NI 43-101 Technical Report on the Tyr Project, New South Wales and the Century South Project, Queensland, Australia

Prepared for: Megawatt Lithium and Battery Metals Corp

Tenements held by Australian Silver Mines Pty Ltd

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MINING EXPLORATION PROJECTS SUPPORT

XPLORE RESOURCES

NI 43-101 Technical Report
Burtorn Silver

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1.0 SUMMARY

This report has been prepared by Xplore Resources Pty Ltd ("Xplore Resources") of Brisbane, Queensland, Australia for Megawatt Lithium and Battery Metals Corp (CSE:MEGA) which has obtained two (2) base metal project areas; the Tyr Project in the New England District of northern New South Wales (NSW) and the Century South Project in north-western Queensland (Qld) (Figure 1.1)

Megawatt Lithium and Battery Metals Corp engaged Xplore Resources to validate all the data provided by the vendor of the two (2) project areas as well as thoroughly interrogate all available open file, government and private exploration and research data relevant to each project area.

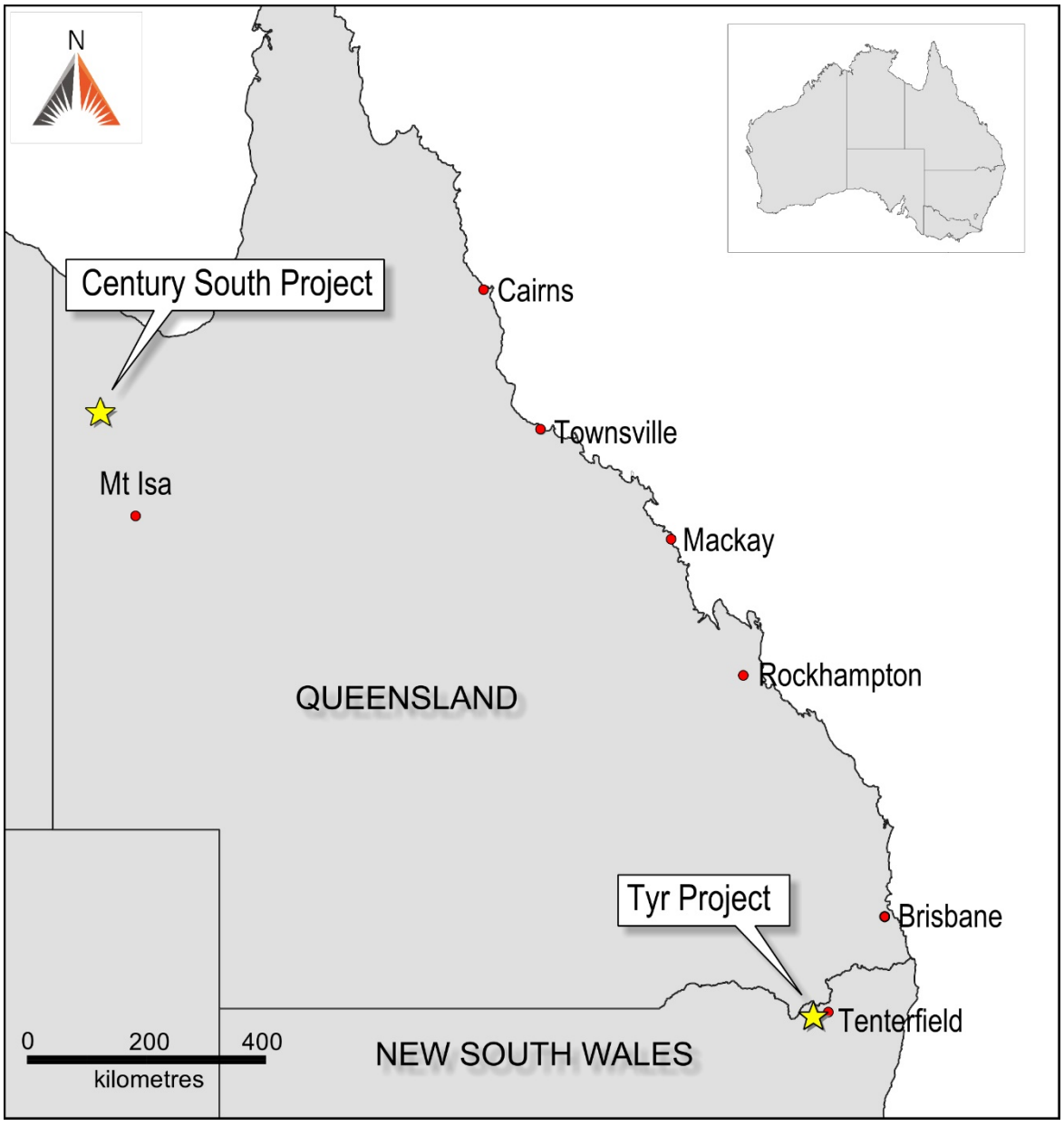


Figure 1.1 Location of Tyr and Century South Projects, Eastern Australia

The New England District of Northern New South Wales has a total area of around 99,100km^2 and has population of approximately 250,000 and is well known for its great diversity of mineral deposits ranging from large coal deposits in the Werris Creek to Boggabri area to metallics and gemstones on the tablelands. Silver, antimony, coal, gold, sapphires and tin have been the most important economic commodities mined in the New England region.

Cattle and sheep are the predominant types of livestock produced in the New England area and they have been produced since their importation during the earliest days of European settlement. The region produces some of Australia's best fine wool and beef cattle.

The North West Queensland Region has a total area of around 310,000km^2 with an estimated population of around 30,000.

The North West Minerals Province is one of the world's most significant base and precious metals producers, while a thriving beef industry is a strong economic stimulator. The north west region is a popular destination for tourists where they can explore world class fossil sites, cultural heritage sites and paddle down the tranquil and picturesque Lawn Hill Gorge.

The Tyr project (EL8728) is located about 20km south-west of Tenterfield (Figure 1.1 on page 7) and accessible via sealed road from Tenterfield. The tenement covers 100 units for an area of 299km^2 is located on the map sheets of Grafton in 1:250,000 and Clive in 1:100,000 scale.

The tenement was granted to NEW ZINC RESOURCES PTY LTD effective 29th of March 2018 as a zinc and polymetallic prospective tenure.

The Century South tenement is located approximately 204km NW of the town of Mount Isa, 122km NE of Camooweal and 61km SW of Gregory.

New Zinc Resources applied for an Exploration Permit for Minerals (EPM26713) consisting of 99 sub-blocks on 23rd November 2017 and granted as EPM26713 (99 sub-blocks) on 25th October 2018.

1.1 GEOLOGY

1.1.1 TYR PROJECT GEOLOGY

The Tyr Project is located in the New England Orogen or New England Fold Belt (NEFB) (Figure 1.2 on page 9).

The Orogen comprises of Devonian to Permian complexes. Devonian island arc assemblages accreted to the Australian continent late in the Devonian. This was followed by repeated cycles of westward subduction and extension producing mineralised granites and volcanics from the Middle Devonian to Early Cretaceous. The New England Orogen is a significant mineral province in Eastern Australia with potential for large gold/silver systems.

Major deposits include gold bonanzas at Hillgrove (NSW). New England Orogen deposit styles include mesothermal and epithermal gold, VMS, epithermal silver, and lateritic nickel. The Orogen also offers porphyry copper and gold opportunities. Other economically important commodities include tin, sapphires, diamonds, molybdenum, tungsten, magnesite, cobalt and antimony (DPI, 2019).

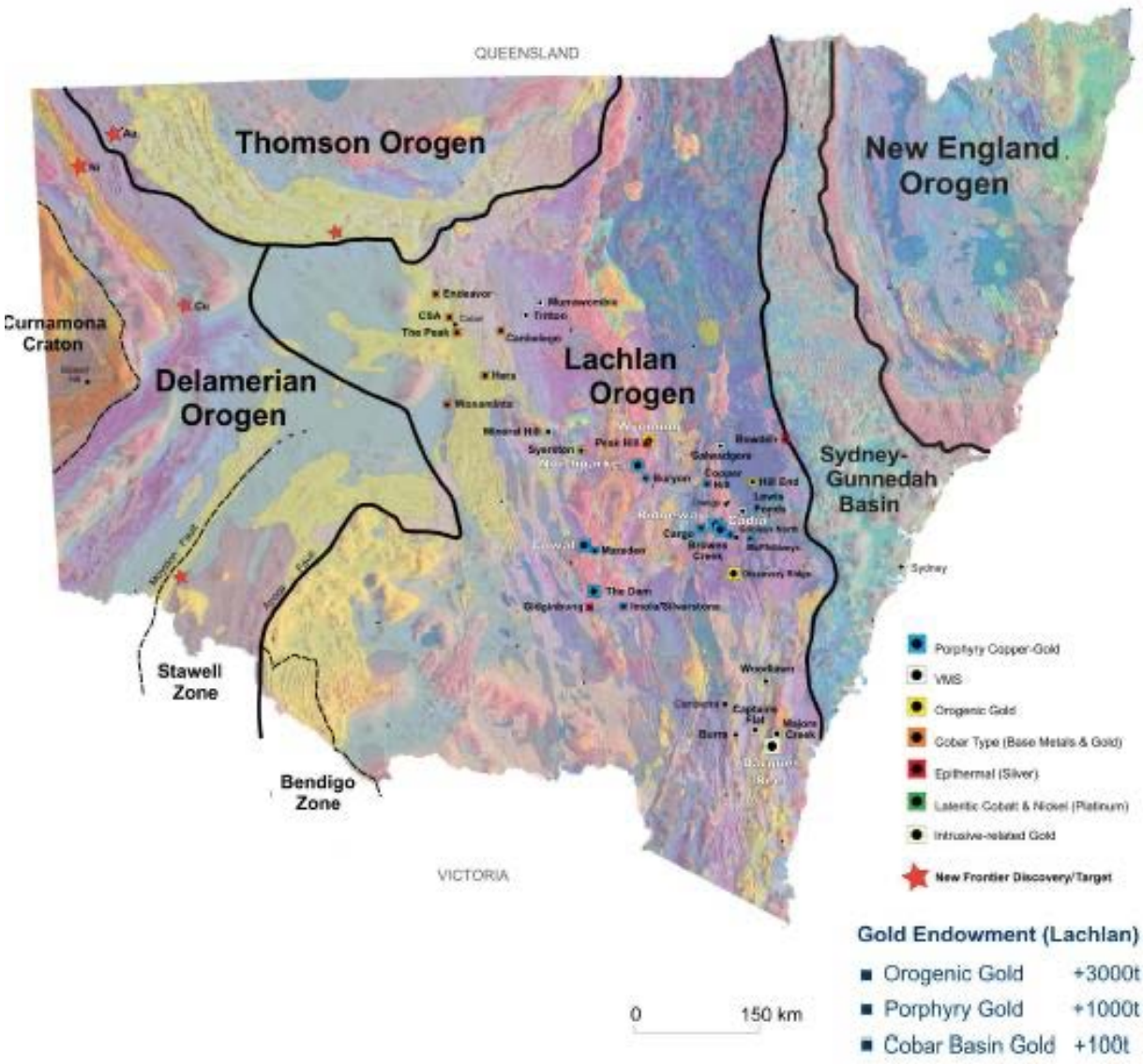


Figure 1.2 Location of New England Orogen, Northern NSW, Australia

The Tyr Project area is located over three (3) main Sub-provinces of New England Orogen;

- Central Block, which is mainly comprised by conglomerate, sandstone and siltstone. Including some felsic igneous rocks and quartzite units;
- Tablelands Complex, which mainly comprises granite and mineralised related material; and
- New England Orogen Granites (dominant lithology of porphyry and basalt).

The Tyr tenement hosts a large number of mineral occurrences according to evidence from historical mines within the exploration licence area. These activities were mostly focused on silver, lead, zinc, arsenic and tin.

The tenement hosts two (2) groups of mineralised area. The first is the Clive Group, located in the south-east portion of the tenement and includes a group of 46 base metal and polymetallic

occurrences. The second is the Mole River group, including 16 mineral occurrences (Figure 1.3 on page 10) Only four (4) of these are polymetallic-base metal occurrences (Henley & et al, 2001).

The Tyr exploration area contains a significant amount of silver occurrences which strikes north-west. Clive group contains major occurrences such as the Ecuador deposit consisting of 4710ppm silver and Torny Mine consisting of 1420ppm silver (Figure 1.3)

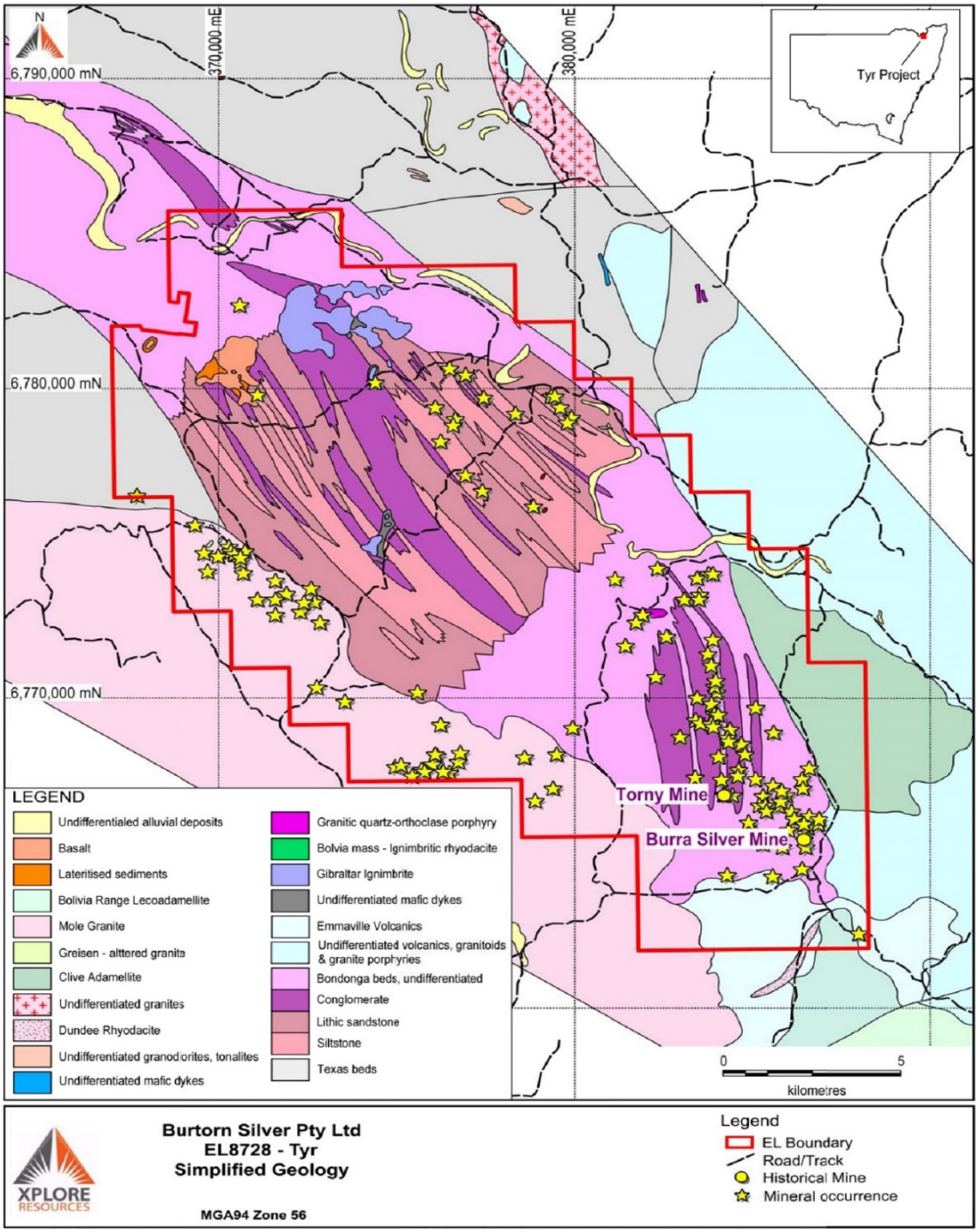


Figure 1.3 Simplified Geology of the Tyr Project Area, Northern NSW

CENTURY SOUTH PROJECT GEOLOGY

The Mount Isa Inlier is part of the North Australian Craton in north-western Queensland in which the Lawn Hill Platform makes up part of the northwest section of the Inlier. To its west lies the Century Domain which includes the Century deposit and Grevillea Prospect (Figure 1.4).

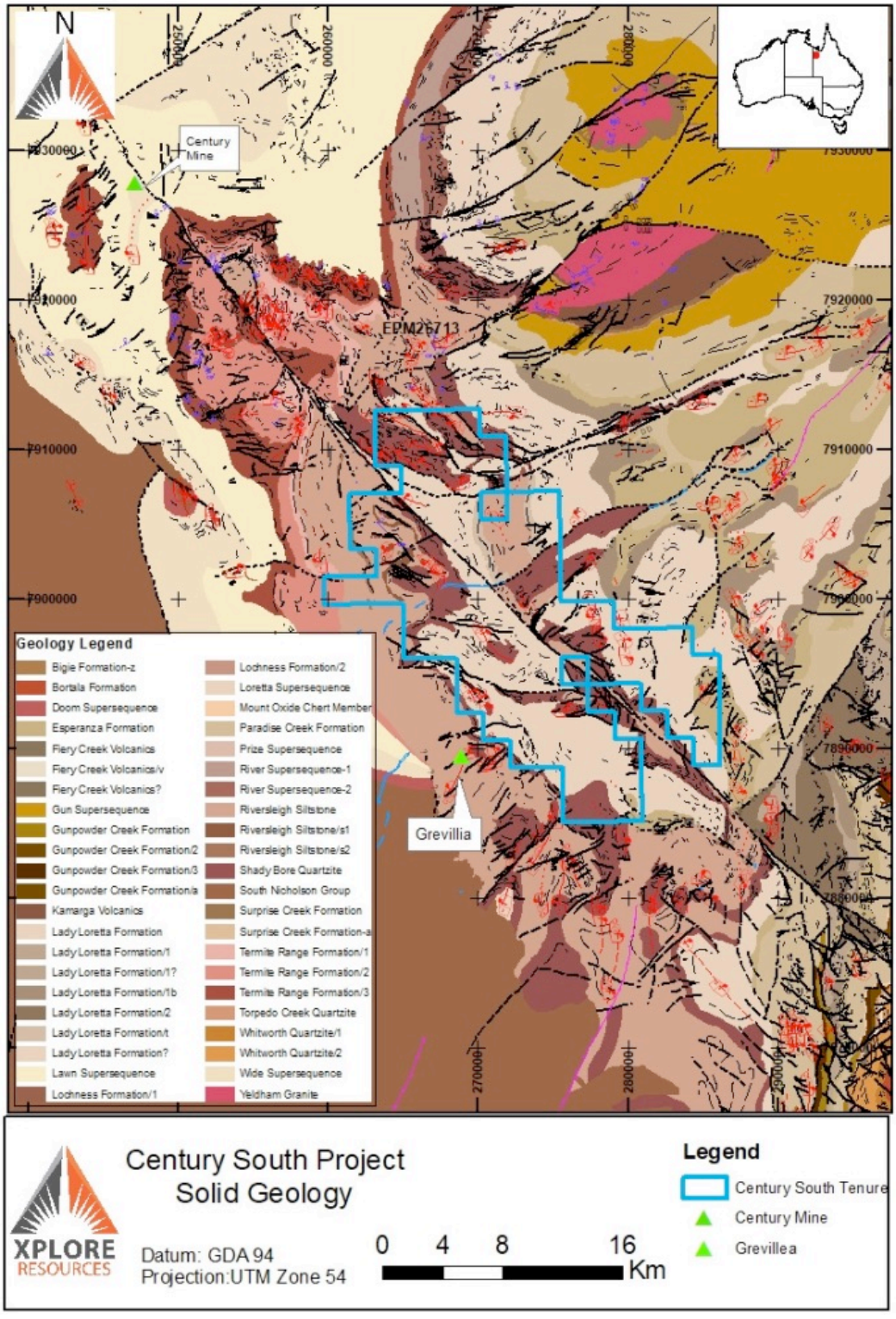


Figure 1.4 Solid Geology of the Century South Project Area

Both deposits are hosted within the middle to upper sequences of the Isa Superbasin (Figure 1.5). Intra-plate tectonic events and consequent stresses within the Isa Superbasin, have attributed to the migration of metal-bearing fluids into its constituent sub-basins.

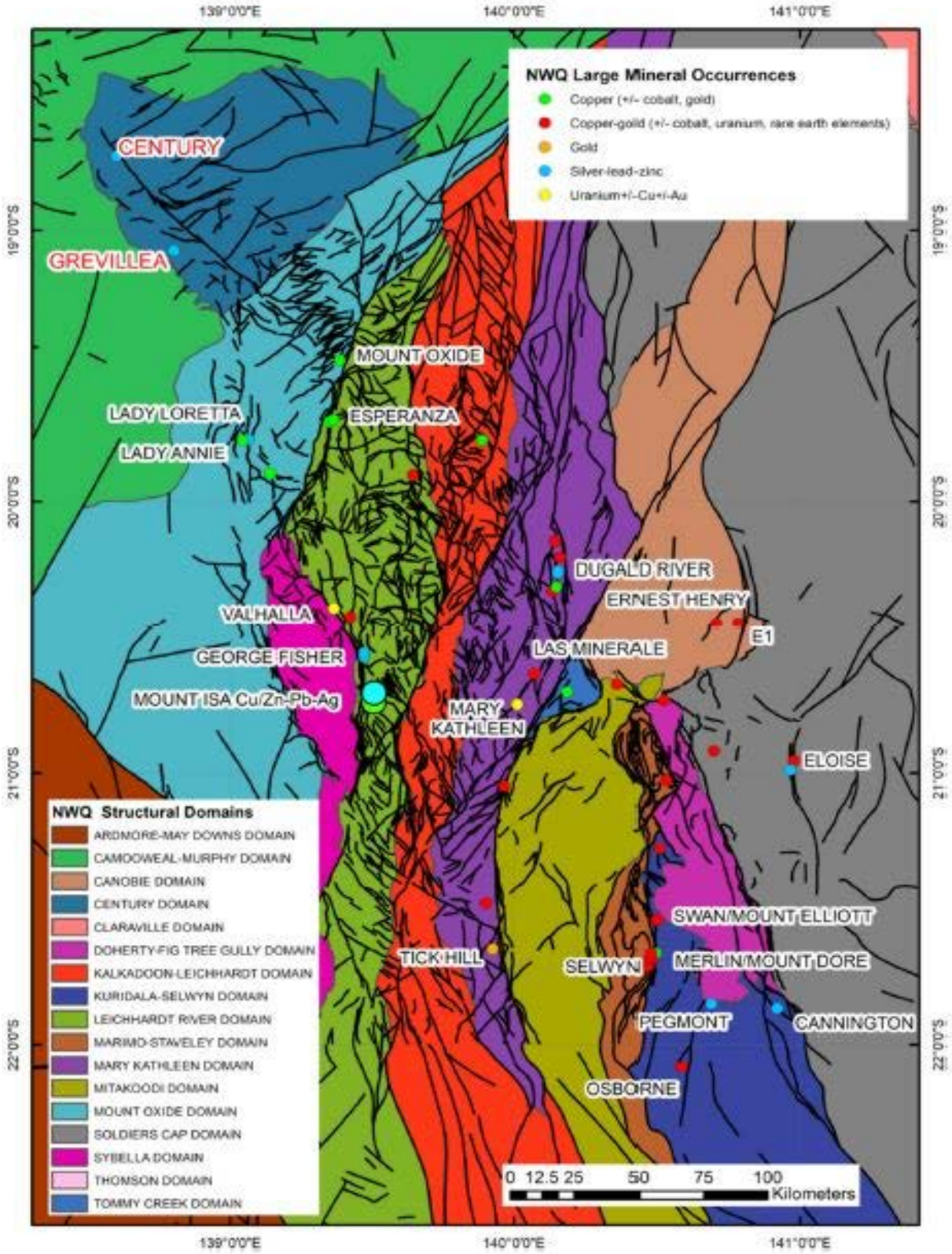


Figure 1.5 Main Mineral Occurrences, North West Queensland

The Grevillea Prospect located to the south of Century Mine and immediately to the west of Century South (western side of Termite Range Fault), has mineralisation bearing host stratigraphy in the Riversleigh Siltstone, with the Century deposit in the Lawn Hill Formation. These units are part of the McNamara Group, which also hosts the Lady Loretta deposit. These are the equivalents to the Mount Isa Group that hosts the Mount Isa and George Fisher Zn-Pb-Ag deposits approximately 200km to the south-east.

Both the Century and Grevillea deposits are in close proximity to the major northwest-trending Termite Range Fault, with the Century deposit located on the fault and the Grevillea deposit approximately 8km southwest of the fault. The closest intrusive units that exist in the Century domain vicinity are the older Paleoproterozoic Yeldham Granites (1796 +/- 3Ma). These intrusive rocks are approximately 30km east of the Century deposit.

Metamorphism in the Lawn Hill Platform region is confined to three main thermal events at 1500Ma, 1440-1400Ma and 1250-1150Ma. The event dating to 1500Ma, is a late Isan Orogeny recorded only in the south that may reflect exhumation of a provenance region. The 1440-1300Ma event is related to fault reactivation and consequent thermal fluid pulse at ~1440-1400Ma, with subsequent enhanced cooling. The youngest thermal/fluid flow event at 1250-1150Ma is recorded mainly in the northeast and may be related to the assembly of the Neoproterozoic supercontinent of Rodinia (Valenta, 2018)

1.2 CONCLUSIONS

1.2.1 TYR PROJECT CONCLUSIONS

The Tyr project area is located within the southern New England Fold Belt and has over 145 mineral occurrences have been recorded in the tenement. Those occurrences are hosted by the Early Permian Bondonga beds form two (2) main clusters; the Mole River group in the northern part of the tenement and the Clive group in the southern part.

At these two (2) areas, the mineral occurrences are structurally controlled and are related to the emplacement of the Mole Granite, which is classifies as a I-type Sn-W granite. Metal zonation around the granite is well developed, with proximal Sn-W, grading outwards from the intrusion to distal polymetallic Cu-Pb-Zn-Ag mineralisation. Evidence suggests that the Tyr Project Area is underexplored and there is significant potential for structurally controlled silver rich polymetallic vein/lode systems.

Obvious areas that warrant further exploration include the areas containing the Mole River and Clive group of mineral occurrences. Both of these areas are strongly mineralised and detailed field mapping and surface geochemical sampling suck as rock chip and soil sampling, followed by ground geophysical surveys including IP or even sub-audio magnetics (SAM) and drilling is recommended.

Surface geochemical surveys within the Tyr project area have been completed by most of the past explorers. The geochemical surveys have included rock chip/grab, stream sediment, panned concentrate, soil sampling programs and high silver grades have been returned.

Modern exploration techniques are proposed to fully exploit the potential of the tenement, particularly the mineralised clusters of historical silver-zinc-lead mines. Significant silver

assays from adits, shaft, and other workings, significant silver assays from surface samples, and significant assays from drilling samples have all been recorded.

The mineral occurrences are structurally controlled and are associated with joints, faults, shear zones and lithological boundaries that have controlled emplacement of mineralising fluids.

Despite the large number of mineral occurrences and historical workings and significant silver assays up to 4,710g/t, there has been little drilling in the Tyr Project area. While past exploration focused almost exclusively on the historical working, there was little emphasis on testing the strike potential of the structures and/or lithologies that control mineralisation.

1.2.2 CENTURY SOUTH PROJECT CONCLUSIONS

Data interrogation for the compilation of this report has made available more historical exploration data pertaining to Century South than was initially thought.

The main data source has been the Mt Isa West 2016 database package which is one (1) of the five (5) databases that make up the Queensland Exploration Geochemistry and Drill hole Database (Queensland Government(c), 2020).The database is a comprehensive record of information extracted from open file company reports archived in the Geological Survey of Queensland's("GSQ") Open Data Portal.

All surface geochemistry presented in this report is a collection of many different sampling programs and as such has not been levelled for differences in sampling medium, size fraction and geochemical analysis.

The Grevillea gossan was the subject of an Honours Thesis by Hann (1999), who found that Tl, Pb, Si, and Fe are surface indicators of mineralisation at the Grevillea deposit. Hann (1999) found there were two (2) types of gossans present overlying the massive pyrite zone: the jarositic limonites and the hematite limonites. This contrasts with the Century deposit where the gossan lacks iron oxides and is dominated by barite. This needs to be kept in mind when conducting field work in the region. There are untested (drilling) surface geochemical anomalies to review.

Generally, the Century South tenement has been sparsely sampled considering its proximity to the major Zn-Pb massive sulphide deposit of Century Mine. Crucially, the tenement covers land on the exact same major fault strike as the mine. The major fault complex of the Termite Range Fault crosscuts the centre of the tenement NW-SE.

This faulted area would be the likely source of mineralisation across the tenement and should be explored and further defined. These constituents conform to a genetic model alluding to a potential deposit, indicative of other massive sulphide deposits found around the world.

Enough data from stream sediment, rock chip and soil assays, suggest that elevated levels of zinc and lead do exist within the tenement area. Recent airborne EM surveys and subsequent exploration drilling programs conducted by peer companies (such as Red Metal Limited) targeting the mineralised bearing unit of the Riversleigh Siltstone Formation have yielded

promising but ultimately uneconomical levels of Pb and Zn. However, the results have been auspicious enough to ramp up exploration in the area immediately to the west of Century South.

A suggested exploration regime of starting at highlighted areas of magnetic anomalies with elevated stream sediments, may allow more targeted sampling. There are several outcrops visible from satellite imagery that could be easily inspected. Identifying boundaries this way may be a cost-effective way of defining lithologies. This may be of benefit as some research suggests; particularly at Grevillea, that the mineralisation in the area is stratabound.

The thickness of the regolith is substantial in the southern areas, adjacent to Grevillea, west of Century South. The regolith cover overlaying the mineralisation bearing units can present multiple obstacles. Deeper penetrating EM methods such as Magneto-Telluric (MT) can be used but at a greater cost. Ultimately, this factor may be unavoidable as exploration progresses deeper into the bedrock. Therefore, targeting the more oxidised gossans and obvious outcrops would be the quickest way to gain preliminary knowledge of the likelihood of mineralisation in the area.

1.3 RECOMMENDATIONS

1.3.1 TYR PROJECT RECOMMENDATIONS

Further work is recommended including plotting of all surface geochemistry data based on sample type and filed mapping and sampling to confirm historical results. Obvious areas that warrant further exploration include the Mole River and Clive group of mineral occurrences. Both areas are highly mineralised and field mapping and surface sampling is required.

Also recommended is a trial ground magnetometer survey to be run over known mineralised structures as there are several reports that sulphide mineralisation from some historical mines in the area contained pyrrhotite, a magnetic mineral (McClatchie, 2005) (McClatchie, 2006). In addition, the magnetometer survey may detect zones of magnetite destruction caused by hydrothermal alteration associated with the polymetallic mineralisation.

Historical fieldwork identified dykes and potentially mineralised zones extending from the existing shafts, these warrant further investigation. Additionally, there are other dykes in the area, which have not been investigated sufficiently in terms of the potential to contain mineralisation.

The key recommendations regarding areas of focus in the high-level project strategy are;

1. A database should be constructed/updated to host all boreholes from peer deposits, with as much data as reasonably possible from all government and commercial sources;
2. A thorough review of earlier ASX announcements with cataloguing of all notable results from previous tenement holders should be added to the database, as these may not be publicly available from other sources;
3. Further geological review to revisit the aforementioned gaps in the data and study of historic data including; geological units, surface (soil and rock chip) geochemistry and the contouring of any drilling and surface geochemistry samples to determine field targets;

4. A physical data review pertaining to surface sampling results from surrounding tenements;
5. Commence landholder negotiations and formalise land access agreements;
6. Ongoing monitoring of markets, commodity prices and peers;
7. Plan and undertake Low Impact Exploration initial field work including;
    a. Field logging;
    b. Geological mapping of previous drilling areas;
    c. Surface geochemical sampling including areas where historical mines exist;
    d. Surface geochemical sampling where historically high grades of surface sampling exist; and
    e. Geophysical surveys and other suitable activities to be determined.
8. Inspection of any available drill cores held in NSW core storage facilities;
9. High level reviews of any geophysical surveys, ground or air based and associated imagery as a guide to delineating more defined target areas; and
10. The planning and execution of drill target generation/identification and subsequent exploration drilling program should be completed, with the drillholes sampled and analysed to appropriate depths as to adequately understand the geology, geochemistry and stratigraphy of the area.

1.3.2 CENTURY SOUTH PROJECT RECOMMENDATIONS

There is a large quantity of historical data covering the Century South project area and surrounds and a detailed review of the data is recommended and should include the following:

- Levelling of the geochemical data set utilising IOGAS software or similar;
- Construct a database of previous drilling and geochemistry to enable meaningful data: interrogation in particular the Mount Isa West Data Package, and data released after the compilation of the Mount Isa West Data Package;
- Understand structural controls on mineralisation in the region and apply to the Century South tenure;
- Geophysical review the available data including EM, Aster and Hymap data in house or external; and
- Review the EM highs located within the Century South tenure (EPM26713).

Other key recommendations for the Century South tenure area are;

1. A database should be constructed to host all boreholes from within tenure and peer deposits, with as much data encoded into the database from a variety of sources (ASX reports, core shed data, open file/publicly available reports etc);
2. A thorough review of earlier ASX announcements with cataloguing of all notable results from previous tenement holders should be added to the database, as these may not be publicly available from other sources;
3. Ongoing monitoring of markets, commodity prices and peers;
4. Further geological review and study of historic data including surface (stream sediment, soil and rock chip) geochemistry and the contouring of any surface geochemistry samples;
5. Inspection of drill core from “Lawn Hill DDH 83-5” stored at Queensland’s Exploration Data Centre core storage facility. Reviewed for lithology, key mineralisation target units, and laboratory analysis should be completed where possible, also examining handheld XRF analysis results if available;
6. All publicly available geophysical data (open file and for purchase) over the tenure should be reviewed to identify any exploration targets/focus areas within the tenure as this desktop

study has primarily focused on zinc, however other significant mineralisation (i.e., Pb, Cu, Ag) has been noted within and near tenure;
7. All geophysical data should be reviewed and interpreted by a specialist consultant, familiar with the mineralisation style and local area;
8. Once the geophysical data should be reviewed and interpreted, further geophysical surveys should be considered to provide additional target information on the subsurface;
9. Plan and undertake Low Impact Exploration initial field work including field logging, geological mapping of previous drilling area (drillhole Lawn Hill DDH 83-5) of geological structures along strike of main fault complex, outcrop and soil sampling, geophysical surveys and other suitable activities to be determined;
10. The planning and execution of an exploration drilling program should be completed, with the drillholes planned to depth of termination in the bedrock of the ultramafic units (Kamarga Volcanics), to adequately correlate the stratigraphy of the region;
11. Drilling regime should focus in areas around mapped parasitic (third order) faults relative to main Termite Range Fault as the PDS has previously identified these areas to have higher probability of yielding elevated base metal results; and
12. In depth mapping of surface and drilling sampling results based on mineralisation targets.

2.0 INTRODUCTION

Burtorn Silver Pty Ltd ("Burtorn Silver" holds two (2) tenements, one in (1) New South Wales; Tyr (EL8728) and one (1) tenement in Queensland; Century South (EPM26713).

This Technical Report has been prepared by Xplore Resource on behalf of Burtorn Silver.

The Tyr project, EL8728, is located in the north-northeast of New South Wales with the nearest town being Tenterfield, approximately 40km north-east of the tenement and the small town of Deepwater situated about 30km south of the tenement (Figure 2.1 on page 18).

The tenement covers 100 units over an area of 299km^2 and was granted effective on the 29th of March 2018 for a period of five (5) years as a zinc and polymetallic prospective tenure. The Tyr tenement hosts a large number of known mineral occurrences and historical mining for commodities; silver, tin, arsenic, lead, zinc and tungsten.

Century South is located approximately 204km north west from Mount Isa and 274km south west of the port town of Karumba in the far north-west of Queensland as shown in Figure 1.1 Location of Tyr and Century South Projects, Eastern Australia . The tenement consists of 99 sub-blocks over an area of 250 km^2 and was granted as Exploration Permit for Minerals (EPM2671) on the 25th of October 2018 for a period of five (5) years.

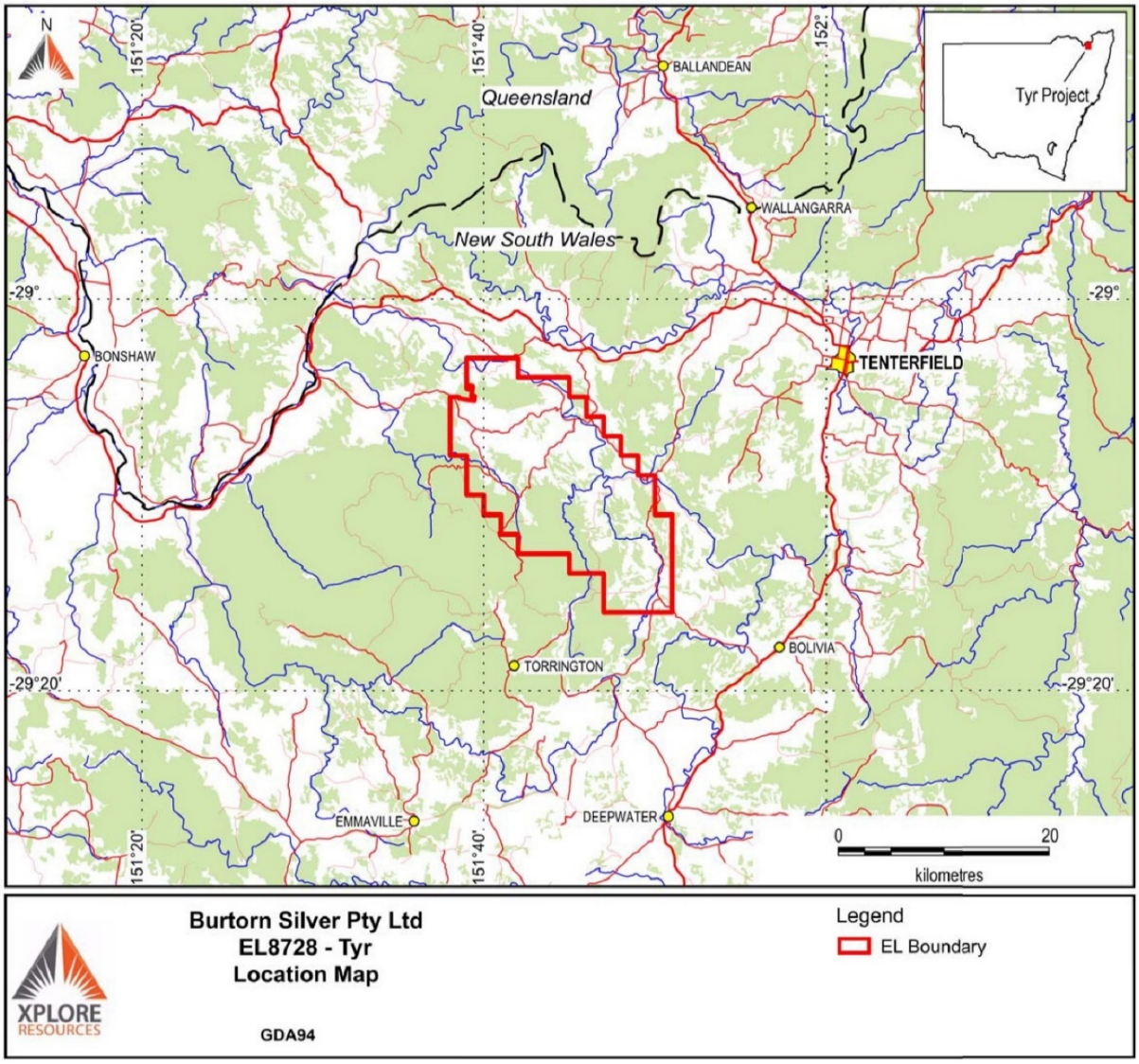


Figure 2.1 Location of Tyr Project, Northern NSW, Australia

The Century South Project (EPM26713) has potential to be highly prospective for zinc-lead-silver, which may occur as primary (sulphide) mineralisation within stratabound formations in shale and siltstone units, juxtaposed against parasitic (third order) faults. The available data suggests that the tenements may also be prospective for other base metals, including lead, copper and silver (Figure 2.2).

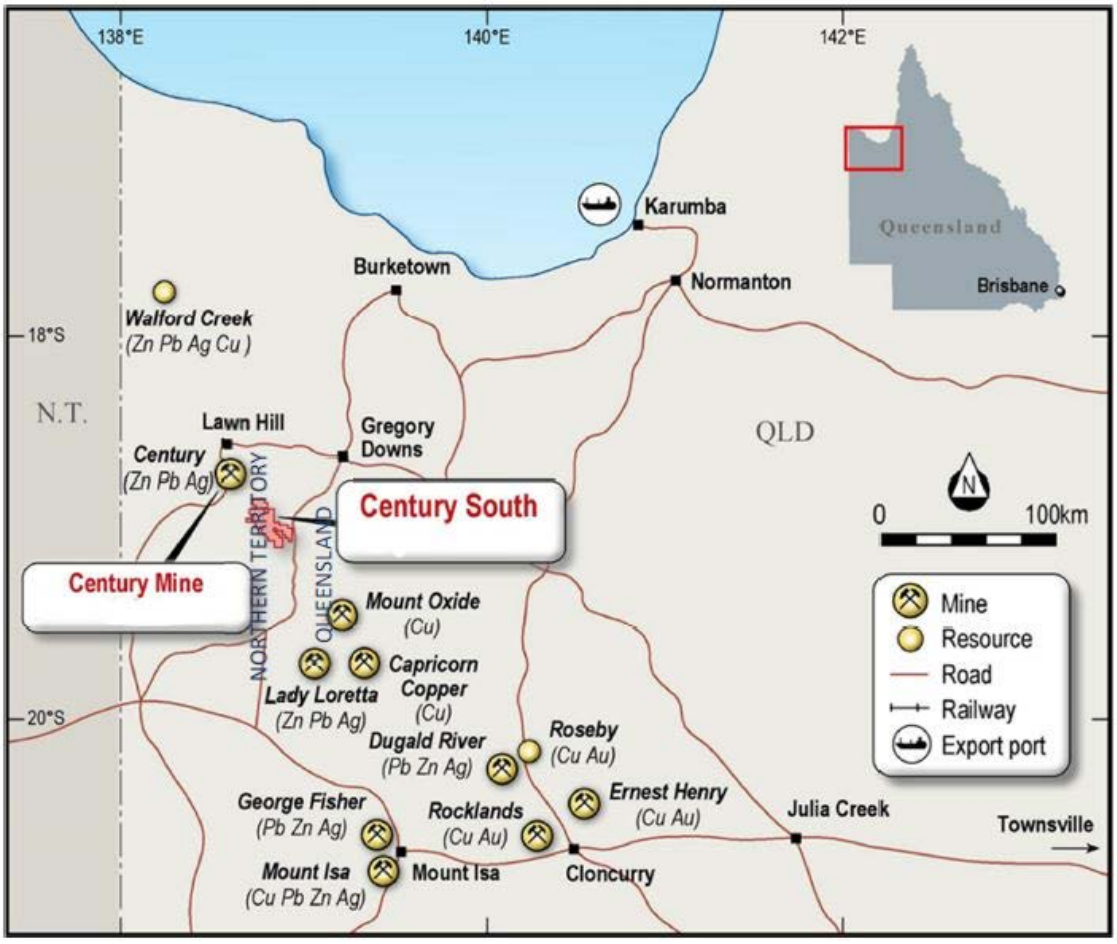


Figure 2.2 Location of Century South Project, North West Queensland, Australia

3.0 RELIANCE ON OTHER EXPERTS

Xplore Resources has completed this report based on the reliance upon data and information provided by New Zinc Resources as well as open file data from the MinView system of New South Wales and the GeoResGlobe system of Queensland as well as publicly available government and private research relevant to each of the project areas. All sources of data and information were validated in as much detail as possible.

The primary author of this report, Mr Matthew Stephens, spent around 10 days on site reviewing the Tyr Project in northern New South Wales while Mr Phillip Todd, a contract exploration geologist, spent around 4 days on site at the Century South Project.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 TYR PROJECT AREA

The Tyr project (EL8728) is located about 40km south-west of Tenterfield and accessable via sealed road from Tenterfield. The tenement covers 100 units over an area of 299km^2 and is located on the mapsheets of Grafton in 1:250,000 and Clive in 1:100,000 scale below (Figure 4.1)

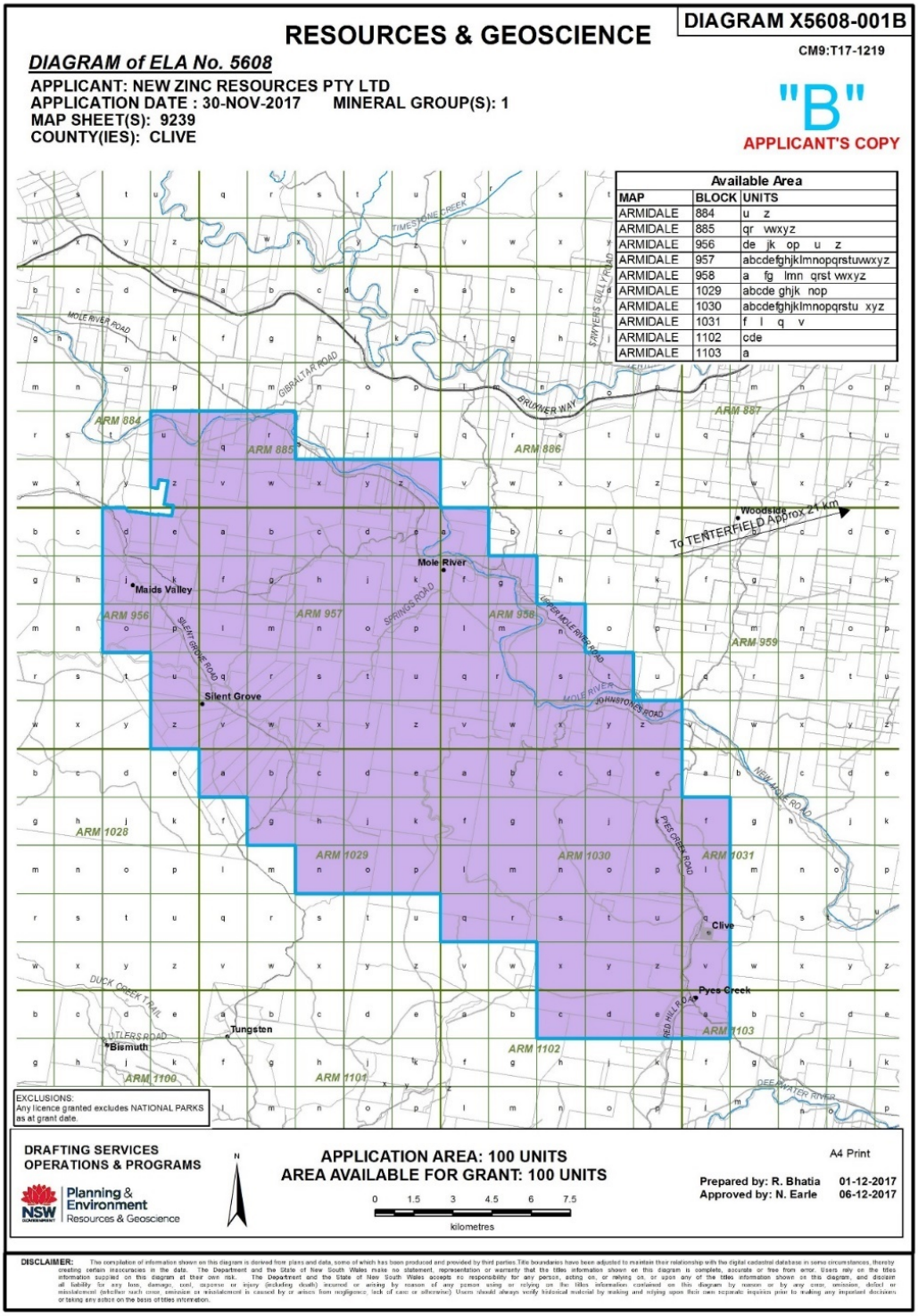


Figure 4.1 Tyr Tenement Particulars

The tenement was granted effective 29th March 2018 for an initial period of five (5) years with renewal options for further tenure as a zinc and polymetallic prospective project.

4.2 CENTURY SOUTH PROJECT AREA

The Century South tenement is located approximately 204km NW of the town of Mount Isa, which has a population of 22,517 (Australian Bureau of Statistics, 2015), 122km NE of Camooweal and 61km SW of Gregory.

Exploration Permit for Minerals (EPM26713), consisting of 99 sub-blocks covering approximately 250km^2 (Figure 4.2) and was granted on the 25th October 2018 for an initial period of five (5) years with renewal options for further tenure. The EPM is for all minerals other than coal, coal seam gas, petroleum or natural gas.

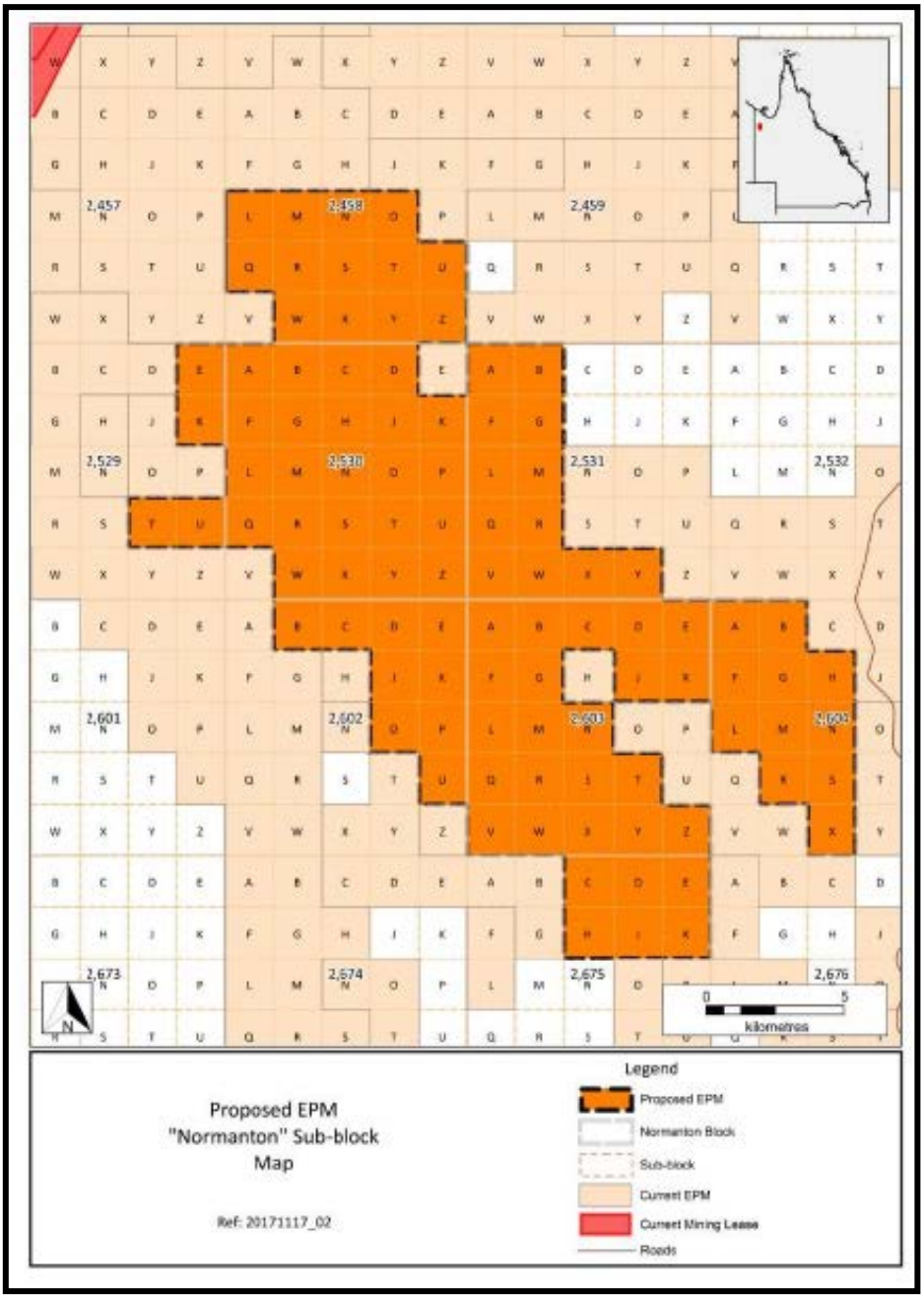


Figure 4.2 Century South Tenement Particulars

The closest regional airport, modern towns/cities (for labour, support services and equipment) is Mount Isa. There is limited accessible infrastructure in the area surrounding the tenement. However, the site is easily accessed via unpaved rural roads which improve their integrity closer to Mount Isa.

There is a proposed, possible future dam site for the upper part of the Gregory River that traverses the tenement which is set out in Restricted Areas RA_28 and RA_404 (Figure 4.3). Any exploration activities within these two (2) areas are subject to stringent conditions prior to and during the course of the exploration activities.

