2041.7	Granite	Wolgolla Granite	141.3165	-28.1788	418.8 ± 2.8	Mag.	SHRIMP	Siegel (2015); Siegel et al. (2018 this issue)
(25) TEA Roseneath 1	2192–2196	Granite	Wolgolla Granite	141.2390	-28.1679	419.4 ± 7	Mag.	LA-ICP-MS	Siegel (2015); Siegel et al. (2018 this issue)
(26) GSQ Eromanga 1	1259.4–1266.9	Metasediment	Thomson beds	143.8801	-26.6135	498 ± 16	MDA	SHRIMP	Purdy et al. (2016)
(27) RJB3123	Outcrop	Granite	Granite Springs Granite (zircon)	144.5473	-28.3307	455.6 ± 5.4	Mag.	SHRIMP	Cross et al. (2015)
(28) RJB3123	Outcrop	Granite	Granite Springs Granite (monazite)	144.5473	-28.3307	453.1 ± 6.4	Mag.	SHRIMP	Cross et al. (2015)
(29) DPTH77b	Outcrop	Granodiorite	Granite Springs Granite (zircon)	144.5533	-28.3348	463 ± 11	Mag.	SHRIMP	Cross et al. (2015)
(30) RJB3127	Outcrop	Granite	Currawinya Granite	144.4687	-28.7800	381.5 ± 2.4	Mag.	SHRIMP	Cross et al. (2015)
(31) RJB3130	Outcrop	Granite	Eulo Granite	145.0193	-28.1699	385 ± 2.5	Mag.	SHRIMP	Cross et al. (2012)
(32) RJB3126	Outcrop	Granite	Hungerford Granite	144.4615	-28.9958	419.1 ± 2.5	Mag.	SHRIMP	Cross et al. (2015)
(33) TRI-RMD08-01	201.85–202.77	Micromonzonite	Tinchelooka Diorite	144.9439	-29.8390	401.8 ± 3.1	Mag.	SHRIMP	Bodorkos et al. (2013)
(34) GSQ Mitchell 1	767.5–770.5	Metasediment	Nebine Metamorphics	147.1178	-26.4151	520 ± 10	MDA	SHRIMP	Kositcin et al. (2015)
(35) AOP Scalby 1	859–860	Granite	Scalby Granite	147.3970	-26.8634	368.4 ± 2.5	Mag.	SHRIMP	Kositcin et al. (2015)
(36) Louth DH L2	139.3–139.6	Metasediment	Louth Volcanics	145.1916	-30.8059	422 ± 4	MDA	LA-ICP-MS	Glen et al. (2010; 2013)
(37) BH7b		Metasediment	Louth Volcanics	144.8870	-30.2777	431 ± 15	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(38) BH7b		Gabbro	Louth Volcanics	144.8870	-30.2777	243 ± 5.6	Mag.	LA-ICP-MS	Dwyer et al. (2018, this issue)
(39) BH5		Volcaniclastic	Louth Volcanics	144.9947	-30.4099	260 ± 4.3	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(40) BH5		Sandstone	Louth Volcanics	144.9947	-30.4099	249 ± 4.2	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(41) T-1		Volcaniclastic	Louth Volcanics	145.4781	-30.3434	261 ± 8.9	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(42) T-1		Gabbro	Louth Volcanics	145.4781	-30.3434	261 ± 8.2	Mag.	LA-ICP-MS	Dwyer et al. (2018, this issue)
(43) MDH1		Gabbro	Louth Volcanics	145.3600	-30.4986	242 ± 7.9	Mag.	LA-ICP-MS	Dwyer et al. (2018, this issue)
(44) DH5/6-1		Volcaniclastic	Louth Volcanics	145.2804	-30.4068	241 ± 8.1	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(45) DH6/7-1		Monzodiorie	Louth Volcanics	145.4712	-30.2540	280 ± 120	Mag.	LA-ICP-MS*	Dwyer et al. (2018, this issue)
(46) L21RMD10-01		Dolerite	Louth Volcanics	145.3044	-30.4711	414 ± 9.3	Mag.	LA-ICP-MS	Dwyer et al. (2018, this issue)
(47) L21RMD10-01		Volcaniclastic	Louth Volcanics	145.3044	-30.4711	411 ± 6.3	Mag.	LA-ICP-MS	Dwyer et al. (2018, this issue)

Drill hole/sample no.	Depth (m)	Rock type	Unit	Long.	Lat.	Age (Ma)	Type	Method	Reference
(48) L30RMD10-01		Volcaniclastic	Louth Volcanics	145.1132	-30.6231	402 ± 5.2	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(49) L33RMD10-01		Gabbro	Louth Volcanics	145.1436	-30.6415	458 ± 9.7	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(50) L33RMD10-01		Volcaniclastic	Louth Volcanics	145.1436	-30.6415	482 ± 5.4	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(51) RDT7	Outcrop	Metasediment	Louth Volcanics	145.2449	-30.3926	484 ± 8	MDA	LA-ICP-MS	Dwyer et al. (2018, this issue)
(52) ACDWE009	162.5–163.3	Metavolcaniclastic sediment	Warraweena Volcanics	146.2856	-29.9429	504 ±	MDA	LA-ICP-MS	Glen et al. (2010; 2013)
(53) OXCOPJG0014	Outcrop	Metasediment	Gumbercoo zone?	146.2397	-30.1920	495 ± 9	MDA	SHRIMP	Fraser et al. (2014)
(54) OXCOSJT0861.01A	Outcrop	Metasediment	Gumbercoo zone?	146.2444	-30.2000	501 ± 7	MDA	SHRIMP	Fraser et al. (2014)
(55) DDHT14A	247.2–262.6	Metasediment	Gumbercoo zone?	146.1810	-30.0810	491.3 ± 2.9	MDA	LA-ICP-MS	Hack et al. (2018, this issue)
(56) SW027	Outcrop	Metasediment	Gumbercoo zone?	146.2480	-30.1680	441 ± 4.9	MDA	LA-ICP-MS	Hack et al. (2018, this issue)
(57) DDHT14A	226.6–226.7	Volcanic	Gumbercoo zone?	146.1810	-30.0810	411 ± 4.5	Dep.	LA-ICP-MS	Hack et al. (2018, this issue)
(58) DDHT14B	135.4–136	Metasediment	Gumbercoo zone?	146.1810	-30.0880	442 ± 17	MDA	LA-ICP-MS	Hack et al. (2018, this issue)
(59) DDH T17	163.28–166.9	Metasediment	Gumbercoo zone?	146.1627	-30.0856	438 ± 9	MDA	SHRIMP	Fraser et al. (2014)
(60) ACDWE008		Volcanic	Warraweena Volcanics	146.2880	-29.9397	414 ± 4	Dep.	LA-ICP-MS	Hack et al. (2018, this issue)
(61) ACDWE009		Volcanic	Warraweena Volcanics	146.2856	-29.9429	417 ± 3.5	Dep.	LA-ICP-MS	Hack et al. (2018, this issue)

Notes:
Numbers in parentheses preceding drill hole/sample no. correspond to reference numbers used in figures
MDA = Maximum depositional age
Mag. = Magmatic age
Dep. = Depositional age
* = LA-ICP-MS apatite age

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