PARSONS

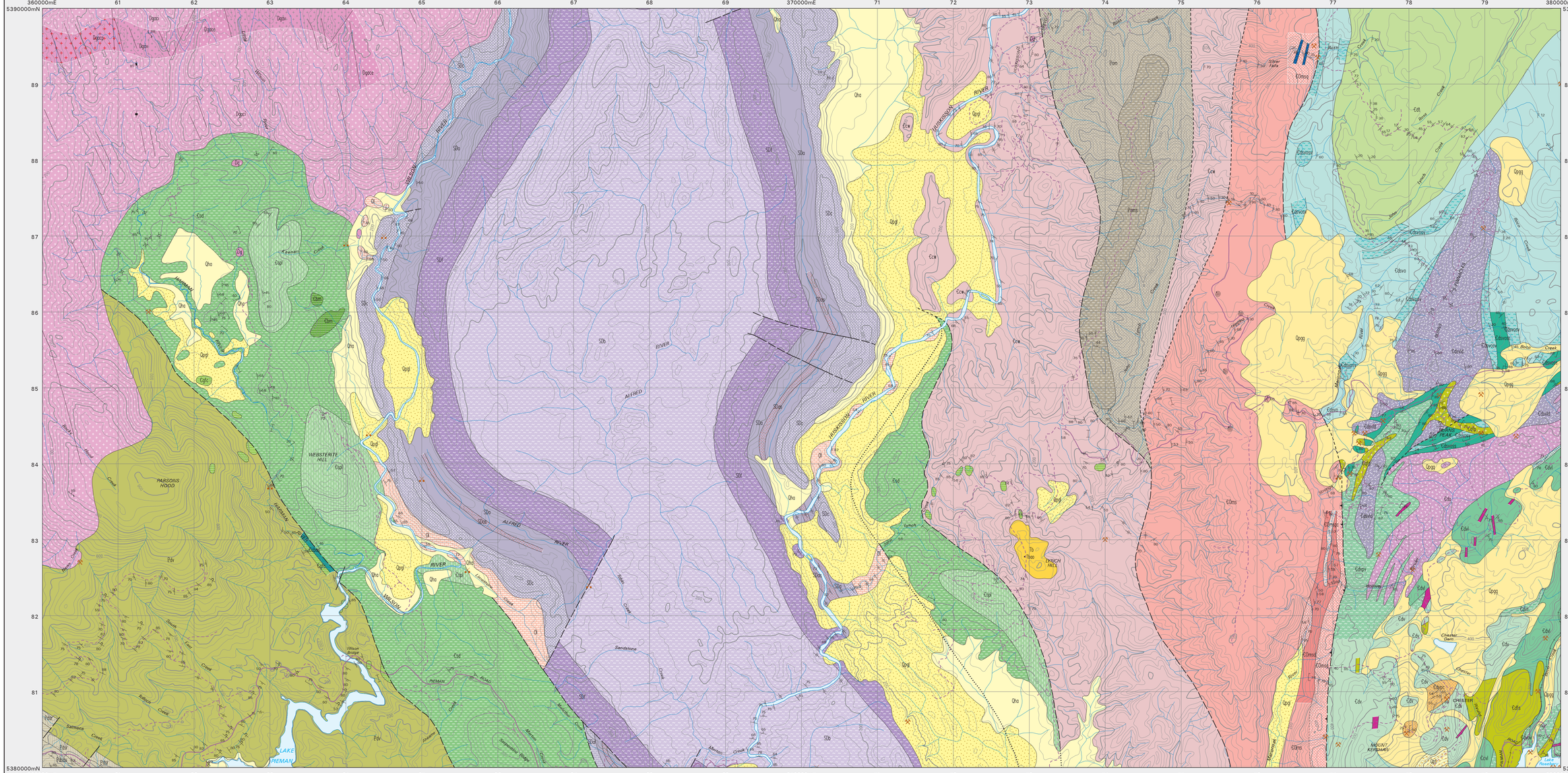
MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
PARSONS, SHEET 3638

Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA
Tasmania
DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES

360000mE 61 62 63 64 65 66 67 68 69 370000mE 71 72 73 74 75 76 77 78 79 380000mE
5390000mN 89 88 87 86 85 84 83 82 81 5380000mN



CAINOZOIC

QUATERNARY — HOLOCENE

- Qha — Marsh and swamp deposits, alluvium, river gravels and slope wash deposits (Qha).
- Qpt — Talus and scree deposits (Qpt).

PLEISTOCENE

- Qpgg — Qpgl — Glacial and glacigene deposits including till (Qpgg); fluvoglacial deposits including outwash conglomerate, gravel and sand (Qpg).

——— Erosional surface.

TERTIARY

- Tb — Basalt (Tb), including local occurrence of alkali olivine basalt (Tbao) at 372940mE, 5382790mN.