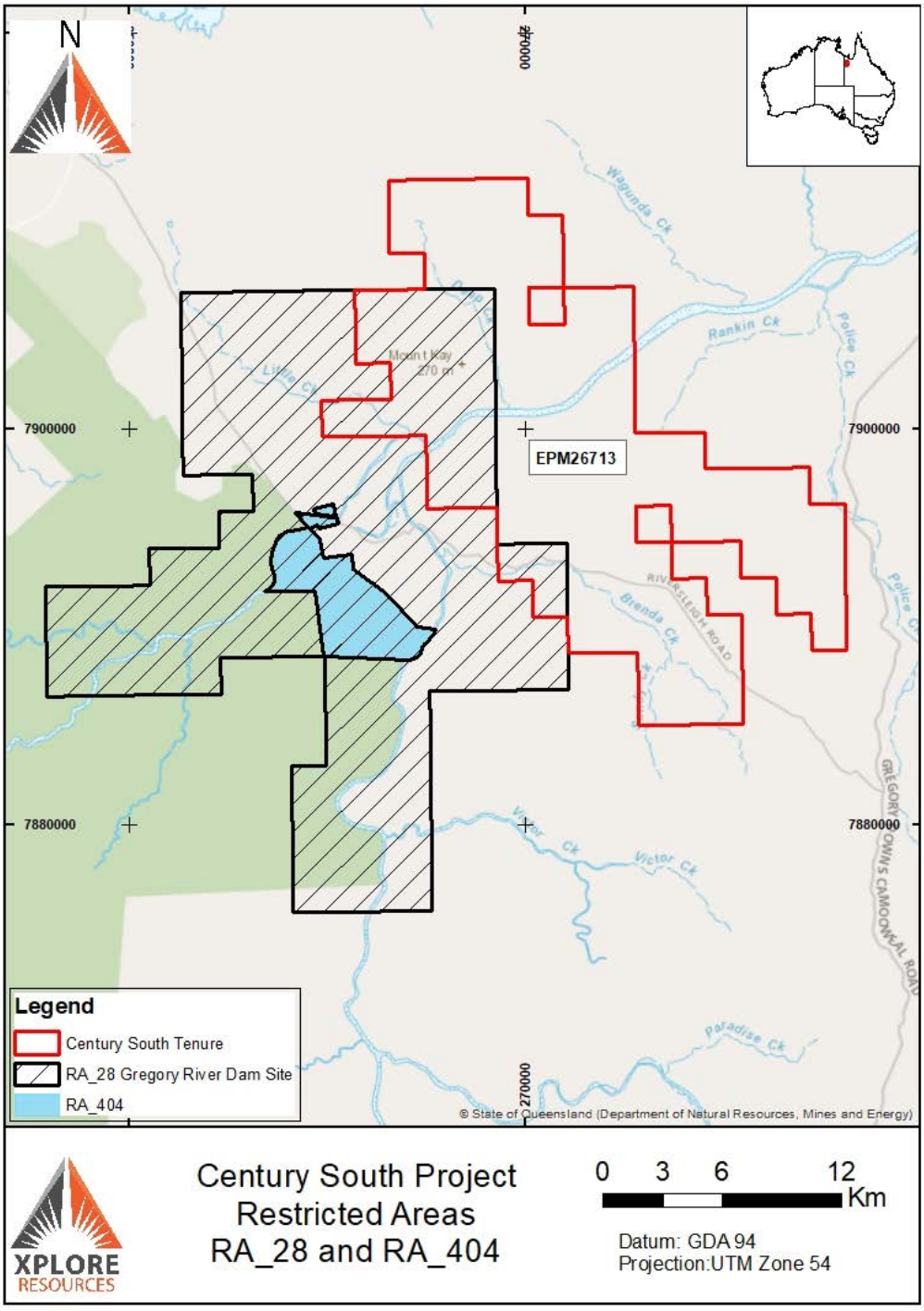


Figure 4.3 Restricted Areas, Proposed Dam sites, Century South Project

In addition to the Restricted Areas, there are a number of Environmentally Sensitive Areas (Category B, refer to Figure 4.4) within the tenement that predominately cover some of the major drainage in the region.

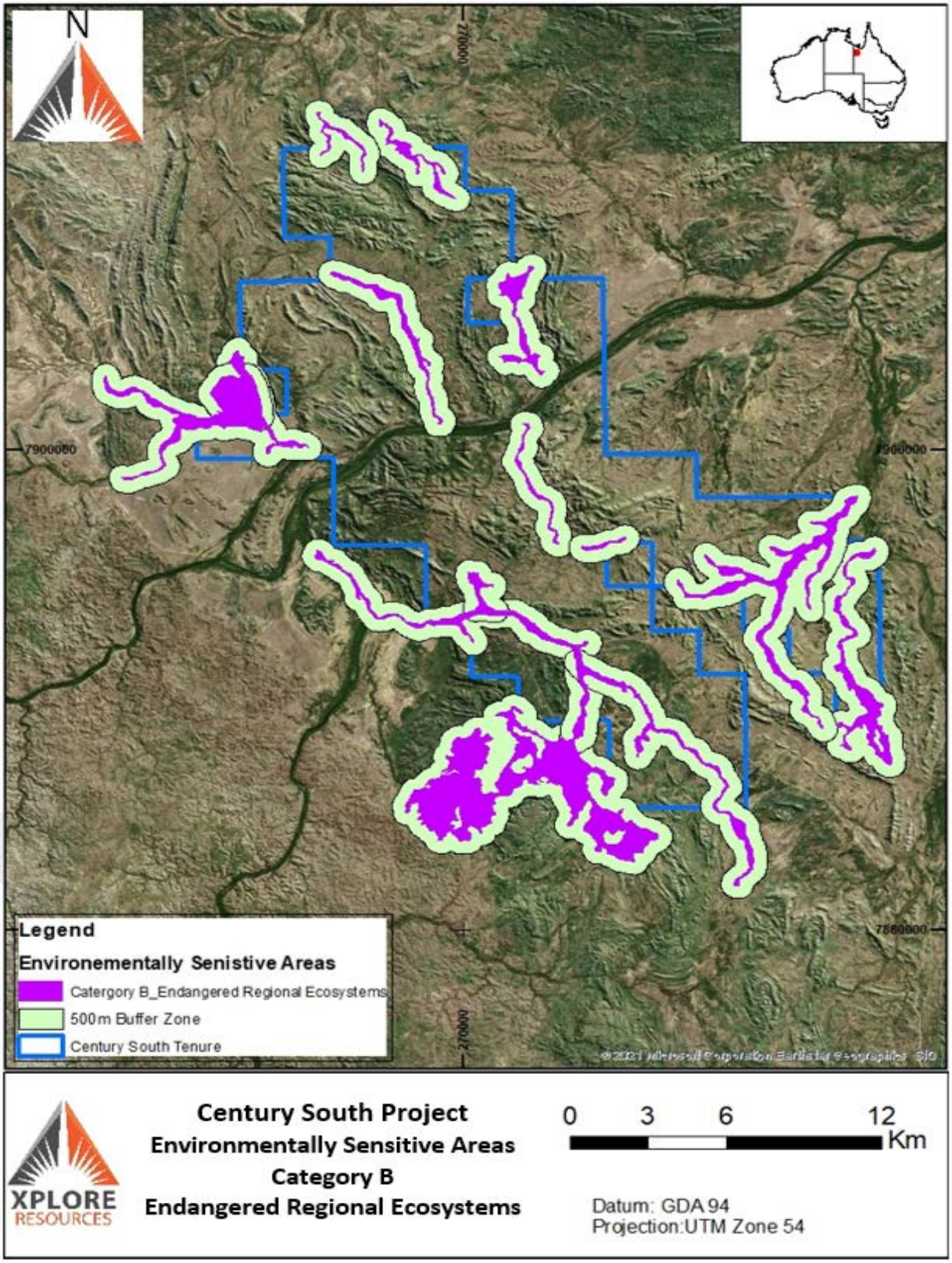


Figure 4.4 Environmentally Sensitive Areas and Buffer Zones, Century South Project

There is also a 500m buffer zone around these environmentally sensitive areas but outside of those the majority of the tenement is not subject to the additional conditions that apply to both the Restricted and Environmentally Sensitive Areas.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, SITE TOPOGRAPHY, ELEVATION AND VEGETATION, INFRASTRUCTURE & PHYSIOGRAPHY

5.1 TYR PROJECT AREA

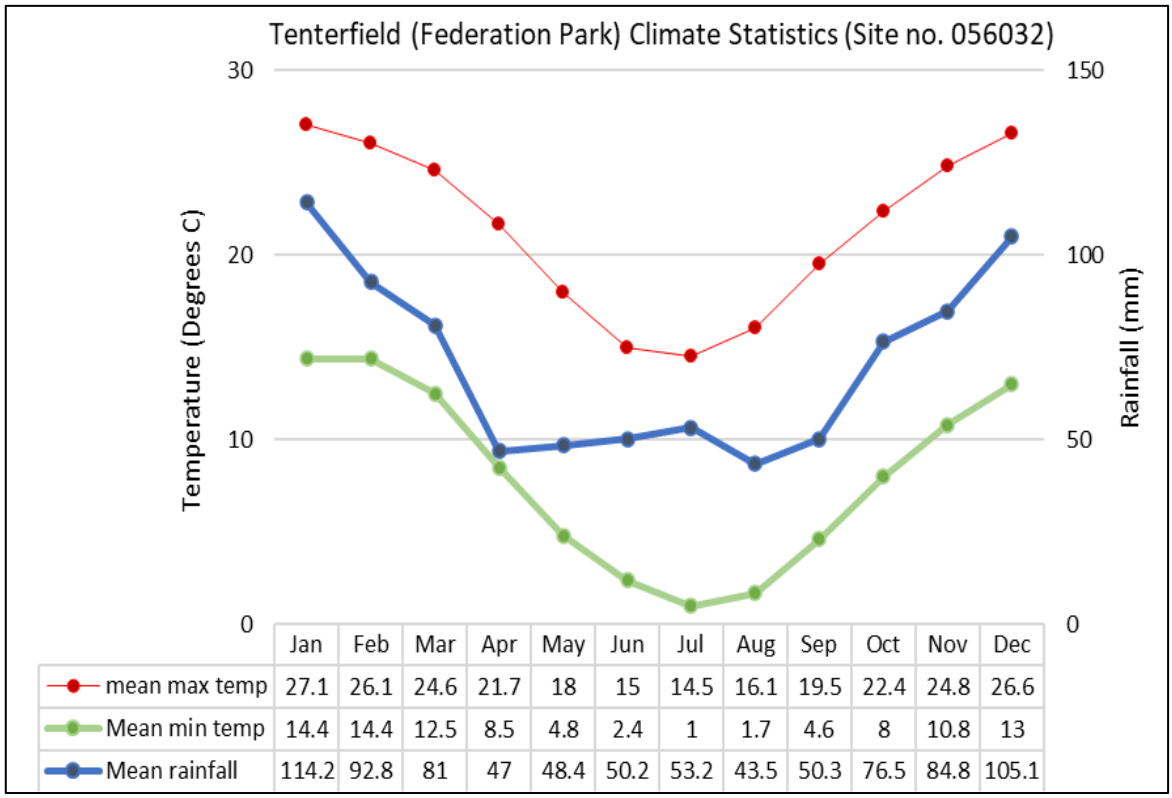
Location and Access

The Tyr project is located approximately 40km south-west of the town of Tenterfield and 500km north of Sydney in New South Wales. Tenterfield has a population of approximately 6,628 people with a median age of 53 (Australian Bureau of Statistics, 2019). The town is located at the intersection of the New England Hwy (north to south) and the Bruxner Hwy (east to west).

The project area is accessible from Tenterfield via the New England Highway as well as the Bruxner Highway. Following the primary access of the Bruxner Highway, Mole River Road then transects the Tyr tenement from the north-east and then connects to the Silent Grove Road at the western area of the tenement.

The Tyr project area is in a temperate climate zone. The weather is described as a moderate dry winter and a warm summer. Rainfall data has been collected from the Tenterfield Federation Park since 1870 and temperature data has been collected since 1907 (Figure 5.1).

The mean rainfall for the area is 844.4mm per year, occurring over 81.1 days. Maximum temperature in the area is 27.1°C in January with a minimum temperature of 1°C in July. The mean maximum temperature is 21.4°C and the mean minimum temperature is 8°C.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
mean max temp	27.1	26.1	24.6	21.7	18	15	14.5	16.1	19.5	22.4	24.8	26.6
Mean min temp	14.4	14.4	12.5	8.5	4.8	2.4	1	1.7	4.6	8	10.8	13
Mean rainfall	114.2	92.8	81	47	48.4	50.2	53.2	43.5	50.3	76.5	84.8	105.1

Figure 5.1 Temperature and rainfall data for Tenterfield Federation (Bureau of Meteorology, 2019)

Topography

The Tyr exploration area is located in Murray-Darling Division (Figure 5.2). Mole River cuts off the tenement from north to south and comes together with Oaky Creek at the centre of the tenure. The project area ranges from approximately 400m to 1020m elevation (Figure 5.3 on page 27). The Tyr tenure has an approximate 620m change in elevation from the northern boundary (lowest) to the south-west boundary (highest) (MinView, 2019a).

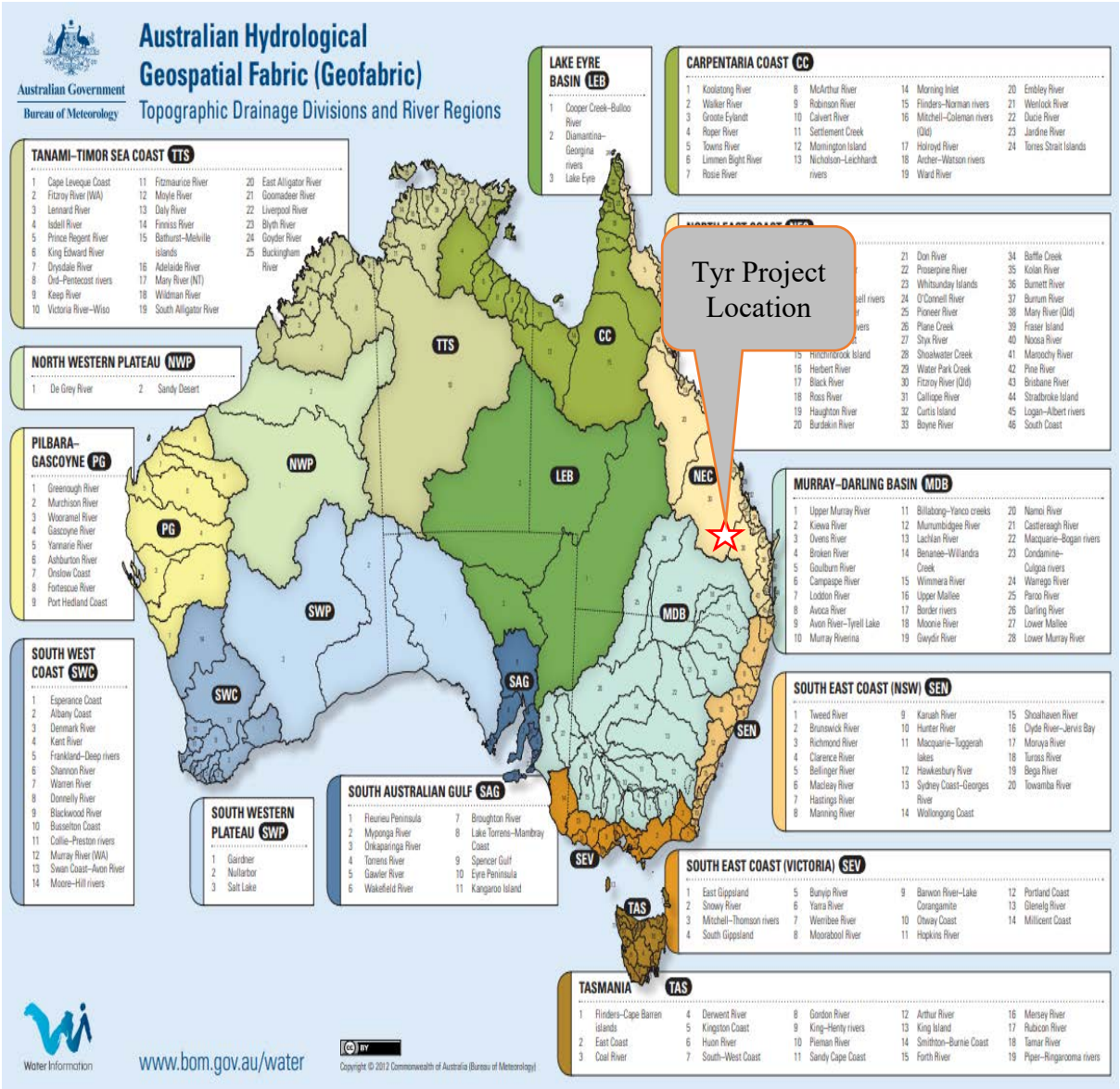


Figure 5.2 Topographic Drainage Division Map with Tyr Location (Australian Bureau of Meteorology, 2020)

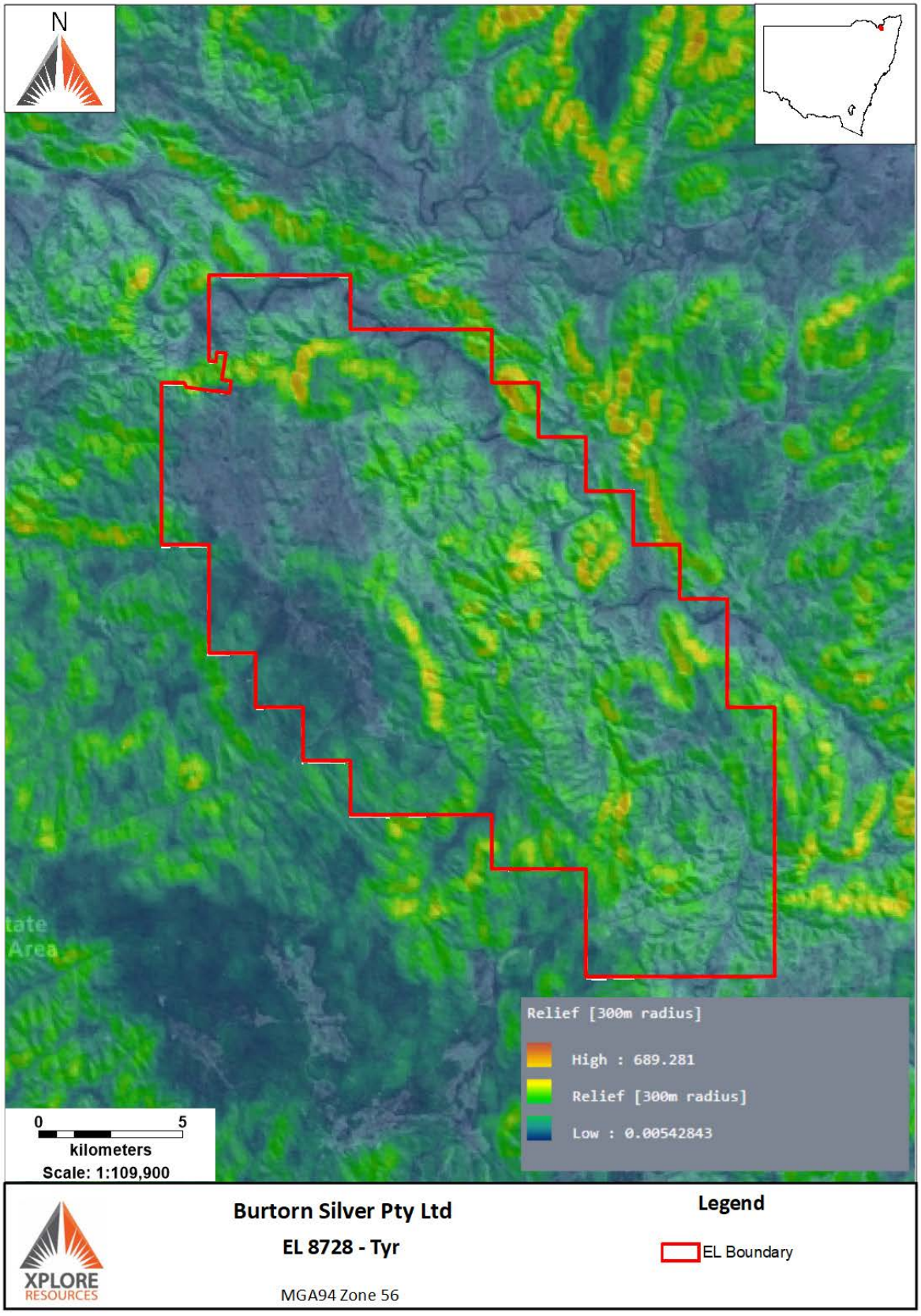


Figure 5.3 Topography of the Tyr Project area (Nationalmap, 2020)

Land Use

The area has been classified primarily as 'grazing native vegetation' and 'dryland cropping' by the Australian Government's Department of Agriculture and Water Resources. The nearest town is approximately 40km away from the tenement and the area is largely unused.

Only a small part in the east portion of the tenement has been classified as 'minimal use area'. There are also 'nature conservation areas' within small segments of the south-west and north-west of the tenure (Figure 5.4).

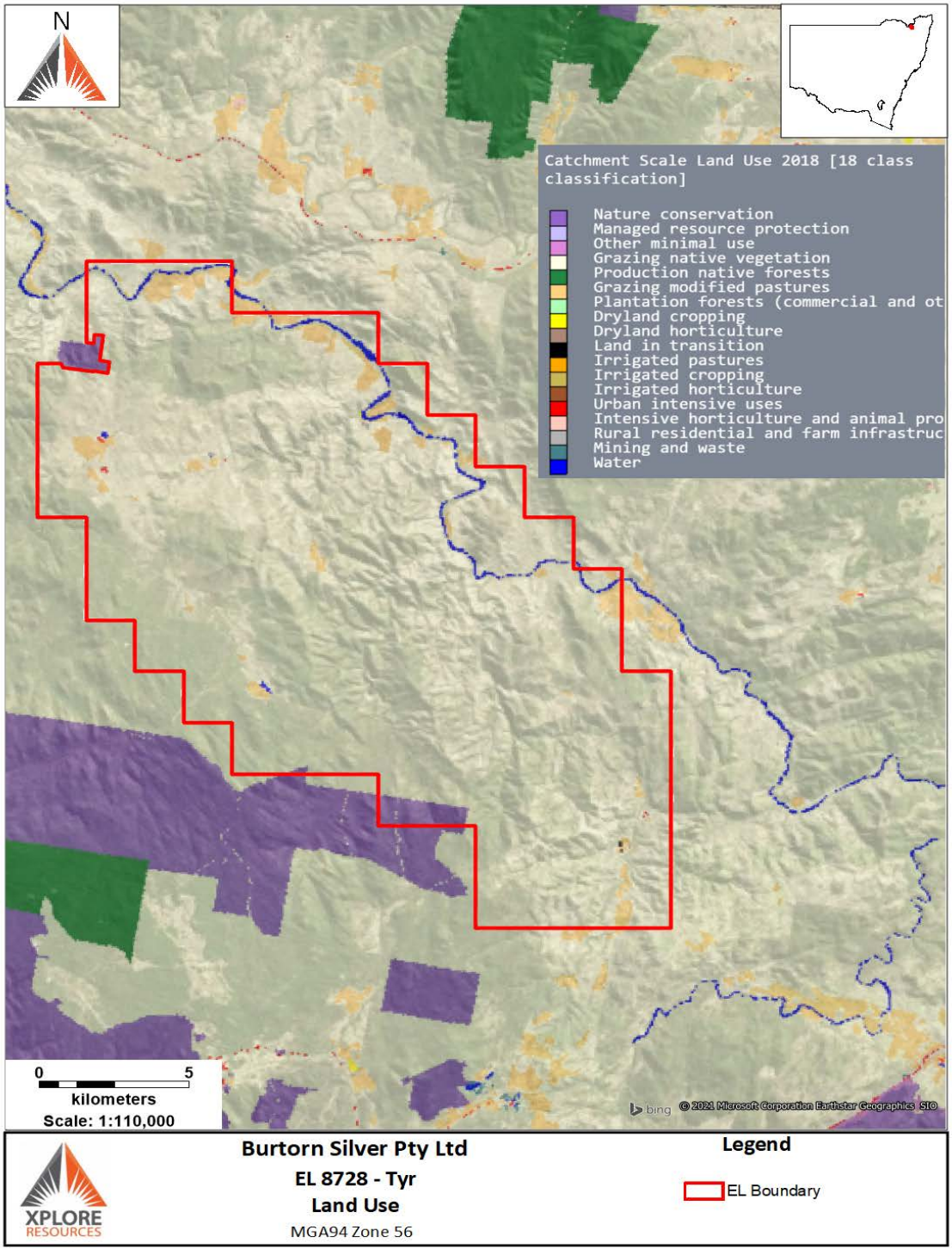


Figure 5.4 Land Use Map of Tyr Project (Nationalmap, 2020)

Infrastructure and Local Resources

Tenterfield's proximity to many regional centres and its position on the route between Sydney and Brisbane led to its development as a centre for the promotion of the federation of Australia. It is located at the northern end of the New England region, at the intersection of the New England and Bruxner Highways.

The town is the seat of the Tenterfield Shire and the closest nearby large town is Stanthorpe in southern Queensland which is 56km north via the New England Highway. Tenterfield is three (3) hours from Brisbane, Queensland (276km), three (3) hours from Byron Bay, New South Wales (205km), two (2) hours from Armidale, New South Wales (188km) and eight (8) hours from Sydney (663km).

The town is on the north-western stretch of the Northern Tablelands plateau, a spur of the Great Dividing Range, and is nestled in a valley beneath Mount Mackenzie (1,287m elevation), one of the highest points along the Northern Tablelands.

5.2 CENTURY SOUTH PROJECT AREA

Location and Access

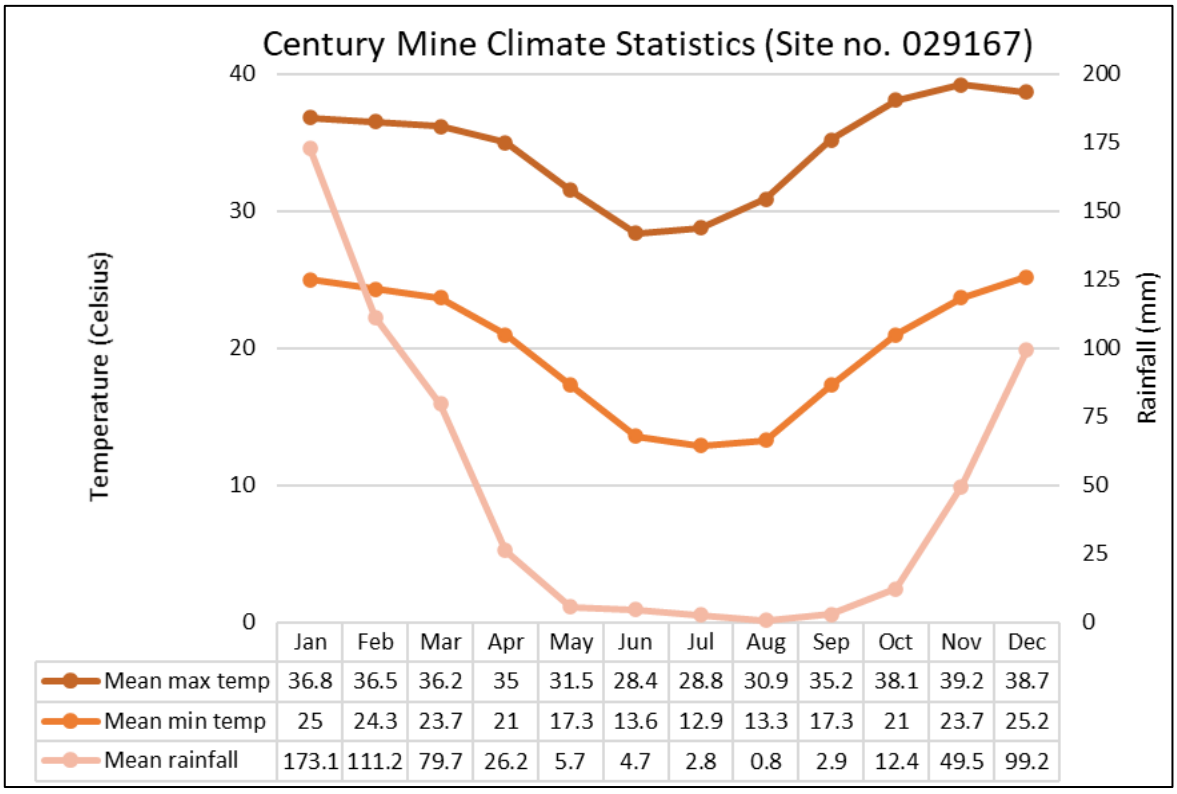
Access to the Century South tenement is via Riversleigh Road. From Mount Isa airport, head north along the Barkly highway for 112km.

Turn right at the intersection with Thorntonia-Yelvertoft Road and continue north along Thorntonia-Yelvertoft Road for 56km to the intersection with the Gregory Downs Camooweal Road and turn right travelling east. After 60km turn left onto Riversleigh Road to head in a north-westward direction for approximately 20km to intersect the EPM26713 tenure.

Climate

The mean rainfall in the area is 576.2mm/year occurring over 41.4 days (defined as days with >1mm rain). Rainfall is relatively consistent throughout the drier winter months of April to October with the mean number of days with >1mm rain ranging from 0.2 to 1.9 days per month. During the wet summer months of November to March the mean number of days with >1mm of rain range from 4.5 to 10.8 days per month.

The maximum (mean) temperatures range from 28.4°C in June to 39.2°C in November. The minimum (mean) temperatures range from 12.9°C in July to 25.2°C in December (Bureau of Meteorology, 2020). Displayed on Figure 5.5 on page 30 is the fluctuation of mean temperatures and rainfall over the course of each month.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean max temp	36.8	36.5	36.2	35	31.5	28.4	28.8	30.9	35.2	38.1	39.2	38.7
Mean min temp	25	24.3	23.7	21	17.3	13.6	12.9	13.3	17.3	21	23.7	25.2
Mean rainfall	173.1	111.2	79.7	26.2	5.7	4.7	2.8	0.8	2.9	12.4	49.5	99.2

Figure 5.5 Century Mine Climate Statistics, North West Queensland

Therefore, exploration activities are suggested to predominantly occur in the cooler drier months of March to September. Exploration planning activities and exploration evaluation are suggested to primarily occur in the hotter, wetter months from October to February.

Topography

The tenement area of Century South ranges from approximately 110m to 290m elevation. There is approximately a 180m change in elevation from the highest point in the central highlands south of the Gregory River, to the lowest point; the Gregory River itself.

This suggests a relatively steep slope from some elevated areas adjacent to the river. The tenement is in the Carpentaria Coast drainage division (Figure 5.6 on page 31), and the Gregory River serves as a major drainage system that flows from the south west to the north east, cross-cutting EPM26713 diagonally.

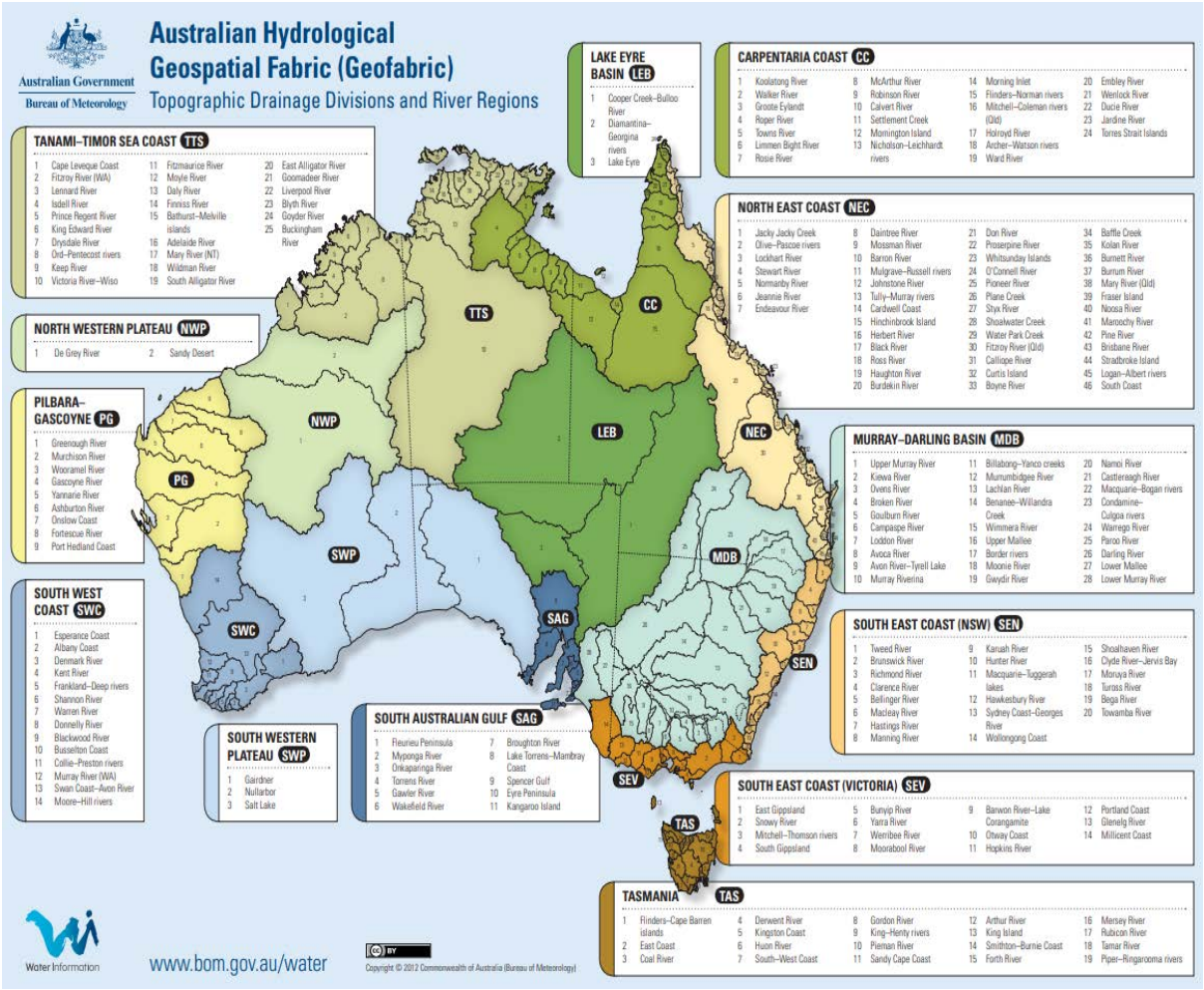


Figure 5.6 Topographic drainage divisions and river regions, Australia

Land Use

The project area has been classified primarily as 'grazing native vegetation', this is land use based on grazing by domestic stock on native vegetation where there has been limited or no deliberate attempt at pasture modification.

Some change in species composition may have occurred but is typified where there is greater than 50 percent dominant native species (Australian Government Department of Agriculture and Water, 2016).

The classification of land use over the tenement and surrounding areas can be seen on Figure 5.4 on page 28 (Australian Government Department of Agriculture and Water Resources, 2018).
Land use of note are to the west and south west of EPM26713 where nature conservation areas exist, namely Gregory Wild River area.

Additionally, a native title exists encompassing the entire tenement area. The Waanyi Peoples were the successful claimants of Native Title Determination of the surrounding land for Century South in 1999.

Infrastructure and Local Resources

The closest regional airport, modern towns/cities (for labour, support services and equipment) is Mount Isa. There is limited accessible infrastructure in the area surrounding the tenement. However, the site is easily accessed via unpaved rural roads which improve their integrity closer to Mount Isa.

In terms of power infrastructure; 90% the tenement lies within the 10km transmission network corridor as powerlines run through the centre of the EPM26713. The remaining 10% on the easternmost perimeter lies within the 30km transmission network corridor. These lines feed the Century Mine to the north west, connecting the site with Mount Isa.

6.0 EXPLORATION HISTORY

CAUTIONARY STATEMENT

This section of the Report refers to the historical exploration done by previous companies and as for all of the historical sampling that was done by other, unrelated companies over the years, there is little to no information recorded on how sample preparation, analyses and security were executed during the period of their own respective reporting.

In the case for all the respective State and Territory Mines Departments, there is mandatory, yearly reporting of all exploration activities conducted on every tenure whether its mineral, coal or oil and gas. This annual report data is submitted by each tenure holder and kept in a confidential status until that company relinquishes part or all of the tenement.

Once that data is off the confidential status, it becomes part of the public domain ("Open File") and can be accessed, viewed and downloaded via each Mines Department's digital portal by any interested party.

Since the digital age of reporting came into effect in the late 90s, all records were submitted electronically but prior to that, all records were submitted via hard copy. In order to have all data readily accessible in digital format, all the submitted hard copy data had to be digitised.

As a result of this digitisation process, some older, hard copy records from the 1950s to the 1980s were in very poor condition and coupled with the inevitable misplacement and loss of physical data in a few cases, the available open file dataset is not quite 100% complete.

Furthermore, given the cyclical boom and bust periods throughout the last 50 years in the Australian exploration and mining industries, the amount of data submitted yearly can vary significantly and during boom times, Mines Departments have struggled to vet each and every submission into their respective systems.

As a consequence of this, some companies inadvertently did not submit all of their exploration data. This only has significance where sample data was assayed but the original lab data was not submitted and/or there were samples assayed but not recorded.

Where this has relevance in sample data preparation, analyses and security is the fact that in general mineral exploration reporting throughout Australia it is not compulsory to describe these three topics in any detail within the confines of regular annual reporting.

Consequently, the comprehensive research and checking that has been done for the compilation of this report has found very little record of how these three topics were covered by each of the historic tenure holders.

Therefore, caution is strongly advised when considering the historical assay results from earlier explorers summarised and reported in this section of the Report as little or no information is available on how the samples were taken and/or what analytical methods were involved in the reporting of those results.

6.1 PREVIOUS EXPLORATION - TYR PROJECT AREA

The region has a long mining history and significant deposits of tin, tungsten, bismuth, arsenic, molybdenite, emerald and silver were mined from 1870s to early 1980s. The region is credited with producing more than 89,000 tonnes of cassiterite concentrate, 4,640kg of gold, 28,000 carats of emerald and beryl, and 4,700 tonnes of arsenic salts (Henley & et al, 2001).

Historical mining had occurred at several locations throughout the project area. the mining was mostly small-scale and consisted of shallow shafts and small open pit that were worked around the 1880s to early 1900s.

The largest and most productive mine was the Torny Mine, which is located 3km west-northwest of the old township of Clive. This polymetallic mine was worked intermittently from 1885-91, 1896-98, 1900-02, 1907-13, 1919-21, 1928-33, 1948-53 and 1960-63 (Henley & et al, 2001). It was worked and prospected along a strike of 600m and to a depth of 61.6m.

The main lode at the Torny Mine consists of two veins 0.05m and 0.6m wide striking 175 degrees true north and dipping vertically within the sediment host. Although, little mineralisation is available on dumps, it appears to consist of massive fine sulphides of galena, arsenopyrite, sphalerite and antimony. The mine produced 175 tonnes of 25% fine grained massive sulphides and has a resource of 51,000t of mineralised material (Henley & Brown, 2000).

Other significant mines in the Tyr Project area include the Burra Mine and the Ecuador Deposit. Arsenic was also mined at several locations within the Tyr Project area. One of the largest producers was the Mole River arsenic mine, located 16km northwest of the old township of Clive. It produced a total of 2,904 tonnes of arsenic from mineralised material grading 25% arsenic (Henley & Brown, 2000). The mine was first worked in 1889, and it was not until 1923-40, that the mine became a major arsenic producer.

The project area also contains many historical tin workings, including both hard-rock and alluvial deposits that are scattered throughout the Mole Granite and its contact zones. Records of tin production from the project area are incomplete, although considerable production has come from the Emmaville-Torrington district, which is located immediately to the south and southeast.

EL8728 and surrounding area have been explored by numerous companies since the late 1960s. The exploration undertaken was initially for tin and base metals and more recently silver. Most of the exploration involved rock chip, stream sediment and small soil sampling programs.

Several airborne magnetic and radiometric surveys and several small drilling programs totalling 35 holes were also completed.

The following summary lists the old tenement numbers, the tenement holder(s), the years active, a brief description of works done and the old report number. For years 2010-2019, see historical tenement map in Figure 6.1 on page 36. For years 2000-2010, see historical tenement map in Figure 6.2 on page 37. For years 1990-1999, see historical tenement map in Figure 6.3 on page 38. For years 1980-1989, see historical tenement map in Figure 6.4 on page 40. For years 1970-1979, see historical tenement map Figure 6.4 Historical Tenements overlapping the Tyr Project, 1980 to 1989on page 43.

EL7802: Flinn, Douglas (2011-2013).
Polymetallic deposits. No field work was undertaken, with work focused on desktop analyses of previous exploration and target generation. RE0007573.

EL7413: Central West Gold NL (2009-2013).
Tin, tungsten, bismuth and arsenic mineralisation associated with the contact between the Mole Granite and metasediments. No file work was completed. Work focused on reviewing previous exploration, landholder title search and planning for a stream sediment program. Due to the lack of exploration and failure to conduct proposed exploration programs, a renewal application for the EL was refused. RE0005356.

EL691: Tinas Gold Exploration Pty Ltd (2007-2009).
Polymetallic deposits. Completed surface geochemical sampling at the Bungulla prospect, Four Mile trend and Castle Group area. Only one (1) sub-block of EL6917 overlaps, with most of the exploration occurring outside of EL8728. RE00036132.

EL6771: Silver Mines Limited (2007-2015).
Silver and base metals with tin as a secondary target. A large amount of exploration was completed including airborne magnetic, radiometric and DEM survey, geological mapping, rock chip and soil sampling, drilling and geo-structural interpretation.

The structural study interpreted N-S structure as deep-seated early thrusts. the geochemical sampling focused on structural corridors within areas with historic workings at the Burra silver Mine and Mt Morgan.

The soil sampling delineated coherent Pb and Zn anomalies associated with linear (NNE) altered mineralised zones and ENE structures. These areas were tested by RC drilling. Rock chip sampling at the Burra Mine returned results up to 4710ppm Ag, 4630ppm Pb and 994ppm Zn (386329E/6765103N). Other anomalous results include 3000ppm Ag, 9630ppm Pb and 966ppm Zn (386333/6765101N).

In late 2012 RC drilling was undertaken near the Burra Silver Mine and Mt Morgan to test for depth extensions of the mineralisation and near surface supergene enrichment. At Mt Morgan, the best drilling result was 1m at 251ppm Ag in hole MMRC003 from 37m. At the Burra Mine, hole EQRC004 returned 1m @ 199ppm Ag from 48m. The tenement covered south-eastern part of EL8728. RE0007396, RE0007009, RE0004443.

EL6512: Silver Mines Limited (2006-2010).
Silver and polly metallic deposits, with tin as a secondary target. Covered central and north-western part of EL8728. Exploration involved airborne magnetic, radiometric and DEM survey over the central and southern parts of the tenement. Aster and a structural study highlighted several target areas. Work also included prospect evaluation. RE005945.

EL6442: YTC Resources Ltd (2005-2009).
Large tonnage tin ± silver ± base metals. Covered central western part of EL8728. Exploration involved limited rock chip sampling around McDowell's Contact Lode. Inability to contact overseas landholders led to relinquishment. REE0000044.

EL6392: Stannum Pty Ltd (2005-2013).
EL6392 was explored during 2005-2013. Reports on exploration are not available or remain confidential. Most of the exploration was outside the area now covered by EL8728, with three (3) sub-blocks overlapping.

EL6114: Central West Coast Gold NL/Silver Mines Limited (2003-2013).
EL6114 was explored during 2003 to 2013 for high-grade silver and polymetallic deposits. Work initially focused on the Hazelden North and Hazelden South prospects where limited sampling and mapping was undertaken.

During 2006, a single RC drillhole was completed (HP4) about 200m north-northwest of Hazeldean homestead. The drillhole intersected pyrite/pyrrhotite/arsenopyrite mineralisation associated with silica and sericite alteration within a thinly bedded sequence of siltstone, sandstone, and conglomerate. The hole was designed to twin an earlier hole (HPD2) drilled by Kennecott in 1982. HP4 returned 2m at 1.6% Zn and 28g/t Au from 50m.

EL6114 was acquired by Silver Mines Limited in 2007. Work included airborne magnetic and radiometric survey, prospect evaluation, geological mapping, rock chip and soil sampling, drilling and geo-structural interpretation. Silver Mines Limited focused on several areas including Whalan's South, Hazeldean North, Hazeldean South and Tory Silver Mine prospects, where they undertook rock chip and soil sampling programs during 2007 to 2009.

Rock chip samples from Hazeldean North prospect returned up to 362g/t Ag. Silver values up to 196g/t Ag were returned from the Hazeldean South prospect.

During 2010 to 2011, a dipole-dipole IP survey was completed over the Torny prospect. High chargeability and low resistivity zones were located along the trend of the old workings and adjacent area. During the same period field inspection and rock chip samples were collected from several workings including Pearman's, Caves Creek and Morgans NW prospects.

Of the thirty-five (35) samples collected, fifteen (15) recorded values ranging from 25-354ppm Ag.

In late 2012, twelve (12) RC holes were completed at the historical workings referred to as the Hazeldean prospect. The drilling was designed to test the depth and strike extensions of mineralisation. The best assay results were 1m @ 460ppm Ag, 9.6% P, 3.7% Zn and 2180ppm Co in hole HZRC010 from 24m.

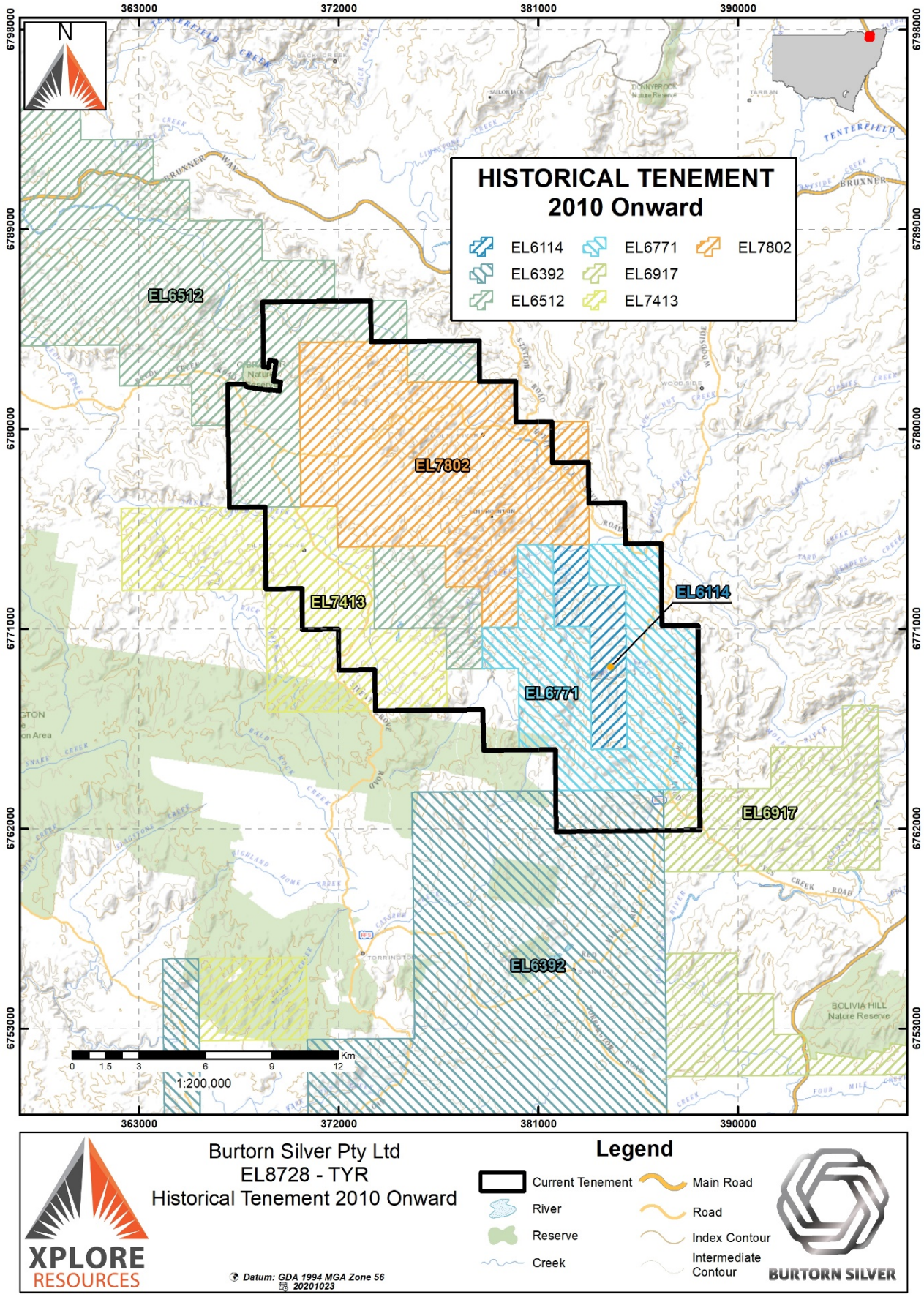


Figure 6.1 Historical Tenements Tyr Project, 2010 to 2019

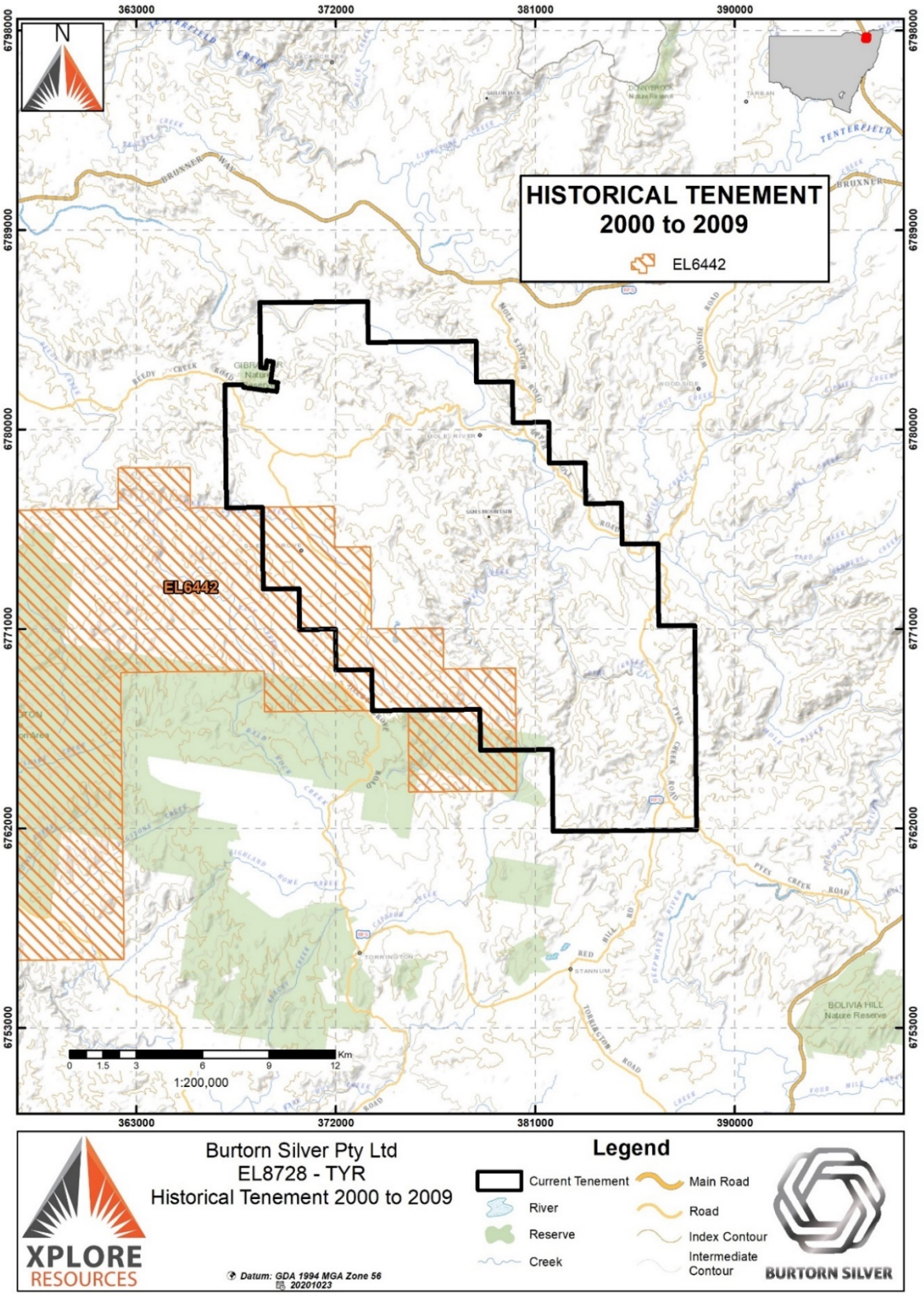


Figure 6.2 Historical Tenements Tyr Project, 2000 to 2010

EL6442: YTC Resources Limited (2005-2009).

During 2005 to 2009, EL6442 was explored for large tonnage silver and base metal deposits. Exploration was limited and involved minor rock chip sampling around McDowall's contact Lode. The inability to contact overseas landholders led to the relinquishment of the tenement**.**

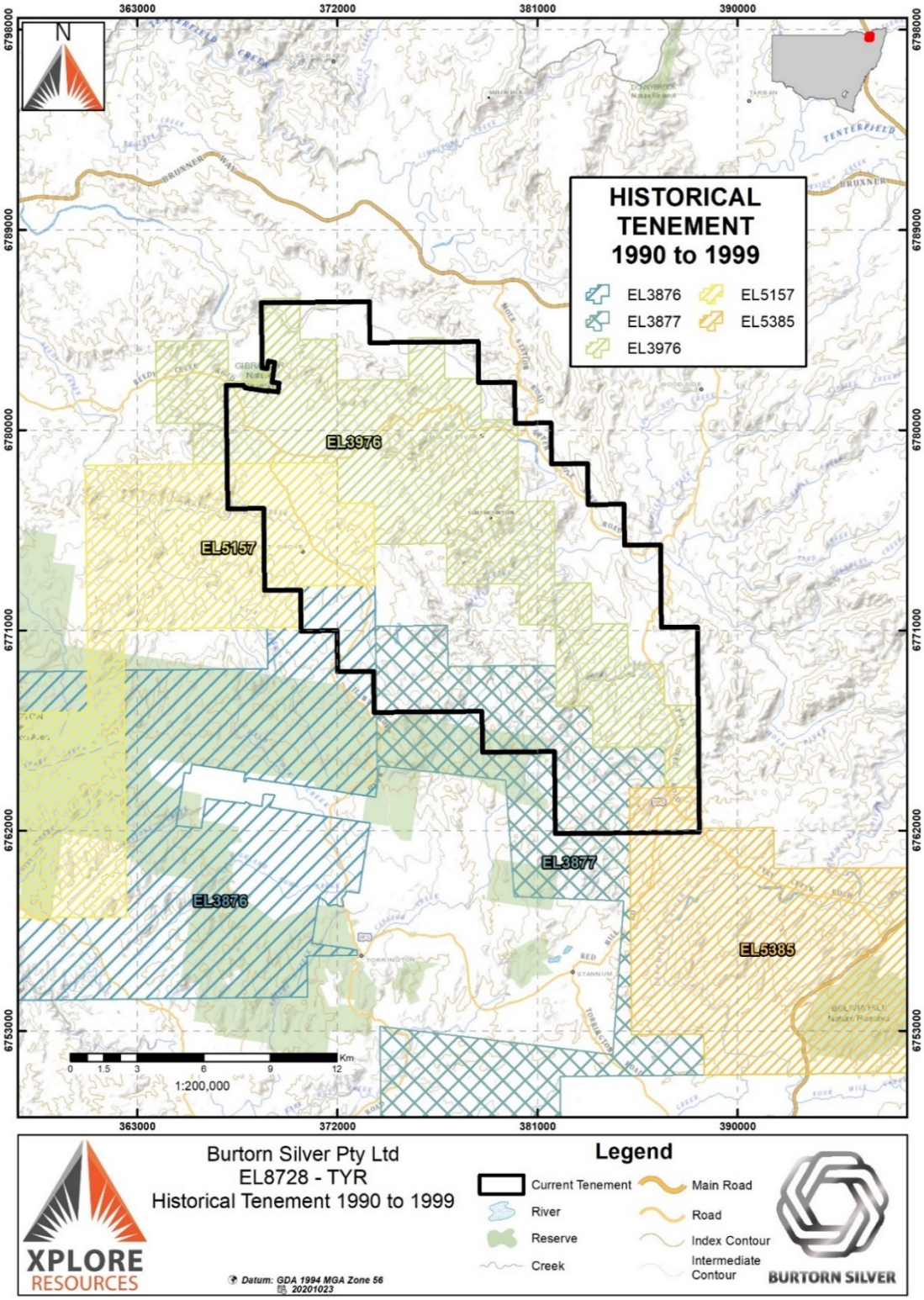


Figure 6.3 Historical Tenements Tyr Project, 1990 to 1999

EL5385: Ross Mining NL (1997-1998).
EL5385 was explored by Ross Mining NL during 1997 to 1998 for Timbarra-style gold deposits. EL5385 was centred southeast of EL8728 and only two (2) units of EL5385 coincide with EL8728. No fieldwork was carried out during the reporting period. Literature search and compilation of all geological, geophysical, and geochemical datasets were carried out, but the information is not included in the reports. The EL was surrendered in 1998.

