

Queensland's significant mineral mines, advanced mineral projects and new intersections

July 2017

Industry update

Queensland is Australia's and one of the world's largest producers of lead (2nd) zinc (3rd), and bauxite (4th), and in Australia for silver (1st) and copper (2nd). The North West Queensland Mineral Province dominates base metal production and is a major gold and phosphate rock producer.

North Queensland produces bauxite and silica sand, and highly prospective for base metals, gold, tin and tungsten. Industrial minerals produced in Queensland include bentonite, kaolin and ceramic clays, diatomite, dimension stone, dolomite, feldspar, gypsum, limestone, lump silica, magnesite, mineral sands (rutile, ilmenite and zircon), perlite, salt and zeolite.

Queensland's significant mineral mines are listed in Table 1 and their locations are shown in Figure 1. Significant opportunities still await with large unexplored potential within the sedimentary basins and basement beneath cover.

The Queensland Government recognises the pivotal role mining plays in the State's economy now and in the future. With exploration success critical to the sector's sustainability, the provision of pre-competitive geoscience data through the Geological Survey of Queensland reduces uncertainty and ensures direct support for exploration activities.

New geological and geophysical data have been acquired in greenfield and under-explored areas of Queensland, and funding grants have been provided direct to industry to drill innovative conceptual targets. To date, 84 projects by 57 companies have been completed with \$6.74 million paid with 1 in 2 projects identifying mineralisation that increases both the inventory and investment attractiveness of the State.

Current projects anticipated to come into production or in mine development are:

- MMG Ltd – Dugald River deposit. Dugald River is one of the largest and highest-grade known undeveloped deposits of zinc, lead and silver in the world with an estimated 25 year mine life from an underground mine with a production rate of 1.5 Mtpa from 2018.
- Altona Mining Ltd – Large low grade copper project at Roseby adjacent to Dugald River.
- Rio Tinto Alcan – Amrun bauxite mine near Weipa (previously known as South of Embley) securing bauxite supply for the foreseeable future.
- Gulf Alumina Ltd – Skardon River bauxite project with an expected mine life of 10 years and a construction period of approximately 1 year.
- Metallica Minerals Ltd – Mineral sands deposit and a bauxite deposit at Urquhart Point with potential for production in 2017.
- Red River Resources Ltd – Thalanga is estimated to commence production of concentrate late 2017.
- Carbine Resources Limited – Positive feasibility study at Mount Morgan to produce gold copper sulphate and a pyrite concentrate from the tailings.
- At the Ravenswood mine, operated by Resolute Mining Ltd, the Nolans East cut back commenced in August 2016 as the first

Quick facts

Concentrate or contained metal production

(Department of Natural Resources and Mines data, 2015–16)

Copper	250 000 t
Silver	964 t
Lead	397 000 t
Zinc	584 000 t
Gold	19.5 t
Bauxite (mineral)	28.1 Mt

Queensland produces

(Bureau of Resources and Energy Economics data, 2015–16 and US Geological Survey data)

Australia's copper	26% (1.3% global)
Australia's silver	67% (3.5% global)
Australia's lead	69% (8.4% global)
Australia's zinc	52% (4.4% global)
Australia's gold	7% (0.6% global)
Australia's bauxite	34% (10.7% global)

Locality maps and contact details for Queensland's significant mineral mines, advanced mineral projects and new intersections are on pages 2–7.

stage of the eventual recommencement of mining at Sarsfield and a new open pit at Buck Reef West. Mine life is extended a further 13 years to 2029.

- Capricorn Copper Holdings Pty Ltd is recommending mining at the old Gunpowder mine in about October 2017 and aims to have steady state production in early 2018.
- Auctus Chillagoe Pty Ltd anticipates stoping zinc ore at the King Vol zinc deposit near Chillagoe from September 2017. The ore will be treated at the refurbished Mungana polymetallic plant.
- Fortified Gold Pty Ltd has reported stockpiling of ore at the Far Fanning mine and aims to be in production later in 2017.
- Metro Mining has completed a feasibility study for an initial mine life of 17 years at the Bauxite Hills bauxite deposit north of Weipa. The company aims to commence production in early 2018.

These and additional advanced projects and Queensland's major mines are listed in this brochure, as well as the location of interesting new drill intersections (Table 2 and Figures 2 and 3).

In 2015–16, an estimated \$112.1 million was spent on mineral exploration in Queensland of which \$36.3 million was spent on copper exploration; \$47 million was spent on gold exploration; and \$28.8 million on other minerals.

The new discoveries and interesting drill intersections demonstrate that Queensland, particularly the north west, remains an ideal location for further mineral discoveries as the industry looks to sustain its future.

