Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
LOYETEA, SHEET 4042

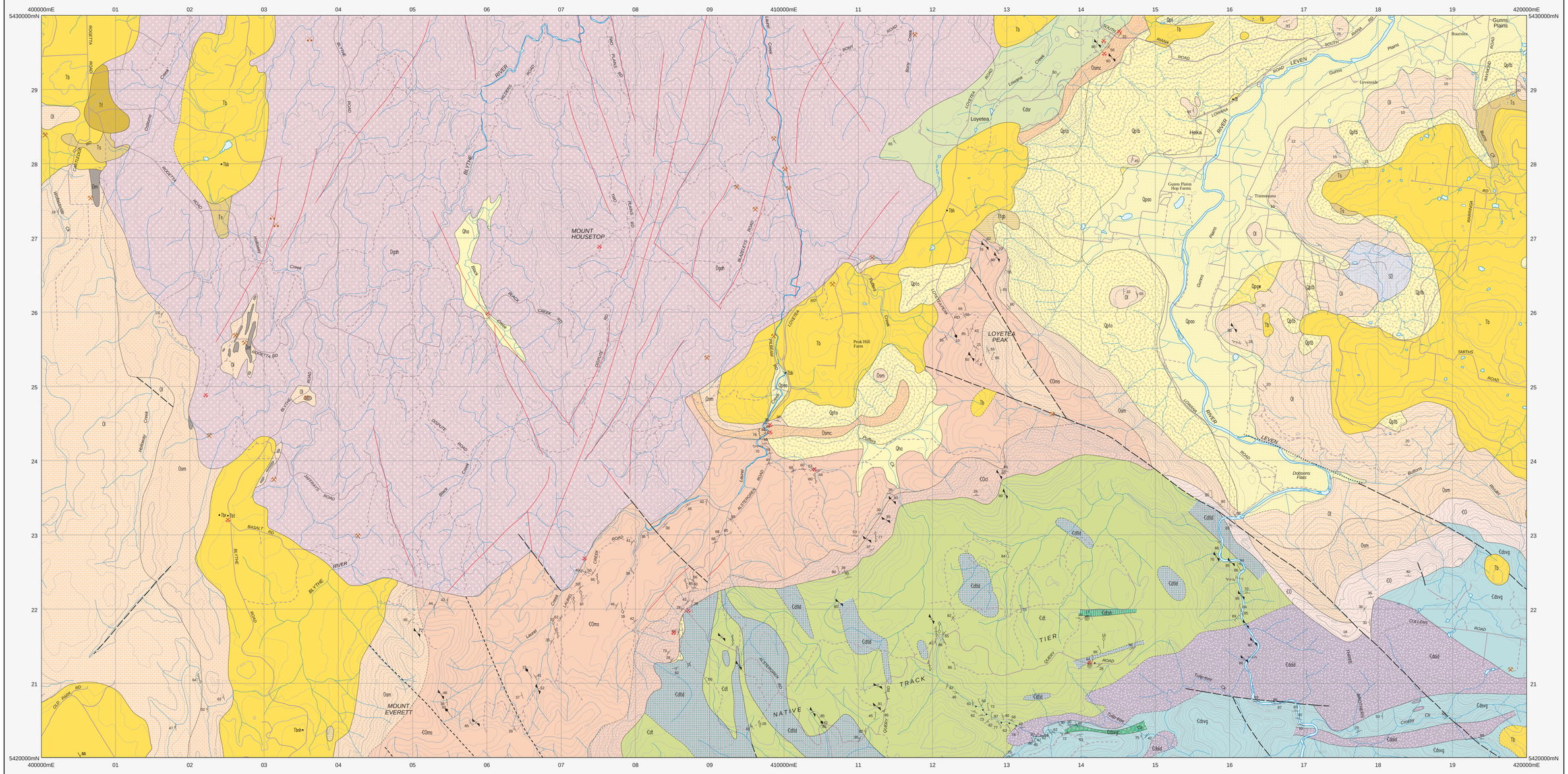
LOYETEA

Scale: 1:25 000

0 500 1000 1500 2000 2500m

INDUSTRY TOURISM RESOURCES

Tasmania
Explore the possibilities



CENOZOIC

QUATERNARY

HOLOCENE

- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qpt** — **Qptb** — *Basalt talus (Qptb).*
- **Qpt** — **Qpto** — *Quartz sandstone and conglomerate talus derived from Owen Group correlates (Qpto).*