EL5157: New England Tin NL (1996-1998).
EL5157 was evaluated for its eluvial and alluvial tin potential during the period 1996 to 1998. Several old mining areas that included Amaroo, Kathida-Yankee, Westminster Mountains/Companies Hill, and Trap Mountain were inspected and alluvial wash sampled.

Work during the second year focused on the Beardy Cliff area where mapping and sampling was completed. The sampling results were disappointing and returned a maximum of 0.143% Sn. No work was undertaken in the area now covered by EL8728.

EL3976: Western Mining Corporation Ltd (1991-1993).
WMC explored the central part of EL8726, while investigating EL3976 during 1991 to 1993. Their exploration target was carbonate replacement tin. Work consisted of regional bulk stream sediment sampling which defined serval Cu-Pb-Zn-As-Sn anomalies. Regional mapping showed that tin sulphide-quartz veins were responsible for most of the geochemical anomalies.

EL3877: RZM Pty Ltd (1992).
Tin, zircon and Rare Earth Minerals. Located predominantly south and south west of EL8728. Covered southern portion of the Mole Granite. A reconnaissance exploration program was proposed but never carried out. R00003389.

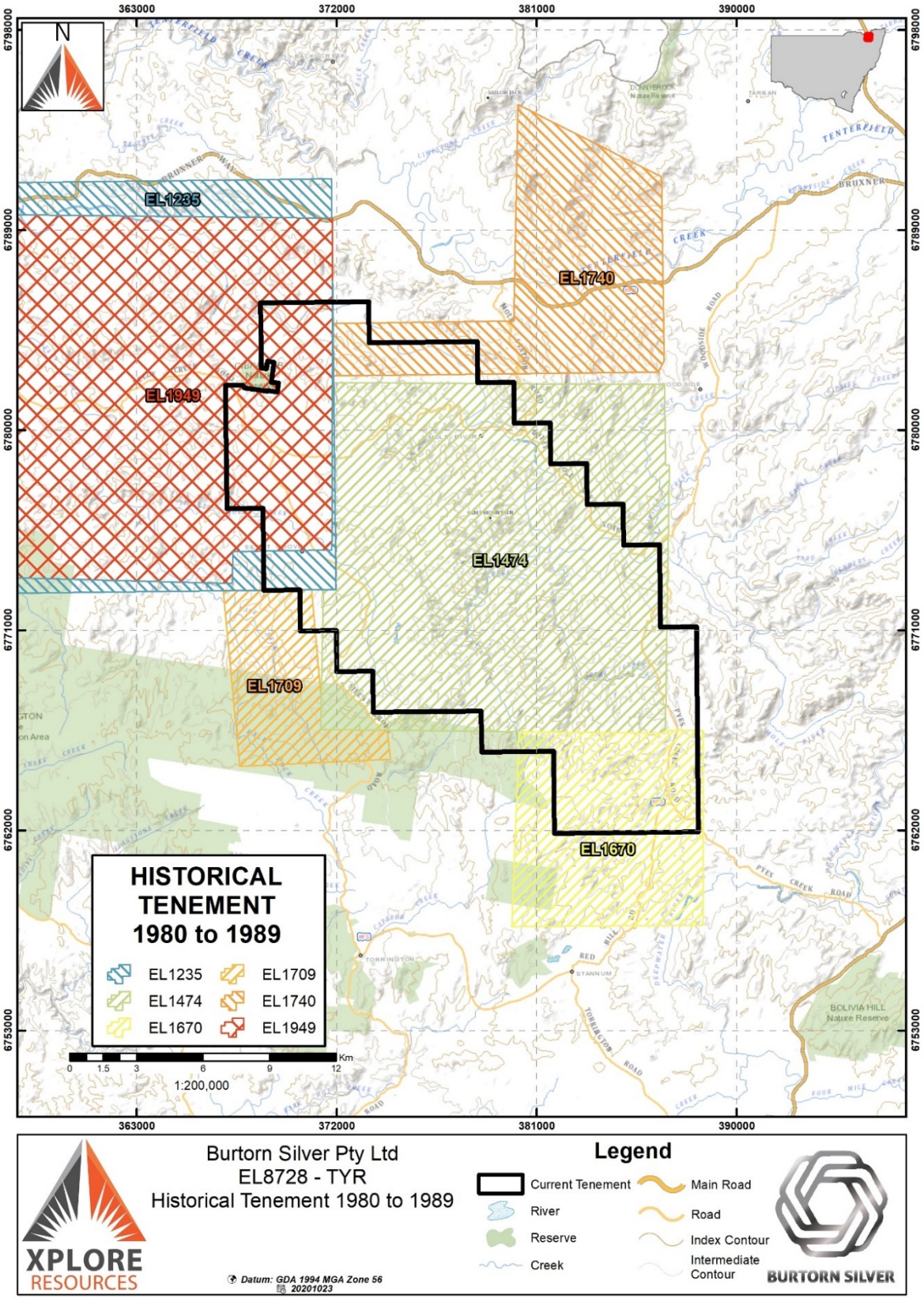


Figure 6.4 Historical Tenements overlapping the Tyr Project, 1980 to 1989

EL1949: Kennecott Explorations (Australia) Ltd (1982-1984).
Cassiterite/pyrrhotite mineralisation similar to the Renison Bell deposit in NW Tasmania. Kennecott completed an airborne magnetic survey which located 33 anomalies that fell into three (3) main groups. The Avenue, Hazeldean and Roma Valley Prospects were selected as being representative of the three (3) groups.

Follow up ground magnetic surveys did not locate lithologies or mineralisation to explain the magnetic response. Eight (8) percussion holes were then drilled to test the source of the anomaly. The drilling intersected weakly to moderately anomalous tin and base metals mineralisation associated with pyrrhotite, which explained the Hazeldean and Roma Valley anomalies.

Renison Goldfields Consolidated in JV with Kennecott undertook a reconnaissance style stream sediment and rock sampling program. The only prospect of interest located by goldfields was the Basalt Hill area in the west of EL1949 which is outside EL8728. Goldfields withdrew from the JV and in 1984 the Shell company of Australia Limited entered into a JV with Kennecott. Shell investigated the Basalt Hill area and concluded the anomalous Sn found in stream sediment samples were shedding from perched Tertiary gravels. R00010169.

EL1740: Electrolytic Zinc Co of A/Asia Ltd (1982).
Tin/tungsten mineralisation associated with carbonate hosted massive sulphide replacement mineralisation, sheeted veins or disseminated greisen and/or vein swarms associated with granite. An aeromagnetic survey eliminated the possibility of the first type. Stream sediment sampling and geological mapping was then carried out. The potential for tin-tungsten mineralisation was eliminated and the licence was relinquished. ROO010798, R00010797.

EL1709: Torrington Minerals Pty Ltd & Pacific Copper Ltd (1981-1983).
Variety of tin/tungsten hard-rock deposits and alluvial tin. Located adjacent to the western boundary of EL8728 and covered the Mole Granite. Exploration included a literature review of historical exploration and mining. Rock chip and stream sediment sampling programs were also completed. No areas with significant potential were located and the tenement was relinquished.

Pacific copper completed detailed mapping and rock chip sampling of a number of historic tin mine occurrences including the McDowall's Contact Lode, Silent Grove Lode, Bailiff's Lode, The Bung Shaft and The Copper Lode. A localised -40# stream sediment survey was also completed. The silexite occurrence at Back Ck was considered the most prospective area within the licence. The lack of any large single occurrence or large-scale potential led to the licence being relinquished. R00010857, R00010855.

EL1670: Kennecott Explorations (Australia) Ltd (1981-1986).
Massive pyrrhotite cassiterite mineralisation of the Renison Bell type. EL1670 covered the southern part of EL8728 and was considered to have potential for tin and base metal mineralisation in a variety of geological environments, including pyrrhotite cassiterite skarns, greisen caps and Taronga style sheeted vein systems.

Work included air photo and Landsat study; aeromagnetic survey aimed at locating cassiterite mineralisation associated with massive pyrrhotite skarns. Detailed stream sediment sampling, mapping and rock chip sampling was carried out. The stream sediment sampling located anomalies likely caused by old workings in the Mole Granite.

Soil sampling was undertaken at the Burra and Torny Grids. Results for silver were low with a maximum 3ppm Ag. The tin results show three (3) anomaly associations with the highest tin assay of 1,300ppm occurring at the granite-sediment contact. A BCL stream sediment survey around the Mt Morgan area returned a highest value of 0.4ppb Au.

The work programs conducted suggest that the large tonnage low-grade and even small tonnage low-grade copper lead zinc silver and gold potential is negligible within the Mt Morgan PLA's. Open pit tin potential would appear to be negligible but potential remains for a moderate tonnage tin deposit within the granite at depth, of underground mining type. Substantial exploration would be necessary to test this possibility. R00008918, R00012200.

EL1474: Kennecott Explorations (Australia) Ltd. JV with Renison Goldfields and Billiton Australia (1980-1984).
Covered the bulk of EL8728. The licences have potential for tin and base metal mineralisation in a variety of geological environments, including pyrrhotite cassiterite skarns, greisen caps and Taronga style sheeted vein systems.

Exploration included aeromagnetic survey, stream sediment sampling, gridding soil sampling and drilling of magnetic targets. Drilling in EL1474 failed to intersect granite or any grade of tin mineralisation within the Texas Beds metasediments. Drilling at Sam's Mountain and Mosman also failed to intersect mineralisation. Rock chip sampling at Mosman returned one (1) weakly anomalous gold value. It was decided to relinquish the licences. R00009460.

EL1235: Broken Hill Proprietary Company Limited (1979-1981).
Pyrrhotite cassiterite mineralisation of the Renison Bell type. Covered north-western corner of EL8728. The work programs were designed to test for tin mineralisation. An aeromagnetic survey was conducted initially and several areas selected for more detailed follow up consisting of stream sediment sampling and a short percussion drilling program.

The possibility of any economic hard-rock mineralisation in the licence area has been discounted. The only area of economic interest was an alluvial deposit in Reedy Creek, but this was considered too small. The tenement was taken out to explore for carbonate-sulphide replacement type tin deposits of the Renison type.

An aeromagnetic survey and a regional stream sediment program were completed on EL1235 and neighbouring EL1236 & EL1237. Selected anomalies were followed up with rock chip sampling with no significant results. R00015204, R00011350.

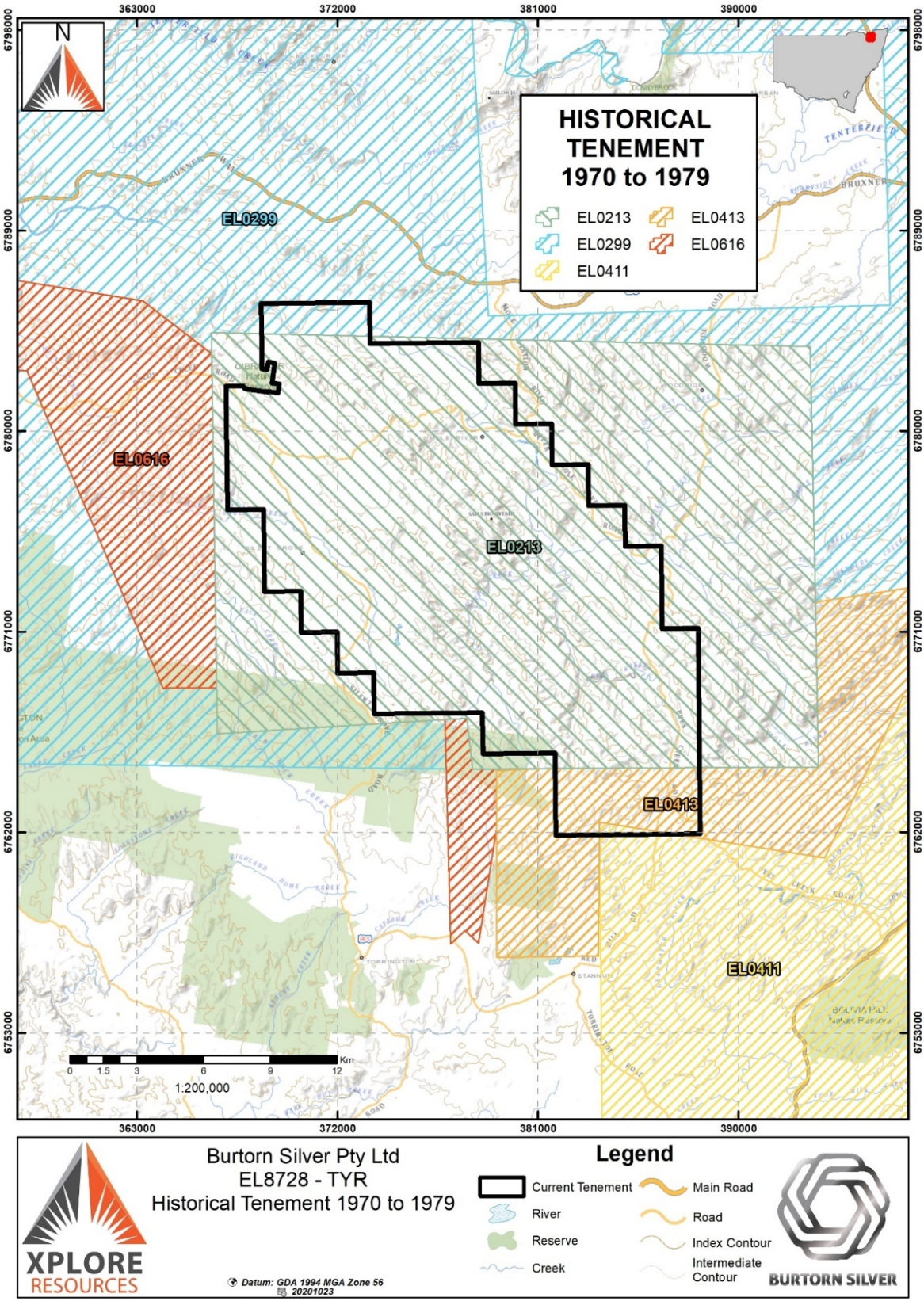


Figure 6.5 Historical Tenements overlapping the Tyr Project, 1970 to 1979

EL616: AOG Minerals Pty Ltd (1973).
Exploration was undertaken during 1973 and focused mainly on alluvial tin. Work included reconnaissance pitting (24) and sampling on the upper part of Reedy Creek near Binghi. This work outlined potential reserves of about 0.5million cubic metres of grade less than 185gm/Sn/m^3 on two (2) alluvial flats. The resource was uneconomic at the time, and the exploration licence was relinquished.

EL411/413: Wentworth Mining Corporation Pty Ltd (1972).
Exploration in 1972 was for polymetallic deposits in the Pye's Creek area, which covers the southern portion of EL8728. Work completed included a program of field geological mapping, property inspections and sampling were undertaken between the Burra Mine and the Mole River Arsenic Mine in the north.

A general economic analysis suggested that the minimum reserves of 300,000 tons of potential mineralisation grade would be needed to establish a viable mining operation in the area. The geological appraisal of the old workings of the Torny and Burra Mines as well as the other minor deposits in the Pye's Creek area, indicated that the existence of the required tonnage of mineralisation was highly improbable.

EL299: Jingellic Minerals NL (1970-1972).
Polymetallic deposits and alluvial tin. The area mostly surrounds EL8728 and was taken out to explore for Group 1 minerals and gold. Most of the exploration consisted of detailed prospecting around the contact zone of the granite with Permian sediments, and the old mine workings. The Reedy Creek silver lode showed good values for tin (to 3.3% Sn), tungsten (to 0.68% WO3), silver (to 835ppm Ag), copper (to 2.35% Cu) and bismuth (to 935ppm Bi). However, the potential for economic mineralisation was considered low. R00000908.

EL213: Griffiths, GT (1969-1970).
EL213 was investigated during 1969 to 1970. Work carried out was limited and included a desktop review that focused on the area's potential for alluvial tin. Reports indicate that no field work was undertaken.

6.2 PREVIOUS EXPLORATION CENTURY SOUTH PROJECT AREA

Historically, the Lawn Hill region has been intensely explored since the late-1950's. Companies initially explored for phosphate and Mississippi Valley-type Pb-Zn-Ag mineralisation in the Cambrian carbonate sequence but more generally for Mount Isa style Cu and/or SEDEX Pb-Zn-Ag deposits in the Proterozoic sedimentary units. Most of this work focused on the lower McNamara Group (Gunpowder to Lady Loretta Formations). The discovery of the Century deposit in 1990 and the Grevillea mineralisation (gossan recognised in 1993) refocused exploration on the mid-upper carbonate-siliclastic McNamara Group (Riversleigh-Lawn Hill Formations).

Historical exploration focused mainly on the base metal potential of the Proterozoic rocks in the area, particularly in the exposed sections of the McNamara Group (Denaro & Culpeper, 1992) (Denaro & Culpeper, 1999) A world class sediment hosted zinc-lead-silver mineralised body was discovered at Century in late 1990's.

The major incentives for exploration have been lithological and stratigraphic similarities to the Proterozoic host rocks and setting for the silver-lead-zinc at Century and the silver-lead-zinc

and copper mineralised bodies at Mount Isa. Several other potential economic deposits have attracted the interest of exploration and mining companies. These include fault breccia-hosted zinc-lead silver lodes near Century including Silver King, brecciated sediment hosted copper deposits, red bed-style copper mineralisation, base metals mineralisation in the base of the Georgina Basin sequence, sedimentary iron deposits in the Constance Range area and phosphorites in the Cambrian sedimentary sequence of the Georgina Basin.

Exploration has also been carried out for gold, uranium and diamonds, but no significant discoveries have been made (Denaro & Culpeper, 1999)

A summary of works (in order of most recent to oldest) completed across Century South EPM26713 by decades is contained in the following sub-sections. This section represents a compendium of results and interpretations from statutory Annual Exploration reports. Reports were selected by listing all reporting tenure which intersected the current Century South tenure.

Historical Exploration – 2010 onwards

The following is a brief summary of exploration work completed over historical tenements overlapping Century South EPM26713 from 2010 onwards. The summaries are taken from the open file company reports listed in ***Table 6.1*** on ***page 46***. For further details on exploration work completed the reader is referred to the open file company reports listed in ***Table 6.1*** on ***page 46***, and the historical tenement map in ***Table 6.1*** on ***page 46.***

EPM16900: MMG Australia Pty Ltd / Smarttrans Holdings Ltd, Ocean Magic Investments Limited (2012-2019).

The tenement (EPM16900) was an amalgamation of nine (9) previous tenements EPM: 7797, 10199, 11130, 11711, 11773, 11453, 12195, 12374, and 12747 to form one (1) large tenement and was managed by MMG Australia Pty Ltd (MMG). The tenement was considered prospective for Century and/or Mount Isa style sediment hosted lead-zinc-silver mineralisation, and sediment-hosted and structurally controlled copper mineralisation. Field work in the relinquished area since the granting of the EPM included field reconnaissance and the collection of the following samples:

- 678 stream sediment samples;
- 202 rock chip samples;
- 2046 soil samples; and
- 11 Reverse Circulation Drill Holes, 1384 assays were completed.

After reviewing the prospectivity of the EPM, Ocean Magic identified 17 sub-blocks for relinquishment. These sub-blocks were deemed to have a lower potential for the discovery of economic mineralisation.

EPM25174: Sunlander Nominees Pty Ltd (2014-2016).

Sunlander Nominees is a wholly owned subsidiary of RMG Limited. The permit is located on the south eastern margin of the Kamarga Dome and along a portion of the Termite Range Fault and is prospective for Pb-Zn and Cu mineralization. Exploration work completed by RMG in the reporting period includes acquisition of high-resolution satellite imagery (SPOT and ASTER), 1:50,000 geologic interpretation of imagery and airborne geophysics, and collation and interpretation of historical geochemistry.

Rock chips, soil samples and stream sampling have identified three geochemical targets as prospective for zinc-lead mineralisation.

Target A is a coincident 3km long EM conductivity anomaly and soil zinc anomaly within the Freeman's Creek syncline in Riversleigh Formation and has a high Ferric Iron spectral response, which does not appear to have been investigated in the field and has not been drilled.

Target B is along the Termite Range Fault in proximity to the fold closure of the Brenda Creek Syncline with high order zinc stream anomalies in Lady Loretta Formation. Best rock chip value is 0.125% Pb.

Target C is along a splay fault from the Termite Range Fault with coincident high order stream and rock chip zinc anomalies in Lady Loretta Formation. Best rock chip value is 8g/t Ag with a zone over 300m wide of brecciated, high iron dolomitic siltstones.
RMG did not follow up on these targets decided to relinquish the EPM and focus its exploration elsewhere.

Table 6.1 Summary of Exploration Reports 2010 Onwards

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM 16900	MMG Australia Pty Ltd / Smarttrans Holdings Ltd	Copper, Silver, Zinc, Lead	2012-2019	CR070709, CR081711, CR103511, CR113794
EPM25174	Sunlander Nominees Pty Ltd	Silver, Zinc, Lead	2014-2016	CR096547

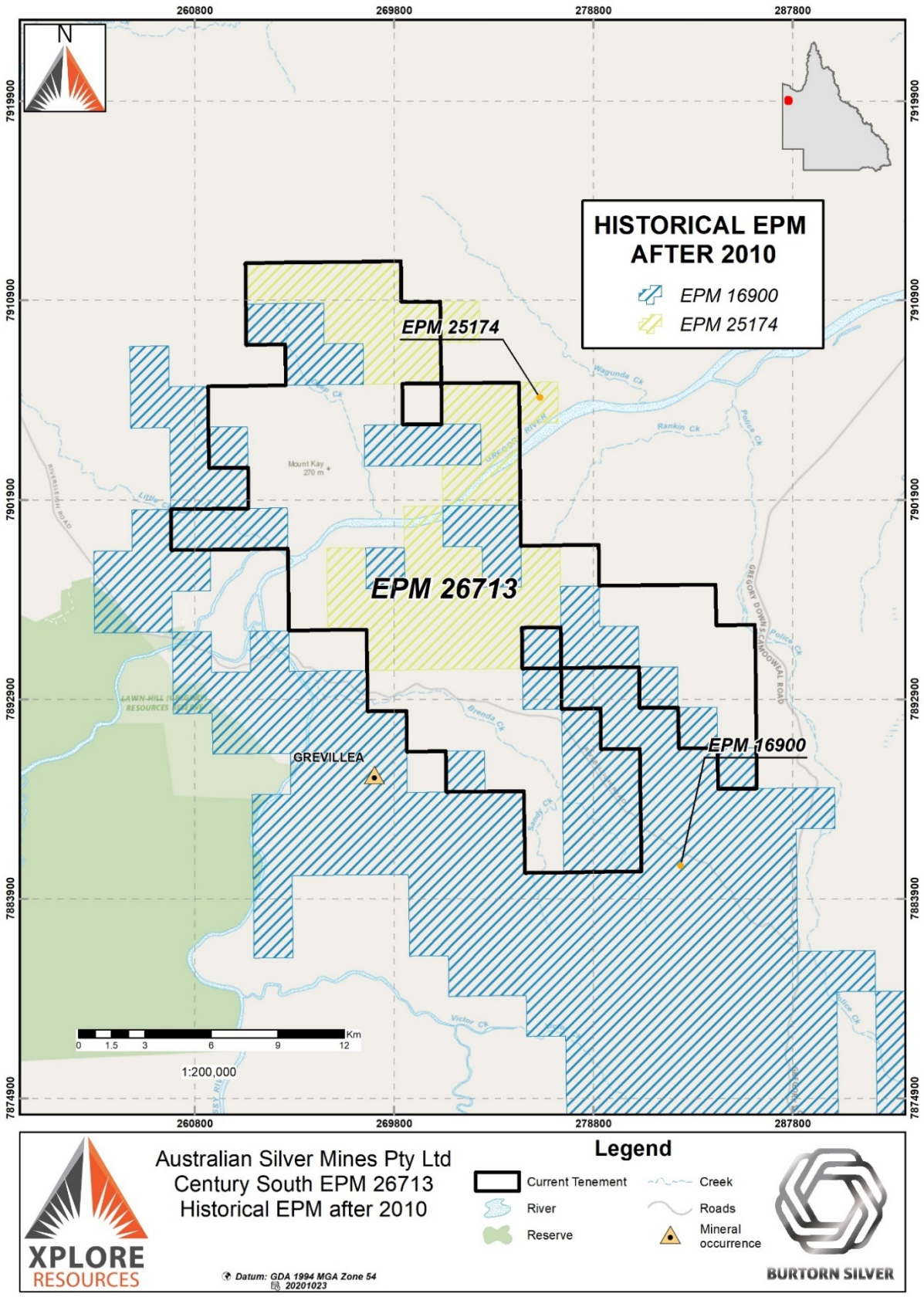


Figure 6.6 Historical EPMs over the Century South tenure after 2010

Historical Exploration – 2000 to 2009

The following is a brief summary of exploration work completed over historical tenements overlapping over Century South EPM26713 from 2000 to 2009. The summaries are taken from the open file company reports listed in Table 6.2 on page 46. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.2 on page 50 and seen on the historical tenement map in Figure 6.7 on page 51 below.

EPM11711: Smart Trans Holdings Limited (2006).
The Riversleigh Extended project area covers highly prospective units of the Palaeo-Mesoproterozoic McNamara Group (time equivalent of the Fickling, Mount Isa and McArthur Groups) ranging from the Lady Loretta Formation to the Lawn Hill Formation.

The Lawn Hill Platform is host to several styles of base metal (Cu-Pb-Zn-Ag) mineralisation. Exploration activity on the relinquished portion of the tenement comprised air photo acquisition and interpretation, structural and stratigraphic analysis, acquisition of geochemical data and compilation of this data into the Company's Exploration Database.

EPM14716: MMG Australia Limited (2006-2010).
The tenement is considered prospective for Century and/or Mount Isa style sediment-hosted base metal deposits and structurally controlled copper mineralisation. During the first period of tenure, exploration was restricted to reviewing historic data.

Year 2 included reviewing the open file geophysical data collected by competitors over the tenement area, and compilation of previously unrecorded geochemical data. Four (4) anomalous areas were identified for follow-up; these being areas 1, 2, 3 and 4.

Exploration completed within the 3rd Year of Tenure included:

- Field inspection of Areas 1, 2, 3 and 4 outlined in Year 2;
- Discovery of an encouraging ferruginous breccia horizon that returned 3.98 g/t Au (Montdelore Prospect) at Area 1;
- Follow up inspections, rock sampling and soil sampling orientation soil sampling at Montdelore prospect (formerly Area 1);
- Native Title exploration activity notices; and
- Retention of all 11 sub blocks at end of Year 3 until the significance of the anomalous gold area is verified.

Exploration completed within the 4th Year of Tenure included detailed geochemical study undertaken by IO Global Geochemical Consultants. In late 2009 IoGlobal presented MMG with preliminary data comprising 104 regionwide soil anomalous areas and 48 region-wide stream sediment anomalies.

EPM15186: Summit Resources (Aust) Pty Ltd & MM Mining Pty Ltd (2007-2010).
Exploration activities during 2007-2010 included acquisition of detailed airborne magnetics and radiometrics by Fugro, compilation of past data by Coffeys and compilation and interpretation of the 2008 acquired detailed airborne magnetic and radiometrics by Southern Geoscience. The establishment of the Wild Rivers Act has curtailed exploration activities over the relinquished sub-blocks, and the compilation by Coffeys and Southern Geoscience has not identified any further targets for exploration. They have therefore been relinquished.

EPM16015: MMG Australia Limited (2009-2011).
EPM16015 “Gregory” is 100% owned by MMG Limited. Exploration on the tenement was focused on finding a large stratiform Zn-Pb-Ag deposit, to supply feed to the existing mill at the Century mine. MMG conducted regional scale structural mapping in EPM16015 and other adjacent tenements, as part of a program to identify areas of interest based on favourable structure. Regional historic geochemical and geophysical data were reviewed by external consultants. No field activities were conducted within the relinquished sub-blocks.

EPM16848: MMG Australia Limited (2009-2011).
During the first year, historic geophysics and geochemistry was reviewed by external consultants. During the second year, works included regional scale and prospect scale structural mapping in the tenement and other adjacent tenements, as part of a program to identify areas of interest based on favourable structure.

Work in EPM16848 was focused at the “Target 12” prospect. In conjunction with field mapping, 18 rock chip samples were collected. The samples were mostly collected from exposed Proterozoic lithologies that were brecciated or ferruginous. Sample R133042 has elevated (8.14ppm) thallium with slightly elevated base metals.

The remaining samples were either slightly anomalous in base metals or non-anomalous. None of the samples warrant further work.

EPM16900: MMG Australia Limited (2009-2011).
EPM16900 "Wangunda" was granted to Smarttrans Holdings limited in May 2010 for a period of 5 years. The tenement is an amalgamation of 9 previous tenements and is managed by MMG Australia Pty Ltd (MMG). The tenement is considered prospective for Century and/or Mount Isa style sediment hosted lead-zinc-silver mineralisation, and sediment-hosted and structurally controlled copper mineralisation.

As a condition of tenure, 88 sub-blocks {from a total of 176) were required to be relinquished at the end of the first year. The sub-blocks chosen were those over which no exploration work was conducted in the reporting period 17th May 2010 to 16th May 2011

Table 6.2 Summary of Exploration Reports 2000-2009

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM11711	Smart Trans Holdings Limited	Silver, Zinc, Lead	2006	CR044598
EPM11453	Smart Trans Holdings Limited	Silver, Zinc, Lead	2006	CR044599
EPM12374	Smart Trans Holdings Limited	Silver, Zinc, Lead	2006	CR044498
EPM14716	MMG Australia Limited	Gold, Silver, Copper, Lead, Zinc	2006-2012	CR047726, CR053295, CR053445, CR058737, C0R65777
EPM15186	Summit Resources (Aust) Pty Ltd / MM Mining Pty Ltd	Zinc, Potassium / Potash, Copper, Uranium, Lead	2012	CR057397, CR062722
EPM16015	MMG Australia Limited	Gold, Silver, Copper, Lead, Zinc	2009-2011	CR067516
EPM16848	MMG Australia Limited	Gold, Silver, Copper, Lead, Zinc	2009-2011	CR073026
EPM16900	MMG Australia Limited	Gold, Silver, Copper, Lead, Zinc	2009-2011	CR70709

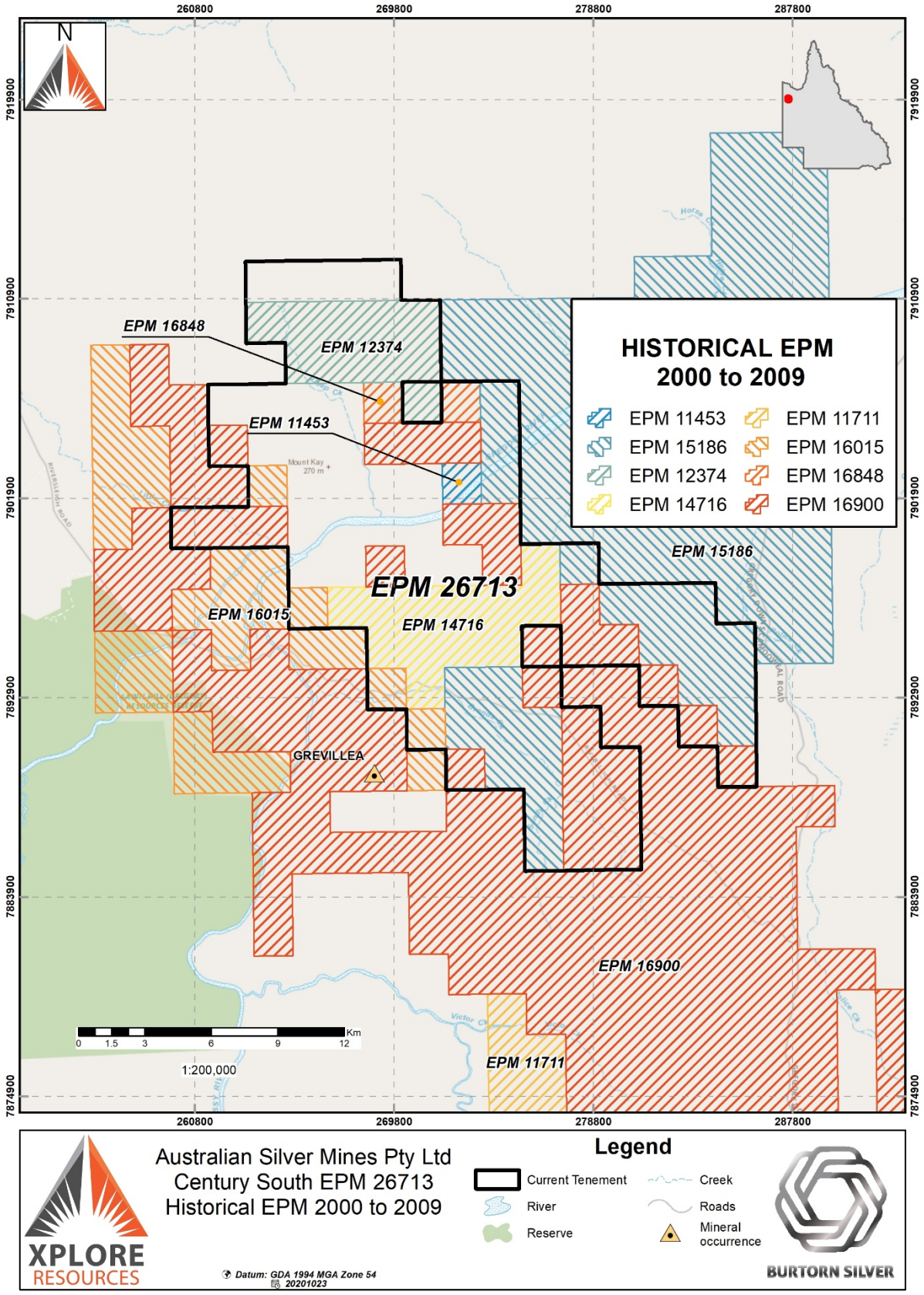


Figure 6.7 Historical EPMs over the Century South tenure from 2000 to 2009

Historical Exploration – 1990 to 1999

The following is a brief summary of exploration work completed on historical tenures overlapping Century South EPM26713 from 1990-1999. The summaries are taken from the open file company reports listed in Table 6.3 on page 54. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.3 on page 54, and the historical tenement map in Figure 6.8 on page 55.

EPM7651 & EPM7705: Aberfoyle Resources Limited (1992-1999).
As a result of 11,700-line km GEOTEM survey flown in 1991, 189 anomalies groups were identified and ranked from 1-5. The top 30 Anomalies were ground inspected, mapped, and geochemically sampled. Follow up work included ground EM surveys and 15 holes drilled between 1993-1994; this included at total of 1927m RC and 2134m diamond drilling. Drilling of the GEOTEM conductors intersected carbonaceous graphitic shales.

EPM7797: Coolgardie Gold N.L. (1993).
This report documents work completed on the 4 sub-blocks relinquished from EPM7797 Riversleigh. Exploration Managers Terra Search carried out the work for Coolgardie Gold N.L.; operators of the Riversleigh Joint Venture. Mineralisation targets within the area were sediment hosted Zn-Ag deposits of the Century type, and brecciated sediment hosted Cu-Pb-Zn deposits of the Lady Loretta type.

Work in the period 1992-1993 included a regional stream sediment sampling program, 1: 25,000 reconnaissance mapping program, and regional rock chip sampling. Within the relinquished sub-blocks all base metal and pathfinder element values were low in all sediment and rock chip sampling and no signs of mineralisation were encountered within the relinquished sub-

EPM10003: North Limited (1995-1996).
Exploration during the first year of tenure included a literature review, stream sediment sampling, regional lag sampling and the commissioning of a detailed photo-geological study. Stream sediment sampling did not define any prospective Cu-Zn-Pb-Ag geochemical anomalies worthy of follow-up.

Fieldwork during 1995 concentrated on stream sediment and regional lag sampling techniques that targeted the prospective Lady Loretta Formation and Riversleigh Siltstone units adjacent to the Termite Range Fault. Regional lag traverses did not highlight any prospective Cu-Zn-Pb-Ag geochemical anomalies. Weak base metal geochemical anomalies were identified, but those were of low tenor or appear related to scavenging by Fe/Mn oxides in the basal, ferruginous member of the Lady Loretta Formation.

EPM10261: North Limited (1995-1996).
EPM10261, located 13km southeast of the 'Century' Zn-Pb-Ag deposit, was selected on the basis of its highly prospective geological setting for stratiform Pb-Zn-Ag mineralisation. The tenement covered prospective fine grained, carbonate rocks of the Proterozoic McNamara Group disrupted by the Termite Range Fault and associated splay structures.

Exploration during the first year of tenure included a literature review, stream sediment survey, regional lag sampling and a detailed photo-geological study. Lag geochemistry identified anomalous Zn within dolomitic units of the Riversleigh Siltstone in the Freemans Creek

Syncline. Regional stream sediment sampling did not highlight any strongly prospective base metal anomalies within the tenement.

Exploration during the second year of tenure included follow-up regional RAB drilling, magnetic fraction, and soil sampling over the Freeman Creek Zn Anomaly. A review of North's data and previous exploration programs in the region suggests that further testing of this unit within the Gregory tenement is not considered likely to result in the discovery of a North size deposit. It was recommended that the tenement be surrendered in full.

EPM10544: Rio Tinto Exploration Pty Ltd (1998).
EPM10544 Century / 'C' comprised 556 sub-blocks. The relinquishment of 69 sub-blocks located over Pasminco Limited's Century ML (55 sub-blocks), Lawn Hill National Park (4 sub-blocks) and unprospective Shady Bore Quartzite (10 sub-blocks) is reported here. No further exploration work was warranted in these areas, so it was recommended that the sub-blocks be relinquished, and EPM10544 be reduced to 487 sub-blocks. Exploration conducted over the Century ML is not reported.

EPM11130: North Limited (1995-1996).
The Gregory Joint Venture package of tenements, EPM7797 (Riversleigh), EPM10199 (Thorntonia) and EPM11130 (Brenda Creek) is located 10km southeast of the world class Century Zn-Pb-Ag deposit. The tenements cover the recently discovered Grevillea Zn-Pb-Ag mineralisation, which is surrounded by highly prospective but underexplored, fine grained carbonate and argillaceous carbonaceous lithologies of the mid Proterozoic McNamara Group.

Title holders, Coolgardie Gold NL (CGNL), and operators, North Limited, have entered an agreement whereby North can earn 75% of CGNL's interest in this tenement group over 5 years. Work by North over the relinquished portion of EPM11130 has concentrated on the development and implementation of a systematic regional geochemical programme, airborne geophysical survey and lithe-structural interpretation. No encouraging results have been defined by this work in the relinquished sub-blocks.

EPM11287: Coolgardie Gold N.L. (1998).

EPM11287 was taken out in August 1996 to cover mid Proterozoic McNamara Group rocks in the Lawn Hill Platform of the Western Succession of the Mount Isa Inlier considered prospective for stratiform sediment-hosted Pb-Zn deposits.

Work carried out in the second year of tenure consisted of a regional soil geochemistry survey using partial and total digest techniques to test for dispersion from significant Pb-Zn mineralisation in proximity to regional structures. Broad multi-element anomalies in partial digest results occur over Riversleigh Siltstone adjacent to the Termite Range Fault, and over Lady Loretta Formation and Shady Bore Quartzite along a north-east trending fault occupied by the bed of the Gregory River. Both areas, require infill sampling to test for continuity and tenor. Several smaller and/or single element anomalies were also detected.
Rock chip samples taken during the soil sampling program detected anomalous Zn/Ag/Ba/Mn and Cu/Pb/Zn/Fe rocks at two additional sites. Extension and infill of the regional soil sampling is recommended to detail the partial digest anomalies. Further sampling and mapping were required to evaluate the anomalous rock chip occurrences**.**

Table 6.3 Summary of Exploration Reports 1990-1999

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM7651	Aberfoyle Resources Limited	Barium, Lead, Silver, Zinc, Arsenic, Copper	1992-1999	CR023523, CR024831, CR025040, CR025537, CR025629, CR026622, CR026967, CR27742, CR027633, CR028841 CR030870
EPM7705	Aberfoyle Resources Limited	Barium, Lead, Silver, Zinc, Arsenic, Copper	1992-1999	CR023523, CR024831, CR025040, CR025537, CR025629, CR026622 CR026967, CR27742, CR027633, CR028841 CR030870
EPM7797	Coolgardie Gold N. L	Zinc, Cadmium, Silver, Arsenic, Lead, Copper	1993	CR024831
EPM10030	North Limited	Copper, Zinc, Silver, Lead	1995-1996	CR027056, CR027849
EPM10261	North Limited	Copper, Zinc, Silver, Lead	1995-1996	CR027296, CR027951
EPM10544	Rio Tinto Exploration Pty Ltd	Silver, Zinc, Lead	1998	CR030449
EPM11130	North Limited	Copper, Zinc, Silver, Lead	1995-1996	CR031055
EPM11287	Coolgardie Gold NL	Silver, Zinc, Lead	1998	CR030365

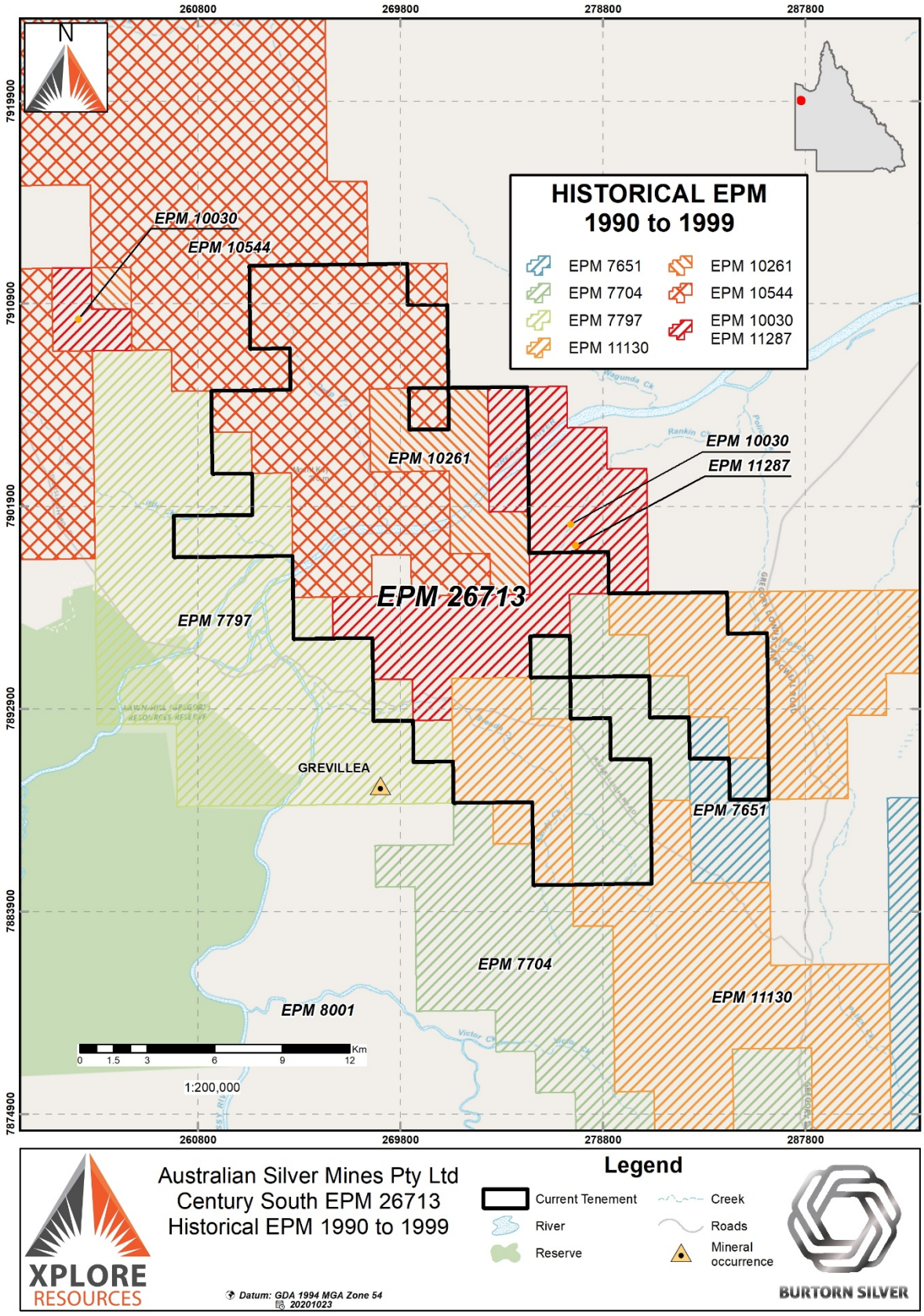


Figure 6.8 Historical EPMs over the Century South tenure from 1990 to 1999

Historical Exploration – 1980 to 1989

The following is a brief summary of exploration work completed on historical tenements overlapping the Century South EPM26713 from 1980-1989. The summaries are taken from the open file company reports listed in Table 6.4 on page 57. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.4 on ***page 57*** and the historical tenement map in Figure 6.9 on page 58.

EPM3154: Western Mining Corp Limited (1982-1984).
EPM 3154 was granted in 1981 where an extensive -80 mesh stream sediment survey was followed-up with soil sampling programs, rock chip sampling and SIROTEM. Most of the work concentrated on the Lady Loretta Formation and favourable structural settings. No geochemical anomalies were located within the area of the current EPM.

EPM3562: Duval Mining (Aust) Ltd (1982).
EPM3562 "Brenda Creek" was granted August 1983 and relinquished after 1 year. Initially exploration focused on the Lady Loretta Formation adjacent to the Termite Range Fault, however as no anomalies were located here the focus changed to the Kingfisher Prospect area (south of Riversleigh homestead).

EPM3907: Ashton Mining Limited (1984-1988).
During the period 3rd December 1984 to 2nd December 1988, Ashton Mining Limited on behalf of the Barkly Joint Venture carried out an exploration program for both diamonds and gold.

As part of the diamond exploration program, in excess of 3,750 samples including six bulk samples (totalling 4,140 tonnes of gravel) were collected within the tenure. In addition, an airborne magnetic survey was flown over approximately 80 percent of the area and targets were identified and followed-up by ground magnetic surveys and limited diamond drilling.

An independent diamond consultant was engaged to review all data gathered by the Joint Venture. Exploration for gold comprised reconnaissance stream sediment and rock chip geochemical sampling to test Proterozoic sediments and volcanics as potential hosts to gold and copper/gold mineralization. Anomalies identified through the reconnaissance program were subject to follow-up bulk cyanide leach stream sediment sampling accompanied by detailed geological traversing. No significant results returned and tenement relinquished**.**

EPM4183: Billiton Australia (1986).
The tenement was explored for Mount Isa copper style mineralisation. Initial work was confined to structural mapping to define drill targets one drill target was proposed.

EPM7249: CRA Exploration Pty Ltd (1990-1995).
CRAE applied for EPM7249 to allow it to prospect a section of the Proterozoic Lawn Hill Platform containing the Termite Range Fault for lead-zinc mineralization. The stratabound Century zinc-lead-silver mineralization occurs immediately adjacent to the Termite Range Fault only 20km to the northwest.

The Kamarga discordant lead-zinc-copper mineralization, which is localised about east-northeast trending faults, is less than 15km to the northeast of the tenement. Work completed on the relinquished area includes:

• detailed -80# drainage sampling (25 samples)
• follow up -40# soil sampling (47 samples)

A 100ppm copper anomaly was identified from a single catchment; the Wagunda Creek Anomaly. Soil sampling traverses within the anomalous catchment failed to locate the source of the anomaly. However, it is suspected that the anomalous source lies on the adjacent competitor tenement. It is recommended that the five sub-blocks be relinquished.

Table 6.4 Summary of Exploration Reports 1980-1989

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM3154	Western Mining Corp Limited	Lead, Silver, Copper, Zinc	1982-1984	CR010976, CR011708, CR012273, CR013008, CR0013373
EPM3562	Duval Mining (Aust) Ltd	Copper, Lead, Zinc, Silver	1982	CR013247
EPM3907	Ashton Mining Limited	Diamonds, gold	1984-1988	CR015588, CR016703, CR016704, CR018153, CR019076, CR20611
EPM4183	Billiton Australia	Copper, Lead, Silver, Zinc	1986	CR016813, CR017650
EPM7249	CRA Exploration Pty Ltd	Copper, Lead, Silver, Zinc	1995	CR027688

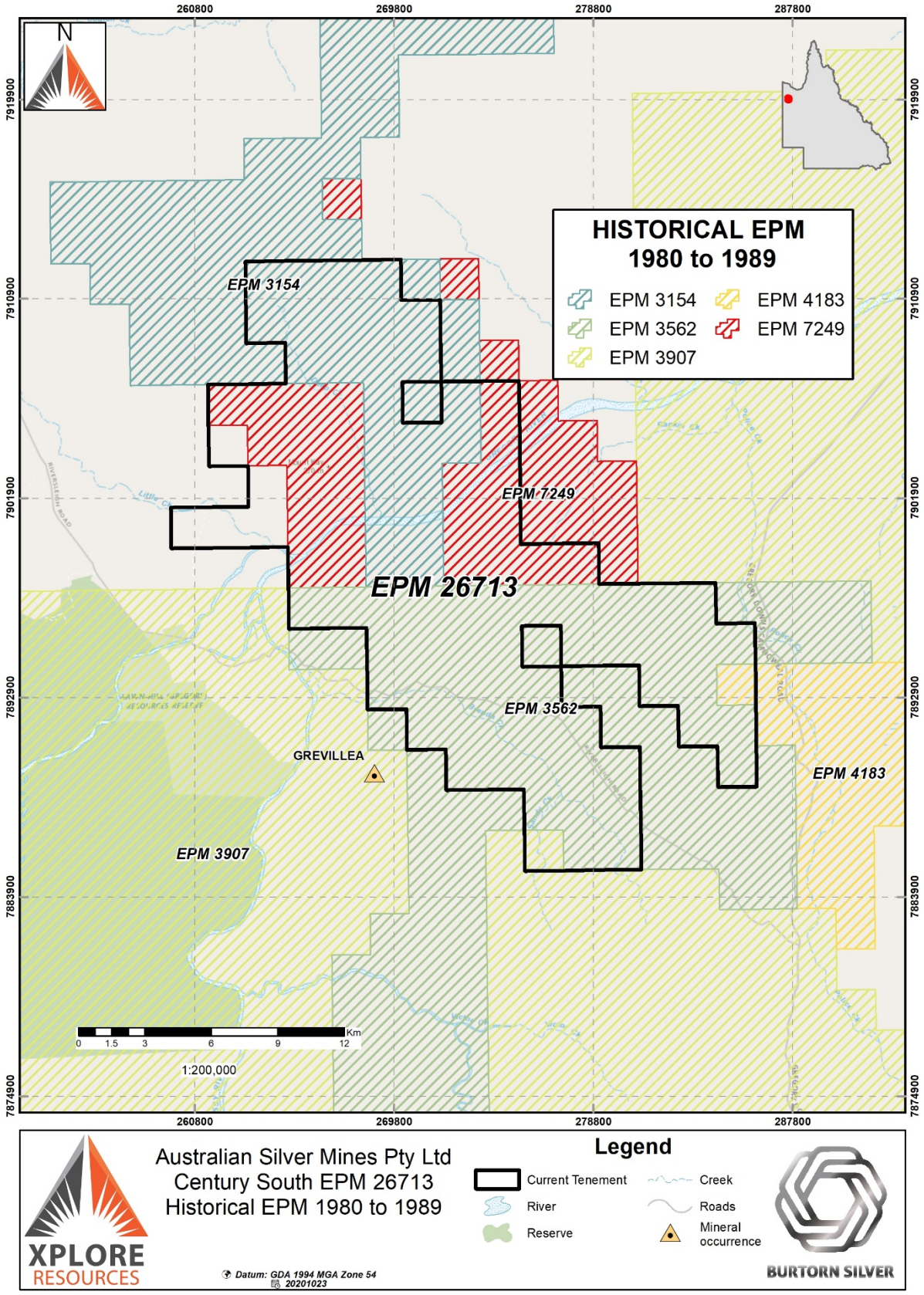


Figure 6.9 Historical EPMs over the Century South tenure from 1980 to 1989

Historical Exploration – 1970 to 1979

The following is a brief summary of exploration work completed on historical tenements overlapping Century South EPM26713 from 1970-1979. The summaries are taken from the open file company reports listed in Table 6.5 on page 61. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.5 on ***page 61*** and the historical tenement map in Figure 6.10 on page 62.

EPM1290: Newmont Pty Ltd; ICI Aust Ltd (1974-1975).
Work completed included photo geological interpretation, geological mapping and map compilation at 1:25,000 scale. The tenement was surrendered in 1974.

EPM1360: Amax Exploration (Aust) Inc (1974-1975).
Work completed included mapping and geochemical sampling which outlined a ferruginous siltstone unit anomalous in copper and zinc. Approximately 1800 soil and rock chip samples were collected from 28 traverses across the siltstone unit. These anomalies were tested by diamond drilling which failed to intersect significant mineralisation within 5 holes for a total of 1335m drilled.