Table 1: Queensland's significant minerals mines

Project	Resource	Location	Principal contact
1. Bajool	Limestone	50 km south south-east of Rockhampton	Omya Australia Pty Ltd www.omya.com.au
2. Balcooma/Mount Garnet	Copper, Zinc, Lead, Silver, Gold	40 km north west of Greenvale/Mount Garnet	Consolidated Tin Mines Limited www.csdtin.com.au
3. Bauxite Hills (Under development)	Bauxite	90 km north of Weipa	Metro Mining Ltd www.metromining.com.au
4. Calliope	Limestone	30 km south of Gladstone	Sibelco Australia Limited www.sibelco.com.au
5. Cannington	Silver, Lead, Zinc	140 km south south-east of Cloncurry	South 32 Limited – Cannington www.south32.net
6. Cape Flattery	Silica sand	220 km north of Cairns	Cape Flattery Silica Mines Pty Ltd www.cfsm.com.au
7. Capricorn Copper (Mount Gordon) (Under development)	Copper	115 km north of Mount Isa	Lighthouse Minerals Holdings Pty Ltd www.capricorncopper.com
8. Chillagoe	Marble	Environs of Chillagoe	Cairns Marble www.cairnsmarble.com
9. Charters Towers (Care and maintenance)	Gold, Silver	Charters Towers	Citigold Corporation Limited www.citigold.com
10. Cracow	Gold, Silver	3 km west of Cracow	Evolution Mining Limited www.evolutionmining.com.au
11. Dugald River	Zinc, Lead, Silver	65 km north west of Cloncurry	MMG Limited www.mmg.com
12. East End	Limestone, Clay	30 km west of Gladstone	Cement Australia Pty Ltd www.cemaust.com.au
13. Eloise	Copper, Gold	60 km south east of Cloncurry	FMR Investments Pty Ltd www.fmrinvestments.com.au
14. Enterprise	Rutile, Ilmenite, Zircon	50 km east of Brisbane – North Stradbroke Island	Sibelco Australia Limited www.sibelco.com.au
15. Ernest Henry	Copper, Gold,	38 km north east of Cloncurry	Glencore plc www.glencore.com
16. Far Fanning (Under development)	Gold	45 km north east of Charters Towers	Fortified Gold Pty Ltd
17. George Fisher/Handlebar Hill	Zinc, Lead, Silver	19 km north of Mount Isa	Glencore plc www.glencore.com
18. Goondicum (Care and maintenance)	Ilmenite, Feldspar, Apatite, Titanomagnetite	110 km south of Gladstone	Melior Resources Inc www.meliorresources.com
19. King Vol	Zinc	45 km north west of Chillagoe	Auctus Chillagoe Pty Ltd www.auctusminerals.com.au
20. Kunwarara	Magnesite	60 km north west of Rockhampton	Queensland Magnesia Pty Ltd www.qmag.com.au
21. Lady Annie	Copper (cathode)	100 km north north-west of Mount Isa	CST Mining Group Limited www.cstmining.com
22. Lady Loretta (Care and maintenance)	Zinc, Lead, Silver	115 km north north-west of Mount Isa	Glencore plc www.glencore.com
23. Leichhardt	Copper (cathode)	110 km north north-east of Mount Isa	Malaco Mining Sdn Bhd www.malaco.com.au
24. Lorena (Under development)	Gold	15 km east of Cloncurry	Malachite Resources Limited www.malachite.com.au
25. Merlin (Care and maintenance)	Molybdenum, Rhenium	100 km south of Cloncurry	Chinova Resources Limited www.chinovaresources.com
26. Miles	Bentonite	30 km north of Miles	Sibelco Australia Limited www.sibelco.com.au
27. Mount Carbine (Care and maintenance)	Tungsten	90 km north west of Cairns	Carbine Tungsten Limited www.carbinetungsten.com.au
28. Mount Carlton	Gold	45 km north west of Collinsville	Evolution Mining Limited www.evolutionmining.com.au
29. Mount Colin (Care and maintenance)	Copper	50 km west of Cloncurry	CopperChem Limited www.copperchem.com.au
30. Mount Isa/Black Star	Copper, Zinc, Lead, Silver	Mount Isa	Glencore plc www.glencore.com
31. Mount Moss (Care and maintenance)	Magnetite	105 km west north-west of Townsville	Curtain Bros (Qld) Pty Ltd www.curtainbros.com.au
32. Mount Rawdon	Gold, Silver	80 km west south-west of Bundaberg	Evolution Mining Limited www.evolutionmining.com.au
33. Mount Ruby	Magnetite	18 km west north-west of Ravenshoe	Developed Iron Ore Pty Ltd
34. Mungana	Polymetallic	15 km north west of Chillagoe	Auctus Chillagoe Pty Ltd www.auctusminerals.com.au
35. Osborne/Kulthor	Copper, Gold	150 km south of Cloncurry	Minjar Gold Pty Ltd www.chinovaresources.com

Table 1: Queensland's significant minerals mines

(continued)

Project	Resource	Location	Principal contact
36. Pajingo	Gold, Silver	60 km south south-east of Charters Towers	Minjar Gold Pty Ltd www.minjargold.com.au
37. Phosphate Hill	Phosphate rock	140 km south south-east of Mount Isa	Incitec Pivot Limited www.incitecpivot.com.au
38. Port Alma	Salt	40 km south east of Rockhampton	CK Life Sciences International (Holdings) Inc www.cheethamsalt.com.au
39. Ravenswood/Mount Wright	Gold, Silver	95 km south of Townsville	Carpentaria Gold Pty Ltd www.rml.com.au
40. Rocklands	Copper, Cobalt, Magnetite, Gold	17 km west north-west of Cloncurry	CuDeco Limited www.cudeco.com.au
41. Thalanga/West 45	Polymetallic	65 km south west of Charters Towers	Red River Resources Ltd www.redriverresources.com.au
42. Urquhart Point (Under development)	Bauxite	3 km south west of Weipa	Oresome Australia Pty Ltd www.metallicminerals.com.au
43. Warwick/Riverton	Limestone	20 km and 105 km south south-east of Warwick	Sibelco Australia Limited www.sibelco.com.au
44. Weipa/Amrun	Bauxite	Weipa	Rio Tinto Aluminium www.riotintoalcan.com
45. Wirralie	Gold	26 km north north-west of Mount Coolon	Solomons Mines
46. Wolfram Camp	Tungsten, Molybdenum	90 km south west of Cairns	Almonty Industries Inc. www.almonty.com