PLEISTOCENE

- **Qpao** — *Older alluvium (Qpao).*
- **Qpgw** — *Weathered till (Qpwg).*

PALEOGENE–NEOGENE

- **Tb** — *Basalt (Tb) including local occurrence of basanite (Tbh), hawaiite (Tbb), nepheline hawaiite (Tbnh), transitional olivine basalt (Tbr) and olivine tholeiite (Tbt).*
- **Ts** — *Terrestrial sand, gravel and minor lacustrine deposits (Ts).*
- **Tf** — *Ferricrete (Tf).*
- **Tfgb** — *Greybilly and silcrete (Tfgb).*

PALEOZOIC

SILURIAN–DEVONIAN

- **SD** — *Shallow marine quartz sandstone, siltstone and shale (SD).* — ELDON GROUP

ORDOVICIAN

- **Ol** — *Limestone (correlate of Gordon Limestone) (Ol).*
- **Osm** — *Grey poorly sorted fine–grained sandstone, commonly bioturbated (correlate of Molna Sandstone) (Osm).* — GORDON GROUP
- **Osmc** — *Grey medium–to coarse–grained sandstone and pebble–cobble conglomerate, rarely bioturbated (Osmc).* — WURAWINA SUPERGROUP

CAMBRIAN

FURONGIAN

- **COl** — *Undifferentiated Owen Group (COl).*
- **COms** — *Grey to black quartzose sandstone (COms).* — OWEN GROUP
- **COcl** — *Lower Sequence of siliceous pebble–cobble grade conglomerate with sandstone interbedds. (COcl).*

PALEOZOIC

CAMBRIAN

CAMBRIAN SERIES 3

- **Cdt** — *Predominantly crystal +/– lithic rich volcaniclastic sediments with minor siltstone and minor acid to intermediate volcanics (Cdt).*
- **Cdtsh** — *Siltstone–shale horizon within Tyndall Group (Cdtsh).*
- **Cdtld** — *Plagioclase (+/– hornblende) phyric dacite lava; may include some shallow intrusive bodies (Cdtld).*
- **Cdsr** — *Undifferentiated mainly sedimentary sequence of shale, siltstone, lithicwacke, sandstone and conglomerate with minor volcaniclastic units (Riana sequence, in part correlate of Tyndall Group) (Cdsr).*
- **Cdsvg** — *Grey to green massive to bedded wacke, pebble conglomerate and laminated siltstone, with clasts of quartzite and chert. (Correlate of Gog Range Greywacke) (Cdsvg).*
- **Cdsvgc** — *Siliceous granule–pebble conglomerate (Cdsvgc).*

TYNDALL GROUP

WESTERN VOLCANO–SEDIMENTARY SEQUENCE

MOUNT READ VOLCANICS AND CORRELATES

INTRUSIVE ROCKS

PALEOZOIC

CAMBRIAN DEVONIAN

CAMBRIAN SERIES 3

- **Dgah** — *Dominantly medium– to coarse–grained, equigranular, biotite +/– hornblende–bearing alkali feldspar granite/syenogranite/monzogranite, with minor porphyritic and finer–grained variants (Housetop Granite; I–type) (Dgah).*
- **Cdold** — *Massive plagioclase – hornblende phyric dioritic, andesitic and dacitic intrusives (Labster Creek intrusives) (Cdold).*

MOUNT READ VOLCANICS

MINERALISATION

PALEOZOIC

DEVONIAN

- **Dm** — *Magnetite skarn (Dm).*

- *Geological boundary – position accurate or approximate.*
- *Geological boundary – inferred.*
- *Fault – position accurate or approximate.*
- *Fault – inferred.*
- *Fault – concealed.*
- *Lineament visible in airborne magnetic data.*
- *(white line)* — *Limit of mapping of sub–unit within undifferentiated rock unit.*