EPM1405: Occidental Minerals Corp Of Aust (1975).
The investigation comprised semi-regional geological mapping and prospecting; the analysis of 201 rock samples for copper-lead-zinc; and approximately 2.25-line miles of Induced Polarisation traversing over three (3) geologically-favourable zones.

Exploration failed to uncover any evidence of significant stratiform base metal mineralisation. However, the relatively small "Barite Blow" Ba-Pb-Zn prospect was outlined within the Carrier Shear complex and this warranted limited future investigation. The anomalous zone was pegged (M.L. 7896) to protect Oxymin's interest**.**

EPM1660: Esso Exploration & Production Aust Inc (1977-1978).
Work completed included stream and rock chip sampling. The results of the two-year exploration program carried out suggest that economic accumulation of base metals in the McNamara Group within the area is unlikely to have occurred. Consequently, no further exploration work was recommended and the tenement was relinquished.

EPM1665: Newmont Pty Ltd (1977-1978).
The principal aim of the exploration programme was to search for stratiform or stratabound Pb-Zn mineralisation in the Paradise Creek Formation, and stratabound Cu mineralisation in the Gunpowder Rocks of the lower to middle Proterozoic Gunpowder and Paradise Creek Formations were investigated with a view to the discovery of stratabound Pb-Zn and/or stratabound Cu mineralisation.

A programme of stream sediment sampling failed to detect any significant geochemical anomalies. In the light of experience gained at other prospects in the district the stratabound Cu mineralisation known to occur in the Gunpowder Formation was considered sub economic. Due to the discouraging results, and in accordance with Mines Department regulations, the area was relinquished on the 20$^{th\ of}$ August, 1977.

EPM1937: Newmont Pty Ltd (1978).
The principal aim of the exploration programme has been to further investigate stratabound Pb-Zn mineralisation previously detected in the middle Proterozoic (Carpentarian) Paradise Creek Formation. Work completed includes geological mapping and drilling of one diamond hole (KD15). This drilling was part of a continued programme of diamond drilling and geological mapping was successful in further exploring the Kamarga Pb-Zn prospect. Although overall grades were low, several zones of moderate anomalism below the fault zone, including dolomitic siltstones and graded dolarenites were intersected to a depth of 224.2m where the Lower Mineralised Dolomite (LMD) began.

The LMD graded 2.6% Zn and 0.2% Pb over 84.8m (70m true thickness). This included a zone from 224.2m grading 7.5% Zn, 1.85m from 234.15m grading 8.3% Zn, 1m from 247m grading 22.5% Zn and 10% Pb, and 2.5m from 295m grading 15.6% Zn and 3.3% Pb.

The last interval appeared to have some continuity as similar thicknesses at similar grades were intersected in the lower LMD in KD7, B, and 9; and high-grade Zn-Pb was intersected through a substantial thickness of the Lower Paradise Creek Formation.

The program of diamond drilling and geological mapping has been successful in further exploring the Kamarga Pb-Zn prospect, although overall grades are low, several zones of moderate to high grade Zn-Pb have been intersected through a substantial thickness of the Lower Paradise Creek Formation.

EPM1985: Newmont Pty Ltd (1979).
This report covers the exploration carried out on the ATP which were explored conjointly as the "Kamarga Project", a joint venture between Newmont Pty. Ltd., ICI Australia Ltd, and CRA Exploration Pty. Ltd.

Work completed included mapping, 7,500m of RAB drilling, maximum values encountered in weathered bedrock in the JB area were 0.79% Zn and 0.84% Pb. 10 diamond holes totalling 3,355m were completed. Best assay result was 2.5m@15.6% Zn. There were other mineralised zones as well.

Amdex Mining Ltd; EPM2104; 1979
Literature from previous exploration has been studied and it appears that ATP2106M contains one major target and two or three secondary target areas. The major target area according to previous geochemistry is Esso anomaly 8 which includes their anomaly 2 and is coincident with Kennecott's Cu 4 and Zn 2 anomalies, and just east of a Kennecott lead anomaly.

Other target areas include Esso anomalies 3, 4 and 10 of which No. 3 is probably most important. Nos. 4 and 10 are low order anomalies at best. Recent Bureau of Mineral Resources mapping in the Riversleigh sheet area has shown part of ATP2106M to contain Lady Loretta Formation rocks, the hosts to the Lady Loretta deposit. Work was been recommended but not completed.

EPM2145: Shell Co. Of Australia Ltd (1980-1983).
ATP2143M "Brenda Creek" was granted in June 1979 and held for 3 years. Work completed included an extensive airborne INPUT-EM/magnetics/radiometrics survey. Selected anomalies were ground checked using IP and geochemistry. No mineralisation was located.

EPM2151: Newmont Pty Ltd (1980-1984).
The main aim of which was to investigate the potential for stratiform and/or stratabound Cu-Pb-Zn-Ag mineralisation in the Gunpowder, Paradise Creek, Lady Loretta and Riversleigh Formations. Work completed during the period included mapping and rock chip sampling.

Surface examination of the outcrops combined with rock chip geochemistry failed to indicate any evidence of stratiform or stratabound sulphides within the lower Paradise Creek Formation. The presence of weak stratabound Cu mineralisation in the Gunpowder and Torpedo Creek formations was confirmed.

Two (2) diamond drill holes were completed by the BMR/GSQ neither hole intersected base metal mineralisation in the Paradise Creek formation low grade copper mineralisation was intersected in the Gunpowder Formation.

Table 6.5 Summary of Exploration Reports 1970-1979

Tenement No	Report Submitted	Commodities	Grant date	CR Report
EPM1290	Newmont Pty Ltd; ICI Aust Ltd	Copper, Lead Zinc	1974-1975	CR004839, CR005152
EPM1360	Amax Exploration (Aust) Inc	Copper, Zinc	1974-1975	CR005655, CR005226
EPM1405	Occidental Minerals Corp Of Aust	Zinc, Copper, Lead, Barite	1975	CR005479
EPM1660	Esso Exploration & Production Aust Inc	Zinc, Copper, Lead, Cobalt, Manganese, Barite	1977-1978	CR006105, CR006386, CR006649, CR006977
EPM1665	Newmont Pty Ltd		1979	CR006847
EPM1937	Newmont Pty Ltd	Silver, Copper, Zinc, Lead	1979	CR007501 CR007118
EPM1985	Newmont Pty Ltd	Silver, Copper, Zinc, Lead	1979	CR007501
EPM2106	Amdex Mining Ltd	Lead, Silver, Zinc, Copper	1979	CR007418
EPM2143	Shell Co. Of Australia Ltd	Copper, Zinc, Lead	1980-1983	CR008032, CR008539, CR08900, CR009636, CR010178, CR010546, CR011643,
EPM2151	Newmont Pty Ltd, CRA Exploration Pty Ltd [CRA] Aquitaine Aust Minerals Pty Ltd Elf Aquitaine, Triako Mines Ltd	Lead, Silver, Copper, Zinc	1980-1984	CR007952, CR008391, CR008392, CR008508, CR009342, CR010141, CR011291, CR011621,

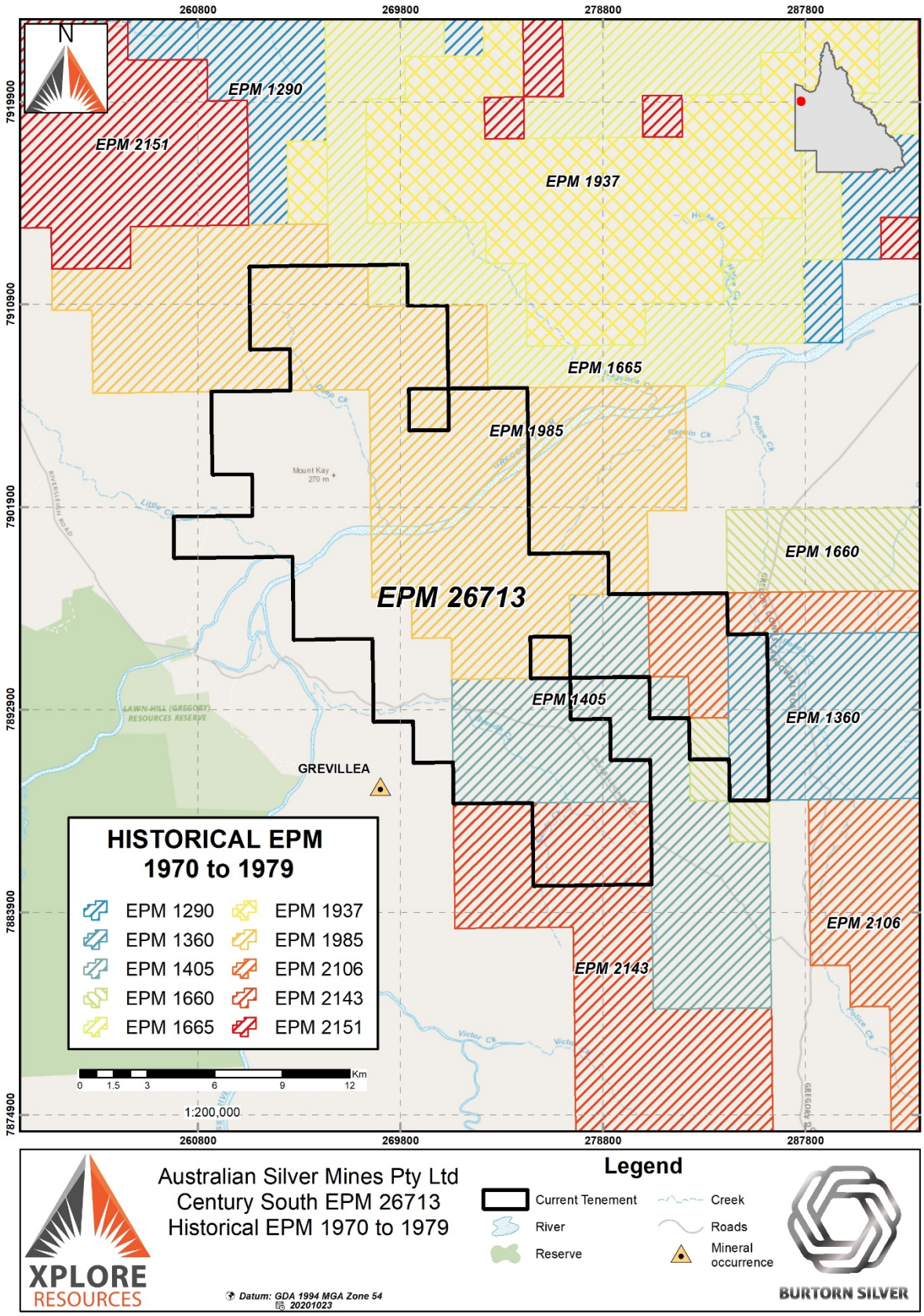


Figure 6.10 Historical EPMs over the Century South tenure from 1970 to 1979

Historical Exploration – 1960 to 1969

The following is a brief summary of exploration work completed on historical tenements overlapping Century South EPM26713 from 1960-1969. The summaries are taken from the open file company reports listed in Table 6.6. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.6 and the historical tenement map in Figure 6.11 on page 64.

EPM183: Carpentaria Exploration Co Pty Ltd (1961-1962).
Work completed included geological reconnaissance and prospecting which resulted in locating 36 copper mineral occurrences. Copper was found to occur throughout the sediments in the region in particular the dolomitic sediments. The dominant control is structural.

EPM664: Carpentaria Exploration Co Pty Ltd (1958-1970).
Work completed during the period included the following: soil and rock chip sampling, 1356 stream sediment samples, geophysical surveys, prospecting, aerial photography and mapping; which located several small copper prospects.

EPM474: Broken Hill South Ltd (1969-1970).
Phosphate Rock (Phosphorite); Outlined phosphate deposit in Area 2 extended for 8 miles. They drilled 115 percussion holes on the phosphate deposit and took bulk samples from a winze (40 feet deep).

Table 6.6 Summary of Exploration Reports 1960-1969

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM183	Carpentaria Exploration Co Pty Ltd	Copper, Lead	1961-1962	CR000943
EPM474	Broken Hill South Ltd	Phosphate Rock	1969-1970	CR002769, CR003120
EPM664	Carpentaria Exploration Co Pty Ltd	Copper, Lead, Zinc, Barite	1958-1970	CR003864, CR003865

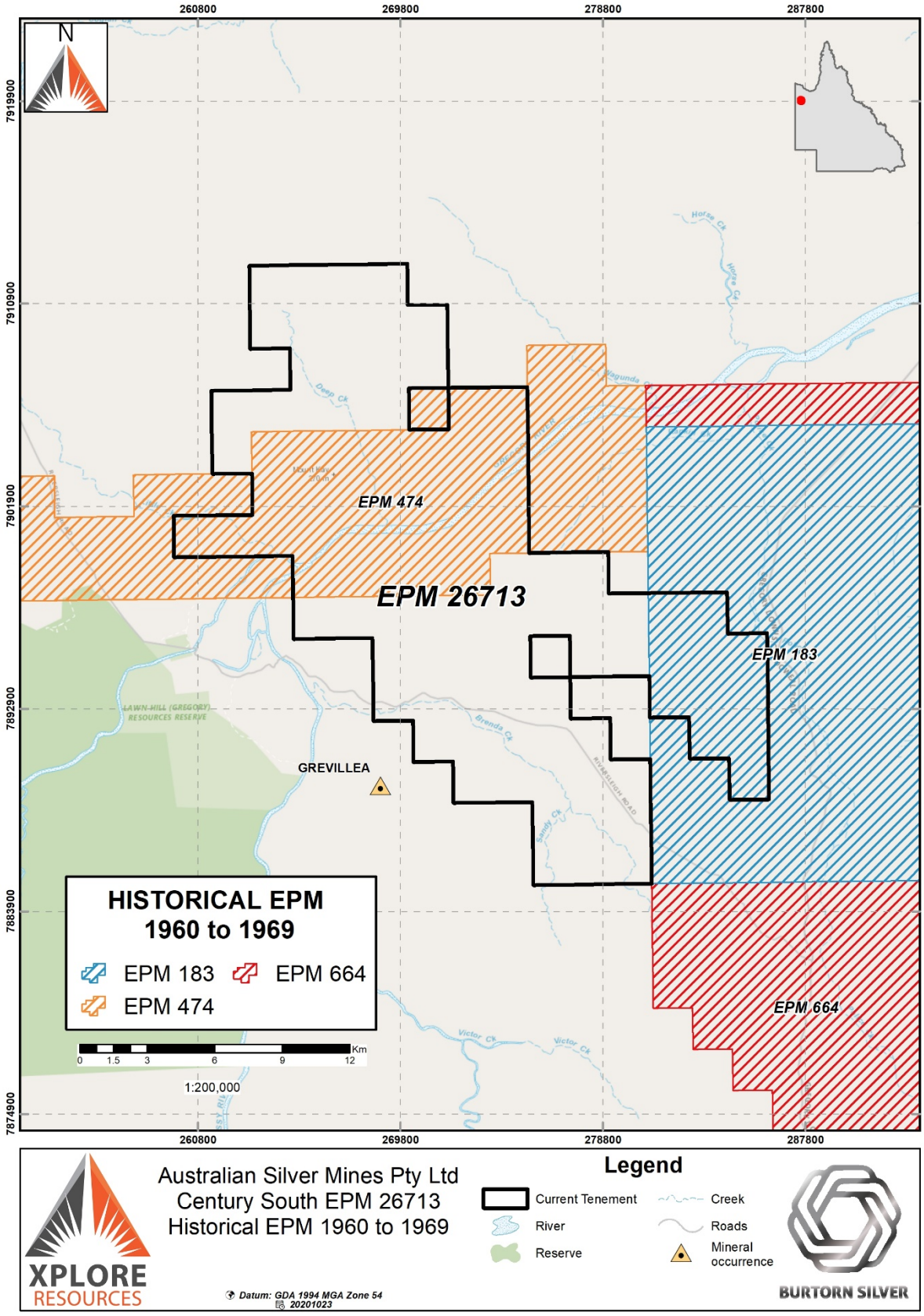


Figure 6.11 Historical EPMs over the Century South tenure from 1961 to 1970

Historical Exploration – 1950 to 1959

The following is a brief summary of exploration work completed on historical tenures overlapping Century South EPM26713 from 1950-1959. The summaries are taken from the open file company reports listed in Table 6.7. For further details on exploration work completed the reader is referred to the open file company reports listed in Table 6.7 and the historical tenement map in Figure 6.12 on page 66.

EPM64: Broken Hill Pty Ltd (1957-1958).
Work completed for iron exploration included rock chip sampling, mapping and diamond drilling of ferruginous sandstones and oolitic hematite beds of the Mullera Formation in the Constance Range. A total of 56 drill holes completed.

EPM92: Enterprise Exploration Company Pty Ltd (1957-1958).
No work was completed within or near tenure.

Table 6.7 Summary of Exploration Reports 1950-1959

Tenement No	Report Submitted	Commodities	Year	CR Report
EPM64	Broken Hill Pty Ltd	Iron	1957-1958	CR000153, CR000158
EPM92	Enterprise Exploration Company Pty Ltd	Copper, Limestone	1957-1958	CR000146, CR000179

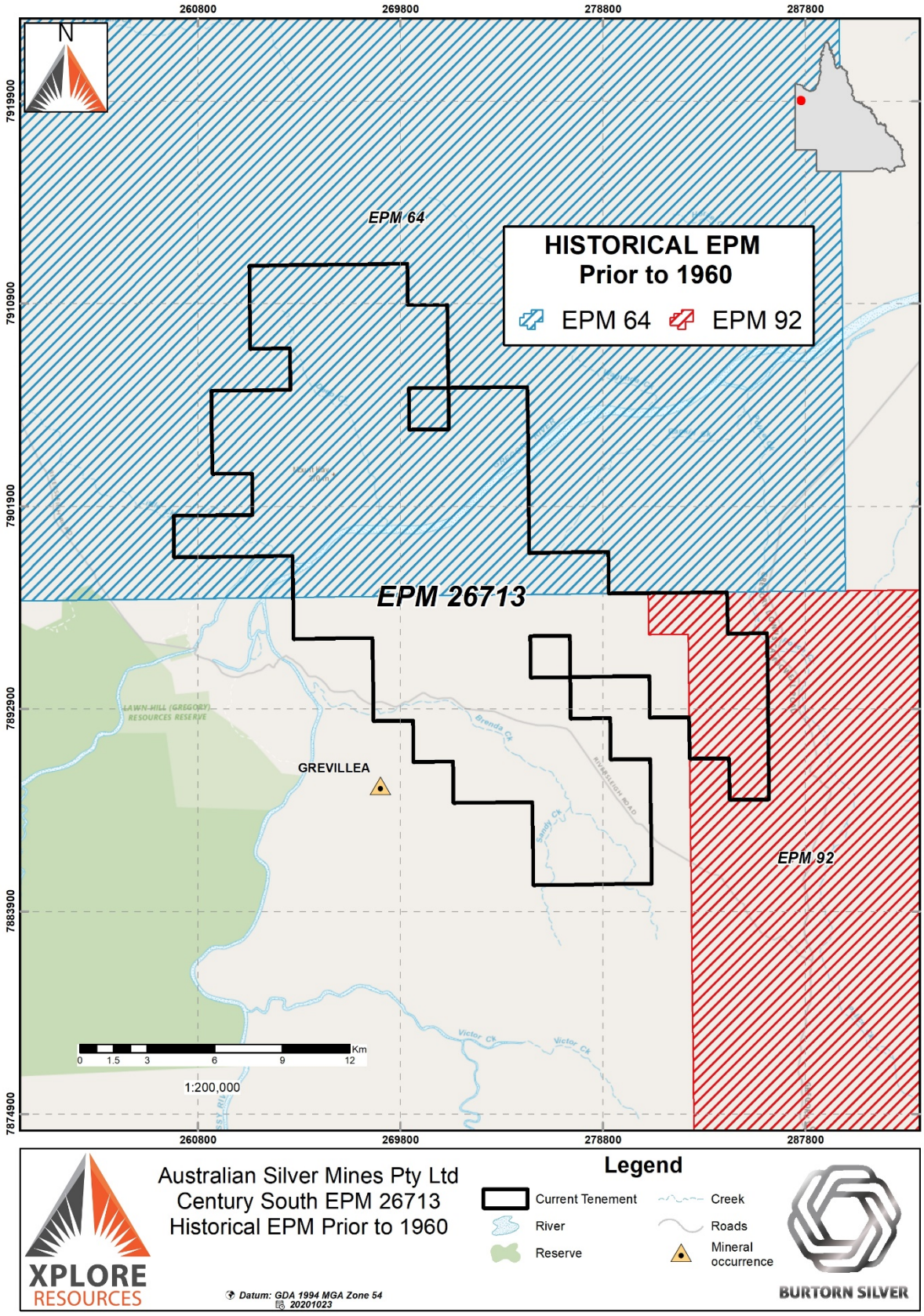


Figure 6.12 Historical EPMs over the Century South tenure prior to 1960

7.0 GEOLOGICAL SETTING AND MINERALISATION

7.1 REGIONAL GEOLOGICAL SETTING

TYR PROJECT AREA

Much of the mineral wealth of New South Wales is contained in its orogenic and cratonic belts. Geologically, New South Wales consists of seven main regions. These are; Lachlan Fold Belt, the Hunter-Bowen Orogeny/New England Orogen, the Delamerian Orogeny, the Clarence Moreton Basin, the Great Artesian Basin, the Sydney Basin and Murray Basin (Figure 7.1).

Geological activities begin at the Middle Cambrian in the Lachlan Fold Belt (approximately 530Ma) (Craig O'Neil, Cara Danis, 2013).

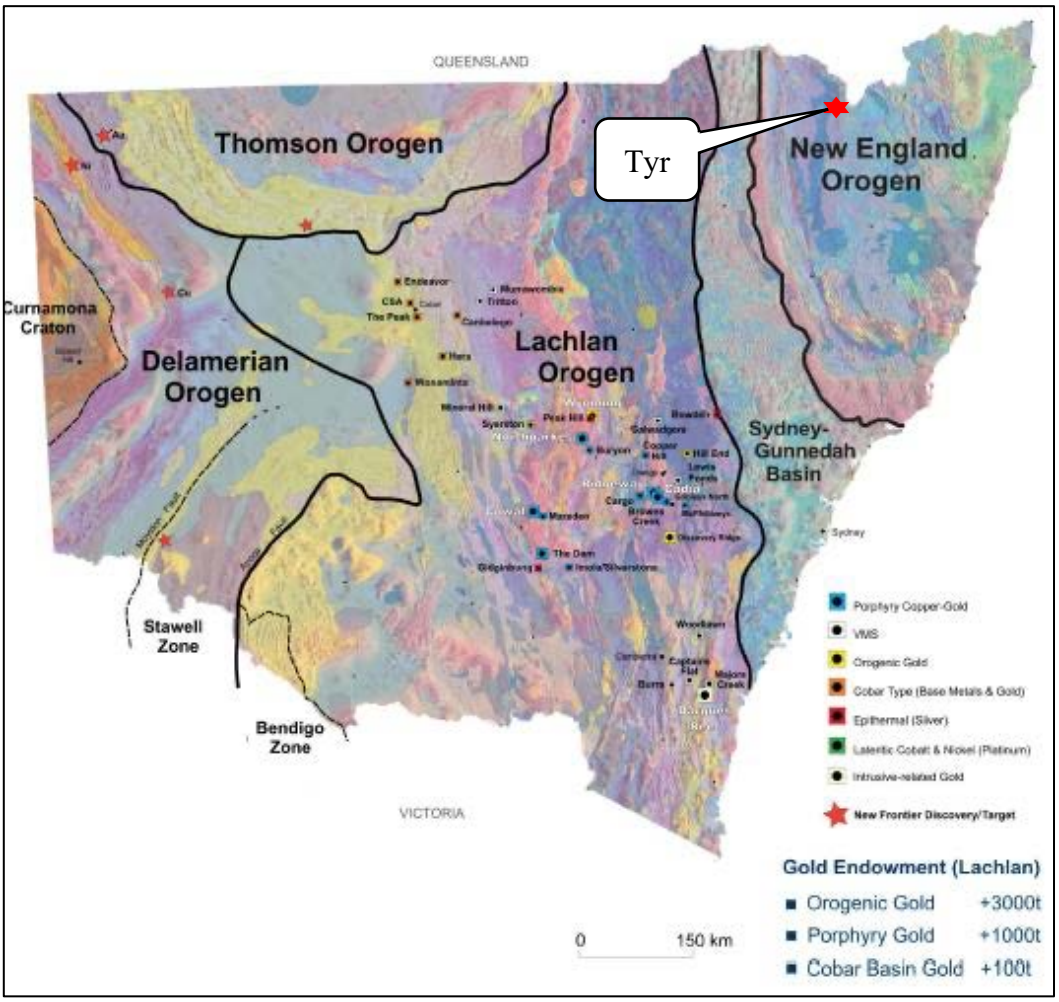


Figure 7.1 The Seven Major Geological Divisions of New South Wales

The Tyr Project area is located in the New England Orogen (Figure 7.1). The New England Fold Belt, also known as Hunter-Bowen Super Cycle, is divided into four (4) cycles, in the NEFB records the Middle Devonian to Triassic (376Ma to 227Ma) convergent margin development of East Gondwana which is expressed in the evolution of the NEFB and the Sydney-Gunnedah-Bowen Basin system (SGBB) (Craig O'Neil, Cara Danis, 2013).

The New England Orogen is a significant mineral province in Eastern Australia with potential for large gold/silver systems in which are detailed several geologic sub-provinces that comprise the New England Orogen (Figure 7.2).

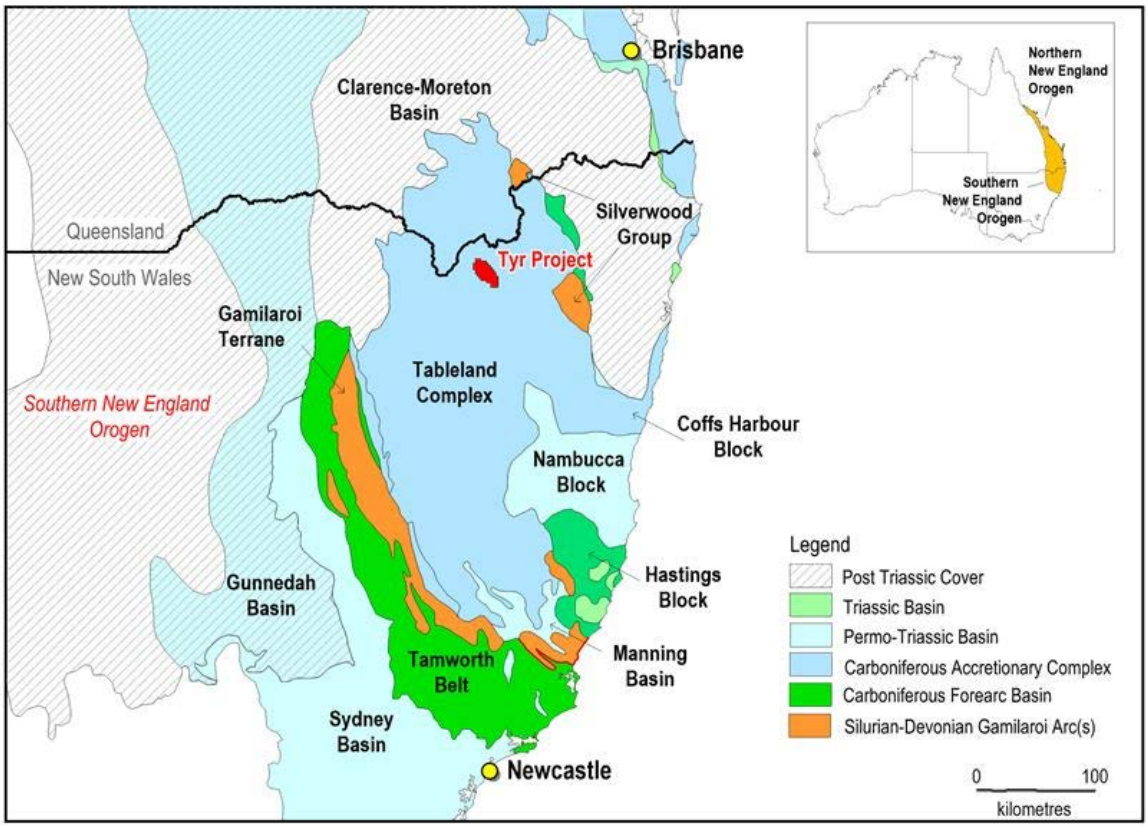


Figure 7.2 Geologic Sub-Provinces of the New England Orogen

The Orogen comprises of Devonian to Permian complexes. Devonian island arc assemblages accreted to the Australian continent late in the Devonian. This was followed by repeated cycles of westward subduction and extension producing mineralised granites and volcanics from the Middle Devonian to Early Cretaceous.'

Major deposits include gold bonanzas at Hillgrove (NSW). New England Orogen deposit styles include mesothermal and epithermal gold, VMS, epithermal silver, and lateritic nickel. The Orogen also offers porphyry copper and gold opportunities. Other economically important commodities include tin, sapphires, diamonds, molybdenum, tungsten, magnesite, cobalt and antimony (DPI, 2019).

CENTURY SOUTH PROJECT AREA

The geological history of Queensland is complex and spans over 1,800 million years.

The basement crustal configuration of the state is reflected in an ongoing process of continental accretional growth that retreats eastward originating from the west, that is driven by multiple crustal margin plate tectonic events (mountain building volcanics, intrusive activity, metamorphism, resulting in multiple phases of associated mineralisation), coupled with intermittent periods of basinal rifting and sag events with widespread sedimentation.
There has been a general progression from the development of Queensland's northwest.
mineral rich province of the Proterozoic Mount Isa Inlier (~1880Ma) dominated by igneous and metamorphic domains. These areas are blanketed throughout northern, central and southern Qld by the north-south trending contiguous Eromanga-Carpentaria Basins known to host the Cretaceous-aged oil.

The subsequent geological history has seen the development of substantial oil shale rich Tertiary-aged block faulted sedimentary basins and volcanic terranes of Queensland's east coast and continental margin.

The geology of Queensland consists of three (3) prominent structural and basinal regions (Figure 7.3 on page 70):

- North Australian Craton (including the Mount Isa Province and three other lesser provinces and associated basins);
- Neoproterozoic-Early Palaeozoic Georgina Basin (Cambrian);
- Tasman Orogenic Zone that can be sub-divided into the:
- Thompson Orogen (Neoproterozoic-Ordovician);
- Mossman (Palaeozoic);
- New England Orogen (middle Palaeozoic-early Palaeozoic; includes Permian coal;
- measures of the Bowen Basin);
- Great Australian (Artesian) Basin (Mesozoic sediments of continental origin including; and
- Jurassic and Triassic Basin coal measures).

The Great Artesian Basin encompasses the:

- Eromanga Basin;
- Carpentaria Basin; and
- Surat, Laura, Mulgildie, Nambour, Maryborough and Clarence-Moreton Basins.

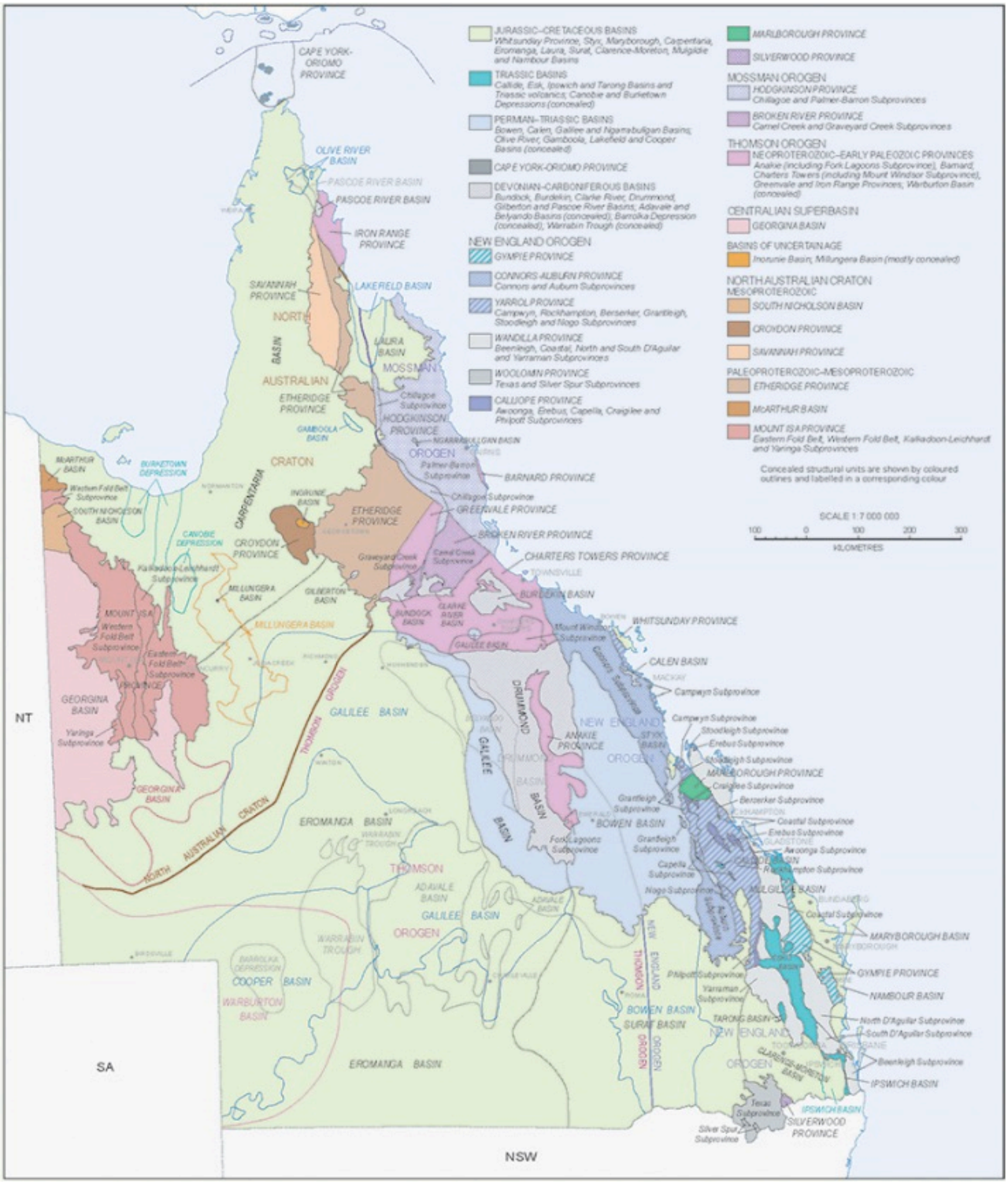


Figure 7.3 Geology of Queensland

The North Australian Craton is in north-western Queensland, of which the Mount Isa Inlier forms part of (Figure 7.4 on page 71). The Lawn Hill Platform makes up part of the northwest section of the Inlier, to its west is the Century domain. Within the Century domain includes the Century deposit and Grevillea Prospect. Both deposits are hosted within the middle to upper sequences of the Isa Superbasin. Intra-plate tectonic events and consequent stresses within the Isa Superbasin, have attributed to the migration of metal-bearing fluids into its constituent sub-basins.

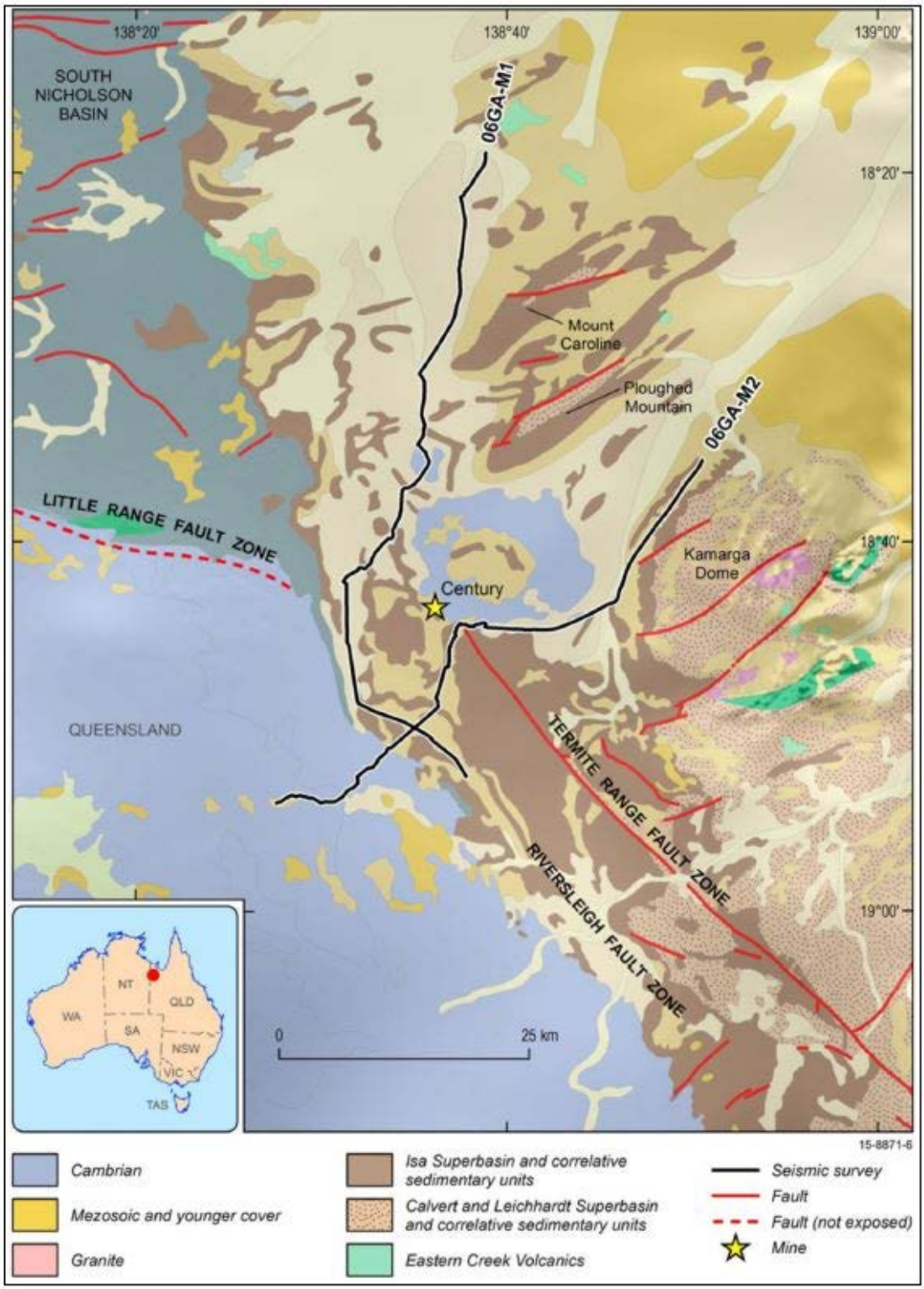


Figure 7.4 Geology of Century South Project Area, NW Queensland

The Grevillea Prospect which sits to the south of Century Mine and immediately to the west of Century South (western side of Termite Range Fault), has mineralisation bearing host stratigraphy in the Riversleigh Siltstone, with the Century deposit in the Lawn Hill Formation. These units are part of the McNamara Group, which also hosts the Lady Loretta deposit.
These are the equivalents to the Mount Isa Group that hosts the Mount Isa and George Fisher Zn-Pb-Ag deposits approximately 200km to the south-east. Both the Century and Grevillea deposits are in close proximity to the major northwest-trending Termite Range Fault, with the Century deposit located on the fault and the Grevillea deposit approximately 8km southwest of the fault.

The closest intrusive units that exist in the Century domain vicinity are the older Paleoproterozoic Yeldham Granites (1796 +/- 3Ma). These intrusive rocks are approximately 30km east of the Century deposit.

Metamorphism in the Lawn Hill Platform region is confined to three (3) main thermal events at 1500Ma, 1440-1400Ma and 1250-1150Ma. The event dating to 1500Ma, is a late Isan Orogeny recorded only in the south that may reflect exhumation of a provenance region. The 1440-1300Ma event is related to fault reactivation and consequent thermal fluid pulse at ~1440-1400Ma, with subsequent enhanced cooling. The youngest thermal/fluid flow event at 1250-1150Ma is recorded mainly in the northeast and may be related to the assembly of the Neoproterozoic supercontinent of Rodinia (Valenta, 2018).

7.1.1 TYR PROJECT AREA GEOLOGY

The Tyr Project area is located over three (3) main Sub-provinces of New England Orogen;

- Central Block, which is mainly comprised by conglomerate, sandstone and siltstone. Including some felsic igneous rocks and quartzite units.
- Tablelands Complex, which mainly comprises granite and mineralisation related material.
- New England Orogen Granites (dominant lithology of porphyry and basalt).

The tenement hosts two (2) groups of mineralised area.

The first is the Clive Group, located in the south-east portion of the tenement and includes a group of 46 base metal and polymetallic occurrences.

The second is the Mole River group, including 16 mineral occurrences (Figure 7.5 on page 73). Only four (4) of these are polymetallic-base metal occurrences (Henley & et al, 2001).

The Tyr exploration area contains a significant amount of silver occurrences which strikes north-west. Clive group contains major occurrences such as the Torny Mine. The Tyr tenement hosts a large number of mineral occurrences according to evidence from historical mines within the exploration licence area. These activities were mostly focused on silver, lead, zinc, arsenic and tin.

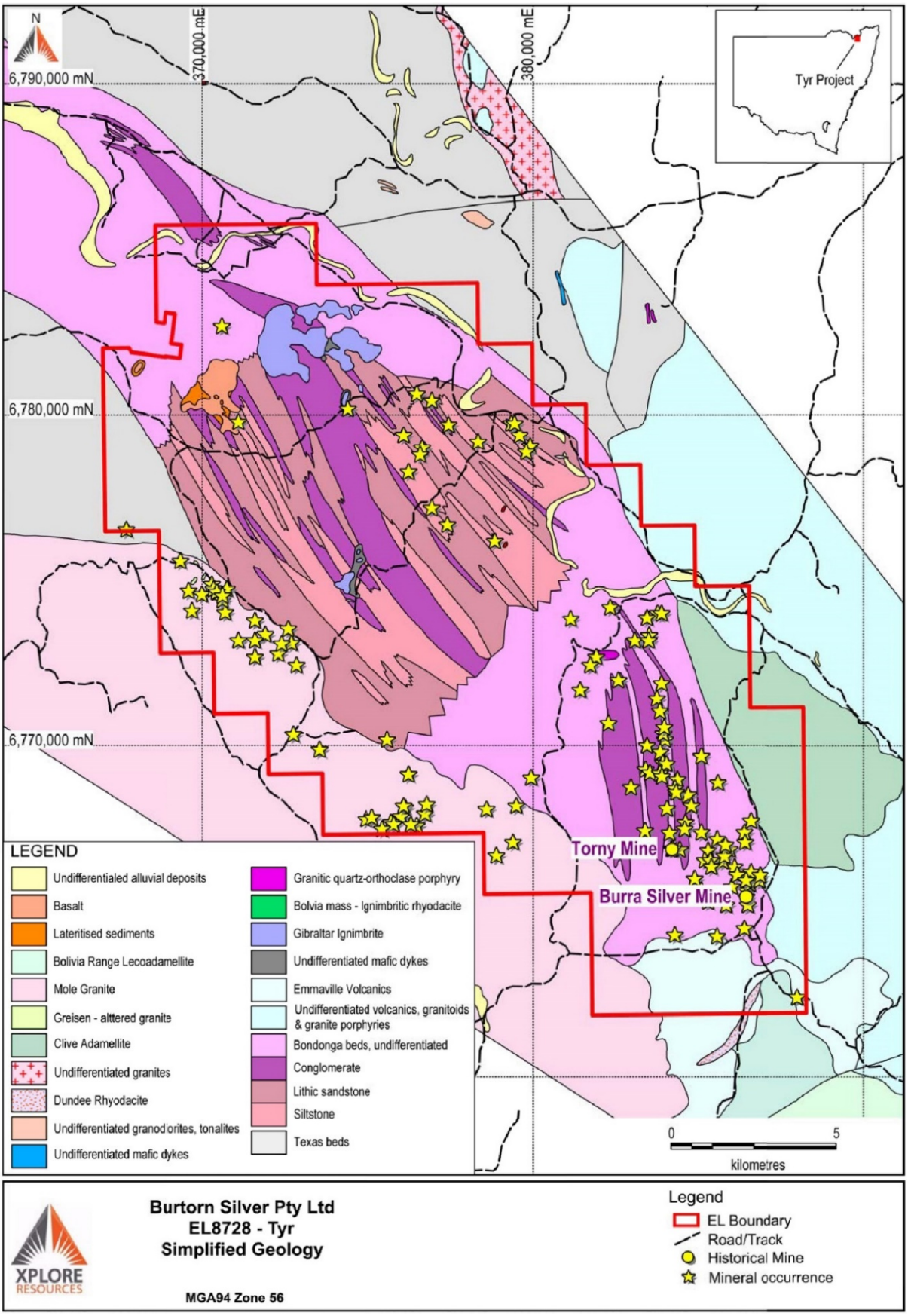


Figure 7.5 Simplified Geology, Tyr Project, Northern New South Wales

7.1.2 CENTURY SOUTH AREA PROJECT GEOLOGY

The Mesoproterozoic rocks hosting the nearby Century Mine (owned by New Century Resources – for further details, please see Section 15, Adjacent Properties, in this Report) are part of the Lawn Hill and Termite Range Formations within the Upper McNamara Group.

The sequence composition is made up of unmetamorphosed to low-grade metapelitic rocks, sandstones, siltstones, shales, mudstones, and minor tuffaceous layers. This upward coarsening trend is indicative of a pro-gradational system of rapidly deposited turbidites in an outer shelf bathymetric setting.

The host rocks for mineralised intervals display variations in the shale/siltstone ratios and are generally characterised as 1–10m alternating beds. Sulphide rich layers occur prevalently as laminated bands within shale intervals, enriched in organic content. These are separated by silty layers, only weakly mineralised or barren, and particularly enriched in sideritic cements.

The siltstones are also characterised by an abundance of stylolites. We interpret these features as direct product of compaction-induced pressure solution, as they are broadly concordant with the stratigraphic layers and preserve organic seams which were most likely accumulated as insoluble material during basin dewatering.

Displayed in Figure 7.6 on page 75 is a sample of stylolitic siltstone typical to that found at Century. The stylolite has a low degree of convolution and preserve carbon and sulphide rich seams, implying at least some carbon and sulphides predated compaction associated with these stylolites. Most layers display differential compaction (see arrow).

The Century zinc deposit lies close to a major structure, the Termite Range Fault. Century's proximity to fault structures is a commonly accepted feature of other preeminent Pb-Zn massive sulphide deposits, often invoked in genetic models e.g. Mt. Isa, Australia; Howards Pass, Canada; Navan, Ireland; Meggen and Rammelsberg, Germany; Gamsberg, South Africa (Gustafson, 1981).

However, at Century the influence of this major fault can be only inferred, as mineralisation results are terminated by an erosional unconformity on its eastern side. The Termite Range Fault is the major strike-slip discontinuity in the region, it is oriented northwest–southeast, and together with other northeast, steep-dipping faults, characterises the structural grain of the Lawn Hill Platform

This structural setting was most likely essential in controlling brine migration and fluid flow channelling across the region. The Lawn Hill Platform has experienced an extended reactivation history where the Termite Range Fault structure was active during several episodes of rifting-related extension, subsequent compression, and basin inversion during the Isan Orogeny (Broadbent G. M., 1998); (Betts, 2004).

This major orogenic episode is recognised by the general macroscopic folding found in the Western Fold Belt. The Isan Orogeny was considered to comprise three main deformation stages D1, D2, and D3 (O'Dea, 1997). Metamorphic ages of 1585Ma for rocks of greenschist to amphibolite facies 250km south of Century.

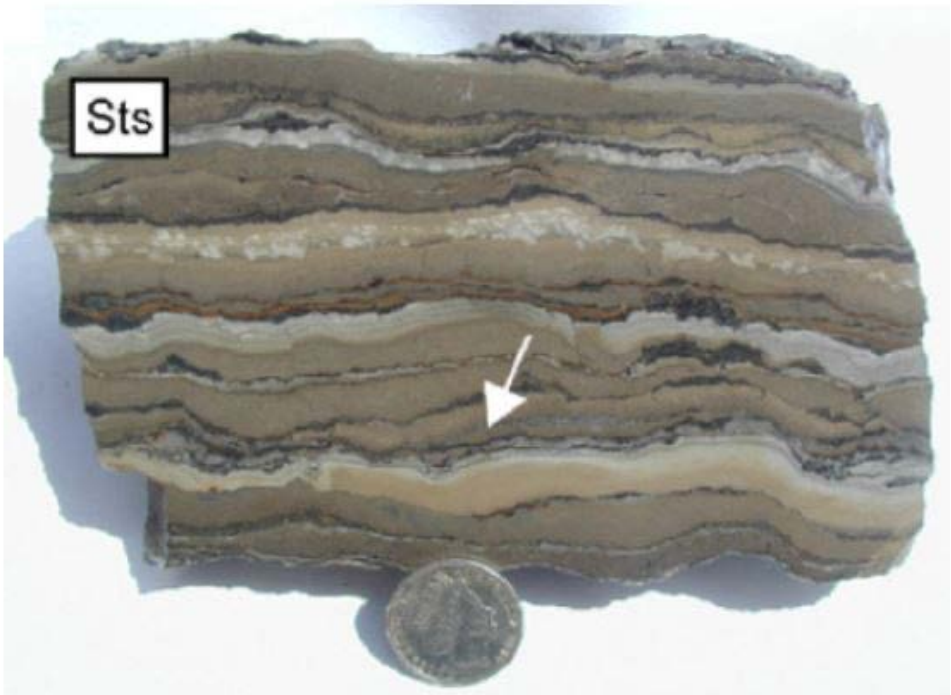


Figure 7.6 Sample of Stylolitic siltstone from Century (Feltrin, McLellan, & Oliver, 2009)

The first folding event in the Lawn Hill Platform (D2), may have been synchronous with this metamorphic age, but there is no direct geochronological constraint on deformation. The Mount Isa terrane is considered to be cratonised after the Isan Orogeny and the architecture of the region has not changed since the Late Mesoproterozoic.

The complex overprinting of brittle and ductile deformational events, in and around the fault, coincides with the complex history of mineralisation found in the Lawn Hill Platform and elsewhere in the Mount Isa Inlier.

Additionally, sporadic regional metamorphic events at the Lawn Hill Platform and subsequent introduction of radiogenic fluids may have resulted in a younger age for the Century mineralisation (35–15Ma younger), relative to the host sediments age (1595Ma). As a result, mixing with later infiltrating Pb-bearing fluid may have occurred (Feltrin, McLellan, & Oliver, 2009).

7.2 STRUCTURE AND METAMORPHISM

TYR PROJECT AREA STRUCTURE AND METAMORPHISM

The New England Orogen (NEO) is a major, north trending structure along the eastern margin of Australia. It is the youngest of the Tasmanides and part of the Gondwanides, which is a series of generally north-south-trending orogenic belts that were active along the eastern margin of Gondwana from the Cambrian until the breakup of the southern supercontinent in the mid-Cretaceous (Glen, 2013); (Champion, 2016); (Jessop & Piazolo, 2019); (Rosenbaum, 2018).

Although the NEO is the youngest orogen preserved on the Australian mainland, it contains some of the oldest rocks of the Tasmanides (Glen, 2013) and rocks from a variety of tecto-metamorphic environments.

Metamorphism is described here according to the terminology agreed by the International Union of Geological Sciences (IUGS) Sub-commission on the Systematics of Metamorphic Rocks. (Sweet & Hutton, 1982)

Within the NEO, regional metamorphism associated with each of the orogenic processes of subduction, collision and extension, as well as burial metamorphism, has been identified.

Local metamorphism in the form of contact aureoles is widespread throughout the orogen. However, some occurrences of high-temperature–low-pressure (HTLP) metamorphism previously attributed to contact effects may have a more complex origin.

CENTURY SOUTH PROJECT AREA STRUCTURE AND METAMORPHISM

In the NW section of the Mt Isa Inlier in Queensland, the exposed units of the McNamara Group represent a 5,000 to 10,700m thick column of fine grained clastic sedimentary rocks with subordinate dolomitic clastic sediment, carbonate, volcanic rocks and chert (Hutton, Denaro, Dhnaram, & Derrick, 2012).

The 1595±6Ma host to the Century mineralisation; the Lawn Hill Formation; is the youngest preserved unit of the McNamara Group and comprises between 1,800 and 2,200m of shale, siltstone, tuff, tuffaceous siltstone and sandstone. It is sub-divided into six (6) members, Pmh1 to 6 (Sweet & Hutton, 1982). The Century mineralisation occurs over a 45m interval, 80 to 100m below the conformable and gradational boundary between the host unit Pmh4 and the overlying Pmh5 Widdallion Sandstone (Broadbent & Waltho, 1998).

Pmh4, which hosts the mineralisation, comprises ~850m of siltstone, shale, carbonaceous shale and sandstone. From the base, this sequence overlies the sandstones of the Pmh3 Bulmung Sandstone, and commences with a fining upwards, succession of 300 to 400m of carbonaceous, pyritic shale.

These are followed by a sequence of interbedded siltstone, sideritic siltstone, shale and minor fine quartz-lithic sandstone that occur in the footwall of the mineralised sequence. A similar package is found in the hanging wall.

The combined footwall, mineralised interval and hanging wall form an ~300m thick, slightly coarsening upward package. Correlations within this package are difficult, due to the lack of lithologically or geophysically distinct markers, apart from a few reworked tuff horizons in the hanging wall siltstone-shale sequence; up to 30m above the top of the mineralisation (Broadbent & Waltho, 1998).The underlying Pmh3 sandstone and Pmh2 siltstone are ~120m thick and overlie ~220m of Pmh1 black shale (Broadbent & Waltho, 1998).

The >150m thick Pmh5 Widdallion Sandstone is the youngest member of the Lawn Hill Formation in the immediate area of the deposit, and is overlain by intensely faulted and folded fragments of Cambrian carbonates; which are from a considerable interval of the Georgina Basin succession (Broadbent & Waltho, 1998); (Szulc, 1993).

The Century deposit is preserved within the core of a large-scale fold structure called the Page Creek syncline, which is one of several deforming the McNamara Group in the Lawn Hill area.

This structure is a relatively gentle, open fold, with dips within most of the mineralised sequence of between 5 and 25° but steepening to ~70° at the margins of the deposit (Broadbent & Waltho, 1998).