Figure 1: Queensland's significant mineral mines locality map

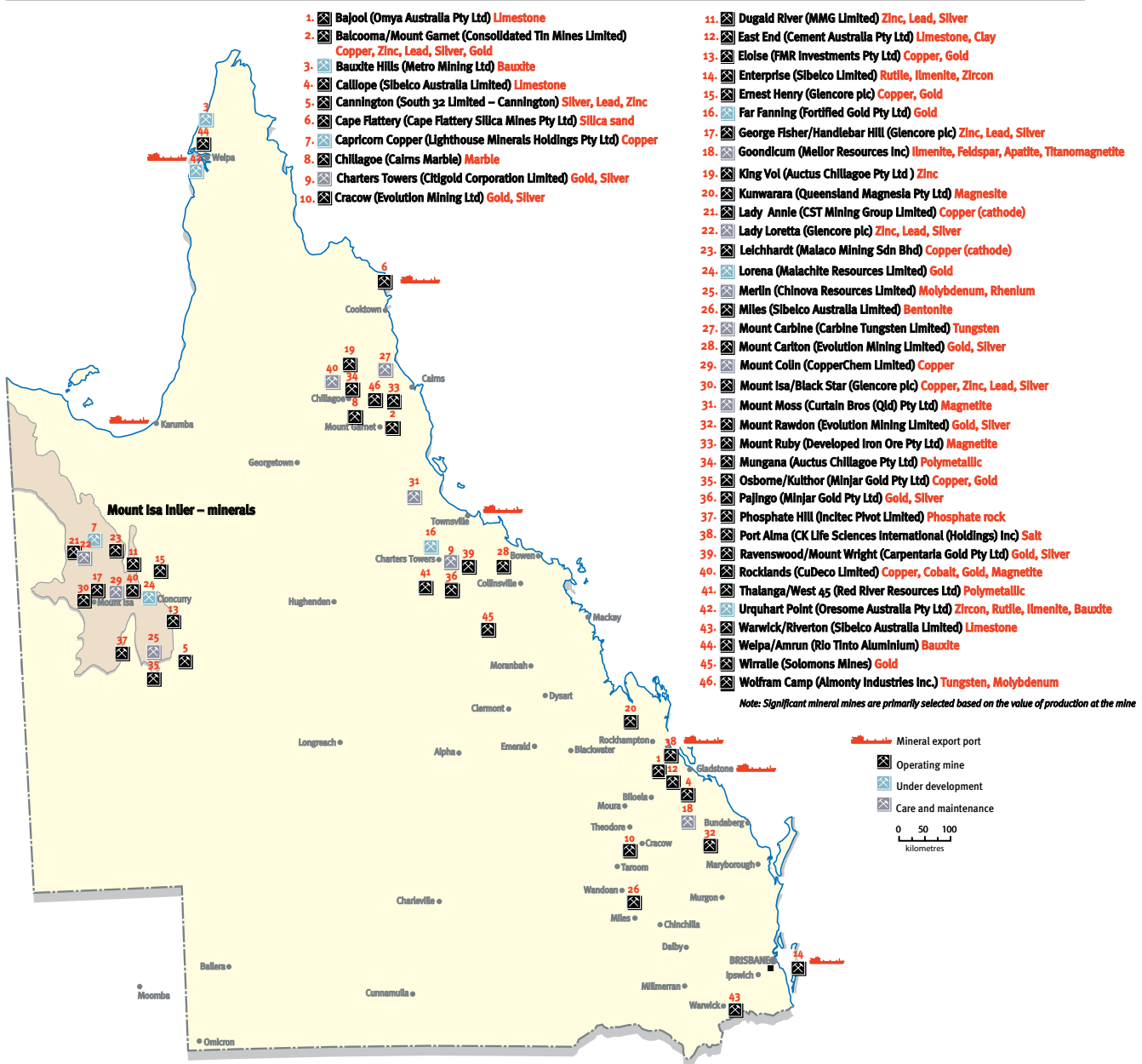


Table 2: Queensland's advanced base metals, other minerals, gold and uranium projects

Project	Resource	Location	Principal contact
1. Barbara	Copper	50 km north east of Mount Isa	Washington H Soul Pattinson and Company Ltd www.whsp.com.au
2. Einasleigh	Copper, Lead, Zinc	Einasleigh	Consolidated Tin Mines Limited www.csdtin.com.au
3. Kalman	Copper, Molybdenum, Rhenium, Gold	60 km south east of Mount Isa	Hammer Metals Limited www.hammermetals.com.au
4. Maronan	Polymetallic	60 km south east of Cloncurry	Red Metal Limited www.redmetal.com.au
5. Mount Dore	Copper, Zinc, Silver	110 km south of Cloncurry	Chinova Resources Limited www.chinovaresources.com
6. Mount Isa Open Pit	Copper, Zinc, Lead, Silver	Mount Isa	Glencore plc www.glencore.com
7. Mount Oxide	Copper, Cobalt	120 km north of Mount Isa	Zhongjin Lingnan Mining (HK) Company Limited
8. Pegmont	Lead, Zinc, Silver	28 km west of Cannington Mine	Vendetta Mining Corporation www.vendettaminingcorp.com
9. Roseby	Copper, Gold	66 km north west of Cloncurry	Altona Mining Limited www.altonamining.com
10. Swan/Mount Elliott	Copper, Gold	95 km south of Cloncurry	Chinova Resources Limited www.chinovaresources.com
11. Walford Creek	Polymetallic	135 km west of Burketown	Aeon Metals Limited www.aeonmetals.com.au
12. Waterloo/Liontown	Polymetallic	60 km south west of Charters Towers	Red River Resources Limited www.redriverresources.com.au
13. White Range	Copper	40 km south of Cloncurry	Queensland Mining Corporation Limited www.queenslandminingcorporation.com.au
14. Aurukun	Bauxite	120 km south of Weipa	Glencore plc www.glencore.com
15. Binjour	Bauxite	20 km north west of Gaydah	Australian Bauxite Limited www.australianbauxite.com.au
16. Gillian	Tin	7 km west of Mount Garnet	Consolidated Tin Mines Limited www.consolidatedtinmines.com.au
17. Grafton Range Soda	Sodium bicarbonate	23 km north east of Roma	Australian Pacific Coal Limited www.aqcltd.com
18. Marlborough Nickel	Nickel, Cobalt	80 km north west of Rockhampton, refinery at Gladstone	Gladstone Pacific Nickel Limited www.gladstonepacific.com.au
19. Sconi	Scandium, Nickel, Cobalt,	Between Greenvale and Mount Garnet	Metallica Minerals Limited www.metallicaminerals.com.au
20. Paradise North/South	Phosphate rock	110 km north north-west of Mount Isa	Legend International Holdings Inc www.lgdi.net
21. Skardon River	Bauxite	80 km north of Weipa	Gulf Alumina Limited www.gulfalumina.com.au
22. Wateranga	Ilmenite, Feldspar, Apatite, Zircon, Rutile, Corundum, Magnetite, Scandium	70 km south west of Bundaberg	Queensland Industrial Minerals Limited www.qim.com.au
23. Watershed	Tungsten	140 km north west of Cairns	Vital Metals Limited www.vitalmetals.com.au
24. Agate Creek	Gold, Silver	80 km south of Georgetown	Laneway Resources Ltd www.rcm.com.au
25. Hadleigh Castle	Gold	27 km west of Ravenswood	Denjim Pty Ltd
26. Horn Island	Gold	Torres Strait	Alice Queen Limited www.alicequeen.com.au
27. Mount Coolon/Yandan	Gold	Several deposits within 10 km of Mount Coolon	GBM Resources Ltd www.gbmr.com.au
28. Mount Morgan Tailings	Gold	38 km south west of Rockhampton	Carbine Resources Limited www.carbineresources.com.au
29. Northcote/Tregoorra	Gold, Silver	100 km north west of Cairns	Territory Minerals Pty Ltd ph: +61 7 3112 5268
30. Norton	Gold	100 km south west of Gladstone	Mantle Mining Corporation Limited www.mantlemining.com
31. Red Dome/Mungana	Gold, Copper	130 km west of Cairns	Mungana Goldmines Ltd www.munganagoldmining.com.au
32. Twin Hills/Lone Sister/309 Deposit	Gold, Silver	220 km south south-east of Charters Towers	Evolution Mining Limited www.evolutionmining.com.au
33. Woolgar	Gold, Silver	110 km north of Richmond	Strategic Minerals Corporation NL www.stratmin.com.au
34. Ben Lomond	Uranium	50 km south west of Townsville	Mega Uranium Ltd www.megauranium.com
35. Westmoreland	Uranium	400 km north west of Mount Isa	Laramide Resources Ltd www.laramide.com
36. Valhalla	Uranium	40 km north west of Mount Isa	Paladin Energy Ltd www.paladinenergy.com.au