- *Strike and dip of bedding, right way up; facing unknown.*
- *Strike and dip of bedding of compositional layering.*
- *Strike and dip of primary igneous banding or platy alignment, and schlieren in granitic rocks.*
- *Strike of vertical igneous banding or platy alignment, and schlieren in granitic rocks.*
- *Strike and dip of cleavage of unspecified type and relative age; vertical.*
- *Strike and dip of cleavage, relative local age S1; vertical.*
- *Strike and dip of cleavage, relative local age S3; vertical.*
- *Strike and dip of cleavage, relative local age S4; vertical.*
- *Trend and plunge of minor fold hinge line, relative local age F1, with vertical axial surface.*
- *Trend and plunge of minor fold hinge line, relative local age F3; horizontal.*
- *Trend and plunge of minor fold hinge line, relative local age F4.*
- *Trend and plunge of minor fold hinge line, relative local age F4, with dip and dip direction of axial surface.*
- *Field station for adjacent readings on map.*
- *Notable small outcrop with rock unit indicated.*
- *Fossil location.*
- *Mineral deposit location – hardrock*
- *Mineral deposit location – alluvial/tailings*
- *Construction material/industrial mineral/gemstone location*

Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.

Compiled by M.J. Vicary, B.Sc.(Hons), Ph.D. and K.D. Corbett, B.Sc.(Hons), Ph.D., 2004 as part of the Western Tasmanian Regional Minerals Program from the following sources (see responsibility diagram):

A BAILLIE, P.W; WILLIAMS, P.R; SEYMOUR, D.B; LENNOX, P.G. and GREEN, G.R. 1996. Geological Atlas 1:50 000 Series. Sheet 36 (8015N), St Valentines. Tasmania Department of Mines.

B JENNINGS, I.B; BURNS, K.L; MAYNE, S.J. and ROBINSON, R.G. 1959. Geological Atlas 1 Mile Series. Zone 7 Sheet 37, Sheffield. Tasmania Department of Mines.

C McKeown, M.V. 1994. Review of the geology of the Kara area. Unpublished Report, McKeown Mining Pty Ltd, Tasmania Mines Limited. TCR 94–3597.

D Vicary, M.J. 1994. Exploration Licence No. 42/92 Loongana Annual Report May 1993 – May 1994. Unpublished Report, RGC Exploration Pty Ltd. TCR 94–3565.

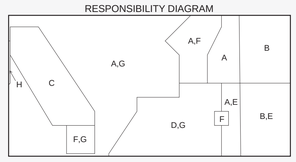
E Vicary, M.J. 1995. Exploration Licence No. 42/92 Loongana Annual Report May 1993 – May 1995. Unpublished Report, RGC Exploration Pty Ltd. TCR 95–9728.

F Corbett, K.D. 2003. Bedrock geological map of the Que River – Sheffield area. North West Tasmania. Mineral Resources Tasmania.

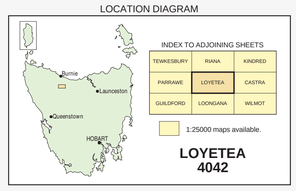
G Air photograph and WTRMP geophysical data interpretation by M. Vicary.

H TAHERI, J. & GREEN, G.R. 1989. Mt Read Volcanics Project, Metallic Minerals Deposits Map Series. Loongana. Tasmania Department of Mines.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



INDEX TO ADJOINING SHEETS

TEWKESBURY	RIANA	KINDRED
PARRAWE	LOYETEA	CASTRA
GUILDFORD	LOONGANA	WILMOT

1:25000 maps available.

LOYETEA 4042

REFERENCE THIS MAP AS:

VICARY, M.J. (compiler) 2004. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4042. Loyetea. Mineral Resources Tasmania.

Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.

GDA

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

Plotfile for this map generated from digital data as at: 02-FEB-2012

WARNING:INKS ARE LIGHT SENSITIVE