A major, long lived, NW-trending fault system, the Termite Range Fault (***Figure 7.7*** on ***page*** 78) passes immediately along the NE margin of the deposit and coincides with a regional scale geophysical linear that can be traced from south of Mount Isa to McArthur River in the north.

Various lines of analysis demonstrate the fault was active during Mesoproterozoic deposition (Andrews, 1998); throughout the later Isa Orogeny; and in a minor way at the end of the Cambrian. Numerous smaller scale faults parallel the major structure, with a second, possibly conjugate set developed approximately perpendicular to the main structures.

These fault sets display a combination of reverse and normal displacement, are generally steeply dipping, and have a significant effect on the distribution of the mineralised unit.

More than 30 faults displace the orebody sufficiently to be regarded as significant to mine planning. The more significant NE-trending district and regional scale faults and their splays also host the quartz-siderite-lead-silver lodes mined historically in the Burketown Mineral Field (Broadbent & Waltho, 1998).

Deformation of the overlying Cambrian carbonate sequence has produced a chaotic, considerably more complex fault and fold pattern, implying a possible thrust or extensional decollement surface at the base of the Cambrian sequence.

A series of low angle, SW-dipping faults are mapped within the Cambrian sequence, responsible for juxtaposing blocks of Lawn Hill Formation from all parts of Pmh4 and Pmh5 as mega-clasts between dismembered blocks of carbonate.

Three (3) distinct blocks of mineralisation have been defined. The Southern and Northern blocks, which are separated by the shallowly (40 to 45°) north dipping Pandoras listric fault, contain essentially all of the economically significant resource, while the small Eastern block is ~100m east of the NE limit of the Southern block. Throws across the Pandoras fault vary from nothing in the east, where the Northern and Southern blocks are juxtaposed, to >150m to thewest (Broadbent & Waltho, 1998).

The deposit covers an area of ~1200m from east to west and 1400m from north to south, and averages 40 to 50m in thickness with mineralisation closed in all directions by east trending normal faults; the unconformity between the Mesoproterozoic and overlying Cambrian sequences; or the present-day land surface.

The southern boundary of the Southern block is the Magazine Hill fault, a shallowly (~ 20°) north dipping, listric normal fault with a throw of at least 250m that passes shallowly below the Southern block, to coalesce with the Pandoras fault below the Northern block (Broadbent & Waltho, 1998).

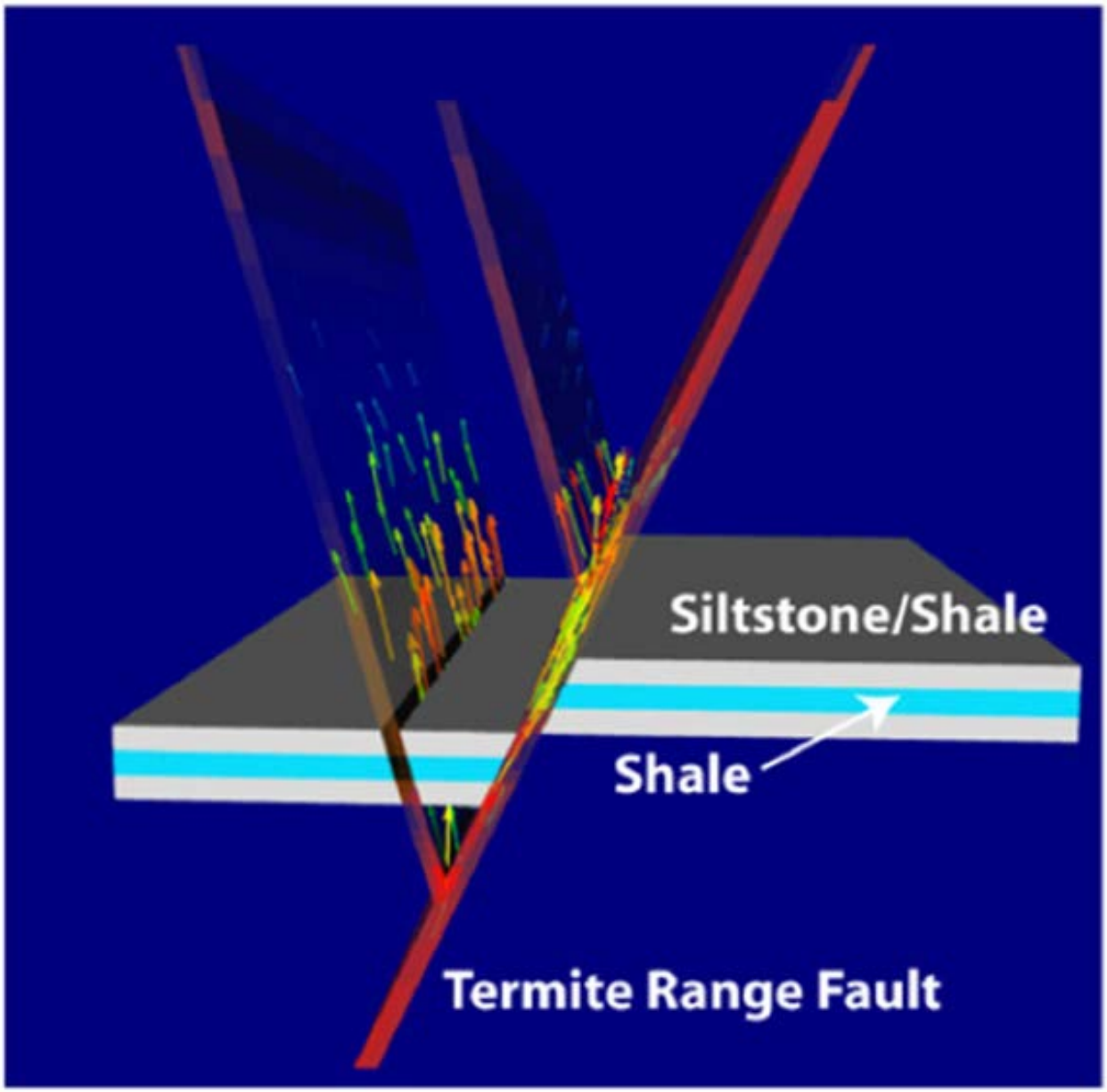


Figure 7.7 Remobilisation of brines along parasitic faults (Feltrin, McLellan, & Oliver, 2009)

The northern margin of the Northern block is partly controlled by the steeply south dipping Nikki's fault, which has a normal throw of at least 70m. The eastern boundary of the Southern block and all other margins of the Northern block are truncated by the Mesoproterozoic-Cambrian boundary. As such the deposit was almost entirely concealed, with a number of limited outcrops. On the western boundary of the Southern block, the upper portion of the mineralised sequence formed a prominent, but low ridge (Broadbent & Waltho, 1998).

Because the deposit is sphalerite rich and pyrite poor, no gossan was evident at surface, only a slightly pitted, banded, sideritic grey shale with a hint of limonitic staining.

Numerous, irregular, discordant, 0.1 to 34m thick, intrusive carbonate breccia bodies are found throughout the deposit, preferentially developed along pre-existing fractures within both the Cambrian and Mesoproterozoic sequences, composed of Cambrian limestone and dolostone clasts in a carbonate matrix (Broadbent & Waltho, 1998) (Straw & Hobby, 2012)

7.3 REGIONAL DEPOSITS

TYR PROJECT REGIONAL DEPOSITS

The Tyr project lies in the northern end of the New England District of northern NSW where a wide range of commodities has been mined, reflecting a diversity of mineral deposit types (Figure 7.8).

Major production has been of gold, tin and antimony, with lesser production of silver, lead, copper, molybdenum, tungsten, bismuth, gemstones and industrial minerals. Early mineral discoveries, led by gold, were in the more accessible and settled areas on the tableland and up the rivers. Later prospectors fanned out into the rugged and forested escarpment areas.

Much of the gold and most of the tin production came from alluvial deposits concentrated during weathering and extensive erosion of small or low-grade primary mineralisation associated with the widespread granites.

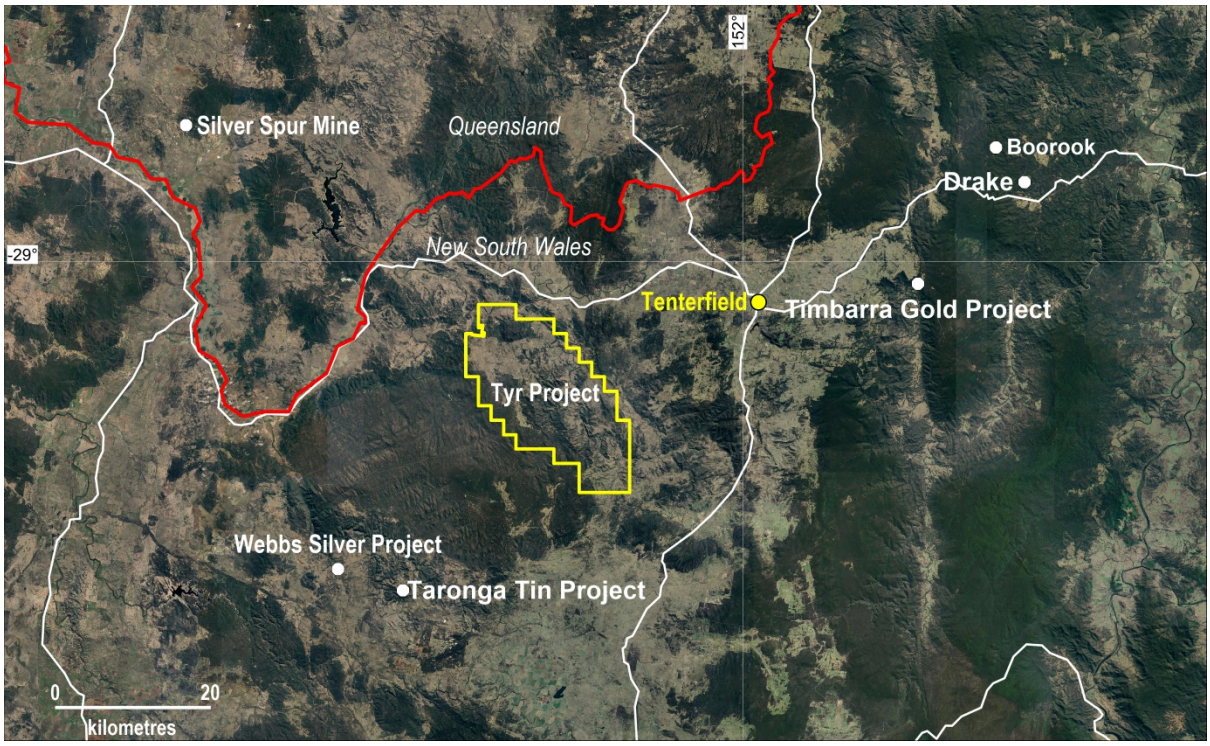


Figure 7.8 Location of Regional Deposits near the Tyr Project Area, NSW

Webbs Silver Project

The Webbs Silver project is located approximately 55km south west of Tenterfield and some 20km south of the Tyr project area (Figure 7.9). The region was a former, large scale, tin mining district with some precious and base metals production.

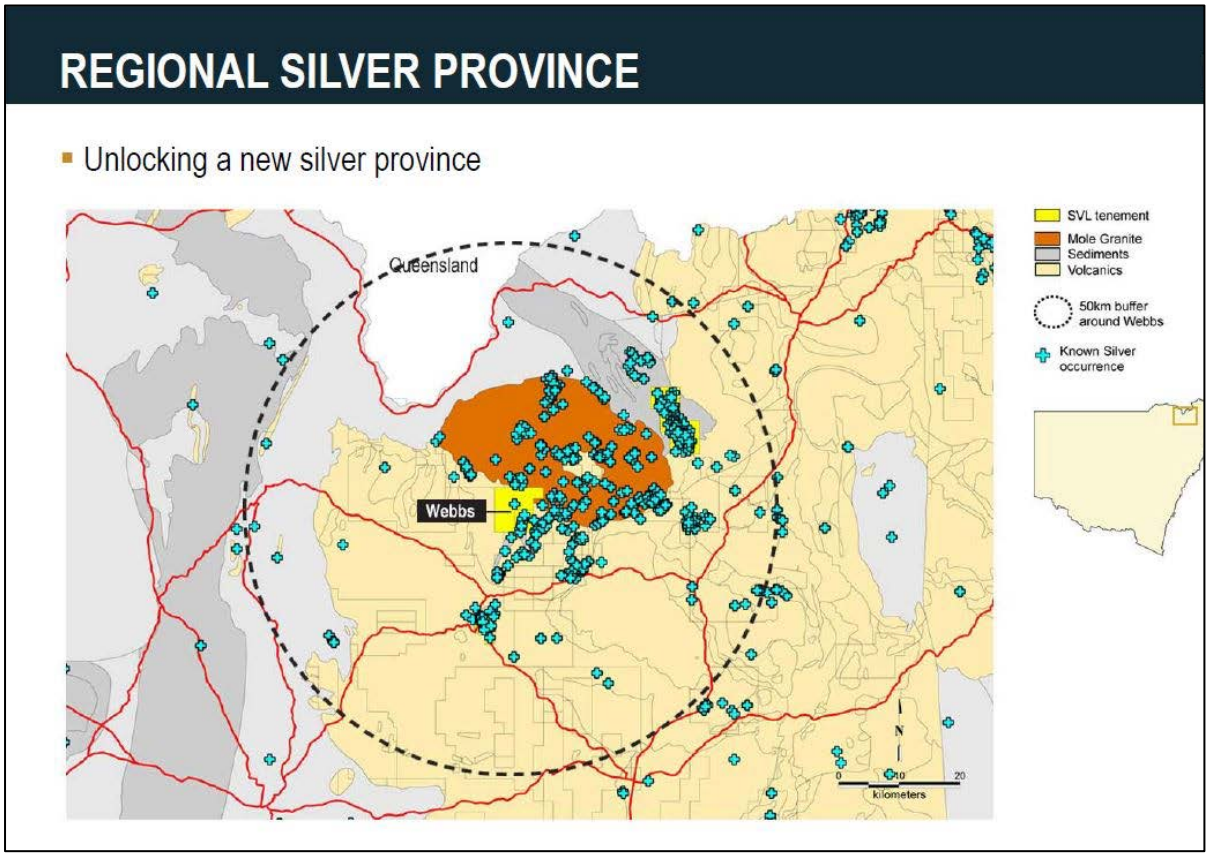


Figure 7.9 Location of Silver Mines' Webb Project, SW of Tenterfield, NSW (Straw & Hobby, 2012)

The project is developed within a 50 to 100m wide north trending zone which is over 2km in length. Silver rich mineralisation is hosted in steeply dipping lodes of quartz-sericite-carbonate-chlorite altered meta-siltstones up to 15m wide.

The sulphide minerals include tetrahedrite, sphalerite, galena and chalcopyrite and mostly occur in fractures and/or breccia fill veins and local disseminations with accessory arsenopyrite and stannite.

The deposit has been classified as a structurally controlled, sediment hosted, felsic intrusion associated, silver rich polymetallic vein deposit.

This group of deposits globally represent some of the largest silver rich districts including Coeur d'Alene, Keno Hill, Kokanee in North America and Freiberg-Herz in Germany and Pribram in the Czech Republic.

The area is well explored for mineralisation (Figure 7.10 on page 81) and was mined between 1885 and 1901, and then again from 1962 to 1965 and produced approximately 55,000 tonnes of mineralised averaging 700g/t Ag from underground mining operations.

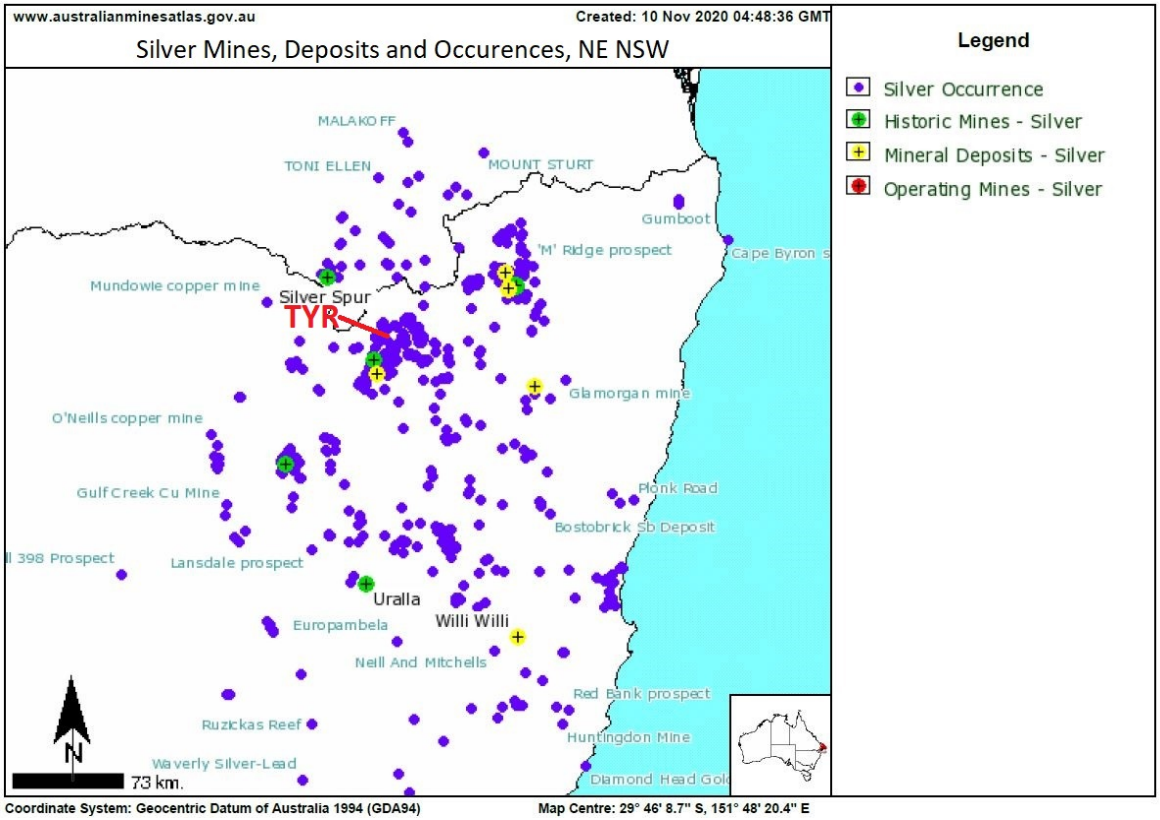


Figure 7.10 Silver Mines, Deposits and Mineral Occurrences, NE NSW

Resource figures for the Webbs silver project have been publicly released (JORC 2012 Compliant) and are displayed in Table 7.1 below. Their resource is spread over several areas as seen in Figure 7.11 on page 82.

Table 7.1 Resource figures for the Webbs silver project

RESOURCE Current resource estimate for Webbs at 70g/t Ag cut-off Resource Class	Tonnes	Ag (g/t)	Cu %	Pb %	Zn %	Ag (oz)
Measured	194,000	364	0.29	0.75	1.67	2,269,000
Indicated	775,000	245	0.26	0.70	1.49	6,102,000
Total M and I	**969,000**	**269**	**0.27**	**0.71**	**1.53**	**8,371,000**
Inferred	522,000	201	0.27	0.71	1.61	3,375,000
Grand Total	**1,490,000**	**245**	**0.27**	**0.71**	**1.56**	**11,746,000**

Preliminary metallurgical test work done on mineralisation from Webbs has indicated a >90% recovery of silver utilising the Albion Process ™ which was developed by Hydromet Research Laboratories (now Glencore Technologies) in Brisbane for treating refractory precious and base metal concentrates from polymetallic mineralisation.

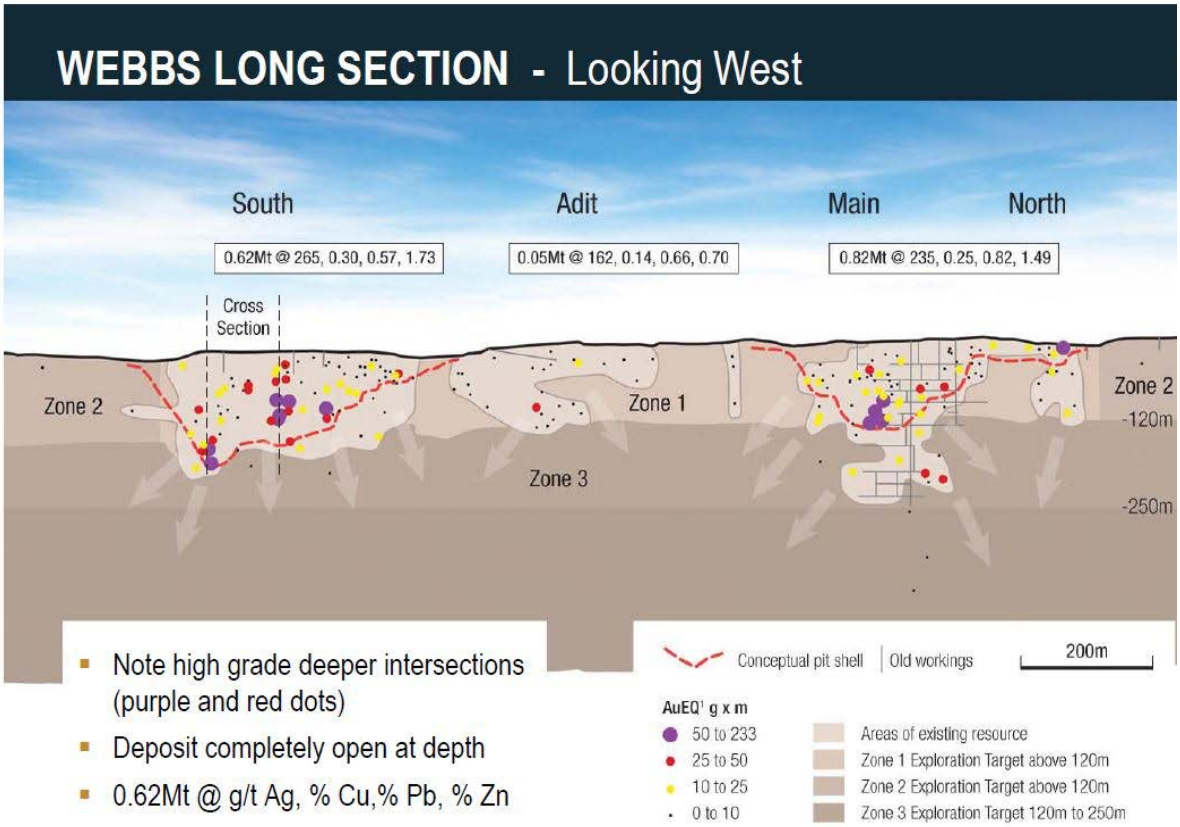


Figure 7.11 Long Section of Webbs – Looking West (Straw & Hobby, 2012)

Silver – Boorook

The Boorook area, east of Tenterfield, was prospected for gold from about 1870 with some payable mineralisation produced from the near surface zones of several reefs. However, gold grades decreased with depth and miners abandoned the site when tin was discovered in the district.

In early 1878, a re-investigation the Golden Age Mine discovered the mineralisation contained high levels of silver, leading to a silver rush to Boorook. By 1879, 50 mining leases had been taken out and a small settlement of 300 people developed at Boorook.

The main producing mines at Boorook were the Golden Age, Addison and Silver King Mines. At the Golden age much of the mineralisation graded 60-350oz/t silver, with some rich patches up to 800oz/t. The Boorook deposits were worked to a maximum depth of 100m, for a total recorded production of 3.58t of silver.

Silver - Drake

The gold-bearing Adeline reef at Drake was discovered in March 1886. This discovery was relatively late but it led to further discoveries on Mount Carrington, just north of the town and further afield at White Rock. Similar to Boorrook, the deposits at Drake are polymetallic, containing copper, gold, silver, lead and zinc. Although the early interest was in gold, the field became an important producer of silver and copper.

Many of the mines were initially very successful, working near surface secondary mineralisation but at depth the complex nature of the mineralisation resulted in metallurgical difficulties. More recently there has been significant exploration and some mining in the Drake area using modern techniques. During 1969-1972 about 10,000t of mixed sulphide mineralisation were mined at Emu Creek and Red Rock by Mount Carrington Mines Ltd.

Between 1988 and 1990, approximately 233,000t of mineralisation grading 2.38g/t gold and 7.44g/t silver were mined by open cut in the Mount Carrington area. Total production from the Drake area included about 2.5t of gold and more than 4.4t of silver.

Silver – Silver Spur (Texas)

The Silver Spur mine, 10km east of Texas in southern Queensland and 45km north east of Tenterfield, was discovered in 1891 and developed from 1892. A sample was sent to Brisbane metallurgists revealing 200oz/t of silver.

The deposit was a pyritic lode containing silver associated with zinc, lead, minor copper and gold. Mineralisation was smelted on site in reverberatory furnaces and the silver rich copper matte shipped to England for final treatment.

Small silver-bearing deposits were found to the north of Silver Spur but were not economic. Modern exploration from 1971 led to the discovery of a large silver deposit at Twin Hills 2.4km to the northwest, which was worked between 2008-2013 using heap-leach processing for 1.4Moz of silver.

Gold - Timbarra

Gold was discovered on the Timbarra River, 33km east of Tenterfield, in 1853. However, it was not until 1856 that significant mining developed when rich alluvial deposits were found along McLeods Creek; a northern tributary. This site is on the edge of the New England tableland and a settlement known as Timbarra-Tableland was established near the head of the creek.

During the 1850s gold was also found on a high granite spur on the western side of the Timbarra River about 10km south of McLeods Creek. The gold occurred over a wide area in the shallow surface soil and underlying weathered granite, however being at such a high elevation it was difficult to obtain water for alluvial sluicing.

The location became known as Poverty Point, although it was later found to contain significant gold. Similar gold-bearing granite was found 4km to the west at Surface Hill where the soil and decomposed granite were worked to a depth of 10m. Initially, the surface material was excavated and sluiced to extract the gold with later hard-rock mining of mineralised zones in the granite and related dykes.

For other gold deposits throughout the region see Figure 7.12 below.

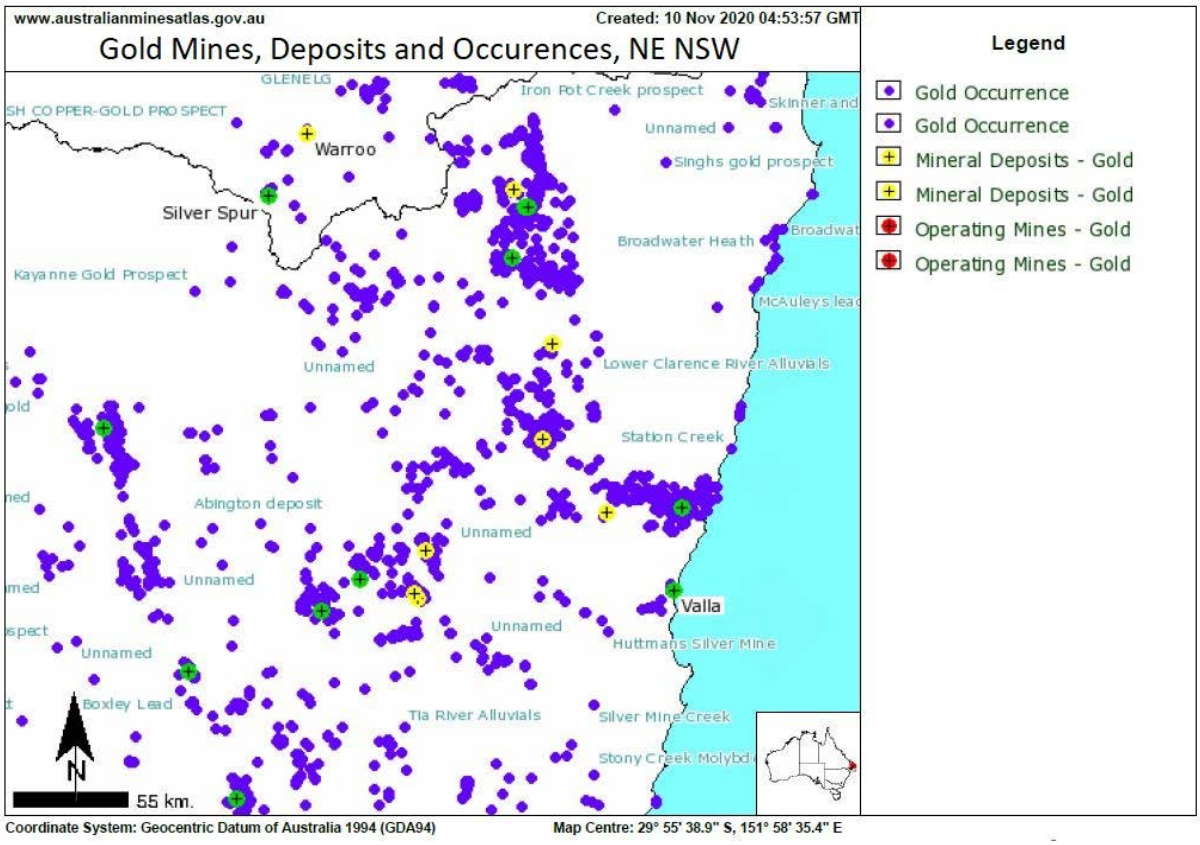


Figure 7.12 Gold Mines, Deposits and Mineral Occurrences, NE NSW

Tin – Taronga Project

The Taronga Tin project is held by AusTin Mining (ASX:AWN) and is located approximately 25km south of the Tyr project area or about 55km south east of Tenterfield in northern NSW (Figure 7.13 on page 85).

The deposit is hosted in Permo-Triassic, hornfelsed sedimentary and volcanic rocks of the New England Fold Belt, assigned locally to the Grampians Formation. The host rocks were intruded by granitoids of Permo-Triassic Age which were the sources of the silver, tin and copper mineralisation associated with the deposit (Figure 7.14 on page 86).

Geological mapping has shown that the mineralisation is hosted in sheeted, quartz vein swarms within a north easterly trending, anticlinal structure. Tin occurs within the quartz veins and has been defined within two (2) large zones, known as the Northern Zone and the Southern Zone.

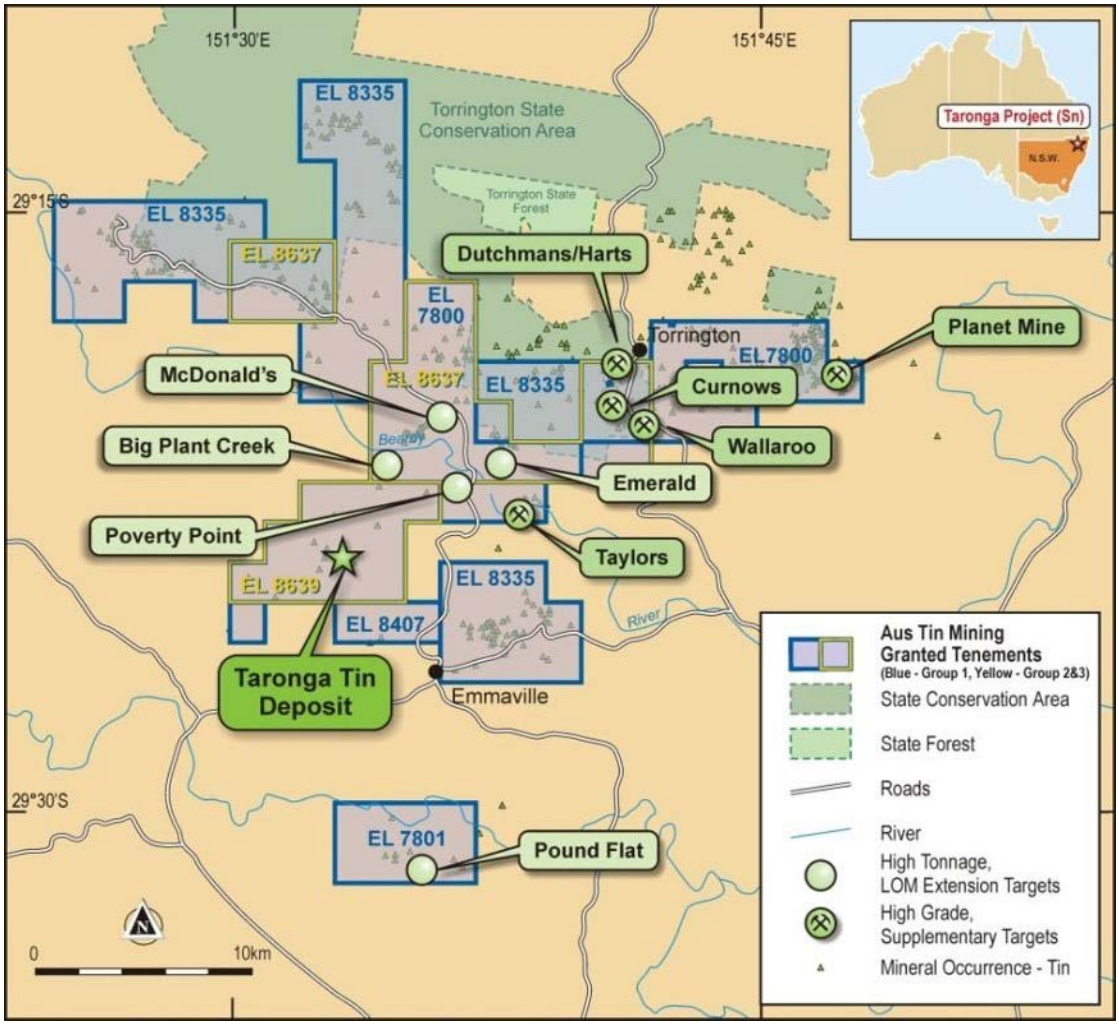


Figure 7.13 Location of the Taronga Tin Project, south of the Tyr Project Area

Two (2) vein swarms exist in the Northern Zone and are between 10 and 80m wide, 600 to 650m long, and approximately 200m deep. Four (4) distinct vein swarms in the Southern Zone are between 8 to 10m wide, 150 to 550m long and down to depths of around 150m.

Metallurgical test work has suggested that the mineralogy has developed through three (3) stages from high temperatures to moderate temperatures to low temperatures with hydrothermal and epithermal styles. The primary tin mineral is cassiterite within all three (3) events and the greisen alteration associated with only the first two (2) events.

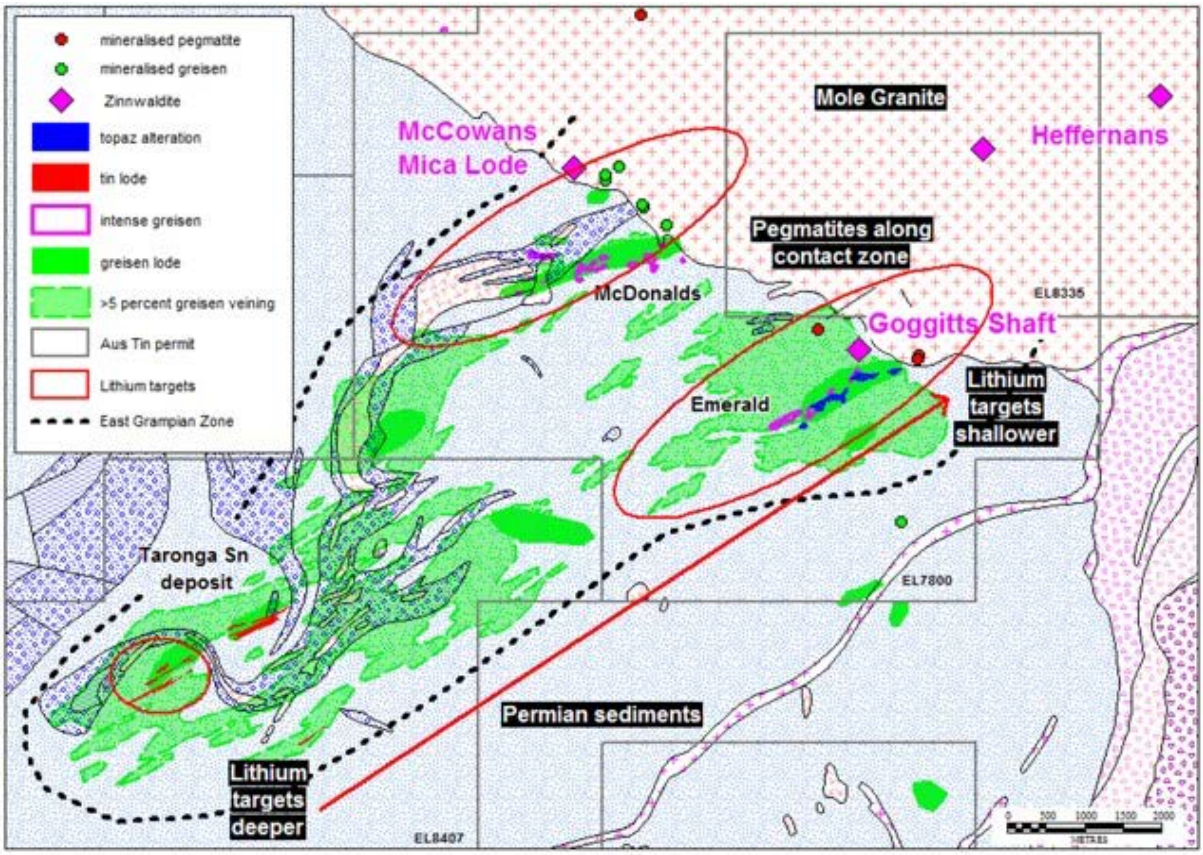


Figure 7.14 Geology and Mineralisation of the Taronga Tin Deposit

Tin - Emmaville-Torrington

This area is approximately 25km south of the Tyr Project and is where alluvial tin was found in March 1872. Early mining was focused on a shallow lead in the swampy valley but later the Vegetable Creek deep lead was discovered to the west. This deep lead system extended for 8km under basalt cover, typically about 40m thick and was worked from shafts and underground drives and later by open cut mining.

By the end of 1873, 2,345t of tin mineralisation had been extracted from the shallow gravels, and 247t from the deep leads. However, by 1881 the deep leads were the major source of tin. By 1887 more than 2000t of tin mineralisation were being treated annually by the Glen Smelting Works at a saving of 30% to the smelting cost.

Bedrock tin lodes were discovered in 1874 and the first crushing machinery introduced. North of Emmaville over 150 mineral deposits were discovered within and around the Torrington roof pendant above the Mole Granite. These deposits contain varying tin, tungsten, silver, arsenic, bismuth, base metals, fluorite, beryl and molybdenum.

The Emmaville-Torrington area is one of the most intensely mineralised regions in Australia, with a fascinating mining heritage.

For other tin and tungsten deposits throughout the region see Figure 7.15 below.

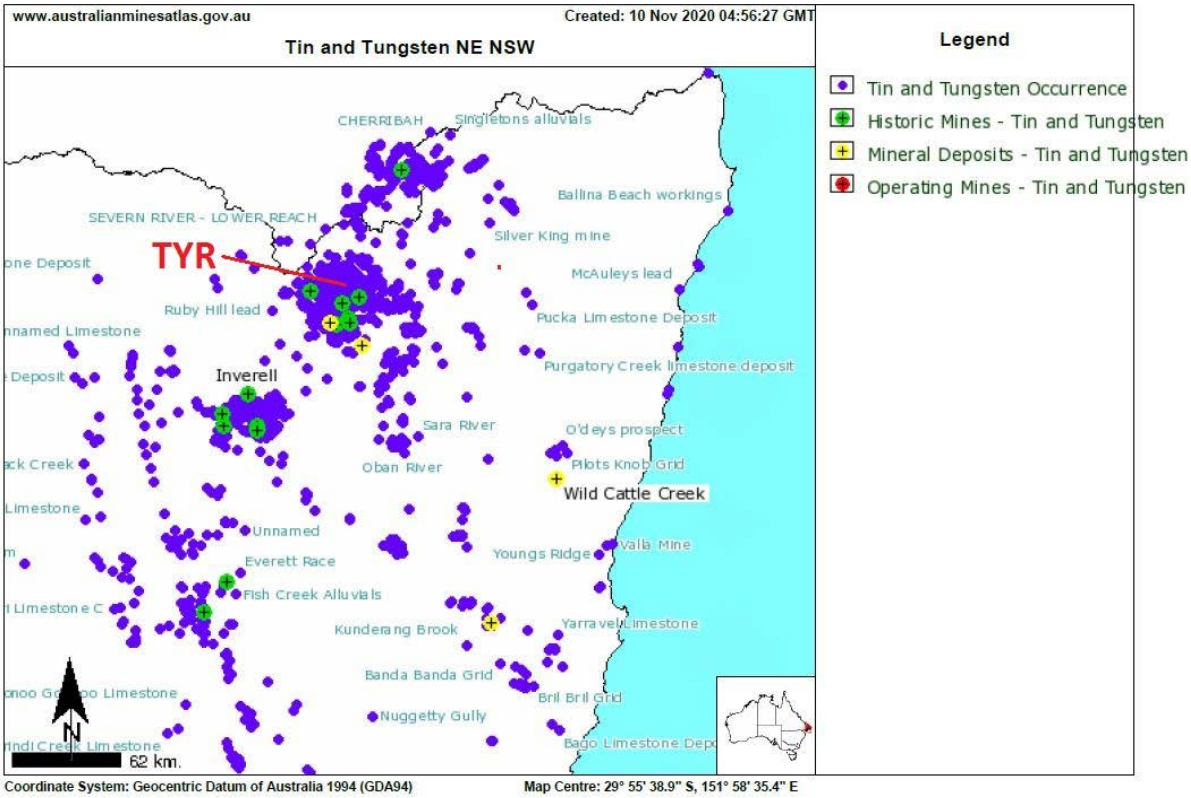


Figure 7.15 Tin and Tungsten Mines, Deposits and Mineral Occurrences, NE NSW

CENTURY SOUTH PROJECT REGIONAL DEPOSITS

CENTURY ZINC MINE

The Century Zinc Mine is owned by New Century Resources (for further details, please see Section 15, Adjacent Properties, in this Report) and is located approximately 235km north west of Mt Isa, in north west Queensland. The deposit has been detailed in other sections of this report and is only briefly summarised in this section.

Significant regional faulting at Century Mine has facilitated the passage of brine fluid flow. Hence, the presence of major fault structures serve as conduits for enriched metalliferous brines. This is followed by the subsequent infiltration of the prementioned brines into adjacent strata where pore pressure is low enough to permeate into sufficient rock units such as siltstone.

Shales are considered over-pressured, whereas stylolitic siltstones have a higher permeability partly allowing lateral flow. Base metals within this fluid flow scenario would be more likely transferred from over-pressured shale into permeable siltstones.

Similarly, fluid in fault zones could permeate into siltstones for limited distances, as these units have a higher permeability compared to shales. Additionally, lateral infiltration is limited by over-pressuring. This model would suggest a greater concentration found in siltstone units, at Century this occurs sometimes but is not the major mineralisation forming process.

If replacement is considered the primary mechanism of mineralisation emplacement, we should see a systematic relationship between the more permeable siltstone units, the abundance of

organic carbon in the form of shale (acting as the REDOX barrier/reductant) and the spatial distribution of the mineralisation itself.

A local spatial relationship between organic C and sulphides has been demonstrated at Century in some veins (Broadbent G. M., 1998). However, widespread mineralisation laminae occur mostly independently of permeable layers; primarily shale units, at Century. Mineralisation is often localised in the impermeable domains of shale rather than the permeable pathways of the siltstone units.

Thus, the sedimentary exhalative (SEDEX) model is preferred, in which the broad-scale zoning was caused by temperature and chemical gradients established between the source of metalliferous brines site of mineralisation deposition in subsequent shale layers.

The Century South tenement and the Century Mine deposit both sit along the same strike of the Termite Range Fault; the major fault complex in the region. The strike-slip fault is a deep, steeply dipping splay off the crustal Riversleigh fault.

The Century deposit is interpreted to have formed in a pull-apart depocenter controlled by sinistral strike-slip displacement on the Termite Range Fault. This accounts for the local thickening of units in the vicinity of the deposit itself (O'Rourke, 2017). Thus, the deposit does not have any natural boundaries, being truncated by either faults or unconformities. Local faulting off the Termite Range Fault is expected to be associated with potential zinc mineralisation. The mine deposit's proximity to these major fault structures is comparable to other prominent massive Pb-Zn sulphide deposits in other parts of the globe as discussed earlier.

Critically, following the aforementioned genetic model, the Century South tenement covers the relevant structural areas needed for Zn-Pb-Ag mineralisation. Encompassing the major (first order) fault; allowing for brine mobilisation, as well as the surrounding parasitic (third order) faults; for hosting mineralisation within the Termite Range Fault complex.

The initial remobilisation of mineralisation bearing brines, firstly through exhalative processes, then following the lower pore pressure gradient along parasitic faults and consequent deposition at water/sediment interface (L. Feltrin, 2009).

The GREVILLEA Zn-Pb-Ag PROJECT

The Grevillea project is located approximately 200km north-northwest of Mount Isa in north west Queensland and is situated approximately 7km west of the Century South project area (Figure 7.16 on page 89).

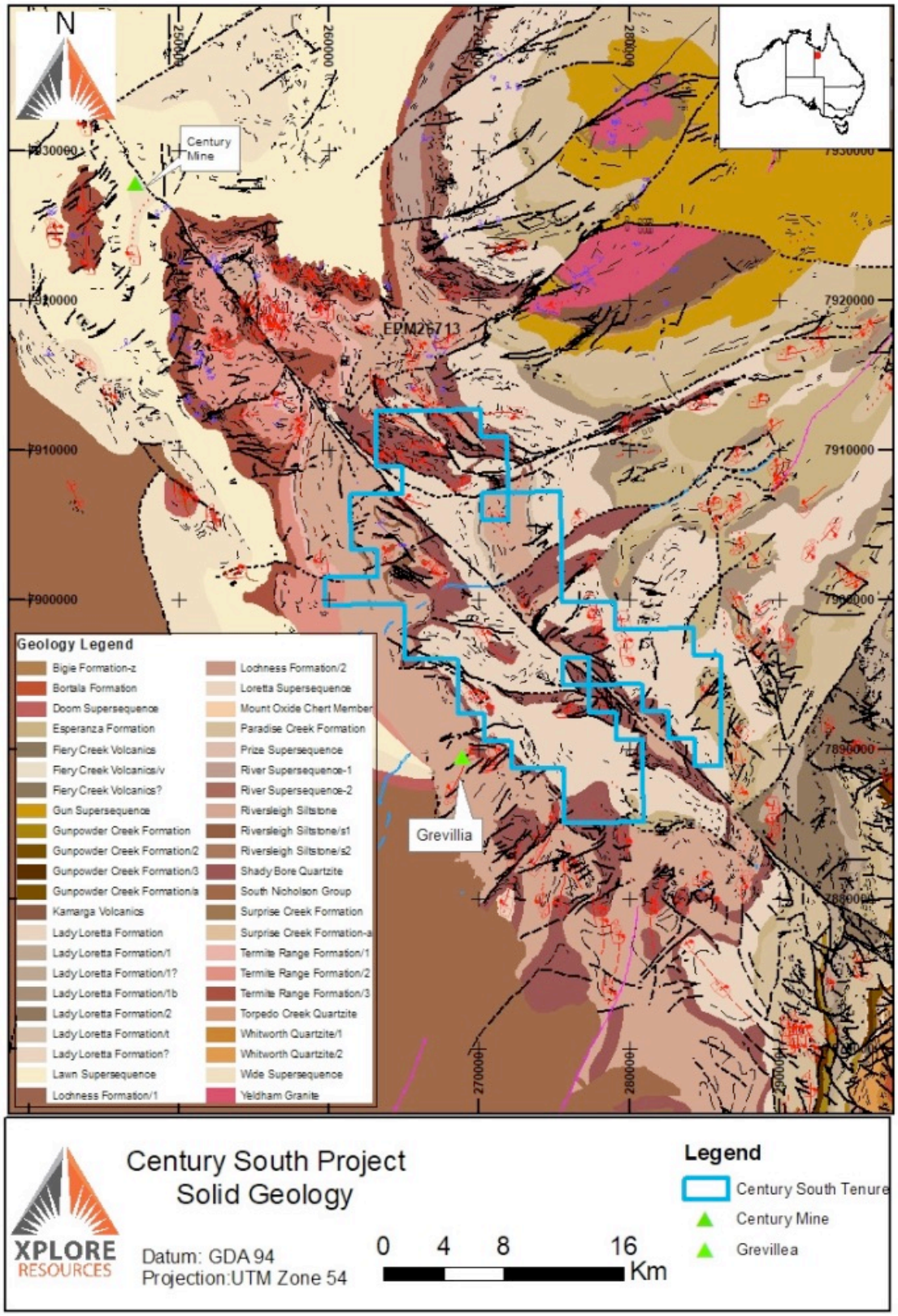


Figure 7.16 Location and Geology of the Grevillea Project, immediately west of Century South Project

The project is located in low hills towards the south west limit of outcropping Proterozoic rock units that further to the west are covered by flat lying Cambrian limestones and Cainozoic colluvium and alluvium (McGoldrick & Hann, 2004).

The discovery gossan, found in 1993, occurs as two (2) prominent, north west trending, black rock outcrops with several metres of positive relief. The project chiefly lies within unmetamorphosed, late Palaeoproterozoic rocks of the McNamara Group of the central Lawn Hill Platform. It is stratigraphically equivalent to the host rocks of the nearby Century Zinc Mine with prominent north east trending faults, including the Termite Range Fault, which is about 9km north east of Grevillea within the Century South project area.

The gossans and surrounding saprock and saprolite are more resilient to weathering than the siltstones and shales of the Riversleigh Formation and form a discontinuous north-northwest trending ridge (Figure 7.17).

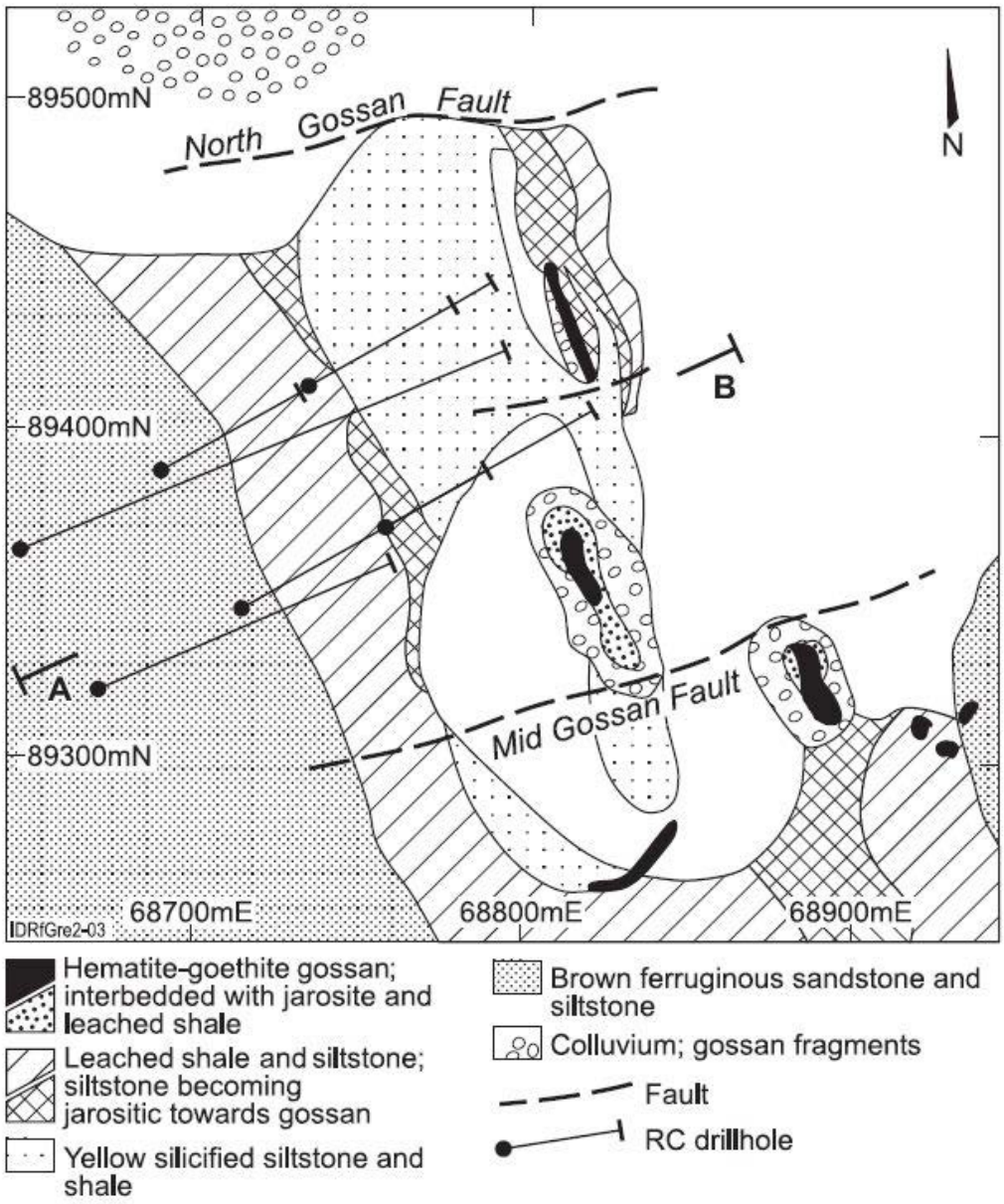


Figure 7.17 Regolith Geology of the Grevillea Project, west of Century South Project [Data sourced from (McGoldrick & Hann, 2004)]

Mineralisation is associated with pyrite which occurs over a stratigraphic thickness of at least 300m with the upper 140m comprised of highly (40 to 50%) pyritic and base metal sulphides, mineralised beds.
The base metal sulphides are up to 25m thick occurring in barite infill and impregnate laminated, highly pyritic rocks and, less often, replace oolitic bed. Coarse barite pseudomorphs, primary gypsum or anhydrite and siderite, ferroan dolomite, pyrite and base metals sulphides are interbedded in the siltstones (McGoldrick & Hann, 2004).

Discovery rock chip samples from the gossans returned values as high as 3600 ppm Pb, 650 ppm As, 16 ppm Ag but only around 100 ppm Zn (Jenkins & al, 1998).

Follow up rock chip sampling of a traverse perpendicular to the gossans confirmed that elements Pb, Zn, As and Tl are closely dispersed around the gossans while Fe, Ba and S are also enhanced in regolith units derived from the gossans.

7.4 PREVIOUS WORK BY GOVERNMENT GEOLOGISTS

TYR PROJECT AREA

The following excerpt is from the Clive Sheet Data Package released by the NSW Geological Survey in 2000 based on the work done by Government Geologists during the mid to late 1990s in the sheet area. The Tyr Project is within this study area.