Figure 2: Queensland's advanced base metals, other minerals, gold and uranium projects

Queensland's base metals projects

- 1 Barbara (Washington H Soul Pattinson and Company Ltd) **Copper**
- 2 Einasleigh (Consolidated Tin Mines Limited) **Copper, Lead, Zinc**
- 3 Kalman (Hammer Metals Limited) **Copper, Molybdenum, Rhenium, Gold**
- 4 Maronan (Red Metal Limited) **Polymetallic**
- 5 Mount Dore (Chinova Resources Limited) **Copper, Zinc, Silver**
- 6 Mount Isa Open Pit (Glencore plc) **Copper, Gold**
- 7 Mount Oxide (Zhongjin Lingnan Mining (HK) Company Limited) **Copper, Cobalt**
- 8 Pegmont (Vendetta Mining Corporation) **Lead, Zinc, Silver**
- 9 Roseby (Altona Mining Limited) **Copper, Gold**
- 10 Swan/Mount Elliott (Chinova Resources Limited) **Copper, Gold**
- 11 Walford Creek (Aeon Metals Limited) **Polymetallic**
- 12 Waterloo/Liontown (Red River Resources Limited) **Polymetallic**
- 13 White Range (Queensland Mining Corporation Limited) **Copper**

Queensland's other metals projects

- 14 Aurukun (Glencore plc) **Bauxite**
- 15 Binjour (Australian Bauxite Limited) **Bauxite**
- 16 Gillian (Consolidated Tin Mines Limited) **Tin**
- 17 Grafton Range Soda (Australian Pacific Coal Pty Ltd) **Sodium bicarbonate**
- 18 Marlborough Nickel (Gladstone Pacific Nickel Limited) **Nickel, Cobalt**
- 19 Sconi (Metallica Minerals Limited) **Scandium, Nickel, Cobalt**
- 20 Paradise North/South (Legend International Holdings Inc) **Phosphate rock**
- 21 Skardon River (Gulf Alumina Limited) **Bauxite**
- 22 Wateranga (Queensland Industrial Minerals Limited) **Ilmenite, Feldspar, Apatite, Zircon, Rutile, Corundum, Magnetite, Scandium**
- 23 Watershed (Vital Metals Limited) **Tungsten**

Queensland's gold projects

- 24 Agate Creek (Laneway Resources Ltd) **Gold, Silver**
- 25 Hadleigh Castle (Denjim Pty Ltd) **Gold**
- 26 Horn Island (Alice Queen Limited) **Gold**
- 27 Mount Coolon/Yandan (GBM Resources Ltd) **Gold**
- 28 Mount Morgan Tailings (Carbine Resources Limited) **Gold**
- 29 Northcote/Tregoorra (Territory Minerals Pty Ltd c/- UTM Global Pty Ltd) **Gold, Silver**
- 30 Norton (Mantle Mining Corporation Limited) **Gold**
- 31 Red Dome/Mungana (Mungana Goldmines Ltd) **Gold, Copper**
- 32 Twin Hills/Lone Sister/309 Deposit (Evolution Mining Limited) **Gold, Silver**
- 33 Woolgar (Strategic Minerals Corporation NL) **Gold, Silver**

Queensland's uranium projects

- 34 Ben Lomond (Mega Uranium Ltd) **Uranium**
- 35 Westmoreland (Laramide Resources Ltd) **Uranium**
- 36 Vathalla (Paladin Energy Ltd) **Uranium**