– – – – – – – – Angular unconformity.

PALAEOZOIC

DEVONIAN

- SDs — Sandstone, siltstone and mudstone (correlate of Bell Shale) (SDs).
- SDr — Dominantly quartz sandstone (correlate of Florence Quartzite) (SDr).

SILURIAN

- SDa — SDas — SDgl — Dominantly, siltstone, mudstone and calcareous siltstone (SDa–undifferentiated correlate of Amber Slate, Keel Formation and Austral Creek Formation), with some units of limestone (SDgl–within Amber Slate correlate) and quartz sandstone (SDas–correlate of Keel Formation) indicated.

ORDOVICIAN

- SDc — Quartz sandstone with minor mudstone and granule conglomerate layers (correlate of Crotty Quartzite) (SDc).
- Ol — Limestone and impure limestone (correlate of Gordon Group) (Ol).

——— Faulted contacts on this sheet.

LATE CAMBRIAN — CORRELATES OF OWEN GROUP

- €Oms — Marine sandstone–siltstone–conglomerate sequence, siliciclastic to polymict, marine fossils in places, includes extensions of the 'Rosebery Group' (€Oms).
- €Omsd — Dolomitic mudstone, siltstone and sandstone, with interbeds of volcaniclastic conglomerate and sandstone in places (€Omsd).
- €Omspc — Polymict conglomerate, typically calcareous, with fuchsite in places (€Omspc).
- €Omsq — Micaceous quartzwacke sandstone–siltstone–conglomerate sequence (includes correlates of Stitt Quartzite) (€Omsq).

ELDON GROUP / GORDON GROUP / WURAWINA SUPERGROUP

PALAEOZOIC

MIDDLE CAMBRIAN — MOUNT READ VOLCANICS

- €dt — Mainly volcaniclastic to polymict sandstone, breccia, siltstone, mudstone and conglomerate (€dt).

TYNDALL GROUP CORRELATE

- €dsvo — Interbedded volcaniclastic sandstone, breccia, siltstone, mudstone, and conglomerate (€dsvo).
- €qfp — Quartz–feldspar +/– biotite porphyry, mainly intrusive but may be partly extrusive (€qfp).
- €dsvoss — Dominantly volcaniclastic sandstone and mass–flow breccia, typically quartz–feldspar–phyric (€dsvoss).
- €dsvoss — Interbedded sandstone and siltstone (€dsvoss).

SOUTHWELL SUBGROUP CORRELATE

- €dsvd — €da — Dacite lava and breccia, typically feldspar +/– quartz–phyric (€dsvd). Andesitic lava and breccia (Hollway Andesite) (€da).

CORRELATE OF QUE–HELLYER VOLCANICS

- €dsqm — Micaceous quartzwacke with interbedded siltstone and black shale and minor volcaniclastic rocks (correlate of Animal Creek Greywacke) (€dsqm).

- €dv — €dfs — €qfp — €dvf — €dvpx — €dvd — €dvl — €dvpc — Dominantly feldspar–phyric volcanic and volcaniclastic rocks (€dv). Feldspar–quartz porphyry, typically with spherulitic groundmass. Intrusive to partly extrusive (€dfs). Quartz–feldspar +/– biotite porphyry, mainly intrusive but may be partly extrusive (€qfp). Mainly felsic volcaniclastic and pyroclastic rocks, typically feldspar–phyric, including pumice–bearing units (€dvf). Pumice–bearing volcaniclastic rocks, usually with eutaxitic texture (€dvpx). Block and ash flow breccia with lithic clasts and relict pumice fragments (€dvd). Felsic lava, typically feldspar +/– quartz–phyric, rhyolitic to dacitic (€dvl). Chert and chert–pyrite rock, bedded in places, at Chester mine (€dvpc).

CENTRAL VOLCANIC COMPLEX

MOUNT READ VOLCANICS

——— Faulted contacts.

EARLY CAMBRIAN(?) — ALLOCHTHONOUS SEQUENCES

- €cw — Mafic volcaniclastic lithicwacke, siltstone and mudstone with minor carbonate and basalt (correlate of Cleveland–Waratah Association) (€cw).

PROTEROZOIC

NEOPROTEROZOIC

- Pdv — Mafic volcaniclastic lithicwacke, siltstone and mudstone with minor carbonate and basalt (Crimson Creek Formation) (Pdv).
- Pdsr — Red chert and mudstone with minor conglomerate layers (upper member of Renison Bell Formation) (Pdsr).
- Pdscu — Laminated siliceous siltstone and black mudstone, with minor interbedded quartz sandstone and conglomerate (Pdscu). (Pdscu, Pdsr: Success Creek Group).

– – – – – – – – Inferred angular unconformity.

- Porn — Porne — Thin bedded calcareous siltstone and conglomerate, with minor quartzwacke and mudstone (Porn). Dominantly quartz sandstone and quartzwacke with minor black laminated mudstone (Porns). (Porn, Porns: correlates of upper Donah Formation).