"Commenced in late 1994, the Clive Data Package Project involved extensive literature research by HF Henley. This included a review of historical records, exploration reports, and academic studies. Field examination of the mineral occurrences commenced in 1995 and in the following year, R.E. Brown joined the Project.

Many new mineral occurrences were identified from lease plans and historical data (including notated parish maps). A large number of sites were worked without formal.
tenure or by Miners' Right and have consequently not been officially surveyed. Some of the occurrences were located by verbal descriptions or entirely by chance and it is assumed that many more remain unidentified.

Where possible verbal accounts from local landowners have been recorded. These accounts were of considerable assistance in helping to locate and name historical workings, and acquire other, miscellaneous data.

A total of 596 samples were submitted for assay to ANALABS. The samples were generally collected from mine dumps, or in some cases in-situ. Wherever possible an attempt was made to obtain high-grade samples of the mineralised material and
in some cases alteration zones adjacent to mineralised veins were sampled.

The samples were crushed in agate, tungsten, and steel mills and the different residues each subjected to five analytical techniques. These techniques were: mixed acid digest with ICPMS finish, mixed acid digest with ICPOES finish, lead collection fire assay with AAS finish, pressed powder XRF and quartz dilution pressed powder XRF (Analabs 1994)."

Their summary of the Clive Sheet Geology and Mineralisation is reproduced below:

"The Triassic Mole Granite dominates the geology of the Clive I : 100 000 sheet area. It hosts and is the origin of over 1000 mineral occurrences of which over half are tin dominant. It is at the centre of the most significant tin province in the New England region that stretches from the Gilgai Granite, south of the map sheet area, to the
Stanthorpe Granite, north of the map sheet area.

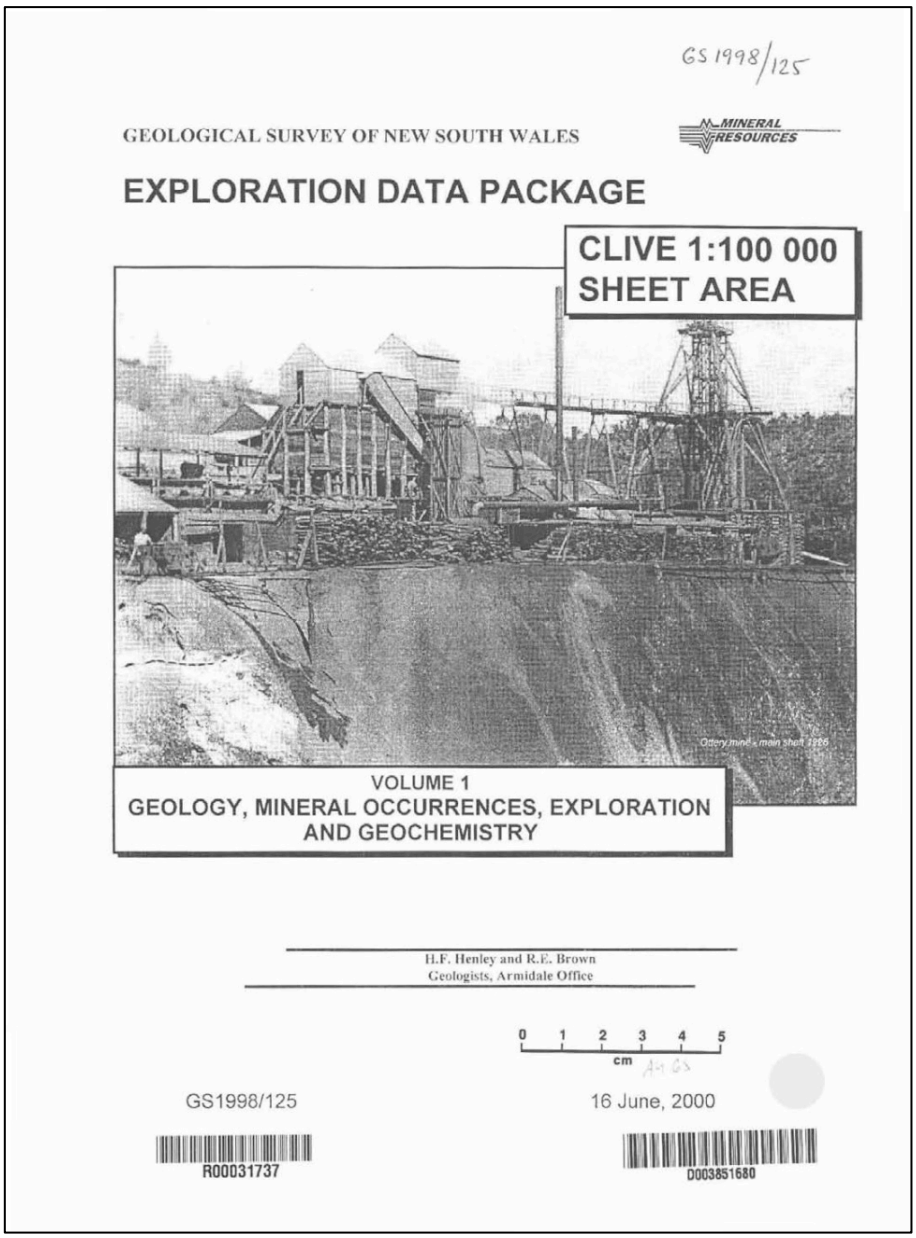


Figure 7.18 GEOLOGICAL SURVEY OF NSW, EXPLORATION DATA PACKAGE, CLIVE 1:100 000 SHEET, NORTHERN NSW

In addition, it hosts the world's largest silexite (quartz-topaz rock) occurrence and two historic arsenic mines. Numerous other occurrences of tungsten, bismuth, base metals, monazite, molybdenite, gold, beryl (including emeralds), polymetallic minerals·, dimension stone, industrial quartz, sapphires, bauxite and kaolin are scattered throughout the area.

The area's geology consists of remnant Tertiary basalt in the southwest and central southern part of the area that overlie Late Permian volcanic rocks and Permo-Carboniferous sedimentary rocks. Numerous leucogranites (including the Bolivia Range, Kingsgate, Mackenzie and Mole Granite, and Mount 10nblee, Nonnington, Pye's Creek, Sandy Flat and Clive Adamellite) and the Bungulla and Wards Mistake Adamellite and several unnamed granitoids intrude the basement sedimentary and volcanic rocks.

The leucogranites are the only mineralised granites in the sheet area. The Mole Granite is by far the most intensely mineralised and has influenced mineralisation on three-quarters of the sheet area. Mineralisation originating from the Mole Granite is strongly structurally controlled, with occurrences trending dominantly northeast and northwest.

The occurrences exhibit metal zonation from tin to tungsten to base metals and polymetallic. These latter occurrences are dominantly located in the surrounding sedimentary and felsic volcanic rocks north, east and south of the outcropping Mole Granite. The deposits are dominantly vein, multi-vein and sheeted vein in form.

The weathering of these deposits has formed the vast deep lead deposits that were exploited mainly from the 1890s to the early 1920s. Mined deep leads include the Vegetable Creek, Y-Waterholes, Graveyard Creek and Stannum Vale leads.

A number of the primary metalliferous deposits are historically significant. Of particular note are Dutchman's, Curnow's, Butler and Wallaroo tin mines that were exploited until the early 1960s. The Mole arsenic and the Ottery mines are significant arsenic mines which were worked in the 1920s to 1930s.

Webbs Silver mine was a significant silver producer until the early 1960s. Other commodities mined in the area include tungsten, thorium, bismuth, emerald, beryl and topaz. Numerous molybdenum ± bismuth, tin, tungsten, base metal deposits and rare sapphire, manganese and gold occurrences are present on the eastern side and northern fringes of the sheet area.

The molybdenum ± bismuth occurrences are associated with the Bolivia Range, Kingsgate, Nonnington and Mount 10nblee leucogranites and the Mackenzie Adamellite. Deposits of note are the A W, Bow and Allies mines.

The Kingsgate Leucogranite has sourced greisen and tungsten vein occurrences. Base metal occurrences are confined to the Carboniferous Texas beds in the north and unnamed Permian sediment in the south and southeast of the sheet area. Minor sapphire occurrences are confined to the SW of the sheet area.

Manganese occurrences are located in unnamed Permian sediment in the south of the sheet area and a gold occurrence is hosted by the Carboniferous Texas beds in the northwest of the area. The Clive I: 100000 sheet area is highly prospective for tin and tungsten mineralisation. Of special note is the sheeted vein tin mineralisation in the southwest of the sheet area, in particular the large, low-grade Taronga deposit.

Other subeconomic hard-rock vein, multi-vein, sheeted and alluvial tin occurrences have been identified. Significant tungsten mineralisation has also been recognised on the margins of the Mole Granite.

Considerable potential for both tin and tungsten mineralisation exists given our better understanding of occurrence distribution and mineralogy. Other commodities with potential are silexite-(quartz-topaz rock), fluorite, gold and emerald within and surrounding the Torrington pendant".

CENTURY SOUTH PROJECT AREA

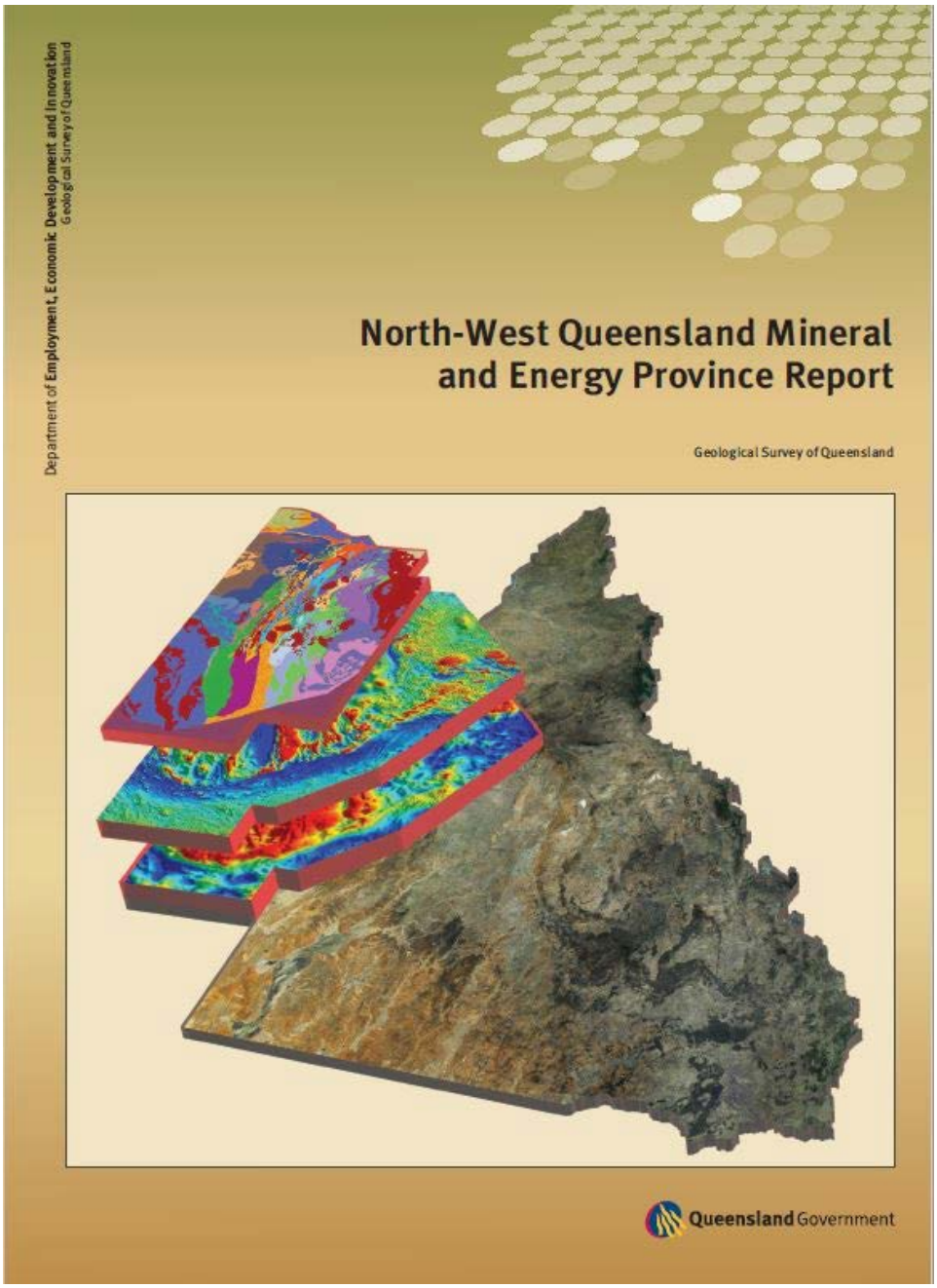


Figure 7.19 NORTHWEST QUEENSLAND MINERAL AND ENERGY PROVINCE REPORT, GEOLOGICAL SURVEY OF QUEENSLAND (GSQ), 2011

The following extract is taken from the NWQMEP study report by the GSQ in which the Century South Project falls within the Report's study area.

"The North-West Queensland Mineral and Energy Province (NWQMEP) study represents the culmination of the 2006–09 regional mapping program by the Geological Survey of Queensland (GSQ) that focused on a revision of the surface geology of the Proterozoic Mount Isa Inlier.

This new information, in combination with new geophysical data and interpretations, forms the foundation from which geological interpretation has been extended into the surrounding areas covered by Phanerozoic sedimentary rocks.

This report includes new information about this world class resource province and new insights concerning the geological evolution of the region and how this has resulted in its mineral and energy prospectivity.

During this time, new high quality airborne magnetic and radiometric surveys have been flown at a maximum line separation of 400m over almost 430 000km^2 of north-western. Queensland. Gravity surveys at two and four kilometre station intervals were also undertaken over a similar area.

These regional geophysical surveys have targeted under-cover areas adjacent to the Mount Isa Inlier, providing information to support geological interpretations in areas with very limited outcrop.

The goals of this report are to synthesise this information and apply modern technologies to provide fresh insights into the tectonostratigraphic evolution, 3D architecture and controls on the distribution of mineral and energy resources and thus enhance the effectiveness of exploration activity to realise the resource potential of this fertile region.

The report was prepared over the period February to November 2010, using public domain geological, geophysical and geochemical data, and the latest publications. Analysis phases of the Project involved interdisciplinary studies requiring the reconciliation of diverse data sets to produce more robust geological interpretations.

The revision of the surface geology integrated new field observations with existing mapping from a range of sources and interpretation of a range of remote sensing datasets, including traditional aerial photography, Landsat and Aster satellite data, airborne magnetics and radiometrics, and gravity data.

SHRIMP U-Pb zircon geochronology in conjunction with Geoscience Australia (GA) also contributed significantly to our new understanding of the geology.

The NWQMEP has experienced a long and episodic history of basin formation, deformation and associated structural complexity and repeated crust-mantle interactions — key factors for the mineral and energy wealth of the region. However, the absence of exposed plate boundaries in the Mount Isa Inlier has led to a large amount of speculation regarding the geodynamic context in which the Inlier has evolved".

Figure 7.20 Map showing the extent of the North-West Queensland Mineral and Energy Province study area

7.5 LOCAL GEOLOGICAL SETTING

7.5.1 TYR PROJECT LOCAL GEOLOGY

The Tyr Project area is in the New England Fold Belt (NEFB), also known as the Hunter-Bowen Super Cycle and is divided into four cycles.

The NEFB records the Middle Devonian to Triassic (376 Ma to 227 Ma) convergent margin development of East Gondwana which is expressed in the evolution of the NEFB and the SGBB system (Craig O'Neil, Cara Danis, 2013).

The New England Fold Belt is a significant mineral province in Eastern Australia with potential for large gold/silver systems, There are several geologic sub-provinces that comprise the New England Orogen.

The Orogen comprises of Devonian to Permian complexes. Devonian island arc assemblages accreted to the Australian continent late in the Devonian. This was followed by repeated cycles of westward subduction and extension producing mineralised granites and volcanics from the Middle Devonian to Early Cretaceous.

Major deposits include gold bonanzas at Hillgrove (NSW). New England Orogen deposit styles include mesothermal and epithermal gold, VMS, epithermal silver, and lateritic nickel. The Orogen also offers porphyry copper and gold opportunities. Other economically important commodities include tin, sapphires, diamonds, molybdenum, tungsten, magnesite, cobalt and antimony (DPI, 2019).

The Tyr Project area is located over three (3) main Sub-provinces of New England Orogen*;*

- Central Block, which is mainly comprised by conglomerate, sandstone and siltstone. Including some felsic igneous rocks and quartzite units;
- Tablelands Complex, which mainly comprises granite and mineralisation related material; and
- New England Orogen Granites (dominant lithology of porphyry and basalt).

The Tyr tenement hosts many mineral occurrences according to evidence from historical mines within the exploration licence area. These activities were mostly focused on silver, lead, zinc, arsenic and tin.

There are two groups of mineralised area that are of most importance. The first is the Clive Group, located in the south-east portion of the tenement and includes a group of 46 base metal and polymetallic occurrences and is the focus of this PDS. The second is the Mole River group, including 16 mineral occurrences (Henley, H.F; etal, 2001).

Mineralisation in these groups come from the nearby Mole Granite. The Mole Granite is an extensively mineralised, highly fractionated, granite with I-type affinities. This granite is the most significant mineraliser in the New England region, accounting for more than 1200 mineral occurrences.

Mineralisation is developed both within the granite and the country rocks over an area of about 50 km x 60 km. The Tyr exploration area contains a significant number of silver occurrences

which strike north-west. The Clive group contains major occurrences such as the Torny Mine, Burra Mine and the Ecuador Deposit.

7.5.2 CENTURY SOUTH PROJECT LOCAL GEOLOGY

The Mesoproterozoic rocks hosting the nearby Century Mine (which is owned by are part of the Lawn Hill and Termite Range Formations within the Upper McNamara Group. The sequence composition is made up of unmetamorphosed to low-grade metapelitic rocks, sandstones, siltstones, shales, mudstones, and minor tuffaceous layers.

Century mineralisation is typified by sequences of interlaminated siltstones and shales, where the younger sequences grade to more sandier intervals. This upward coarsening trend is indicative of a progradational system of rapidly deposited turbidites in an outer shelfal bathymetric setting.

The general stratigraphy found at Century showing alternating shale, siltstone intervals and relative total deposit, averaged, concentrations in weight % for Zn-Pb–Mn. Note higher Mn contents of siltstones between Pb-Zn-rich shales (Clifford, 2003).

The host rocks for mineralised intervals display variations in the shale/siltstone ratios and are generally characterised as 1–10 m alternating beds. Sulphide rich layers occur prevalently as laminated bands within shale intervals, enriched in organic content.

These are separated by silty layers, only weakly mineralised or barren, and particularly enriched in sideritic cements.

The Termite Range Fault is the major strike-slip discontinuity in the region, it is oriented northwest–southeast, and together with other northeast, steep-dipping faults, characterises the structural grain of the Lawn Hill Platform.

This structural setting was most likely essential in controlling brine migration and fluid flow channelling across the region. The Lawn Hill Platform has experienced an extended reactivation history where the Termite Range Fault structure was active during several episodes of rifting-related extension, subsequent compression, and basin inversion during the Isan Orogeny (Broadbent G. M., 1998); (Betts, 2004).

This major orogenic episode is recognised by the general macroscopic folding found in the Western Fold Belt. The Isan Orogeny was considered to comprise three main deformation stages D1, D2, and D3 (O'Dea, 1997). Metamorphic ages of 1585Ma for rocks of greenschist to amphibolite facies 250 km south of Century.

7.6 MINERALISATION

7.6.1 TYR PROJECT AREA MINERALISATION

The main source of mineralisation in the Tyr Project Area is the Mole Granite, an extensively mineralised, highly fractionated granite with I-type affinities.

This granite is the most significant mineraliser in the New England region, accounting for more than 2000 mineral occurrences. Mineralisation is developed both within the granite and country rocks over an area of about 50 x 60 km.

Some of the NSW's most significant mineral fields, mines and prospects are developed on mineralisation derived from the Mole Granite, including:
• the Vegetable Creek deep lead and associated Holocene deposits (>78 000 tonnes cassiterite concentrate)

• the Taronga tin stockwork prospect (in ground resource of 46 818mt @ 0.145% Sn)

• the Torrington silexite prospect (6 mt outcropping)

• de Milhous emerald mine (>28 000 carats of emerald and beryl produced)

• the Torny Mine (I75 t of 25% polymetallic mineralisation production), Webbs Silver mine (produced 22 t As, 9.3 t Cu and 5.5 t Ag) and Webbs Consols (> 19 000 t base metal mineralisation production – Inverell 1:250 000 sheet area)

• the Ottery mine (I 873 t As mineralisation, 2 737 t Sn mineralisation @ 3% Sn produced) and Mole River As mine (2904 t of 25% As mineralisation produced)

• the Bismuth mine (>200 t wolframite and > 30 t bismuth concentrate):

The mineral occurrences associated with this granite comprise polymetallic tin, tungsten, gold, arsenic and base metals. Mineral occurrence chemistry exhibits a metal zonation from a tin-rich core, through to tungsten-rich and gold near the granite margins, to base metal-rich within the surrounding country rocks.

Many occurrence types represent a metal chemistry continuum, ranging from tin, tungsten, or base metal/arsenic rich, with any combination of the end members possible. This is to some degree due to the polyphase character of the Mole Granite mineralising events, with many fluid conduits remaining open to multiple pulses of often diverse mineralised fluids.

A large metasedimentary roof pendant within the centre of the granite, the Torrington pendant is host to large silexite (quartz-topaz rock) bodies. These are highly prospective for production of refractory grade mullite and fluorine compounds.

All occurrences associated with the Mole Granite are strongly structurally controlled by northeast and northwest-trending joints, faults and folds.

The controlling structures were developed from a regional stress regime operating during granite emplacement. Formation of cupolas and granitic ridges was facilitated by deformation of the overlying country rocks.

The most abundant of all base metal and polymetallic occurrences are fissure lodes and stockwork veins in country rocks. They are generally developed in structurally controlled clusters related to subsurface cupolas or local or regional scale fractures.

The Mole River group is a cluster of sixteen mineral occurrences developed along strike from the Clive group to the northeast of Binghi. Only four of these are regarded as polymetallic or base metal occurrences.

These are characterised by quartz sulphide-cassiterite veins up to 1 metre wide with

little or no wall rock alteration in a metasedimentary host. Galena and arsenopyrite are the dominant sulphides, inevitably associated with various amounts of cassiterite and sphalerite. Assays of mineralisation locally exhibit anomalous Mo, Cu and Ag. The Clive group occurs in a north north-westerly trending cluster north of Stannum. Forty-six base metal and polymetallic occurrences have been identified.

The dominant mode of occurrence is single or multiple, parallel quartz veins in silicified metasedimentary or granitic host rocks.

Wall rock brecciation is common, and in some localities (e.g. McKnight's workings - MR0218) the mineralised quartz vein has undergone brecciation. Joints, faults, shear zones and lithological boundaries have controlled emplacement of mineralising fluids.

Mineralisation is predominantly arsenopyrite, galena, sphalerite and cassiterite. This occurs as disseminations and massive aggregates within quartz veins and brecciated and non-brecciated wall rock.

Associated alteration is generally minor silicification, with sericitisation (e.g. Gully deposit - MROI91) and chloritisation (e.g. Burra silver mine - MROO 17) developed rarely. The Clive Group includes the Torny Mine (MROOI5), the largest polymetallic mine in this area.

The mine was worked and prospected over a strike of 600m and to a depth of 61.6m. The lode consists of two veins 0.05m and 0.6m wide striking 175 degrees true and dipping vertically within the sediment host.

The mine produced 175 tonnes of 25% fine grained massive sulphides. A grab sample assay (G94/067) of sulphide mineralisation returned Cu 0.185%; As 3.33%; Zn 5.2%; Au 0.066g1t; Pb 3.64%; Ag 455g1t; Sn 0.137%; Sb 2.8%; Bi 254ppm; Hg 0.09ppm.

7.6.2 CENTURY SOUTH PROJECT AREA MINERALISATION

Three styles of base metals mineralisation are present locally;

i. Shale-hosted stratiform Zn-Pb-Ag Century style mineralisation, carbonate hosted pyrite rich Isa-type mineralisation (e.g. Flat Tyre).
ii. Vein-style mineralisation of the Burketown Mineral Field, best exemplified by Silver King and Watson's Lode.
iii. At Grevillea, the Riversleigh Siltstone Formation comprises fine to medium grained sandstone with carbonaceous and pyritic siltstones and shales that host the base metal sulphides (McGoldrick & Hann, 2007).

The 1595±6 Ma host to the Century mineralisation, the Lawn Hill Formation, is the youngest preserved unit of the McNamara Group and comprises between 1 800 and 2 200 m of shale, siltstone, tuff, tuffaceous siltstone and sandstone. It is sub-divided into six members, Pmh1 to 6 (Sweet & Hutton, 1982).

The Century mineralisation occurs over a 45 m interval, 80 to 100 m below the conformable and gradational boundary between the host unit Pmh4 and the overlying Pmh5 Widdallion Sandstone (Broadbent & Waltho, 1998).

Pmh4, which hosts the mineralisation, comprises ~850 m of siltstone, shale, carbonaceous shale and sandstone. From the base, this sequence overlies the sandstones of the Pmh3 Bulmung Sandstone and commences with a fining upwards, succession of 300 m to 400 m of carbonaceous, pyritic shale.

These are followed by a sequence of interbedded siltstone, sideritic siltstone, shale and minor fine quartz-lithic sandstone that occur in the footwall of the mineralised sequence. A similar package is found in the hanging wall.

The combined footwall, mineralised interval and hanging wall form an ~300 m thick, slightly coarsening upward package. Correlations within this package are difficult, due to the lack of lithologically or geophysically distinct markers, apart from a few reworked tuff horizons in the hanging wall siltstone-shale sequence, up to 30 m above the top of the mineralisation (Broadbent & Waltho, 1998).

The underlying Pmh3 sandstone and Pmh2 siltstone are ~120 m thick and overlie ~220 m of Pmh1 black shale (Broadbent & Waltho, 1998).

The >150 m thick Pmh5 Widdallion Sandstone, the youngest member of the Lawn Hill Formation in the immediate area of the deposit, is overlain by intensely faulted and folded fragments of Cambrian carbonates which are from a considerable interval of the Georgina Basin succession (Broadbent & Waltho, 1998) ; (Szulc, 1993).

Table 7.2 Historical Mine Workings, Immediate Vicinity of Century South

Occurrence name	Easting (MGA94)	Northing (MGA94)	Work extent	Work extent comments	Main commodity code
Unnamed 408235	240940	7923703	20m Long X 2.5m Wide 2 2.5m Deep	Shaft 4m long x 2.5m wide x 2.5m deep	Pb
Queenslander	246002	7924265		Pit 3m long x 2m wide x 1m deep	Pb
Leek	241232	7924333	30m Long X 8m Wide X 2m Deep	Collapsed shaft	Pb
Unnamed 479243	248033	7924473	40m Long X 2m Wide X 15m Deep		Zn
Unnamed 479244	248043	7924573	2m Deep		Pb
Mended Hill	248072	7924713	60m Long X 30m Wide X 30m Deep		Zn
Burke Copper Mine	251572	7925083	110m Long X 2m Wide X 2m Deep		Cu
Thistle	240791	7925413	3m Long X 2m Wide X >10m Deep	Collapsed shaft	Pb
Bells Lode	247943	7925653	275m Long X 2m Wide X >15m Deep		Zn

Occurrence name	Easting (MGA94)	Northing (MGA94)	Work extent	Work extent comments	Main commodity code
Silver King	245912	7925663	305m Long X 70 M Wide X 61m Deep	Within the Century mining lease.	Ag
Wattle	240732	7925782	20m Long X 5m Wide X 5m Deep		Pb
Tunnel Hill	249142	7926183	3m Long X 2m Wide 2 30m Deep		Zn
Magazine Hill	247362	7926883	100m Long X 2m Wide X >5m Deep	Workings collapsed	Zn
Ten Mile Shows	245523	7926873	3m Deep		Pb
Anglo American	243382	7929753	300m Long X 30m Wide X 12m Deep		Pb
Unnamed 433301	243413	7930233	10m Long X 3m Wide X 1m Deep		Pb
Star Spangled Banner	244142	7930453	150m Long X 30m Wide X 20m Deep		Zn
Union Jack	242633	7930573	120m Long X 30m Wide X 2m Deep		Pb
Little Banner	244722	7930673		Workings all infilled with alluvium	Pb
Little Banner	244472	7930673			Pb
Unnamed 403314	240393	7931613	7m Long X 2m Wide X >1m Deep		Pb
Little Wonder	240452	7931633	50m Long X 5m Wide X 7m Deep		Pb
Dorothy	243912	7931743	50m Long X 20m Wide X 10m Deep		Pb
Unnamed 435321	243632	7932233	3m Deep		Pb
Black Snake	243762	7932253			Zn
Axis	243352	7932814	300m Long X 30m Wide X 15m Deep		Pb
Silver Queen	243342	7933083	100m Long X 30m Wide X 15m Deep		Pb
Triangle Queen	243493	7933143			Pb
Sirdar	241772	7935733	110m Long X 5m Wide X 2m Deep		Cu
Blue Bell	260787	7896693	50m Long X 3m Wide X > 5m Deep		Cu
Malachite Occurrence	256272	7898813	10m Long X 2m Wide 2 1.5m Deep		Cu

Occurrence name	Easting (MGA94)	Northing (MGA94)	Work extent	Work extent comments	Main commodity code
Star Of The South	253962	7903263	50m Long X 30m Wide X 1m Deep		Pb
Unnamed 538031	253922	7903274			Pb
Greater Britain	252031	7911922	40m Long X 15m Wide X > 15m Deep	Collapsed adit. Adit workings trend 260 degrees.	Pb
Kamarga Road	267948	7914895			Pb
Lilydale	246692	7914801			Pb
Western Star	248722	7915213	230M LONG X 2M WIDE X >3M DEEP		Pb
Coghlan's	245538	7916400	160m Long X 15m Wide X >5m Deep	All shaft workings have collapsed, one has a collapsed head frame & the other is timber lined. The workings trend 080 degrees.	Pb
Watson's Lode	246592	7917164	360m Long X 20m Wide X >20m Deep	Workings occur in 2 areas; the main shaft is at the north-east end of the lode & another extensive line of workings occurs at the southwestern end of the lode.	
Prince Charles	239502	7918270	15m Long X 4m Wide X >10m Deep	Workings trend 020 degrees. The shaft has collapsed.	
East Star	249342	7918713	450m Long X 30m Wide X 26m Deep		
Wooden Duck	239432	7918895	10m Long X 2m Wide	Workings strike 085 degrees. Shaft workings have collapsed.	
Quinlan's Lode	239068	7919392	9m Long X 9m Wide X >10m Deep	Shaft has collapsed	
B1 Copper Prospect	273042	7919918	1.8m Long X 1.5m Wide X 1.5m Deep		
Cassowary	240693	7922097	380m Long X 2m Wide	Workings trend 010 degrees	

8.0 DEPOSIT TYPES

The Tyr Project area is located over three (3) main Sub-provinces of New England Orogen.

- Central Block, which is mainly comprised by conglomerate, sandstone and siltstone. Including some felsic igneous rocks and quartzite units;
- Tablelands Complex, which mainly comprises granite and mineralisation related material; and
- New England Orogen Granites (dominant lithology of porphyry and basalt).

The Tyr tenement hosts many mineral occurrences according to evidence from historical mines within the exploration licence area. These activities were mostly focused on silver, lead, zinc, arsenic and tin.

There are two groups of mineralised area that are of most importance. The first is the Clive Group, located in the south-east portion of the tenement and includes a group of 46 base metal and polymetallic occurrences and is the focus of this PDS. The second is the Mole River group, including 16 mineral occurrences (Henley & et al, 2001).

Mineralisation in these groups come from the nearby Mole Granite. The Mole Granite is an extensively mineralised, highly fractionated, granite with I-type affinities.

This granite is the most significant mineraliser in the New England region, accounting for more than 1200 mineral occurrences. Mineralisation is developed both within the granite and the country rocks over an area of about 50km x 60km.

The Tyr exploration area contains a significant number of silver occurrences which strike north-west. The Clive group contains major occurrences such as the Torny Mine, Burra Mine and the Ecuador Deposit.

Three styles of base metals mineralisation are present in the vicinity of the Century South Project area; shale-hosted stratiform Zn-Pb-Ag Century style mineralisation, carbonate hosted pyrite rich Isa-type mineralisation (e.g. Flat Tyre) and the vein-style mineralisation of the Burketown Mineral Field, best exemplified by Silver King and Watson's Lode.

At Grevillea, the Riversleigh Siltstone Formation comprises fine to medium grained sandstone with carbonaceous and pyritic siltstones and shales that host the base metal sulphides (McGoldrick & Hann, 2007).

The Century South Project has potential for shale/siltstone/dolomite hosted Zn-Pb-Ag deposits. In the Mt Isa Inlier these deposits are characterised by stratiform to stratabound massive sulphide lenses in carbonaceous shales and dolomitic siltstones at varying stratigraphic levels.

They include the Mount Isa Pb-Zn (Isa mine, George Fisher), Century, Duguld River, Kamarga, and Lady Loretta deposits (Hutton, Denaro, Dhnaram, & Derrick, 2012).

8.1 COMPARISONS WITH PROJECT AREAS

The Tyr Project area contains over 145 mineral occurrences (MinView, 2020) including historical mines and workings (Figure 8.1 on page 106).

The available literature (Henley & Brown, 2000) (Henley & et al, 2001) shows several deposit styles have been recognised in the project area and these are described below:

Fissure lodes and stockwork veins within country rock

These are the most abundant of all base metal and polymetallic occurrences and generally developed in structurally controlled clusters related to subsurface cupolas or local or regional scale fractures (Henley & Brown, 2000).

Within the Tyr tenement, the main cluster of mineral occurrences include the Mole River and Clive groups**.**

Clive Group
The Clive group occur in a north north-westerly trending cluster north of Stannum. Forty-six base metal and polymetallic occurrences have been identified (Henley & et al, 2001).

The dominant mode of occurrence is single or multiple, parallel quartz veins in silicified metasedimentary or granitic host rocks.

Wall rock brecciation is common, and in some localities the mineralised quartz vein has undergone brecciation. Joints, faults, shear zones and lithological boundaries have controlled emplacement of mineralising fluids.

The Clive group includes the Torny Mine, the largest polymetallic mine in this area.

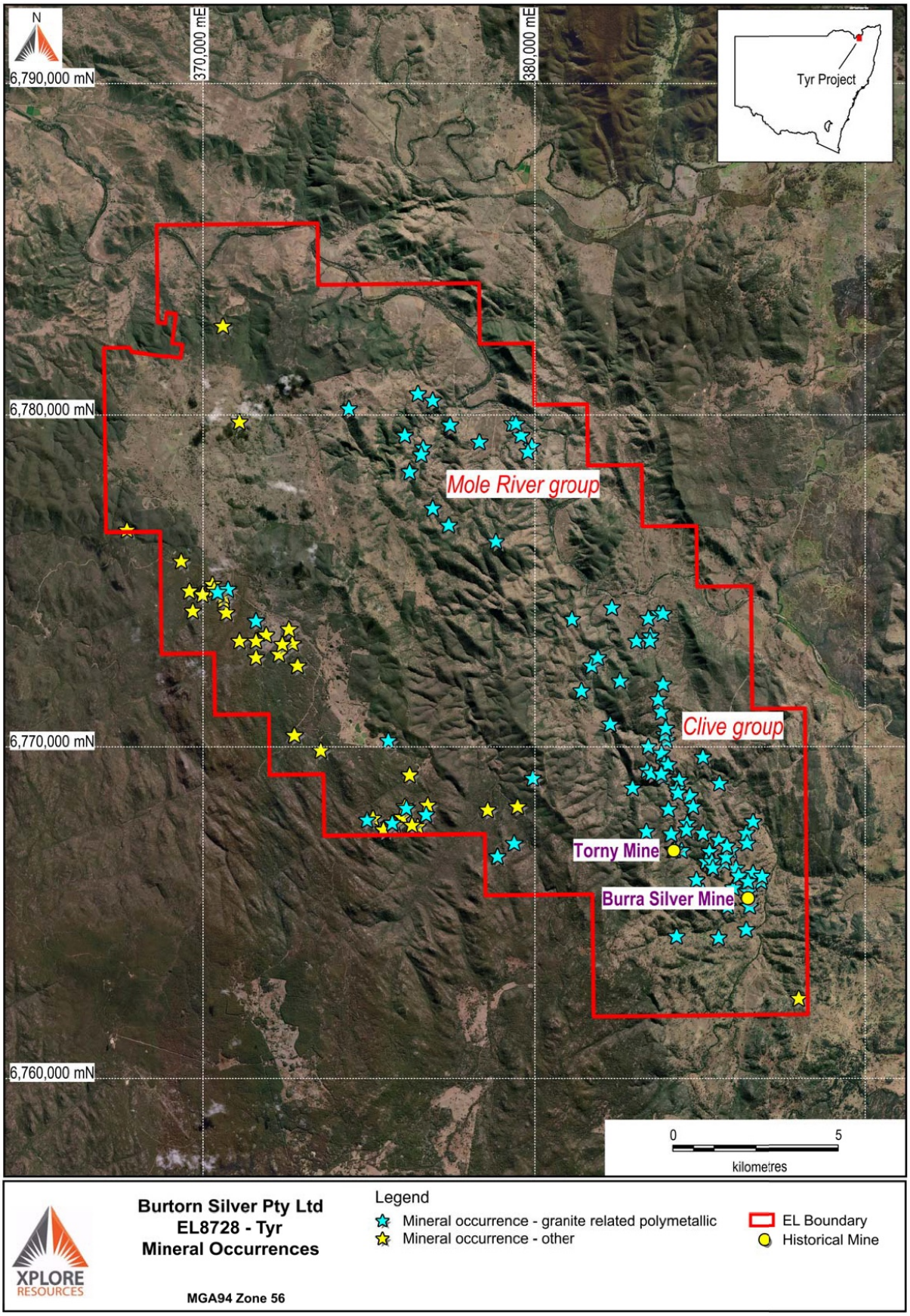


Figure 8.1 Mineral Occurrences, Tyr Project (MinView, 2020)

Mineralisation is mainly arsenopyrite, galena, sphalerite and cassiterite, and generally occurs as disseminations and massive aggregates within quartz veins and brecciated and non-brecciated wall rock. Associated alteration is generally minor silicification, with sericitisation and chloritisation (Henley & et al, 2001).

Mole River group

The Mole River group includes a cluster of 16 mineral occurrences developed along strike from the Clive group. Only four of these are polymetallic-base metal occurrences. These are characterised by quartz–sulphide–cassiterite veins up to 1 m wide with little or no wall rock alteration in a metasedimentary host.

Galena and arsenopyrite are the dominant sulphides, which invariably are associated with various amounts of cassiterite and sphalerite. Assays of the mineralisation revealed anomalous molybdenum, copper and silver (Henley & Brown, 2000).

Skarn Zn-Pb & Polymetallic occurrences

Three occurrences of skarn-hosted polymetallic mineralisation are located 4 km northwest of Tent Hill within Permian sediment close to a granitic dyke (Henley & Brown, 2000)

The occurrences appear structurally controlled, forming a straight line 2 km long, and trending north-northwest. The occurrences are hosted by altered metabasalts (altered pillow lavas) over a strike of about 2km. Sulphides are developed within the calc-silicates as lenses, disseminations and massive aggregates, or in quartz veinlets up to 4mm wide. Mineralisation includes galena, sphalerite, chalcopyrite and pyrite (Henley & et al, 2001).

Mole Granite related Sn occurrences

MinView (2020) shows around 35 tin, tin-tungsten and tin-polymetallic occurrences within EL 8728 that are hosted by the Mole Granite. Some are alluvial deposits but most are veins or multi-veins occurrences.

Country rock hosted Sn veins

Country rock hosted tin veins are widespread within the Tyr Project area. Major clusters of veins and stockworks are present in the Taronga-McDonalds mineralised line, Dalcoath group, Ottery-Emmaville group and the Stannum group (Henley & Brown, 2000). Theses area are outside the Tyr tenement.

CENTURY SOUTH PROJECT AREA

For the Century South Project, an extensive amount of historical exploration was reviewed within and near the tenement.

The majority of the prior work completed on how historical exploration licences appeared to strongly focus on the economic potential of zinc (Zn), lead (Pb) and/or silver (Ag). Historical exploration activities within the tenure and to the immediate east and immediate south of the tenure area can be described as sparsely scattered exploration activities.

Positively. the Century South project (EPM26713) is in close proximity to the Century Mine (for further details, please see Section 16, Adjacent Properties, in this Report) and the Grevillea Exploration for zinc, lead, silver and copper has been undertaken in the area since the 1990 by CRA Exploration, Aberfoyle Resources Ltd and others.

New Century Resources Ltd (ASX: NCZ) holds the major proximal deposit located at the Century Mine. The main mineralisation bearing lithologies in the north of the region include; the interbedded siltstone and shale sequences of the Lawn Hill Formation, and in the south; the interbedded siltstone and shale sequences of the Riversleigh Siltstone.

The regional exploration results and geological interpretations indicate potential economic Zn-Pb-Ag and other aforementioned base metals present within the Century South project (EPM26713). Where parasitic (third order faults) were intersected via exploration drilling, assay results have returned favourable results.

This includes favourable soil and stream sediment sample results in proximity to these faulted areas. In the current tenure, mineralisation is considered to be polymetallic in nature and often includes zinc (Zn), lead (Pb), silver (Ag) and copper (Cu). A PTS (Fox & Taylor, 2019) was undertaken to better understand the prospective geology and geomorphology; as a precursor to assist in recommending a targeted program of exploration.

9.0 EXPLORATION

9.1 EXPLORATION COMPLETED BY CURRENT EXPLORER

This section details exploration activities undertaken on behalf of Australian Silver Mines Pty Ltd within the period of the 1st of December, 2020 to the 11th of December, 2020. Prior to the commencement of the exploration activities in December 2020, historical exploration reports were compiled and reviewed. The collected historical exploration report information and data were summarised, used for fieldwork planning and target generation and included in other, relevant sections within this report.

The Tyr (EL8728) historical reviews included the following reports prior to the commencement of the fieldwork exploration program:

1. *Data room and Folder Structure Report ("DFR") Year 1* – data compilation and assembling of a soft copy data structure (Ryan N. , 2019).

2. *Preliminary Desktop Study Report ("PDS") Year 1* - establishing a mineralisation style model, identifying relevant existing data, reviewing this data at a preliminary level to ascertain the potential prospectivity of the Project, and recommending future courses of exploration strategy (Ryan, Gray, & Roberts, 2019);

3. *Data room and Folder Structure Report ("DFR") Year 2* – includes the download of newly available data, organisation, and structure of all relevant data for the Tyr tenure (Ryan N. , 2020);

4. *Preliminary Desktop Study Report ("PDS") Year 2* – focused on Silver for Year 2 period (Bagci, Tomko, & Taylor, 2020);

5. *Landholder Identification and Access Report ("LIA") Year 2* – generated to summarise the Landholders of cadastre parcels for key localities for the Tyr Project (Brown M. , 2020);

6. *Field Reconnaissance Planning Report ("FPR") Year 2* – to implement field reconnaissance in the Year 3 tenure period (Ryan N. P., 2020);

7. *Preliminary Geological Review ("PGR") Year 2* – of selected mines, with a focus on the historical silver mines in the Tyr tenure EL8728 (Ryan & Bagci, 2020);

8. *Landholder Identification and Access Report ("LIA") Year 3* – generated to summarise the Landholders of cadastre parcels for key localities for the Tyr Project ((Brown M. , 2020) ;and

9. *Field Reconnaissance Planning Report ("FPR") Year 3* – initial field trip to project area (Stephens & Bagci, 2020).

For the exploration activities completed in December, 2020, 55 rock chip and grab samples were taken during the recent field campaign. These samples were taken from the dumps around old workings (grab samples) where separate samples were taken for what was considered at each separate site to be “highly mineralised type” material, “mineralised country rock” and “ordinary country rock”.

Figure 9.1 Old Wooden Headframe at abandoned Torny Mine Shaft

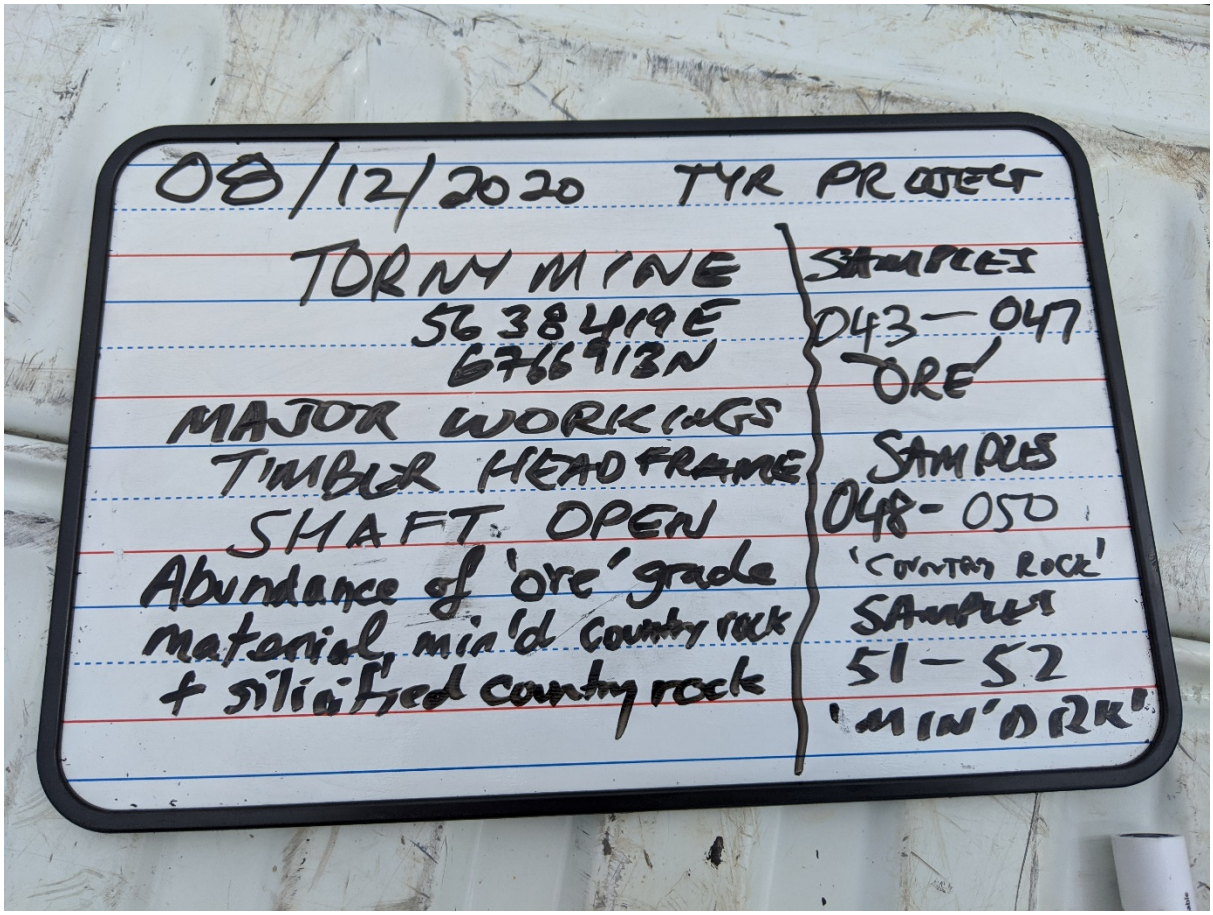


Figure 9.2 Photo sample record from old abandoned Torny Mine

Samples were also taken from outcrop or road cuttings/exposures where mineralisation or alteration features were identified from traversing the tenement when going from one location to the next, especially between historic old, workings.

Where possible, samples were taken of the surrounding country rock as well as the main feature considered to be of significance, mostly altered and silicified lithologies (metasediments) that were considered to have a possible role in the mineralising events within the project area.

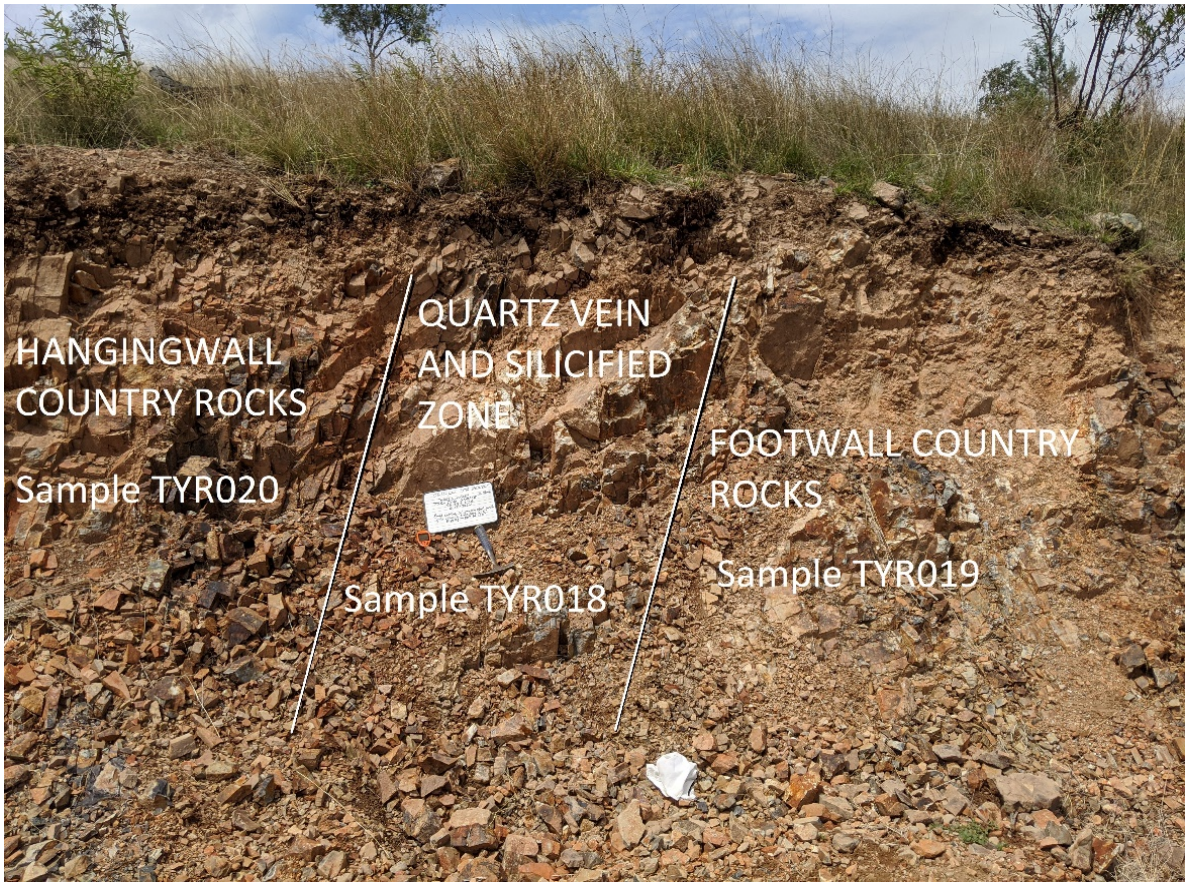


Figure 9.3 Outcrop divided into separate lithological zones for sampling

The 55 rock chip and grab samples from the Tyr Field Reconnaissance Trip were submitted to the independent laboratory used by Xplore Resources, ALS Brisbane, on Wednesday, December 16th 2020.

As some of the samples will have "highly mineralised type grade" base metal values as well as high sulphur content, it was necessary to use two assaying methods in order to accurately gauge the range of values for the base metals, especially those greater than 10 000 ppm or 1%.

The methods recommended and hence used for the base metals analyses were:
Sample Preparation:

1. Dry for 24 hours.
2. Crush to a nominal 70% passing 2mm.
3. Split – riffle split 250g out.
4. Pulverise 250g to 85% passing 75 microns.