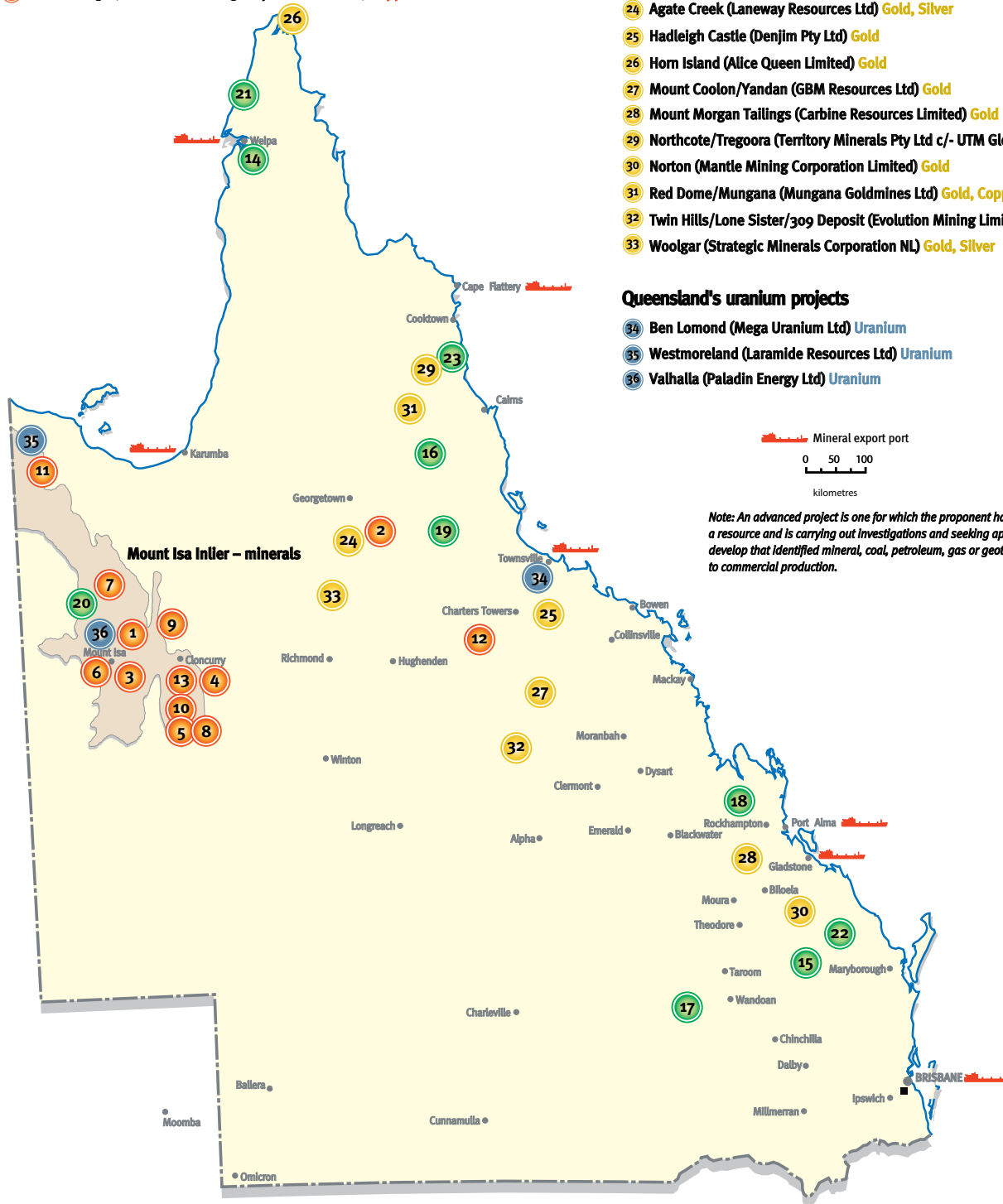
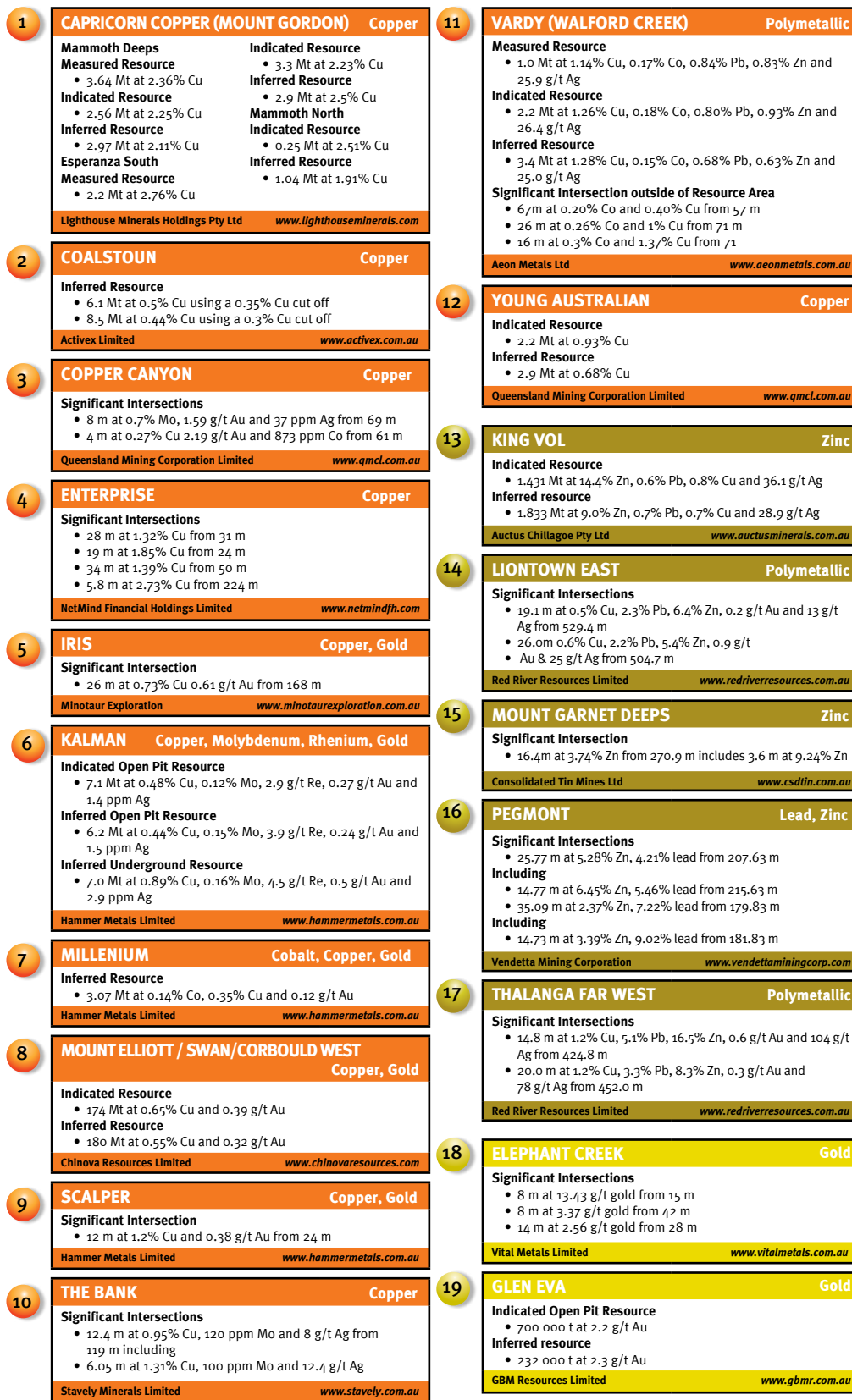