INTRUSIVE AND ALLOCHTHONOUS IGNEOUS ROCKS

LATE DEVONIAN (–EARLY CARBONIFEROUS?)

- Dg — Dgacl — Dgacp — Dgav — Dgace — Very coarse–grained equigranular biotite granite, with very abundant intrusions of fine–to coarse–grained porphyritic (quartz–K–feldspar) biotite granite (Dgaci). Some areas of pink, medium–to coarse–grained equigranular granite (Dgacp), grey fine–to medium–grained variably porphyritic granite (Dgav) and grey to white medium–to coarse–grained equigranular granite (Dgace) indicated. Quartz–tourmaline nodules locally abundant. (Dgacl etc: felsic phase of Meredith Granite).

DEVONIAN(?)

- Dl — Lamprophyre (Dl).

PALAEOZOIC

MIDDLE CAMBRIAN — MOUNT READ VOLCANICS

- €dbc — Basaltic dykes, typically chlorite–altered (€dbc).
- €qfp — Quartz–feldspar porphyry (€qfp).
- €dfs — Feldspar–quartz–phyric, commonly spherulitic, felsic intrusives (€dfs).

EARLY CAMBRIAN(?) — ALLOCHTHONOUS SEQUENCES

- €bm — Massive to pillowed, aphyric basalt and intercalated breccia ("low–titanium basalt") (€bm).
- €gfc — Fine–to coarse–grained gabbro (€gfc).
- €sd — Serpentinised, interlayered dunite, harzburgite and minor orthopyroxenite ("LDH succession") (€sd).
- €spl — Serpentinised interlayered orthopyroxenite, dunite and pyroxene–bearing dunite ("LPD succession") (€spl).
- €cbas — Amphibolite (€cbas).

——— Geological boundary – position approximate
– – – – Geological boundary – inferred.
— — — — Fault – position approximate
– – – – Fault – inferred
····· Fault – concealed.
——— Air photo lineament
(white line) Colour boundary

Strike and dip of bedding, facing known – right way up; overturned; vertical, facing indicated by single tick.
Strike and dip of bedding, facing unknown – dipping; vertical.
Strike and dip of cleavage – dipping; vertical.
Trend and plunge of hingeline of minor fold; with vertical axial surface.
Strike and dip of dominant joint set – dipping; vertical.
Strike and dip of igneous banding – dipping; vertical.
Strike and dip of small dyke, sill or vein (quartz vein where rock type not specified).
Mineral deposit location – hardrock
Mineral deposit location – alluvial
Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.
Construction materials location –
Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.
Macrofossil location.

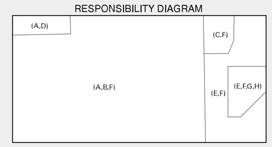
Compiled by J.L. Everard, 2000 from the following sources (see responsibility diagram)

A Turner, N.J.; Brown, A.V.; McClenaghan, M.P. & Soetriano, I. (1991). Geological Atlas 1:50,000 series sheet 43 (7914N). Corinna. Tasmania Department of Resources and Energy.
B Brown, A.V. (1986). Geology of the Dundas–Mt Lindsay–Mt Youngbuck Region. Geological Survey Bulletin 62. Tasmania Department of Mines.
C Collins, P.L.F. (1981). Geological Survey Explanatory Report, Sheet 44 (8014N). Mackintosh. Tasmania Department of Mines.
D Sharples, C. 1992. Subdivisions in the southern part of the Meredith Granite. Appendix 5 in Turner, N.J. (ed.). Corinna 1:50000 geological map. Field guide to selected rock exposures. Tasmania Department of Mines Report 1992/09.
E Corbett, K.D. & McNeill, A.W. (1986) Mt Read Volcanics Project, Map 2. Tasmania Department of Mines.
F Revised and updated after YITRMP studies by K.D. Corbett 2003, with additional information from:
G Michael, A.W., 2002. EL 4/2000 Bulgobac. Annual report for the period ending May 16, 2002. Pasminco Exploration. TCR 02-4667.
H Field, R.O., 1990. The geology of the Burns Peak–Boco Road area. BSc(hons) thesis. University of Tasmania.

Digital base information from Information and Land Services Division, Department of Primary Industries, Water and Environment.

Map produced by the Data Management Branch of Mineral Resources Tasmania using G.I.S. software. AGD66 • AMG Zone 55. Contour Interval: 20 metres.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM

ADJOINING SHEETS

MEREDITH	RAMSAY	CHARTER
LEVINGSTONE	PARSONS	BLOCK
STRINGER	ROSEBERRY	TULLAH

1:25000 maps available.

PARSONS 3638

Data correct & plotfile generated: 27-APR-2005

WARNING: INKS ARE LIGHT SENSITIVE