Base metal trace: ME-ICP41 (0.5g sample) – aqua regia digest with ICP-AES finish

Over limit grade base metals: OG46 (0.4g sample) – aqua regia

Gold metal trace Au-ICP21 (30g sample) – Au by fire assay and ICP-AES

Gold AuAA25 (30g sample) – Au by fire assay and AAS

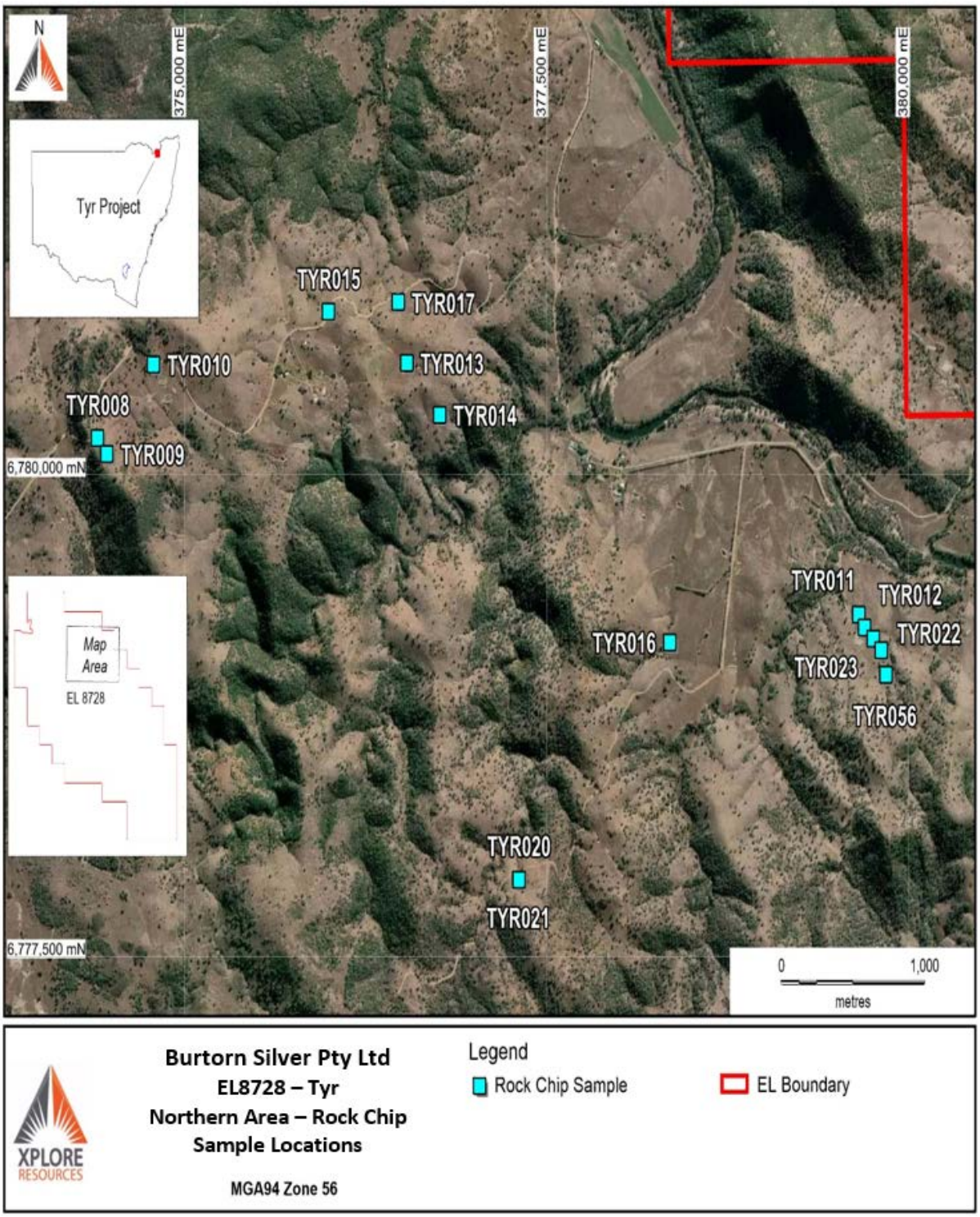


Figure 9.4 Rock Chip Sample Locations, northern area, Tyr Project

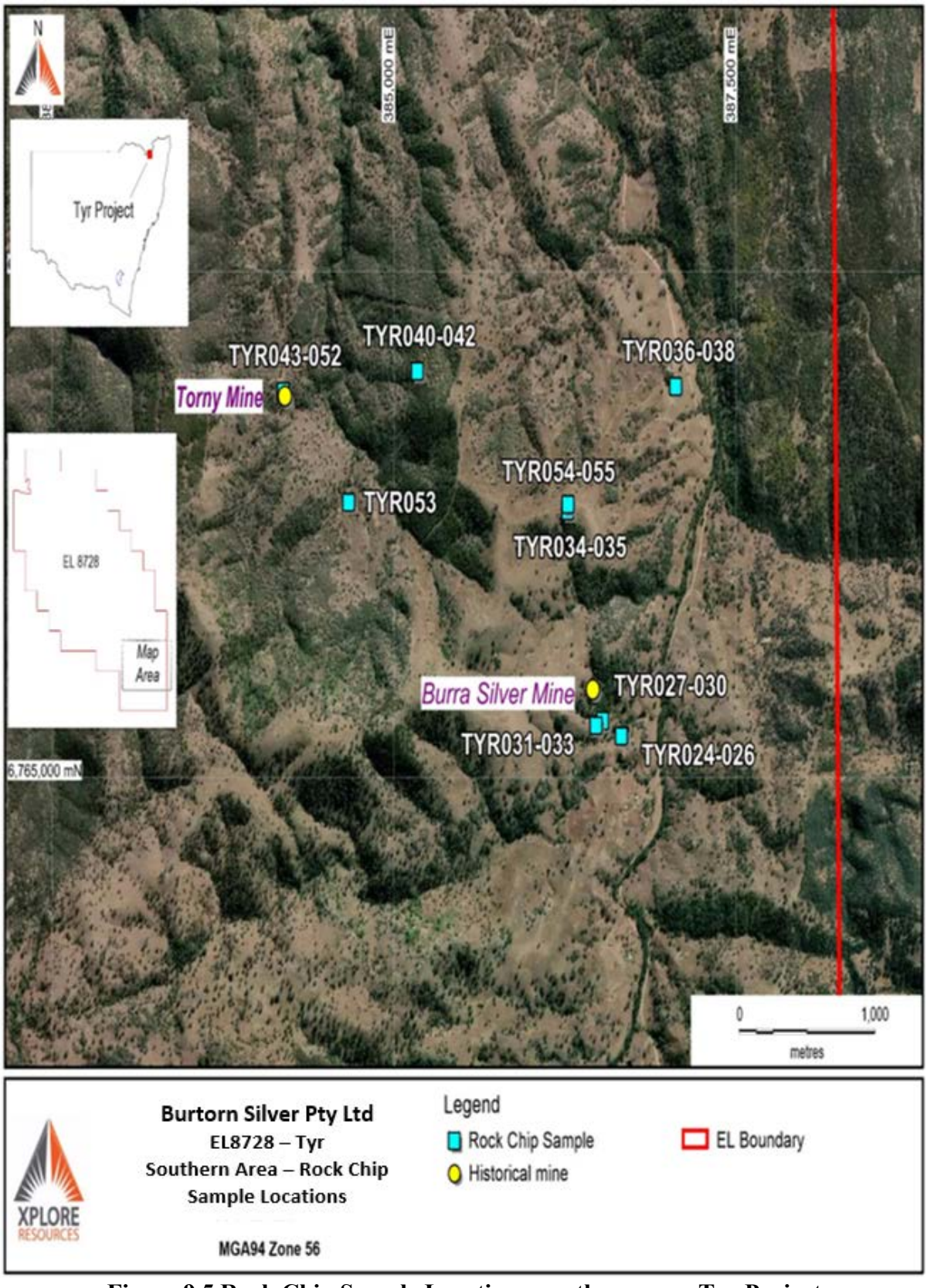


Figure 9.5 Rock Chip Sample Locations, southern area, Tyr Project

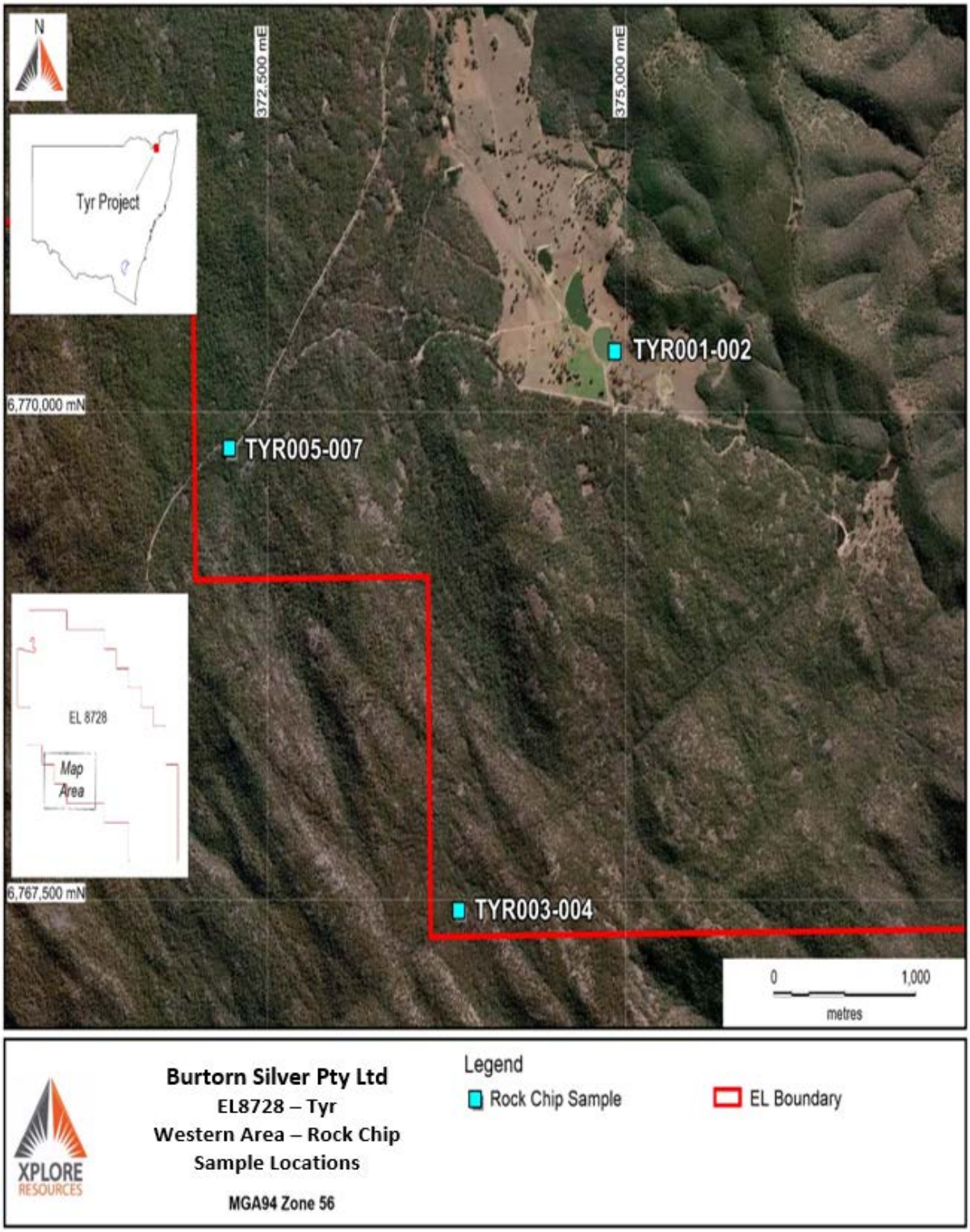


Figure 9.6 Rock Chip Sample Locations, western area, Tyr Project

Figure 9.7 Outcrop sampled east of old abandoned Torny Mine

Results for the 55 samples became available in the second week of January 2021 (after the usual Christmas-New Year shut down of businesses).

A full tabulation of results is outlined in the Appendix of this report and a brief summary of the more anomalous and noteworthy results are tabulated below:

Table 9.1 Summary of anomalous rock chip and grab results, Tyr Project

Sample #	Ag ppm	As ppm	Bi ppm	Cu ppm	Fe %	Pb ppm	S %	Sb ppm	Zn ppm	Au ppm
TRY002	<0.2	1615	<2	16	2.25	4	<0.01	<2	131	0.003
TRY011	2.4	500	9	35	1.17	242	0.04	<2	17	0.001
TRY014	16.6	529	<2	305	22.2	>10000	0.14	19	3210	0.003
TRY021	8.4	413	83	2320	21	1490	0.02	7	991	0.004
TRY022	1.8	551	4	1300	5.06	224	0.01	2	297	0.001
TRY024	13.6	133	111	645	17.15	89	5.3	<2	>10000	0.002
TRY025	0.4	43	2	28	2.82	69	0.1	<2	3250	0.001
TRY026	>100	417	2500	867	>50	1980	0.14	5	8410	0.007
TRY027	>100	6920	1560	6320	22	>10000	>10.0	3	>10000	0.037
TRY028	35.6	4970	430	1950	13.65	296	6.01	<2	>10000	0.028
TRY029	11.5	419	32	617	2.88	834	0.31	<2	2080	0.003
TRY030	>100	1405	292	1380	7.86	>10000	1.13	<2	5200	0.008
TRY031	43.3	333	37	381	9.17	>10000	1.01	<2	>10000	0.003
TRY032	33.1	1170	25	467	8.18	9270	0.61	<2	7320	0.003
TRY034	8.7	>10000	1660	18	10.35	61	0.93	22	36	0.236
TRY035	0.5	7740	47	84	6.66	44	0.05	<2	130	0.007
TRY036	<0.2	358	5	13	0.7	14	0.01	<2	18	0.002
TRY037	<0.2	1040	6	3	0.58	7	0.02	<2	9	0.003
TRY038	<0.2	33	3	9	0.59	14	0.01	<2	10	0.002
TRY039	10.2	>10000	35	409	4.09	171	0.82	8	136	0.005
TRY043	>100	>10000	235	263	10.9	>10000	5.1	2450	478	0.097
TRY044	61.6	>10000	16	1230	13.45	3370	7.14	1350	>10000	0.091
TRY045	>100	7400	446	2240	23	>10000	>10.0	464	>10000	0.027
TRY046	>100	>10000	42	246	19.05	8340	9.19	1180	2330	0.13
TRY047	95.5	>10000	61	428	13.6	10000	7.67	725	>10000	0.068
TRY048	20.9	>10000	6	95	2.61	>10000	0.77	157	1050	0.004
TRY049	23.4	1785	2	391	8.66	6800	0.24	107	2050	0.005
TRY050	4.1	329	<2	22	0.45	1120	0.07	14	174	0.003
TRY051	28.7	990	8	558	27.5	3810	0.21	97	3500	0.002
TRY052	>100	4360	54	352	1.93	>10000	1.29	8220	1400	0.026
TRY053	25.7	179	2	25	0.88	641	0.08	384	156	0.003
TRY054	22.5	>10000	630	2410	12.65	192	1.44	35	29	0.119
TRY055	3.6	>10000	127	23	4.04	144	0.54	17	82	0.032
TRY056	0.5	461	2	105	3.71	1820	0.04	3	1210	0.003

Some of the more noteworthy results include:

(N.B. Terms used as Low, Mod, High, Very High and Anomalous to describe assay results are relative to known background values and this Project's historical records and therefore not considered to be universally applicable elsewhere).

Samples TYR 021 and 022
These were taken from a road-side cutting previously not recorded nor sampled where silicified, blue-grey chert/metasediments returned high as, Mod Cu, Mod-High Fe and Mod Pb and Zn. TYR021 - As 413 ppm, Cu 2320 ppm, Fe 21% and TYR022 - As 551 ppm, Cu 1300 ppm, Fe 5%.

Samples TYR 034 and 035
Small pit on hilltop site, not recorded nor sampled previously, host lithology different to rest of project area, possibly basalt/meta-basalt or andesitic? Noted quartz veining looked epithermal like and high as, Bi, Fe and Sb with 0.24 g/t Au and negligible Pb, Zn and S are what one would expect for epithermal mineralisation. TYR034 Ag 8.7 ppm, As >1%, Bi 1660 ppm, Fe 10%, Sb 22 ppm and Au 0.24 ppm (240ppb).

Sample TYR 039
This site was an old shaft now used as a rubbish dump, not recorded nor sampled previously, TYR039 Ag 10.2 ppm. As >1%, Bi 35 ppm, Cu 409 ppm, Pb 171ppm and Zn 136 ppm.

Samples TYR046 and 047
These two were part of a group of samples from the old Torny Mine Dumps and have high Ag, As, Bi, Sb, S, Pb and Zn but are noteworthy for relatively anomalous Au. TYR046 Ag 109 ppm, As >1%, Bi 42 ppm, Fe 19%, Pb 8340 ppm, S 9%, Sb 1180 ppm, 2330 Zn and 130 ppb Au and TYR047 Ag 95,5 ppm, ASs >1%, Bi 61 ppm, Fe 13%, Pb 9890 ppm, S 8%, Sb 725 ppm, Zn 7760 ppm and Au 70 ppb.

Sample TYR 053
Outcrop east of Torny Mine, not previously recorded nor sampled, altered, chloritic, highly silicified metasediments, banded and green in colour. TYR053 Ag 25.7 ppm, As 179 ppm, Pb 641 ppm, Sb 384 ppm, Pb 641 ppm and Zn 156 ppm.

Sample TYR 054
Two small pits on the saddle of a ridge on the road back from Torny Mine, silicified metasediments, small quartz vein, 40 mm wide. TYR054 Ag 22.5 ppm, As>1%, Bi 630 ppm, Cu 2410 ppm, Fe 13%, Pb 192 ppm, S 1.4%, Sb 35 ppm and Au 120 ppb (0.12 ppm).

Samples TYR027 to 031
These were taken from the old Burra Mine and the assay results are in line with expectations given the historical records of previous sampling.

Samples TYR043 to 052
These were taken from the old Torny Mine and the assay results are in line with expectations given the historical records of previous sampling.

Based on the observations made during the first field trip in December 2020, it is now recommended that an additional field trip should be done at the end of the summer (wet season) i.e. after March 2021.

During this second field trip, areas not accessed during the first field trip due to absentee landholders should be re-visited along with any areas of interesting and/or unexpected anomalisms from the assay results of rock chip and grab samples from the first field trip, as summarised in the previous section of this report.

There may also be a case for additional rock chip and grab sampling in and around areas that showed anomalous values from the assay results of the first field trip.

CENTURY SOUTH PROJECT AREA EXPLORATION BY CURRENT HOLDER

Prior to the commencement of the fieldwork, exploration program, historical exploration reports were compiled and reviewed.

The collected historical exploration report information and data were summarised then used in target generation and fieldwork planning.

The Century South (EPM26713) studies included the following reports prior to the completion of the initial, fieldwork exploration program:

1. *Data room and Folder Structure Report ("DFR") Year 1* – data compilation and assembling of a soft copy data structure (Davey, 2019);

2. *Preliminary Desktop Study Report ("PDS") Year 1* – aiming to download the bulk of the publicly available data and historical exploration reports for the Cuprite Project (Ryan, Taylor, & Fox, 2019);

3. *Landholder Identification and Access Report ("LIA") Year 1* – generated to summarise the Landholders of cadastre parcels for key localities for the Century South project (Davey, 2019);

4. *Preliminary Targeting Study Report ("PTS") Year 1* – provided an assessment of potential exploration targets in the Century South Project area and advise on suitable methods available to test these targets (Fox & Taylor, 2019);

5. *Field Reconnaissance Planning Report ("FRR") Year 1* – to complement the areas visited in historical works throughout the Project (Ryan N. , 2019);

6. *Landholder Identification and Access Report ("LIA") Year 2* – generated to summarise the Landholders of cadastre parcels for key localities for the Century South project (Bulner & Brown, 2020);

7. *Geological Review Report ("GRR") Year 2* – summarised the relevant information from existing reports completed for the Project (Brown M. , 2020) and;

8. *Field Reconnaissance Planning Report ("FRR") Year 2* – complement the areas visited in historical works throughout the Project, taking into consideration the previously identified prospects in the area (Stephens M. , 2020).

Rough terrain and lack of prepared tracks were the primary challenge to four-wheel light vehicular access in approximately three-quarters of the tenement area. The prospective geology is contained primarily in the Riversleigh Siltstones which lie in the centre of the lease area and is not well serviced by roads.

The tenement straddles moderately folded and inclined successions of siltstones and quartzites. Erosion of the sequences has formed a NW/SE trending low mountain range that rises from the surrounding alluvial plains. The mountain ridges have been formed by preferential erosion of softer siltstone horizons from the surrounding quartzite horizons that vary in thickness from less than a metre to hundreds of metres.
Fortunately, the mountain ridges are cut through at regular intervals by river stream courses. Historic stream sediment data showed that a reasonable amount of geochemical exploration has been done on the tenement in the past.

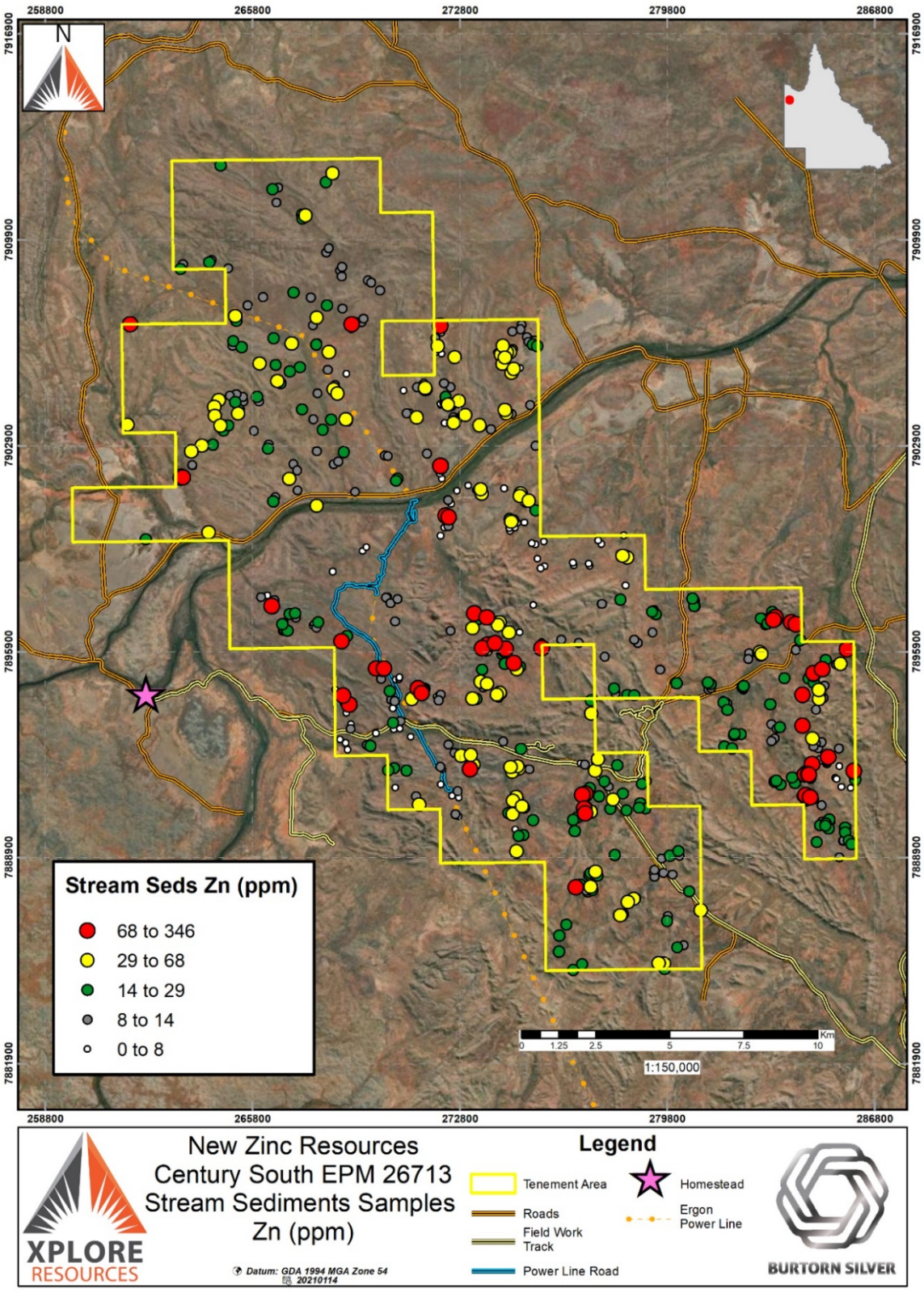


Figure 9.8 Historic stream sediment samples (Zn), Century South Project (Queensland Government(d), 2020)

Seven (7) rock/chip samples were collected from a 30 m x30 m (approximately) gossanous outcrop immediately to the east of the southern powerline service track. The Exploration geologist had noted an anomalous white quartz ridge about 1m high while driving southward along the powerline service track.

The low quartz ridge outcrop is about 10 m to the west of the service track. The dark gossanous outcrop was found around 50 m to the east on the other side of the service track.

The map co-ordinates of the gossan are 272471mE and 7891220 mN (MGA94 zone 54). This locality was nicknamed 'Electron' after the nearby powerlines and one hydrothermal vein rock sample was taken here.

Results for the seven rock chip samples are tabled below – only elements showing appreciable variation are shown in the table.

Table 9.2 Rock Chip Assay Results for Century South – summary table of appreciable elements

Sample Number	Ag ppm	Au ppm	Ba ppm	Fe %	Mn ppm	P ppm	Sr ppm	V ppm	Zn ppm
387912	<0.2	<0.001	40	0.68	132	200	16	3	10
387913	<0.2	0.001	50	0.76	138	40	2	3	5
387914	<0.2	<0.001	110	13.7	946	300	5	24	19
387915	<0.2	0.007	110	11.15	2610	1080	9	12	28
387916	<0.2	<0.001	340	19.3	1785	570	10	28	33
387917	<0.2	0.002	310	13.25	3480	660	16	16	24
387918	<0.2	0.003	120	19.65	1105	680	15	22	29

9.2 GEOCHEMISTRY COMPLETED BY PREVIOUS EXPLORERS

9.2.1 TYR PROJECT AREA GEOCHEMISTRY

A total of 995 surface samples were taken within the Tyr tenement by previous explorers as per the records of the NSW Mines Department (MINVIEW). Surface sampling programs mainly focused on the trend of magnetic anomalies within the tenement. Besides, known production areas were sampled.

These samples returned with high-grade silver, zinc, tin and lead results (Minview, 2019b).

The Burra Silver Mine rock chip assay yielded results as high as 933ppm Ag (selective sampling of vein material only). The area has produced results of 23% zinc, 11% lead and 30.45 oz/ton from the historical mine (Minview, 2019b).

The Ecuador deposit rock chip sampling (selective vein only) produced results as high as 4,710 ppm Ag. The area is located 250 m south of the Burra Silver Mine [Sample ID: 127862] (Tawa R. , 2013a).

Torny Mine shaft sample (selective sampling) returns with results as high as 1,420ppm Ag and rock chip sampling resulted up to 1,340 ppm Ag [Report No: R00037680, Sample ID: 28839 (S. Elliott, 2009)]

The Caves Creek Mine sits 600 m north of Torny Mine. Rock chip sampling from the area resulted in 265 ppm Ag (Minview, 2019b) and rock chip sampling from 200 m north of the mine yielded results of 354 ppm Ag [Report no: RE0002576, Sample ID: 127250 (David Hobby, 2012)]

Rock chip sampling from McKnight's Pye's Creek deposit resulted up to 500 ppm Ag [Investor Presentation: New_Zinc_Resources_XR_Geology_2019_JUL, page 14/45 and 16/45]. Rock chip sampling from Hazeldean prospect resulted in up to 564 ppm Ag.

Nearby rock chip sampling shows results of up to 362 ppm Ag [Report no: RE0000563, Sample ID: HZ18] (L. Gillespie, 2010).

Rock chip sampling from Heffernan's Tin Mine produced assay results as high as 614 ppm Ag [Report: R00037680, Sample ID: 66544] and nearby soil sampling (150 m north) shows 600 ppm Ag [Report no: R00037680, Sample ID: 66028] (S. Elliott, 2009).

The Silent prospect area is the only location explored on the west portion of the tenement. Rock chip results show up to 400 ppm Ag (Minview, 2019b) and nearby rock chip samples (200 m NE) show up to 203 ppm Ag and 5.8% Pb [Report no: RE0000044, Sample ID: 070926-2] (Rimas Kairaitis, Joe Xie, 2008).

Rock chip sampling from northern region of the tenement produced assay results of up to 552 ppm Ag [Report no: R00079461, Sample ID: 6512-119] (J.D.Elliot, 2008).

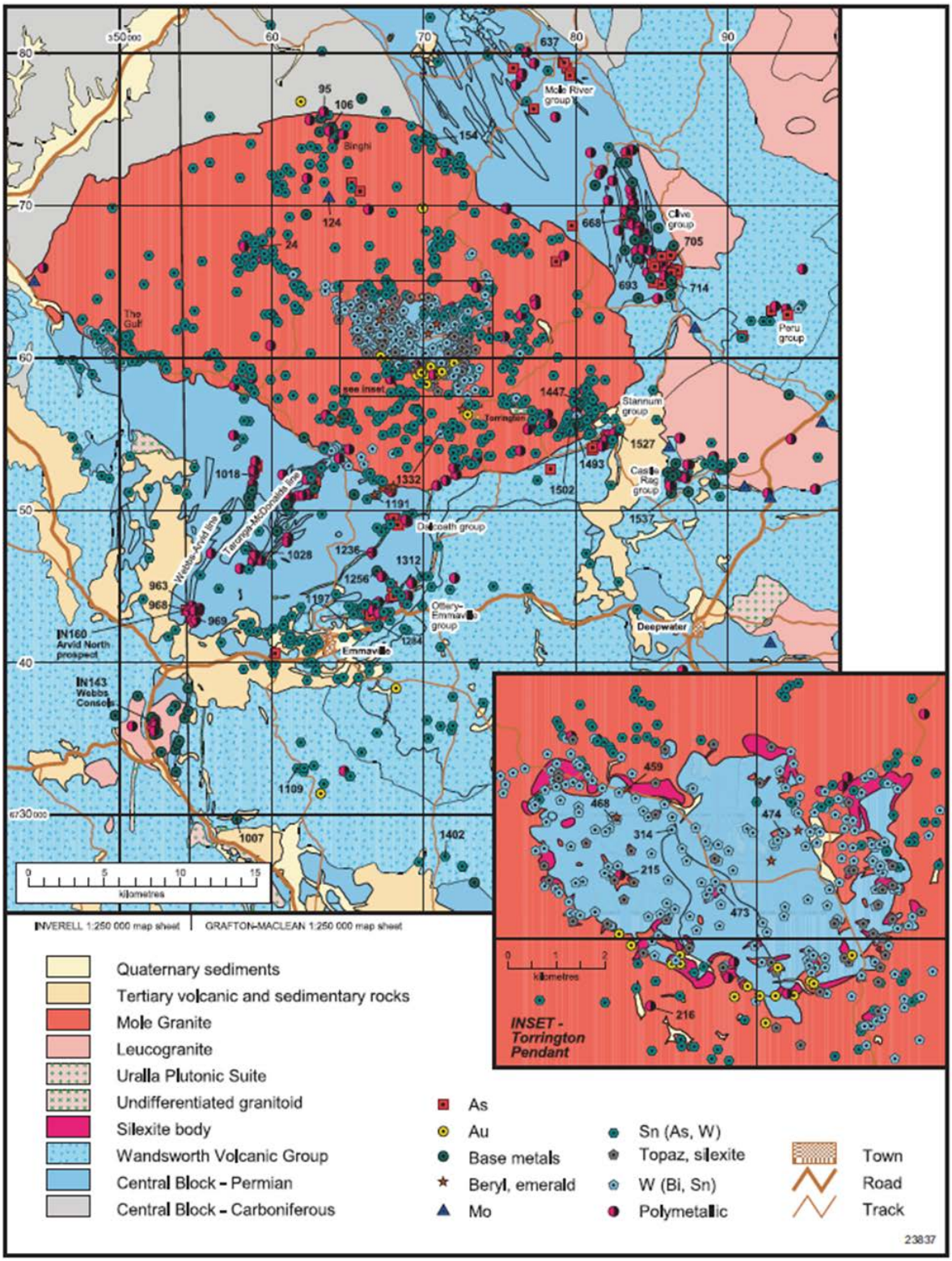


Figure 9.9 Mole Granite and related mineral occurrences (Henley & et al, 2001)

Torny Mine

This was the largest polymetallic mine in this area. It was worked periodically from 1885-1933, 1948-53 and 1960-63. Workings are intermittent along a strike length of 600 metres and developed to a maximum depth of 62 metres.
The lode consists of two veins 0.05 m and 0.6 m wide, striking 175 degrees grid north and dipping vertically within the sedimentary rock host. Although, little mineralised material was available on dumps, it appears to consist of massive fine sulphides of galena, arsenopyrite, sphalerite and antimony. The mine has produced 175 tonnes of 25% fine grained massive sulphide mineralisation (Henley & et al, 2001).

The Torny Mine is estimated to have had a pre mining estimate of 51,000 tonnes of mineralised material with the following estimated parameters (no drilling, estimated by Croft & Garman, 1972):

- Silver: avg. grade of 466g/t Ag: with contained metal of 23.76 tonnes Ag;
- Copper: avg. grade of 0.1% Cu: with contained metal of 1.58 tonnes Cu;
- Lead: avg. grade of 11.9% Pb: with contained metal of 5255 tonnes Pb;
- Tin: avg. grade of 0.2% Sn: with contained metal of 8 tonnes Sn; and
- Zinc: avg. grade of 2.3% estimate: with contained metal of 586 tonnes.

The Geological Survey of New South Wales (GSNSW) published the assay results of its grab sampling undertaken at the Torny Mine within the Data sheet related to the occurrence and deposits emplaced on the Grafton Maclean Geological and Metallogenic Maps ((Henley & et al, 2001).

Assay G94/067 (GSNSW) of sulphide mineralisation: 0.185% Cu; 3.33% As; 5.2% Zn; 0.066g/t Au; 3.64% Pb; 455g/t Ag; 0.137% Sn; 2.8% Sb; 254ppm Bi and 0.09ppm Hg. This information is sourced from the Geological Survey of New South Wales is shown below in Figure 9.10.

Historical rock chip sampling buy Silver Mines Ltd. returned assay results show up to 1340 g/t (Ag-OG46 assay method) within Torny area (Elliot, 2009.)

MR0015 M Torny mine SML Ag, Pb (Zn, As, Sb, Cu, Sn, Bi) multi-vein

NAME(S): Torny mine ***Recorder(s):*** Recorded H F Henley, date 2/12/1993, updated 27/6/1995
LOCATION ***Map sheets:*** SH/56-6, 9239-I-S ***Coordinates:*** 384100mE, 6766700mN ***Locality:*** 3km WNW of Clive
Location method: 50K topo map ***Co:*** Clive ***Ph:*** Annandale ***Por:*** MLA57; EL413, ELA77, EL3976
MINING HISTORY ***Workings:*** Underground and shafts. ***Extent (m):*** ***d:*** 61.6 ***l:*** 600 ***w:*** 0.9
Prods and period: T Keating & Co (1885-91); H Vivian (1896-98); C Wagner (1900-01); J Fletcher (1901-02); L Staader (1907-13); S Williams (1919-21); The Torny Mining Company NL (1928-33); W O'Neil (1948-53); A Martin (1960-63)
Exploration: Western Mining Corporation Pty Ltd (1971-72)-mapping, geochemistry, appraissal; Western Mining Corporation Ltd (1991-93)-mapping, geochemistry; (1960-63)
HOST ***Host rock(s):*** clastic sediment, argillite, Silicified argillites and conglomerates, Bondonga beds, Early Permian
DEPOSIT CHARACTER ***Ore minerals:*** arsenopyrite, cassiterite, chalcopyrite, galena, jamesonite, stibnite, (sphalerite) ***Alteration:***
Gangue: quartz ***Resources:*** 1.58t Cu @ 0.1%, 445t Zn @ 2.3%, 23.8t Ag @ 466 g/t, 5255t Pb @ 11.9%, 8t Sn @ 0.2%
Ore genesis: vein ***Relation to host:*** fault contact ***Orientation:*** Strike: 175 Dip/plunge: 90
REMARKS: Intermittent workings striking parallel to the sediments. Worked two veins 5cm and 0.6m wide intermittently over 600m. Assays revealed 20.92% Pb, 7.9% As, 2.97% Zn, 0.905% Sb, 0.72% Sn, 0.21% Cu and 1,420 g/t Ag (Croft & Garman). Annual Reports apply to mines in Pyes Creek area. Assay G94/067 of sulphide ore: Cu 0.185%; As 3.33%; Zn 5.2%; Au 0.066g/t; Pb 3.64%; Ag 455g/t; Sn 0.137%; Sb 2.8%; Bi 254ppm; Hg 0.09ppm.
REFERENCES: AR1888/098, Parish map, Markham & Basden (1975), MR2269, AR1886/033, Lease plan, AR1886/034, AR1885/040?, Field work (1994) - H.F. Henley, AR1888/099?, AR1889/104?, AR1889/106?, AR1890/104?, AR1892/041?, GS1972/033, GS1993/251

Figure 9.10 Torny Mine data sheet (Henley, H & Brown, RE, 2000)

Burra Mine

The Burra Mine minor lode assayed 920g/t Ag, 23% Zn, 11% Pb, & 0.2% Cu (Croft & Garman, 1972) (Figure 9.2.3). Lead and zinc occur separately in the lode.

Silver and lead occur mostly on granite wall with the mineralising source believed to be the Mole Granite, the Clive Monzogranite is not considered to be mineralised (Henley & et al, 2001).

Samples (G94/076 & G95/421) assayed by the GSNSW from the sulphide mineralisation showed a polymetallic tendency and returned assay values (maxima) of 13.5% Zn, 176g/t Ag, 1.4% Pb, 1.07% Cu, 0.32% As, 0.042g/t Au, 124ppm Sn, 156ppm Sb, 622ppm Bi, & 0.045ppm Hg [Data sourced from: 2017_11_06_Ag_Zn_Burra_162126] (Henley & Brown, 2000)

The pre mining estimate of 60,000t of mineralisation @ 933g/t Ag, & 20% Zn with contained metal of 6,000t Zn and 56t Ag was calculated (no drilling) in a report by: (Croft & Garman, 1972).

GR0714 (MR0017) M Burra silver mine SML Pb, Ag, Zn (Cu, As, Bi, Sn, Sb) multi-vein

NAME(S): Burra silver mine, Dora Maud, Bonanza mine ***Recorder(s):*** H F Henley 2/12/1993, updated 10/4/1997
LOCATION ***Map sheets:*** SH/56-6, 9239-I-S ***Coordinates (MGAz56):*** 386456mE, 6765438mN ***Locality:*** 1km SW of Clive
Location method: 50K topo map ***Co:*** Clive ***Ph:*** Annandale ***Por:*** 12; ML150, ML171, ML206, ML423; EL413, EL477, EL3976
MINING HISTORY ***Workings:*** adits, underground and shafts ***Extent (m):*** ***d:*** 21 ***l:*** 120 ***w:*** 0.75
Prods and period: J Pearman (1880'S); M Barnes (1892-95); E Ashcroft (1897-98); W Barham (1898-1900); J Stevens & A Staader (1904-1911); A Staader (1911-13); Bolivia Silver Lead Syndicate (1916); S Williams (1919-21); R & C Staader (1925); W O'Neil (1948-53); A Martin (1960-63)
Exploration: Wentworth Mining Corporation Pty Ltd (1971-72)-mapping, geochemistry, appraisal; Western Mining Corporation Ltd (1991-93)-mapping, geochemistry
HOST ROCK(S): (clastic sediment, argillite, silicified argillites, Bondonga beds, Early Permian, (felsic intrusive, granite, aplite, Mole Granite, Early Triassic, (felsic intrusive, granite, coarse dioritic intrusive, Clive Monzogranite, Triassic)
DEPOSIT CHARACTER ***Ore minerals:*** arsenopyrite, chalcopyrite, galena, jamesonite, sphalerite ***Alteration:*** silica, chlorite
Gangue: garnet, pyrite, quartz ***Production:*** ***Resources:*** 60 000 t inferred estimated from vein thicknesses at surface Ag 933 g/t, Zn 20%
Ore genesis: magmatic multi-vein mineralisation associated with the Mole Granite ***Relation to host:*** joint control ***Orientation:*** Strike: 085 Dip/plunge: vertical
REMARKS: lode strikes 085 T and 0.1-0.75 m wide. On contact striking E-W and dips S. Grades on minor lode assayed 23% Zn, 11% Pb, 0.2% Cu and 920 g/t Ag (Croft & Garman 1972). Lead and zinc occur separately in lode. Silver and lead occur mostly on granite wall. Annual reports apply to deposits in this area. Garnets to 0.5 cm were found in chloritised lode material on dump. Mineralising source believed to be the Mole Granite, the Clive Monzogranite being unmineralised. Assay G94/076 & G95/421 of sulphide ore: Cu 1.07%, As 0.32%, Zn 13.5%, Au 0.042 g/t, Ag 176 g/t, Sn 124 ppm, Sb 156 ppm, Pb 1.4%, Bi 622 ppm, Hg 0.045 ppm
REFERENCES: Lease plan, Parish aid card, Parish map, AR1886/033-34, AR1888/098, AR1889/119, AR1900/056?, AR1905/041?, AR1906/043, Field work (1971) - C.R. Weber, GS1972/033, Markham & Basden (1975), Field work (1994) - H F Henley

Figure 9.11 Burra Mine data sheet (Henley & Brown, 2000)

Ecuador Deposit

The Ecuador deposit consists of one main shaft with several cuts over a 10m width and 20m in length striking 146° and vertical dipping. Mineralisation consists of arsenopyrite, galena, sphalerite and molybdenite hosted in sediments of the Bondonga beds.

Mining was conducted from periodically from 1878 to 1900. An assay (G94/080 GSNSW)) of sulphides in gossan returned: 6.5% Zn, 0.3% As, 0.47% Pb, 119g/t Ag, 239ppm Bi and 0.17% Cu (Henley & Brown, 2000)).

Adjacent (<200m WSW) to the Ecuador deposit, recent exploration (2013) included rock chip assays graded up to 4,710ppm Ag Figure 9.12 on page 127 (Tawa R. , 2013a).

GR0717 (MR0196) M Ecquador deposit OCC Zn (Pb, Ag, As, Bi, Cu) multi-vein

NAME(S): Ecquador deposit ***Recorder(s):*** H F Henley 27/5/1994, updated 19/12/1996
LOCATION ***Map sheets:*** SH/56-6, 9239-I-S *Coordinates (MGAz56):* 386506mE, 6765188mN ***Locality:*** 1km SW of Clive
Location method: 50K topo map ***Co:*** Clive ***Ph:*** Annandale ***Por:*** 12; ML85, ML86, ML150, ML151, ML171; GL424; EL413, EL0477
MINING HISTORY ***Workings:*** one main shaft and several cuts over a 10m width ***Extent (m):*** ***d:*** >7 ***l:*** 20 ***w:*** 10
Prods and period: W Scheel & P Ruhl (1878-82); E Cassidy (1885-90); J Beacroft (1888-90, 1897-98); A Ashcroft (1897); W Barham (1898-1900);
Exploration: Wentworth Mining Corporation Pty Ltd (1971-72)-mapping, geochemistry
HOST ROCK(S): (meta-argillites, Bondonga beds, Early Permian)(felsic intrusive, granite, Clive Monzogranite, Triassic)
DEPOSIT CHARACTER ***Ore minerals:*** arsenopyrite, galena, sphalerite, (molybdenite) ***Alteration:*** pyrite
Gangue: calcite, limonite, pyrite, quartz ***Production:*** ***Resources:***
Ore genesis: magmatic multi-vein mineralisation associated with the Mole Granite ***Relation to host:*** fault contact ***Orientation:*** Strike: 146 Dip/plunge: vertical
REMARKS: the Clive Monzogranite is believed to be unmineralised and believed not to be the source of mineralisation. The Mole Granite is the probable source. Assay G94/080 of sulphides in gossan: Zn 6.5%, As 0.3%, Pb 0.47%, Ag 119 g/t, Bi 239 ppm, Cu 0.17%
REFERENCES: Lease plan, AR1885/039, GS1972/033, Field work (1994) – H F Henley

Figure 9.12 Ecuador deposit data sheet (Henley & Brown, 2000)

9.2.2 CENTURY SOUTH PROJECT AREA GEOCHEMISTRY

Displayed on Figure 9.13 on page 129 and Figure 9.14 on page 130 are the stream sediment geochemistry of base metals zinc and lead respectively. For interpretation on these datasets, it is noted that irregular quantities ranging from -2mm samples, to bulk samples were levelled uniformly. Hence, results may not be a true proportionate representation of concentrations.

From these findings it can be deduced that samples collected closest to the Century deposit produce elevated zinc (100-250ppm) and lead (40-140ppm) levels. However, there is no significant Cu anomalism.

There is a differentiation in zinc and lead stream sediment concentrations where large areas of Cambrian Thorntonia Limestone are exposed. Consequently, concealing the Century mineralised body, due to the high litho-chemical background in its carbonate composition.

Rock chip sampling

There is a considerable amount of rock chip sampling within and adjacent to the tenure area. A total 272 samples taken within the current boundaries of EPM26713 and numerous samples adjacent to the tenure. The data capture includes sample type e.g. rock chip or trench, description.

The data shown in Figure 9.17 on page 133 and Figure 9.18 on page 134 shows total samples taken regardless of type or size fraction. There is a discrepancy between the location of the Prospect between the company reports and the location in Minloc as shown on GeoResGlode.

Other rock chips that have not been followed with further exploration include 364ppm Zn and a Ferruginous Brecciated Rock with 615 ppm Cu, 188 ppm Zn and 54 ppm Co both samples within the lady Lorretta Formation.

Soil Sampling

There is a considerable amount of soil sampling data within and adjacent to the tenure area. A total 3,434 samples taken within the boundaries EPM26713 and considerable data in the vicinity.

The data capture has recorded numerous data attributes including sample type e.g. soil, lag, magnetic lag, termite mounds, size fraction of sample collected, tenement and report number.

Total Zn and Pb regardless of sample type, mesh etc. are shown below in Figure 9.15 on page 131 and Figure 9.16 on page 132.

Some of the soil anomalies generated in the historical exploration efforts were drill tested and some remain untested by drilling for example Mag Lag samples on historical EPM10030 with assays up to 659 ppm Zn located at approximately 268700 mE and 7894600 mN.

A full review of the soil geochemical database and the levelling of samples is required to ascertain the extent of these anomalies. The southwestern areas hosting exposed Cambrian Thorntonia Limestone produce significant Zn and Pb anomalism.

Thallium has a strong primary dispersion (>4 ppm) about the Grevillea mineralisation that persists for at least 450 m along strike (University of Queensland, 2020).

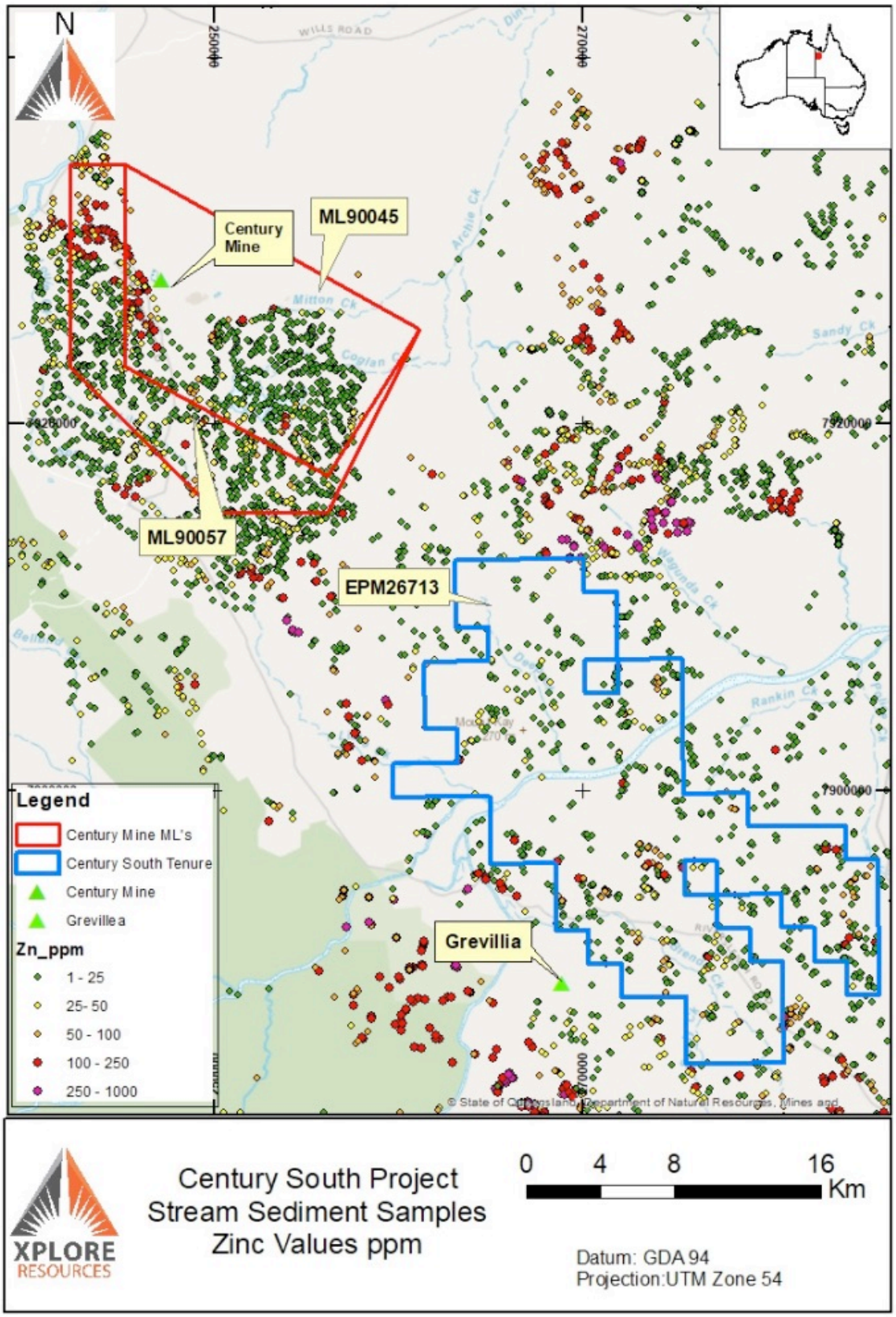


Figure 9.13 Stream sediment data zinc values (ppm) from Century-Grevillea district (GSQ, 2020)

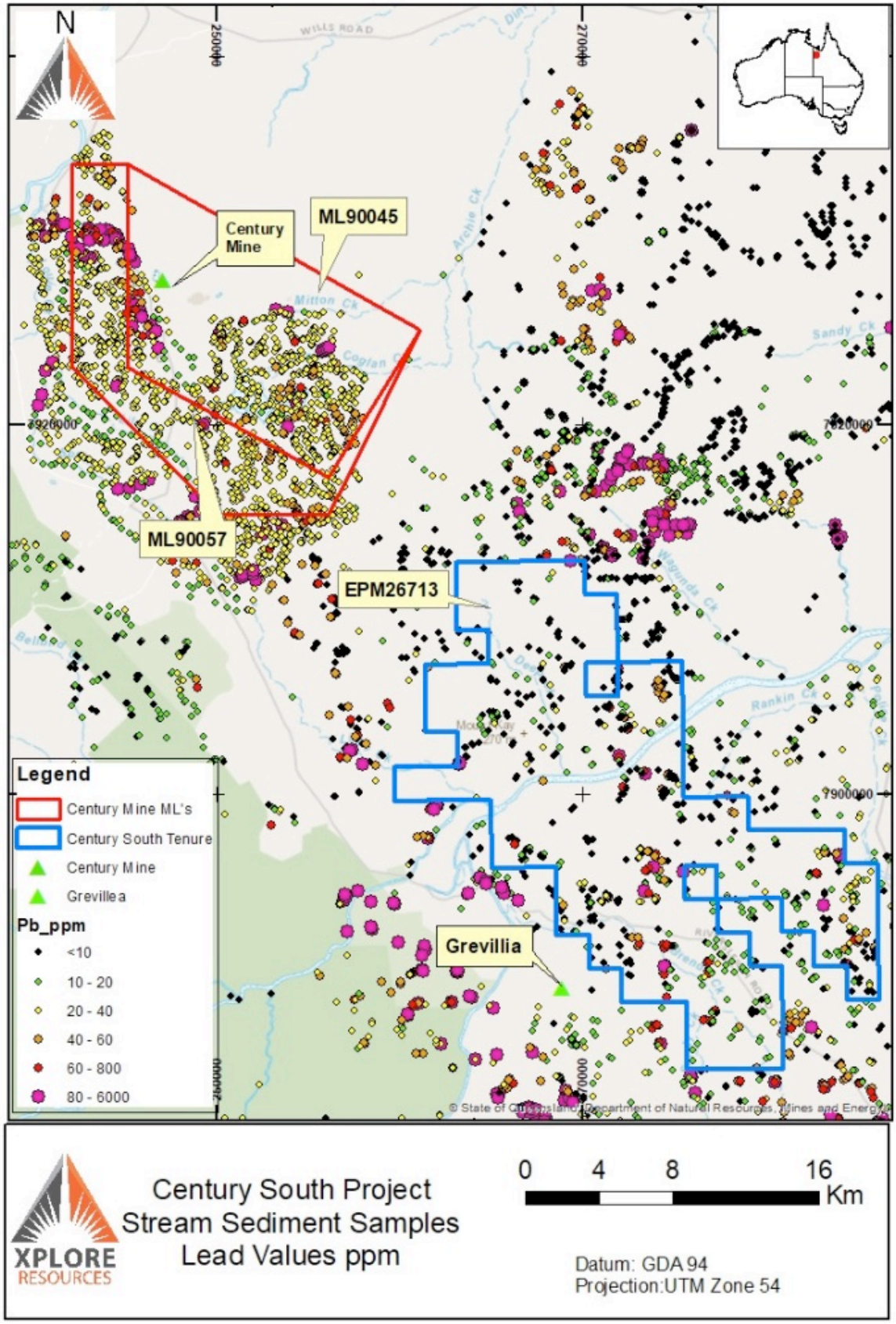


Figure 9.14 Stream sediment data lead values (ppm) from Century-Grevillea district (GSQ, 2020)

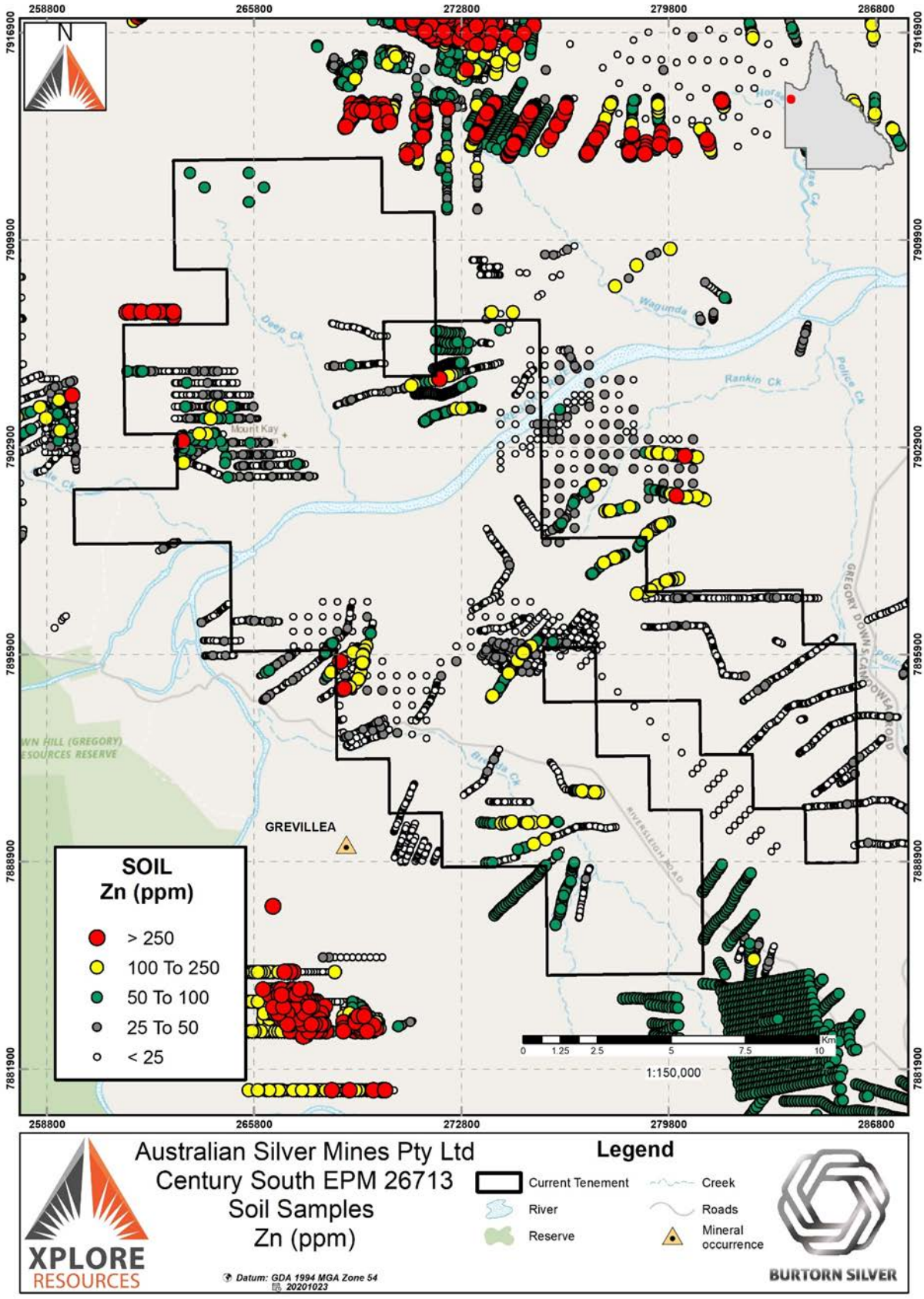


Figure 9.15 Soil sample data zinc values (ppm) from Century-Grevillea district (GSQ, 2020)