Figure 3: Queensland's new resources and mineral intersections map

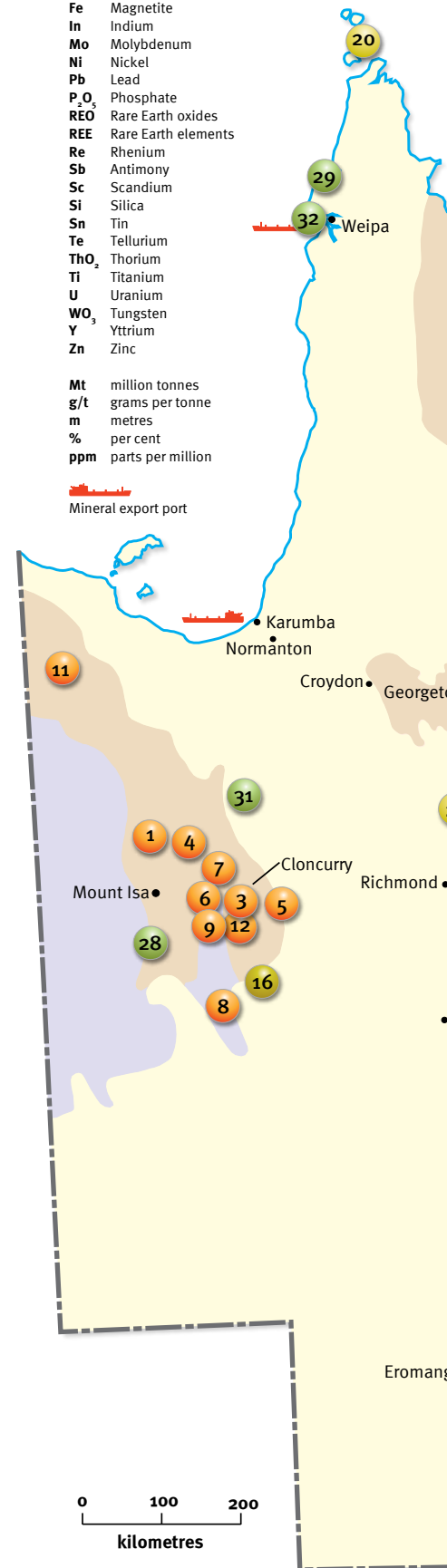


Key

Ag Silver
 Au Gold
 Al Aluminium
 Co Cobalt
 Cu Copper
 F Fluorite
 Fe Magnetite
 In Indium
 Mo Molybdenum
 Ni Nickel
 Pb Lead
 P₂O₅ Phosphate
 REO Rare Earth oxides
 REE Rare Earth elements
 Re Rhenium
 Sb Antimony
 Sc Scandium
 Si Silica
 Sn Tin
 Te Tellurium
 ThO₂ Thorium
 Ti Titanium
 U Uranium
 WO₃ Tungsten
 Y Yttrium
 Zn Zinc

Mt million tonnes
 g/t grams per tonne
 m metres
 % per cent
 ppm parts per million

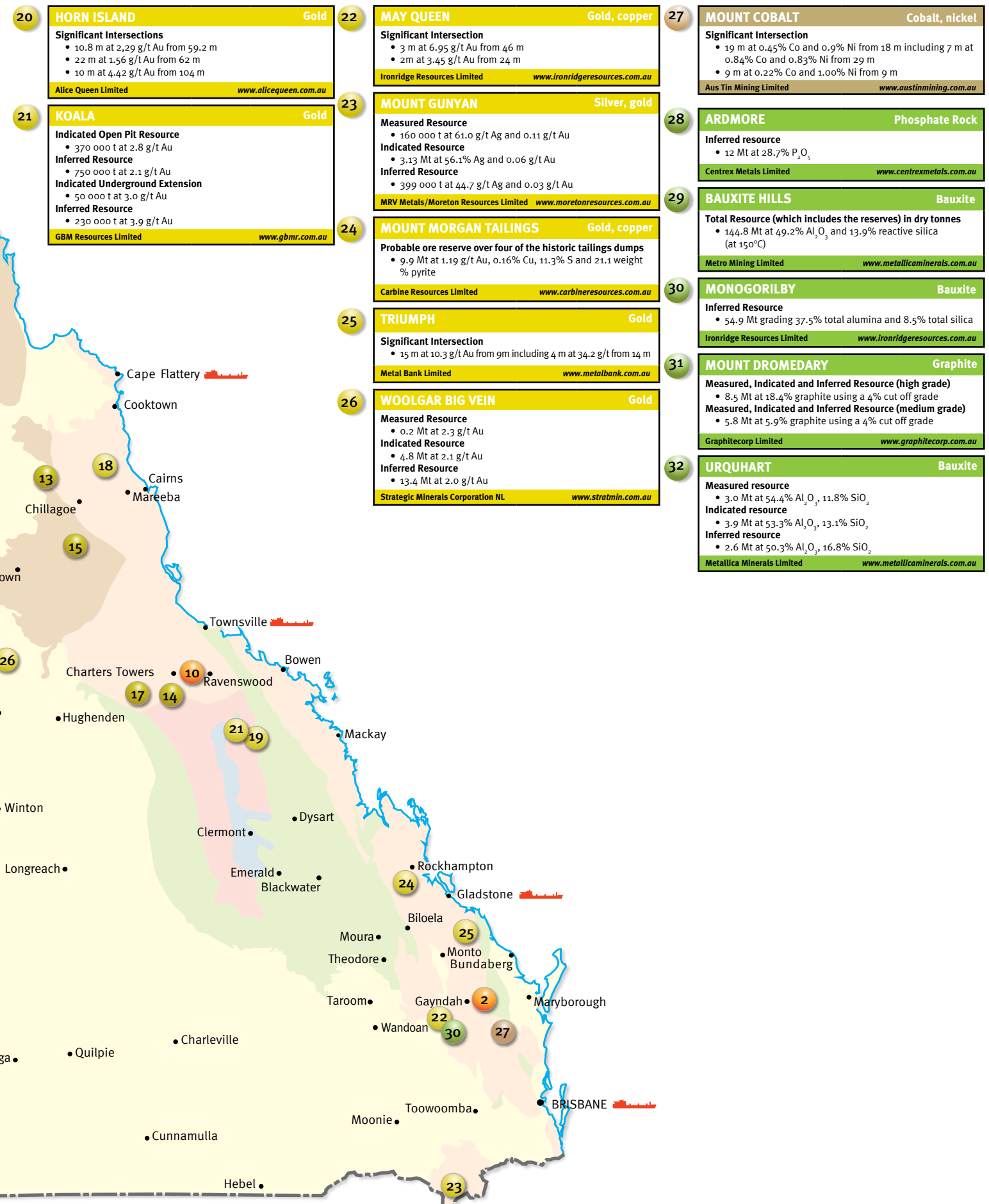
 Mineral export port



Updated June 2017
 Prepared by Corporate Communications and Geological Survey of Queensland
 © The State of Queensland (Department of Natural Resources and Mines) 2017

Reserve/resources figures and drill intersections quoted and sourced from company information

Disclaimer: This publication has been prepared by officers of the Geological Survey of Queensland and its contractors. This publication is intended to provide information only and is not intended to be used as a basis for investment decisions. While all care has been taken in the preparation of this document, neither the Queensland Government nor its officers accept any liability for any inaccuracy or omission in the information contained herein.



20 HORN ISLAND Gold
Significant Intersections
 • 10.8 m at 2.29 g/t Au from 59.2 m
 • 22 m at 1.56 g/t Au from 62 m
 • 10 m at 4.42 g/t Au from 104 m
 Alice Queen Limited www.alicequeen.com.au

21 KOALA Gold
Indicated Open Pit Resource
 • 370 000 t at 2.8 g/t Au
Inferred Resource
 • 750 000 t at 2.1 g/t Au
Indicated Underground Extension
 • 50 000 t at 3.0 g/t Au
Inferred Resource
 • 230 000 t at 3.9 g/t Au
 GBM Resources Limited www.gbmr.com.au

22 MAY QUEEN Gold, copper
Significant Intersection
 • 3 m at 6.95 g/t Au from 46 m
 • 2 m at 3.45 g/t Au from 24 m
 Ironridge Resources Limited www.ironridgeresources.com.au

23 MOUNT GUNYAN Silver, gold
Measured Resource
 • 160 000 t at 61.0 g/t Ag and 0.11 g/t Au
Indicated Resource
 • 3.13 Mt at 56.1% Ag and 0.06 g/t Au
Inferred Resource
 • 399 000 t at 44.7 g/t Ag and 0.03 g/t Au
 MRV Metals/Moreton Resources Limited www.moretonresources.com.au

24 MOUNT MORGAN TAILINGS Gold, copper
Probable ore reserve over four of the historic tailings dumps
 • 9.9 Mt at 1.19 g/t Au, 0.16% Cu, 11.3% S and 21.1 weight % pyrite
 Carbine Resources Limited www.carbineresources.com.au

25 TRIUMPH Gold
Significant Intersection
 • 15 m at 10.3 g/t Au from 9m including 4 m at 34.2 g/t from 14 m
 Metal Bank Limited www.metalbank.com.au

26 WOOLGAR BIG VEIN Gold
Measured Resource
 • 0.2 Mt at 2.3 g/t Au
Indicated Resource
 • 4.8 Mt at 2.1 g/t Au
Inferred Resource
 • 13.4 Mt at 2.0 g/t Au
 Strategic Minerals Corporation NL www.stratmin.com.au

27 MOUNT COBALT Cobalt, nickel
Significant Intersection
 • 19 m at 0.45% Co and 0.9% Ni from 18 m including 7 m at 0.84% Co and 0.83% Ni from 29 m
 • 9 m at 0.22% Co and 1.00% Ni from 9 m
 Aus Tin Mining Limited www.austintinmining.com.au

28 ARDMORE Phosphate Rock
Inferred resource
 • 12 Mt at 28.7% P₂O₅
 Centrex Metals Limited www.centrexmetals.com.au

29 BAUXITE HILLS Bauxite
Total Resource (which includes the reserves) in dry tonnes
 • 144.8 Mt at 49.2% Al₂O₃ and 13.9% reactive silica (at 150°C)
 Metro Mining Limited www.metallicaminerals.com.au

30 MONOGORILBY Bauxite
Inferred Resource
 • 54.9 Mt grading 37.5% total alumina and 8.5% total silica
 Ironridge Resources Limited www.ironridgeresources.com.au

31 MOUNT DROMEDARY Graphite
Measured, Indicated and Inferred Resource (high grade)
 • 8.5 Mt at 18.4% graphite using a 4% cut off grade
Measured, Indicated and Inferred Resource (medium grade)
 • 5.8 Mt at 5.9% graphite using a 4% cut off grade
 Graphitecorp Limited www.graphitecorp.com.au

32 URQUHART Bauxite
Measured resource
 • 3.0 Mt at 54.4% Al₂O₃, 11.8% SiO₂
Indicated resource
 • 3.9 Mt at 53.3% Al₂O₃, 13.1% SiO₂
Inferred resource
 • 2.6 Mt at 50.3% Al₂O₃, 16.8% SiO₂
 Metallica Minerals Limited www.metallicaminerals.com.au

Geological Survey of Queensland and Corporate Communications, Department of Natural Resources and Mines. It may be distributed to other interested parties for information only. It is not intended to, nor does it constitute, expert advice. Readers are warned against relying solely on the information contained in this publication. The Department of Natural Resources and Mines, nor its officers or staff accept any responsibility for any loss or damage that may result from any use of the information.

Mineral exploration and mining tenures in Queensland

All exploration and mining tenures are issued and administered by the Queensland Department of Natural Resources and Mines (DNRM) under the *Mineral Resources Act 1989* and the associated Mineral Resources Regulation 2003.

The three main tenures that are issued in Queensland for mineral exploration and development are listed below.

1. Exploration permit for minerals (EPM)

An EPM allows the holder to conduct mineral exploration activities including geological mapping, exploration drilling and sampling (term up to 5 years and renewable according to performance).

2. Mineral development licence (MDL)

An MDL may be granted after exploration strongly indicates the existence of a resource. This tenure allows the holder to retain control of the resources within the defined area and conduct further testing and bulk sampling as approved by the government (term up to 5 years and renewable according to performance).

3. Mining lease (ML)

An ML allows mining for a specified term, generally up to 35 years commensurate with the proposed scale of mining and the size of the known resource, and is renewable.

MinesOnlineMaps

MinesOnlineMaps is our new GIS system that replaces the Interactive Resource and Tenure Maps (IRTM) system.

MinesOnlineMaps:

- provides you with greater access to view, query and analyse mines spatial information in an integrated, user friendly interface (see Figure 4)

- allows you to zoom, pan, search and display geological data with mining and exploration permit information for the whole of Queensland
- links to Queensland Digital Exploration Reports system (QDEX Reports), allowing you to list company reports for your project area based on historic permits.

MinesOnlineMaps offers more functionality than the old IRTM system, with features including:

- enhancements to support identification, monitoring and reporting of resource activity
- quick and easy assessment of target resource areas by highlighting geographic constraints and barriers
- self-service of publicly available permit and geoscience information.

In September 2014, MinesOnlineMaps customers gained access to improved integrated data downloads using the next-generation spatial information portal QSpatialCatalogue.

Further information:

Manager, Mineral Geoscience
Geological Survey of Queensland
Department of Natural Resources and Mines
PO Box 15216, City East, Queensland 4002
Email: geological_info@dnrm.qld.gov.au

www.dnrm.qld.gov.au

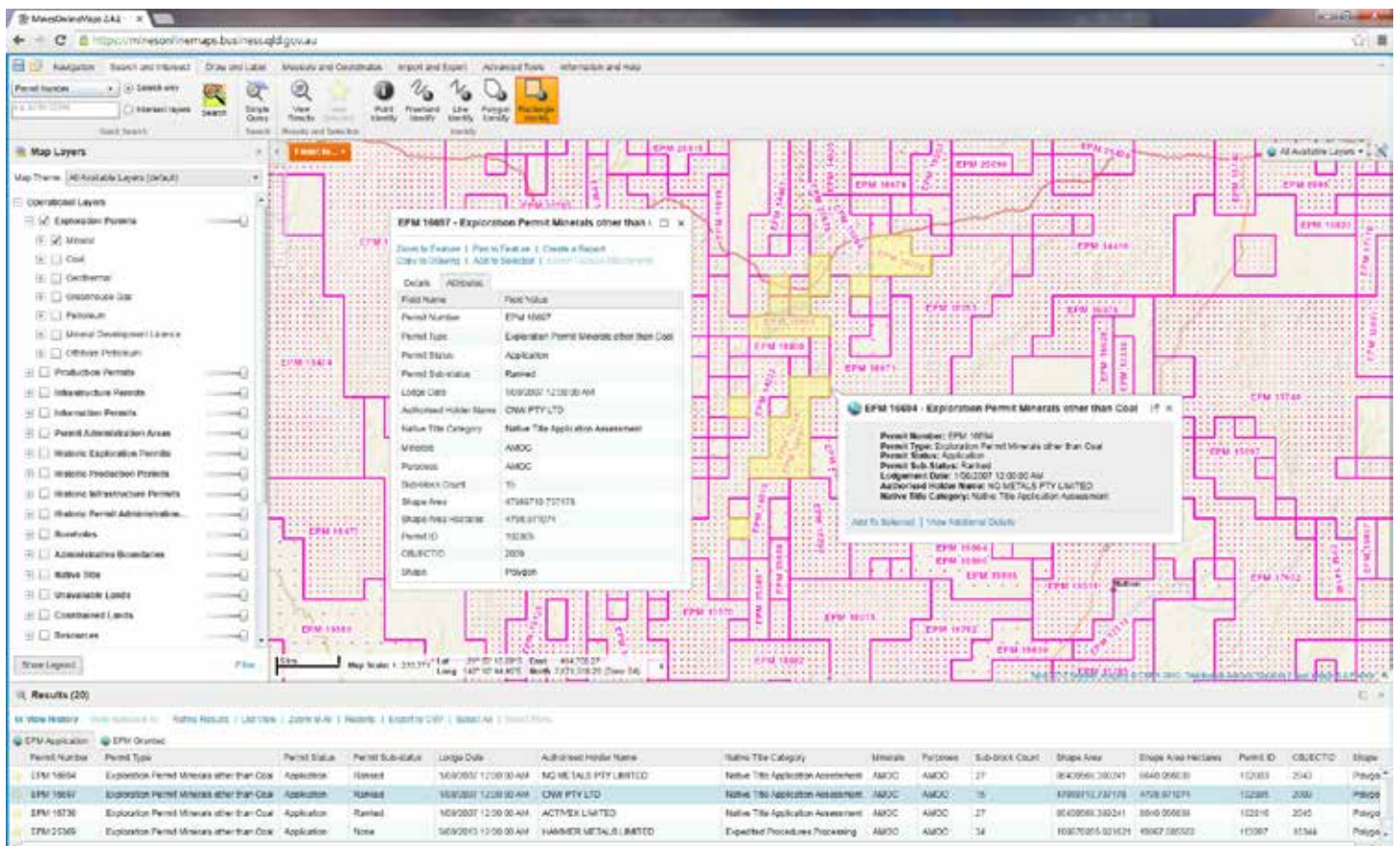


Figure 4: MinesOnlineMaps (MOM) screen image showing mineral exploration and mining tenures in the Mount Isa and Cloncurry region of north west Queensland (August 2014)