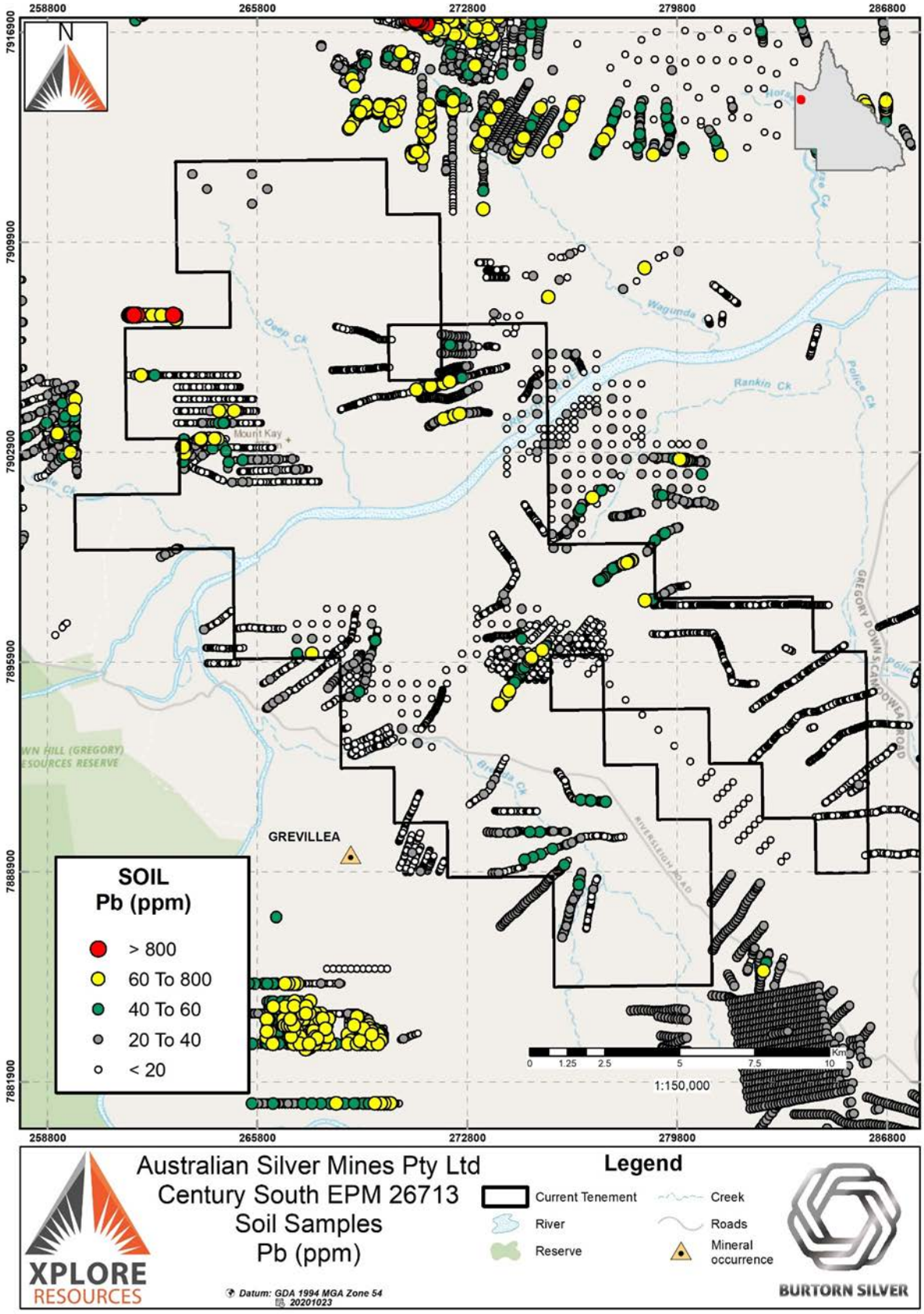


Figure 9.16 Soil sample data lead values (ppm) from Century-Grevillea district (Queensland Government(d), 2020)

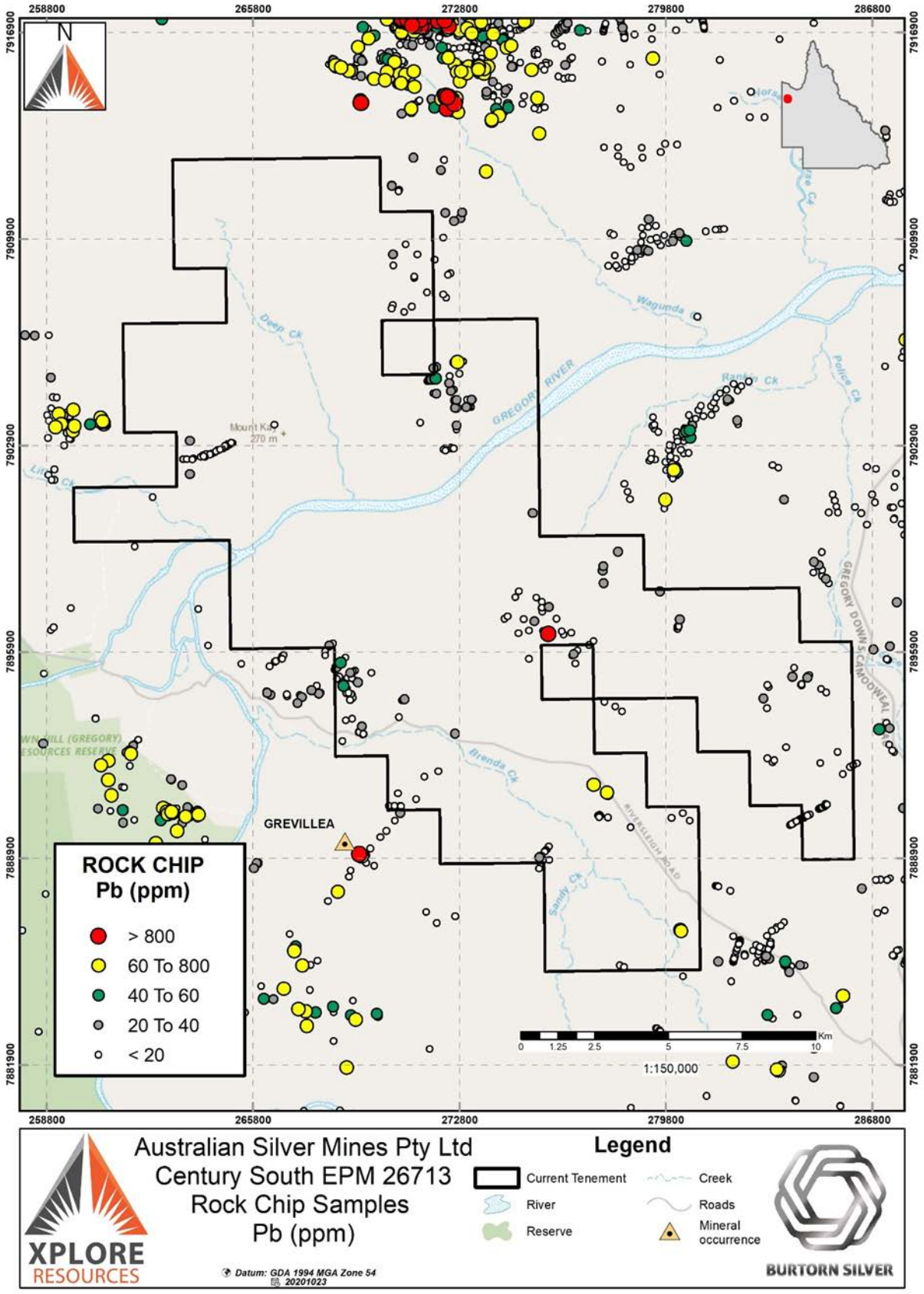


Figure 9.17 Century South and surrounds Pb in rock chip geochemistry (Queensland Government(d), 2020)

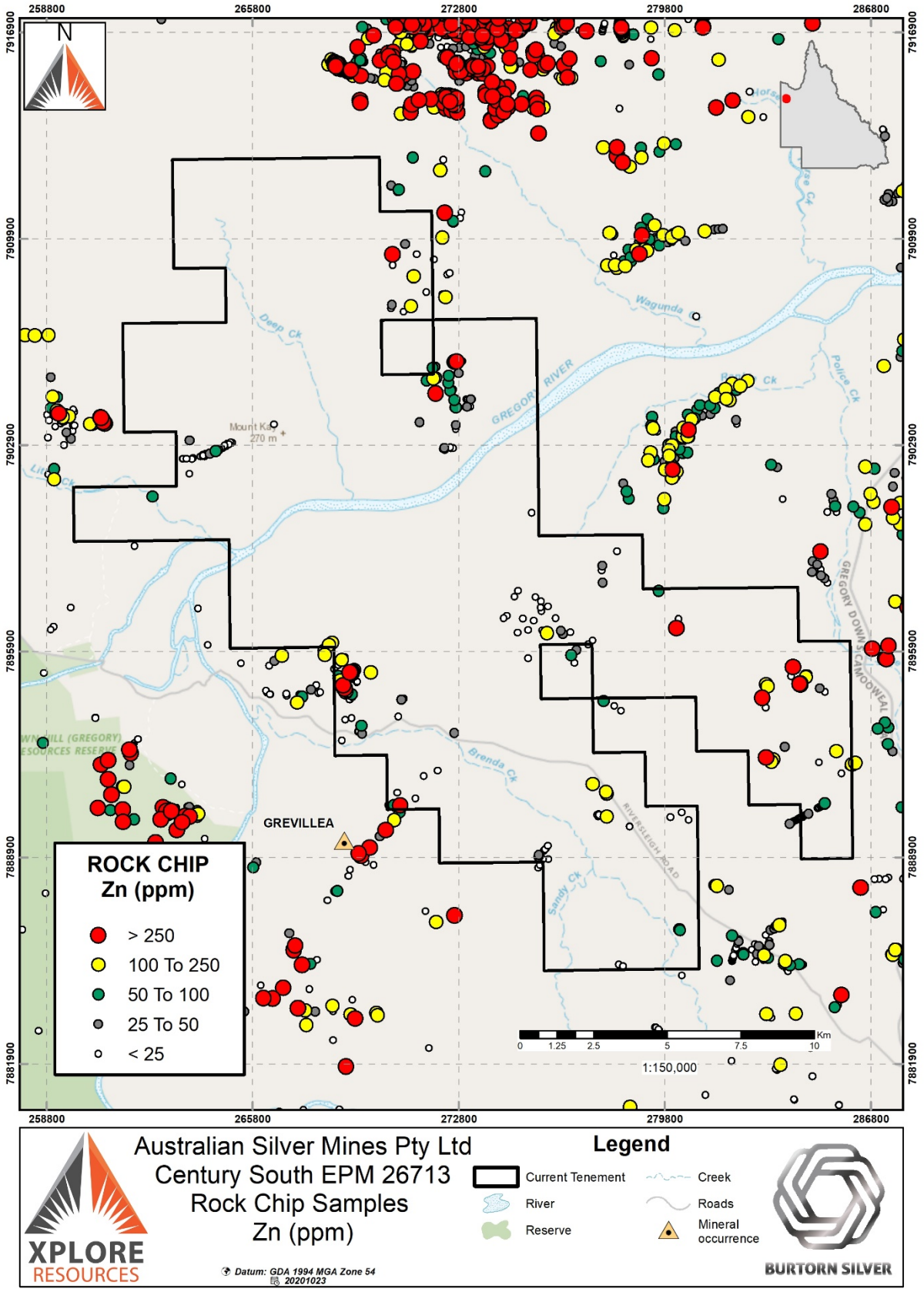


Figure 9.18 Century South and surrounds Zn in rock chip geochemistry (Queensland Government(d), 2020)

9.3 GEOPHYSICS COMPETED BY PREVIOUS EXPLORERS

9.3.1 TYR PROJECT AREA GEOPHYSICS

The Tyr tenement shows magnetic anomalies on a north westerly strike (Figure 9.19 on page 136), coinciding with known mineralisation zones. The mineral occurrences follow the magnetic anomaly trend across the region. A list of company airborne geophysical surveys is summarised in Table 9.3 and government airborne geophysical surveys are shown in Table 9.4.

Table 9.3 Company Airborne Geophysical Surveys

Survey Name	Acquisition Target	Year	Air Svy ID	Line Spacing	Line Direction	Licensee	Title	Contractor	Reports
Jibbinbar	Magnetic	1979	AIR0695	300	90	BHP	EL1235, EL1236, EL1237	Geoex	R00011347
Severn River	Magnetic & Radiometric	2008	AIR0291	100	45	Silver Mines Limited	EL6512	UTS Geophysics	RE0000891, RE0005945

Table 9.4 Government Airborne Geophysical Surveys

Survey Name	Acquisition Target	Year	Air Svy Id	Line Spacing	Line Direction	Licensee	Contractor
Inverell Grafton Maclean	Magnetic & Radiometric	1982	AIR0647	1500	90	Geological Survey Of NSW	Geometrics
Grafton Tenterfield	Magnetic & Radiometric	2011	AIR0056	250	90	Australian Geological Survey Organisation	GPX Surveys Pty Ltd

An examination of the regional aeromagnetic data (VRTP) downloaded from (Geoscience Australia, 2020) highlights the extent of lithological variation within the Tyr Project area, even below surficial cover. The magnetic data shows that many of the mineral occurrences within the Tyr Project area are located within a northwest-trending 5km-wide, 20km-long magnetic corridor that coincides with the Permian-Triassic Bondonga beds.

The Bondonga beds display evidence of northeast and north-northwest fracturing and are possibly bounded by several unnamed faults along the southwestern and north-eastern margins. Also, the Bondonga beds produce a magnetic signature that is characteristic of nearby granites, confirming the intrusive rocks underly the sediments at shallow depth.

The airborne magnetic data also indicates several covered and small granite-like intrusive bodies in the southern and northeast parts of the tenement.

The magnetic data also shows that most mineral occurrences within the Bondonga beds are aligned along well developed north and northwest linear magnetic highs. A dipole-dipole induced polarisation/resistivity survey comprising 5-line km was completed over the Torny Mine in 2011.

The survey was undertaken on 100m spaced lines with 50m dipole spacings. Results from the showed coincident zones of low resistivity and high chargeability over a strike of 400m that corresponds with the north-south trend of the Torny workings (Hobby, 2012). The IP responses are open along strike and at depth.

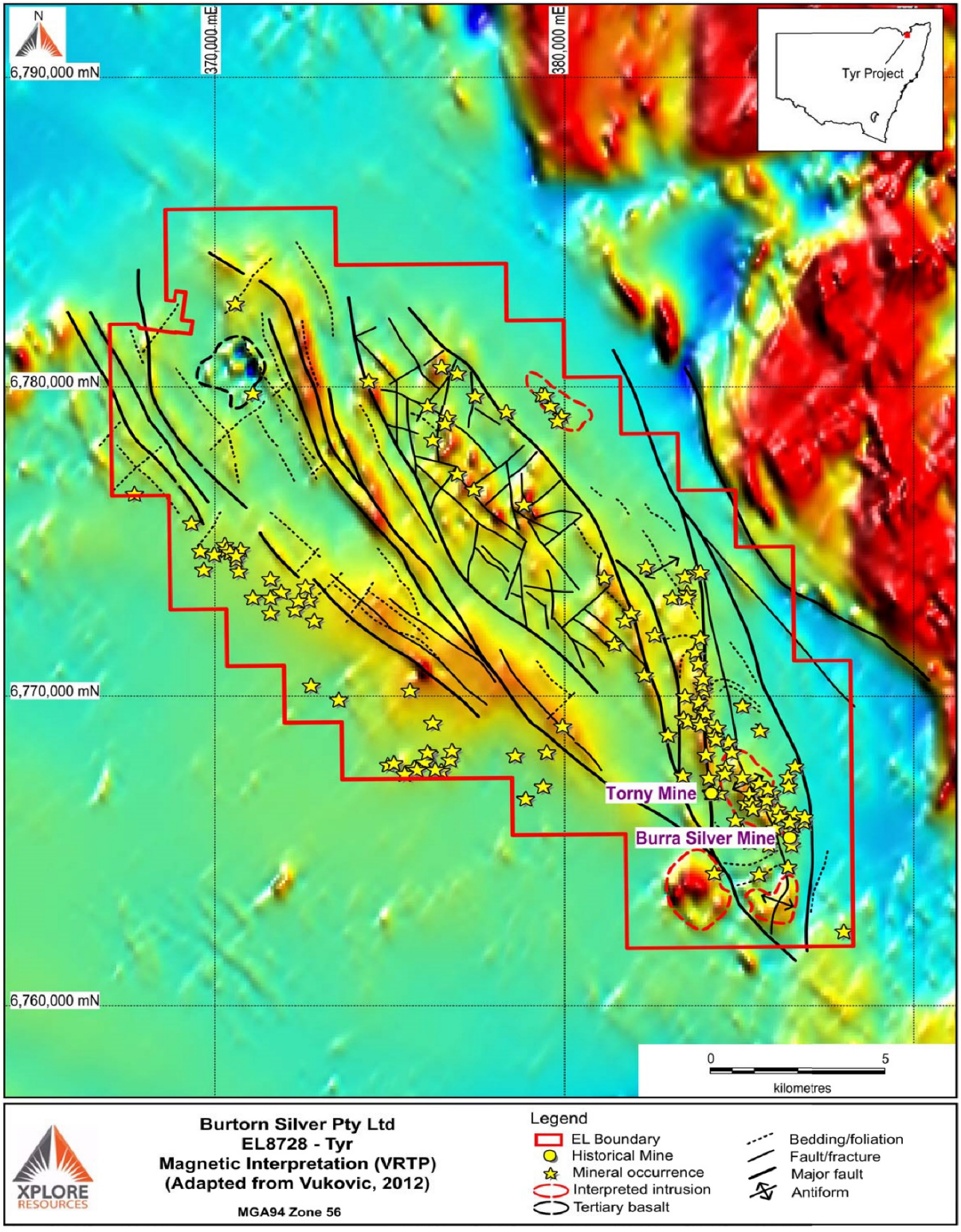


Figure 9.19 Variable Reduced to Pole (VRTP) magnetic anomaly map- Tyr Project (Geoscience Australia, 2020)

9.3.2 CENTURY SOUTH PROJECT AREA GEOPHYSICS

New studies involving Red Metal Limited, have yielded promising results west of Century South and to the immediate west of Grevillea.

Airborne EM data has identified the Riversleigh Siltstone as a major conductor in the area. As such, the mineralisation bearing strata of the Riversleigh Siltstone may serve as a prospective identification unit for base metal mineralisation going forward.

A total of seven (7) private company surveys (Queensland Government(a), 2020) that intersect the Century South Project area of which the majority are magnetic and airborne electromagnetic GEOTEM surveys.

The GEOTEM surveys are more relevant than magnetic data as the style of mineralisation (massive sulphides) does not have a strong magnetic signature but is a strong conductor.

All of the surveys are available on open file. A list of surveys available is given in Table 9.5 on page 138 and shown in Figure 9.20 on page 139. There has been some difficulty in obtaining the data from the Open Data Portal.

There is also Aster data available through the Queensland Open Data Portal which covers Century South.

This is Version 2 ASTER product created as part of CSIRO's 3D mineral mapping Queensland funded by the Geological Survey of Queensland as part of the Industry Priorities Initiative, under the Future Resources Program. Created by CSIRO; Geological Survey of Queensland (Geological Survey of Queensland, 2020)

The data is available in 1:250K map sheet references. An example of the Aster data is shown in Figure 9.21 on page 140.

HyMap data was acquired in 2006-2007 over an approximate 65km long swath of the Termite Range Fault. The HyMap data, which covers the Century deposit, but not the Grevillea Prospect.

The spatial resolution of the HyMap sensor is 3-10m depending on flight height. The data was flown on behalf of the Geological Survey of Queensland and CSIRO (Geological Survey of Queensland, 2020). The data is split into two sheets A and B, with Century South contained mostly within sheet A (Figure 9.22 on page 141).

Table 9.5 Company Airborne Surveys, Century South Vicinity

Name	Survey No.	Mag	EM	Line_Km	Date Flown	Client	Contractor
Termite South GEOTEM Survey	647	Y	Y	900	30/06/1990	CRA Exploration Pty Limited	Geoterrex Pty Ltd
Camooweal GEOTEM Survey	94	Y	Y	10578	1/10/1991	Aberfoyle Resources Limited	Geoterrex Pty Ltd
Bloodwood Bore – Questem	835	Y	Y	1328	16/07/1994	North Limited	Aerodata Holdings Ltd
Barkly GEOTEM	966	Y	Y	7508	25/05/1997	BHP Minerals Pty Ltd	Geoterrex Pty Ltd
Riversleigh/Brenda Ck/Thorntonia GEOTEM	1001	Y	Y	2116	13/08/1997	North Limited	Geoterrex Pty Ltd
Camooweal	1002	Y	N		30/07/1985	Ashton Mining Limited	Geoterrex Pty Ltd
Constance Range Lawn Hill	1219	Y	N	16654	8/09/2008	Summit Resources (Aust) Pty Ltd	Fugro

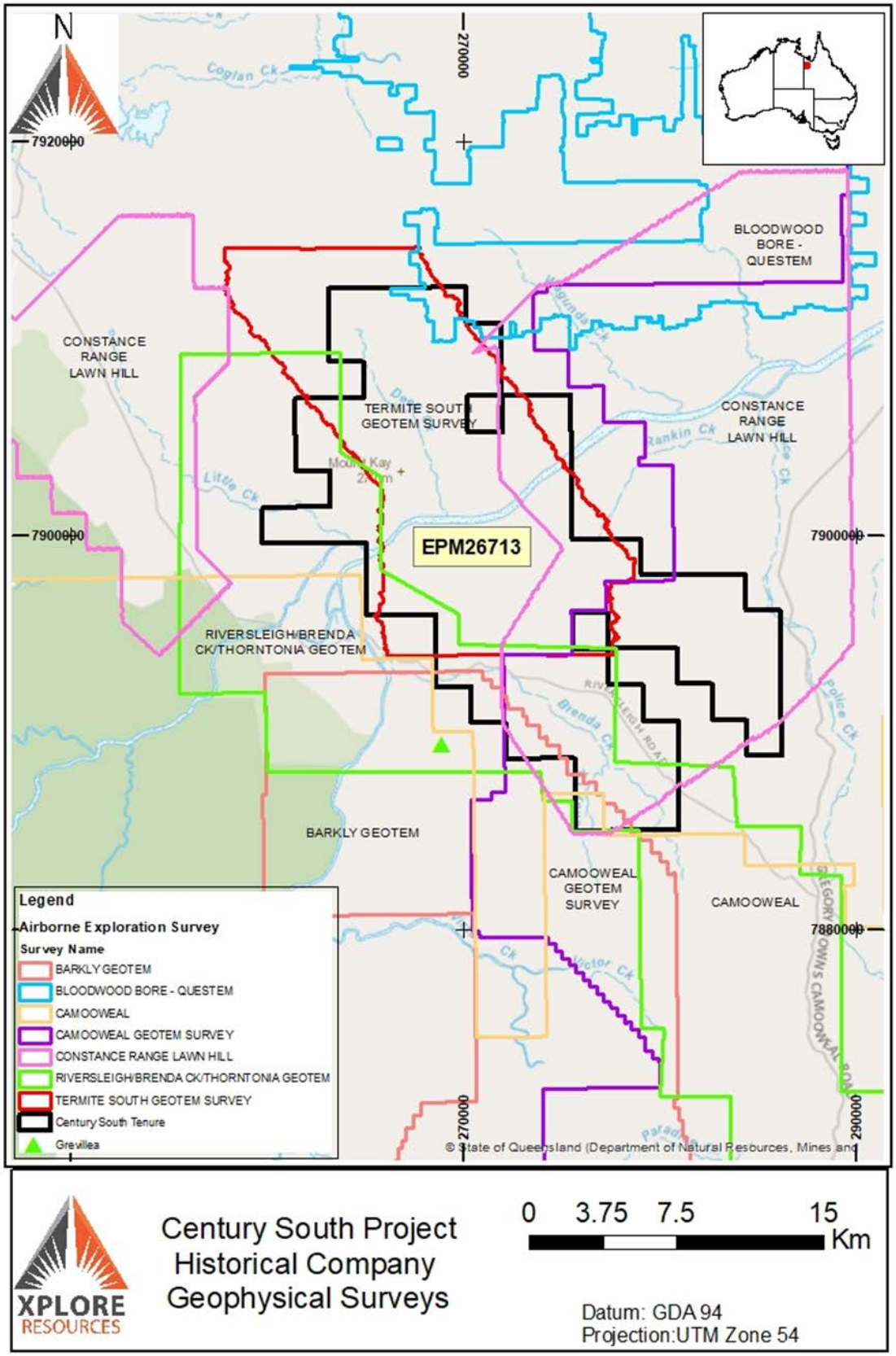


Figure 9.20 Company Airborne Surveys intersecting the Century South tenure EPM26713 (Queensland Government(a), 2020)

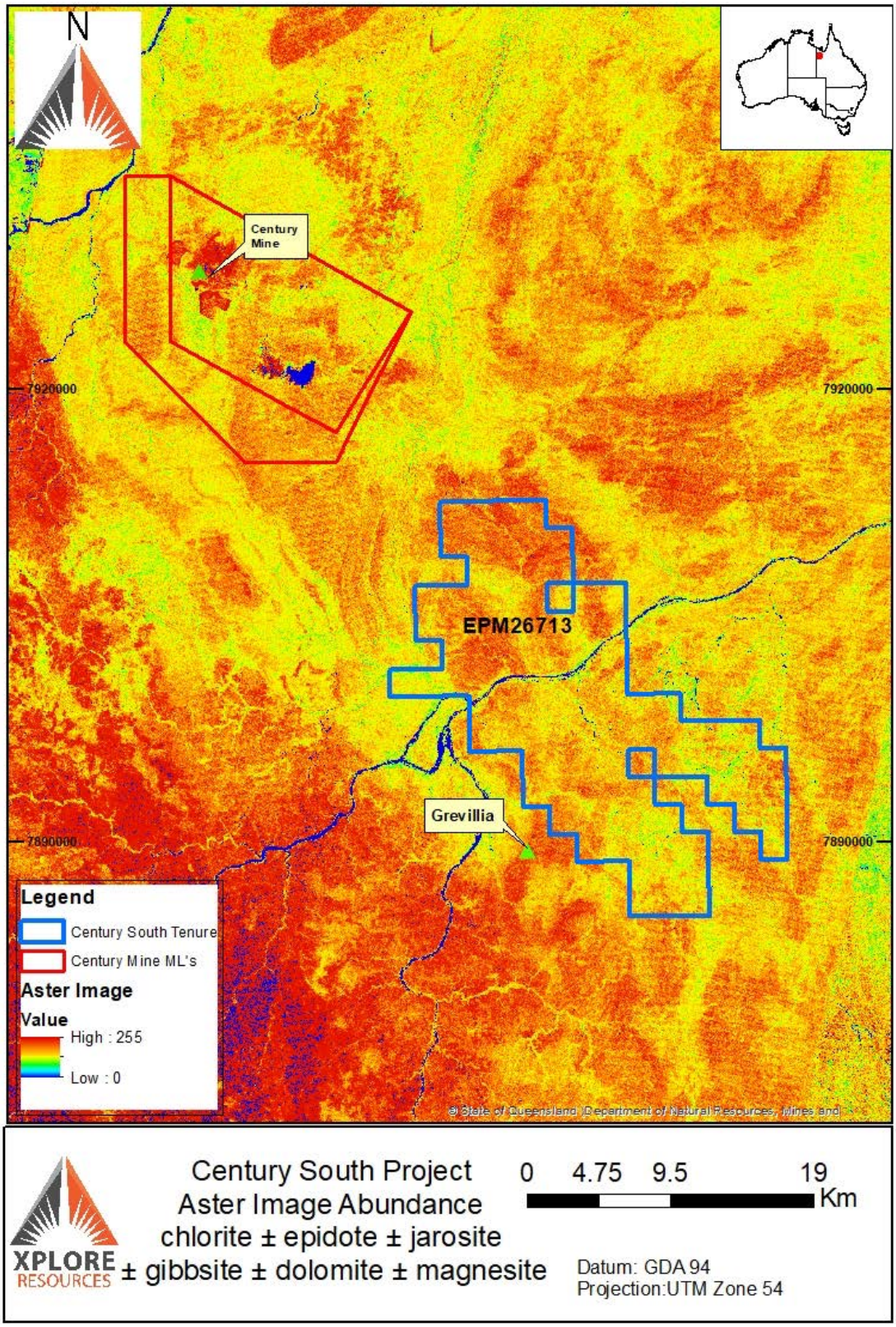


Figure 9.21 Aster Data covering Century, Grevillia and Century South (Queensland Government(c), 2020)

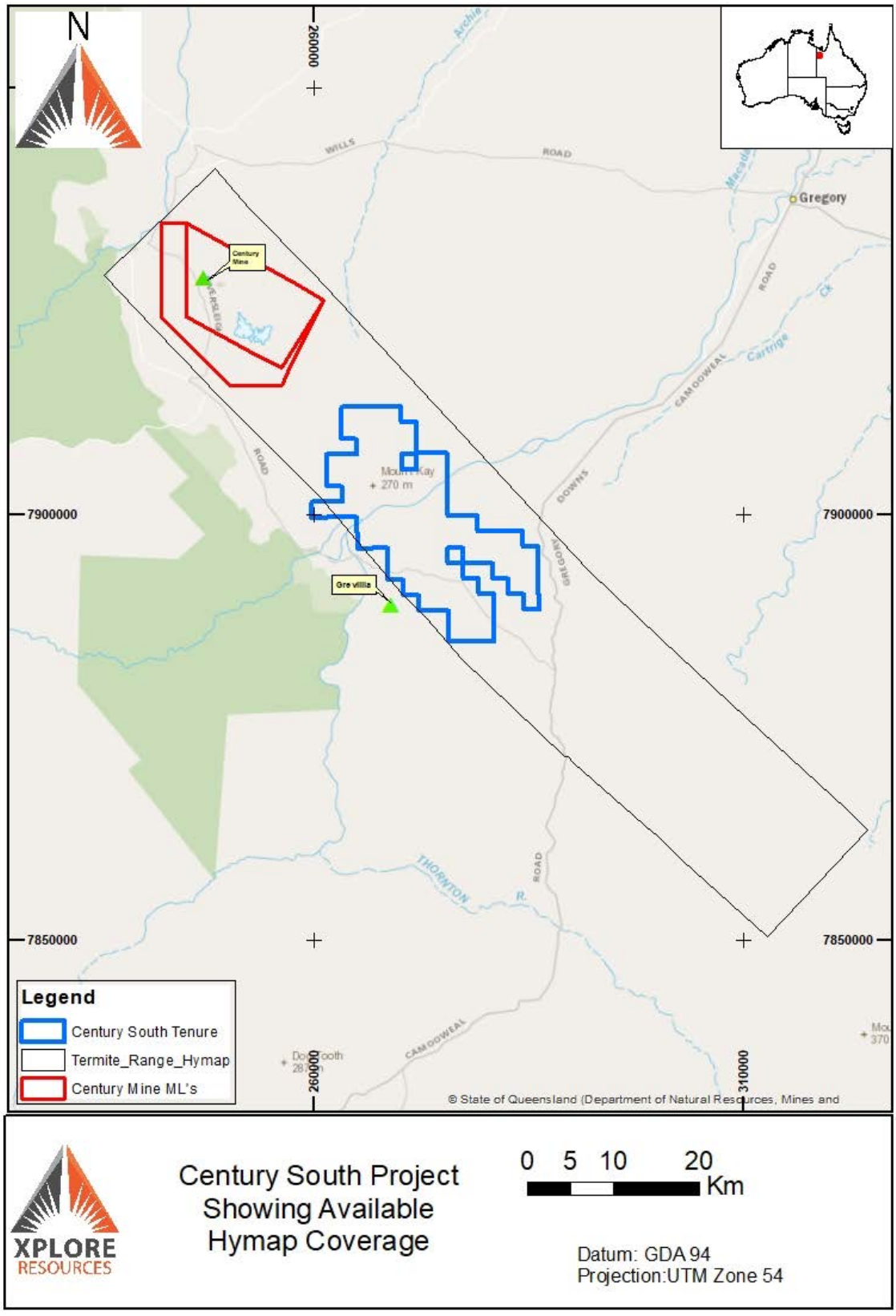


Figure 9.22 Hymap Data Coverage Century South (Queensland Government(c), 2020)

Displayed in Figure 9.23 on page 143 is the airborne electromagnetic data of the Century Mine site and regions to the south-east (including Century South Project tenure), collected from open file data from the GSQ Open Data Portal (Geological Survey of Queensland, 2020).

The EM dataset is a colour balanced stich of mid-time channels of various datasets (with various degrees of processing) from the GSQ Open Data Portal website.

Some key geological features that are most prominent on this image are the Lawn Hill impact structure and the change to Cambrian limestone cover in the south west.

Unfortunately, at this scale, the image indicates the Century deposit does not have a distinctive, identifiable airborne electromagnetic signature (University of Queensland, 2020). The Grevillea deposit does appear to have a subtle associated magnetic anomaly (University of Queensland, 2020).

New studies involving Red Metal Limited (Red Metal Ltd, 2020) west of Century South and to the immediate west of Grevillea. Airborne EM data has identified the Riversleigh Siltstone as a major conductor in the area.

As such, the mineralisation bearing strata of the Riversleigh Siltstone may serve as a prospective identification unit for base metal mineralisation going forward.

Airborne EM data from the Grevillea deposit area shown in Figure 9.24 on page 144 represents the conductivity grid from a GEOTEM electromagnetic survey (Channel 7) flown by GEOTERREX PTY LTD for BHP MINERALS PTY LTD in 1997 (GSQ; survey Barkley 966).

The mid-time channel (Ch7) maps several high intensity conductors, but the source of these is unclear. The Grevillea deposit is located on a subtle conductivity high.

The Grevillea deposit presents a subtle positive anomaly in the mid-time GEOTEM Ch7 imagery. The Grevillea deposit is located on a subtle conductivity high but whether this is related to the pyritic units of other host rocks is not resolvable (University of Queensland, 2020).

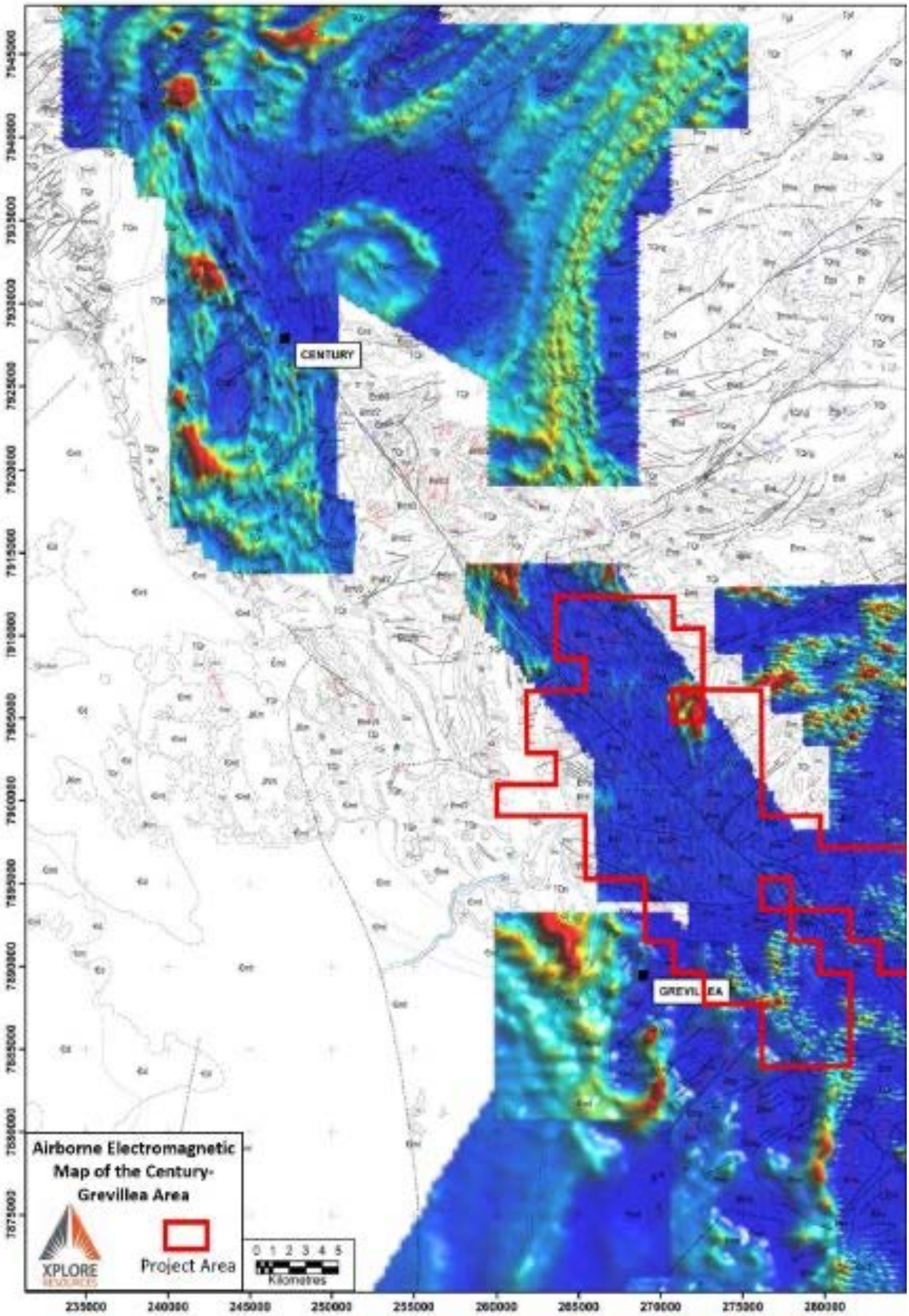


Figure 9.23 Airborne Electromagnetic data (Queensland Government(c), 2020)

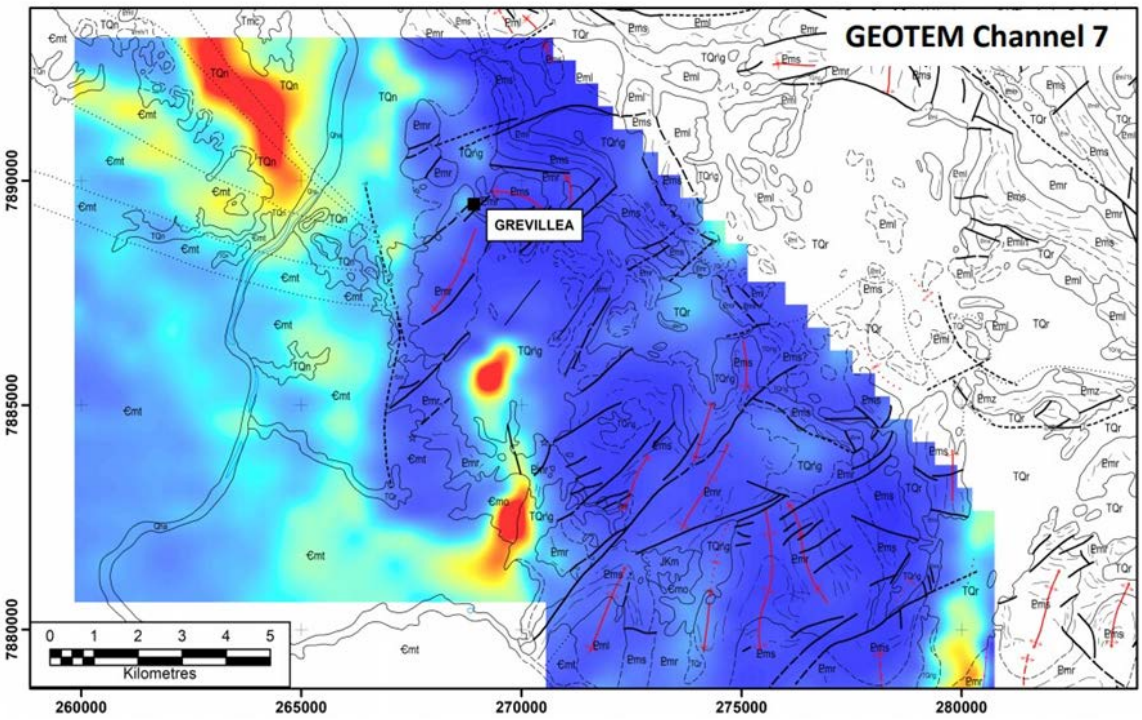


Figure 9.24 Airborne EM data from the Grevillea deposit area (Queensland Government(c), 2020)

10.0 DRILLING

10.1 TYR PROJECT AREA DRILLHOLES

A total of thirty-five (35) historic drillholes have been drilled within the tenement: Eleven (11) of them are percussion and twenty-four (24) of them are reverse circulation drillholes.

Seven (7) drillholes were drilled on the northern east portion of the tenement, one (1) was drilled on the west of the centre portion of the tenement and the remaining twenty-seven (27) drillholes are located on the south-east portion of the tenement which is well known for high-grade silver occurrences.

All reverse circulation drillings are located at the south east of the tenement and additionally three (3) percussion drillholes were completed in the same area. Only percussion drilling was done in the north portion of the tenement (Figure 10.1 on page 146).

Three (3) drill programs were completed during 1982 by Kennecott Exploration (Aust) Limited. These are:

- Hazeldean Anomaly – Mole River with three (3) drill holes;
- Roma Valley Anomaly – Mole River with one (1) drill hole; and
- The Avenue Anomaly – Mole River with (4) drill holes.

Kennecott Exploration (Aust) Limited continued drilling programs in 1984 with two (2) programs:

- Mosman – Mole River included two (2) drill holes and
- Sam's Mountain – Mole River included one (1) drill hole.

Until 2012, there was no drilling completed within the Tyr Tenement. Silver Mines Limited have completed twenty-four (24) drill holes with two (2) different programs. These are:

- The Clive program which included twelve (12) drill holes; and
- Pye's Creek included twelve (12) drill holes.

Silver Mines Limited (Tawa R. , 2013) completed 12 R C drill holes within the current Tyr tenure at Pye's Creek. These include the drill hole series HZRC001 and HZRC012, significant silver intercepts are shown in Table 10.1 on page 147.

Silver Mines Limited (Tawa R. , 2013a) completed 12 Reverse Circulation ("RC") drill holes within the current Tyr tenure (Clive). These include the drill hole series EQRC001 to EQRC006 and MMRC001 to MMRC006, significant silver intercepts are shown in Table 10.1 on page 147.

According to Minview and related report (Report ID: R00009458) PDH M-1 and PDH M-2 were undertaken in the Bondonga beds. Both drillholes are located next to fault breccias. The distance between the two drillholes is approximately 500m.

Besides, PDHSM1 is in the Bondonga beds at the central region of the current tenement. Sampling was undertaken at 3m sections of drill chips. Sn, As, Cu, Pb, Zn and Ag were assayed but the results do not show any economically viable grades.

Report ID R00010625 (M. Brown, 1982) includes results of 8 drill holes within the current Tyr tenure. These are APPDH1 to APPDH4, HPPDH1 to HPPDH3 and RVPDH1. The drillings were confined to propylitically altered volcaniclastic rocks and predominantly sulphide mineralisation. The significant intercepts were:

- 1m @480ppm Sn, 1800ppm Pb, 2300ppm Zn and 4ppm Ag from 21m in APD1;
- 1m @50ppm Sn, 2200ppm Pb, 4300ppm Zn and 3ppm Ag from 46m in APD2;
- 3m @ 820ppm Sn, 1550ppm Pb, 1850ppm Zn and 5ppm Ag from 101m in APD3;
- 1m @470ppm Sn, 3050ppm Pb, 3100ppm Zn and 7ppm Ag from 66m in APD4;
- 1m @340ppm Sn, 1350ppm Pb, 550ppm Zn and 5ppm Ag from 34m in HPD1;
- 1m @920ppm Sn, 1850ppm Pb, 1.2%Zn and 33ppm Ag from 50m in HPD2;
- 1m @660ppm Sn, 930ppm Pb, 3400ppm Zn and 10ppm Ag from 76m in HPD3; and
- 1m @ 70ppm Sn, 3000ppm Pb, 1050ppm Zn, 21ppm Ag and 75ppm W from 48m in RVPDH1.

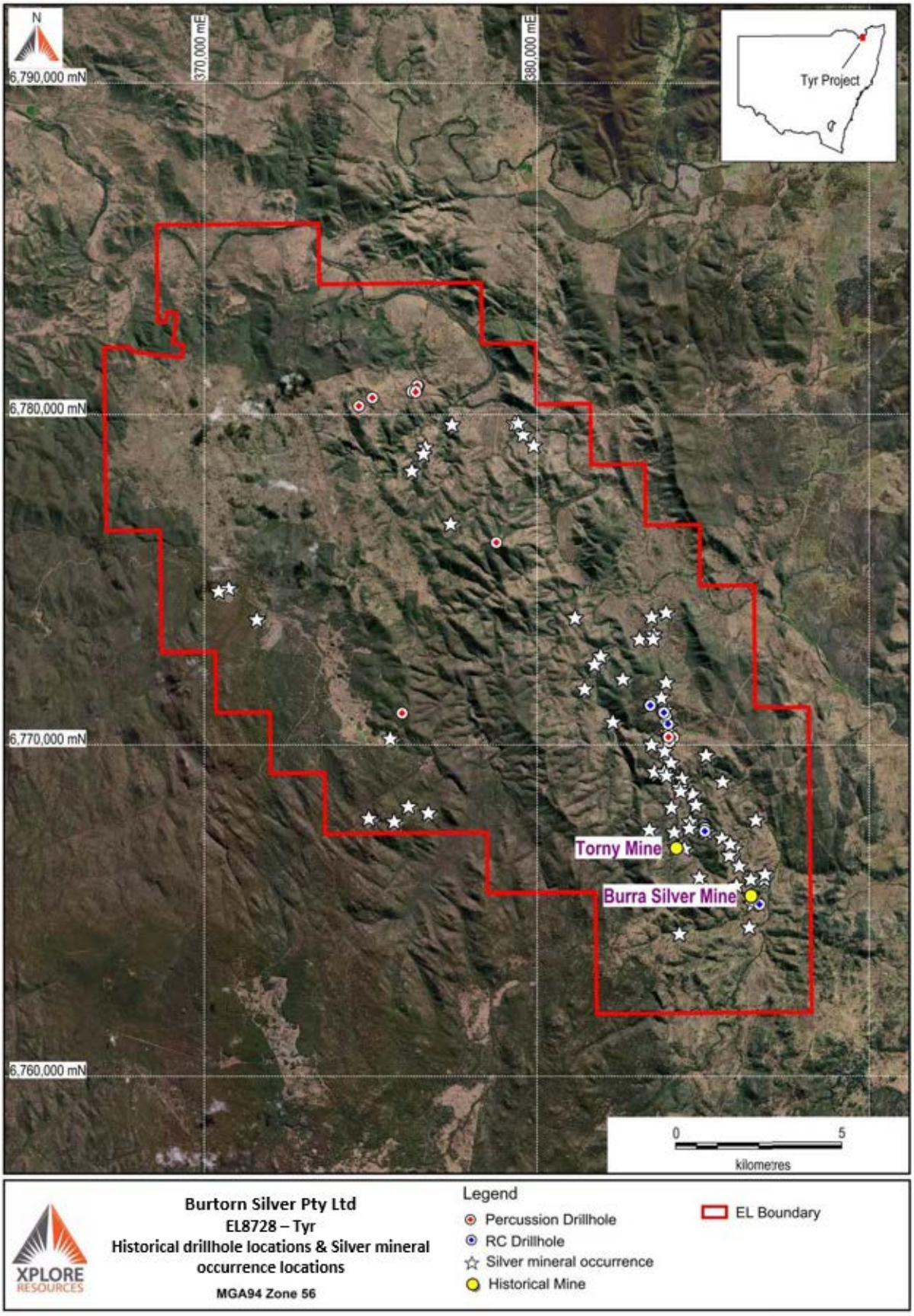


Figure 10.1 Historical Drillholes with Ag mineral occurrences within the Tyr Project (EL8728) [Data sourced from (Minview, 2019c)]

Table 10.1 Historical drillholes within the Tyr tenement from (Minview, 2019d)

Hole ID	Total Depth (m)	Title	Reports	Year drilled	Drill Type	MGA 94 Easting (m E)	MGA 94 Northing (m N)	Zone
APPDH1	128	EL1474	R00010625	1982	Percussion	376430	6780845	56
APPDH2	65	EL1474	R00010625	1982	Percussion	376400	6780850	56
APPDH3	120	EL1474	R00010625	1982	Percussion	376250	6780685	56
APPDH4	101	EL1474	R00010625	1982	Percussion	376350	6780675	56
HPPDH1	61	EL1474	R00010625	1982	Percussion	384100	6770225	56
HPPDH2	79	EL1474	R00010625	1982	Percussion	383980	6770095	56
HPPDH3	128	EL1474	R00010625	1982	Percussion	383950	6770240	56
PDHSM1	288	EL1474	R00009458	1984	Percussion	378775	6776125	56
PDHM1	201	EL1474	R00009458	1984	Percussion	375050	6780500	56
PDHM2	162	EL1474	R00009458	1984	Percussion	374650	6780250	56
RVPDH1	85	EL1474	R00010625	1982	Percussion	375945	6770955	56
MMRC001	60	EL6771	RE0004452	2012	Reverse Circulation	385050	6767608	56
MMRC002	60	EL6771	RE0004452	2012	Reverse Circulation	385022	6767598	56
MMRC003	55	EL6771	RE0004452	2012	Reverse Circulation	385053	6767557	56
MMRC004	40	EL6771	RE0004452	2012	Reverse Circulation	385058	6767507	56
MMRC005	28	EL6771	RE0004452	2012	Reverse Circulation	385054	6767472	56
MMRC006	37	EL6771	RE0004452	2012	Reverse Circulation	385049	6767400	56
EQRC001	64	EL6771	RE0004452	2012	Reverse Circulation	386657	6765196	56
EQRC002	60	EL6771	RE0004452	2012	Reverse Circulation	386649	6765203	56
EQRC003	60	EL6771	RE0004452	2012	Reverse Circulation	386641	6765229	56
EQRC004	63	EL6771	RE0004452	2012	Reverse Circulation	386553	6765264	56
EQRC005	60	EL6771	RE0004452	2012	Reverse Circulation	386530	6765272	56
EQRC006	51	EL6771	RE0004452	2012	Reverse Circulation	386689	6765182	56
HZRC001	40	EL6114	RE0004641	2012	Reverse Circulation	383889	6770847	56
HZRC002	58	EL6114	RE0004641	2012	Reverse Circulation	383895	6770808	56
HZRC003	70	EL6114	RE0004641	2012	Reverse Circulation	383936	6770676	56
HZRC004	57	EL6114	RE0004641	2012	Reverse Circulation	383899	6770699	56
HZRC005	58	EL6114	RE0004641	2012	Reverse Circulation	383872	6770708	56
HZRC006	60	EL6114	RE0004641	2012	Reverse Circulation	383940	6770619	56
HZRC007	60	EL6114	RE0004641	2012	Reverse Circulation	383780	6770995	56

Hole ID	Total Depth (m)	Title	Reports	Year drilled	Drill Type	MGA 94 Easting (m E)	MGA 94 Northing (m N)	Zone
HZRC008	54	EL6114	RE0004641	2012	Reverse Circulation	383878	6770885	56
HZRC010	57	EL6114	RE0004641	2012	Reverse Circulation	383384	6771193	56
HZRC009	57	EL6114	RE0004641	2012	Reverse Circulation	383818	6770969	56
HZRC011	58	EL6114	RE0004641	2012	Reverse Circulation	383406	6771192	56
HZRC012	58	EL6114	RE0004641	2012	Reverse Circulation	383420	6771254	56

10.2 CENTURY SOUTH PROJECT AREA DRILLHOLES

A review of the Mount Isa West 2016 geochemistry data packages as discussed above has shown considerably more drilling data than was reported on in the year one PDS study (Fox, Taylor, & Ryan, 2019) which sourced the drilling data from the GeoResGlobe website.

A program of RAB drilling consisting of 76 holes for a total of 913m was completed within the boundaries of Century South EPM26713. The drilling targeted previous soil sampling results and also covers an EM high. The drilling was completed by North Limited within historical tenement EPM10261 in 1996.

Regional RAB traverses highlighted sporadic anomalous Zn in a dolomitic and pyritic carbonaceous sequence on the eastern limb of the Freeman's Creek Syncline. North's primary target was a large stratiform Zn-Pb(-Ag) deposit within the Lady Loretta Formation or Riversleigh Siltstone.

Base metal analytical results were generally disappointing, with best sporadic results of Cu<105ppm, Pb<410ppm and Zn<940ppm. Most geochemical 'anomalies' are associated with the dolomitic and pyritic, carbonaceous unit. However, there was an elevated element background (Cu, Pb, Zn, Fe, S, Ca, Mg,) also associated with this unit.

This downgraded the prospectivity of the 'anomalous' results as the geochemical 'anomalism' may not relate to economic mineralisation but to elevated background concentrations in the carbonaceous units.

There were 5 holes drilled within 400m of the Century South tenement boundaries including 3 diamond holes and 2 RC holes (Figure 10.2 on page 149). All holes were drilled by CRA in 1995 however the company report on the drilling activities is not available on open file as the tenure is still current.

The information for these holes was sourced from the Mount Isa West Data Package. The data available includes collar details, and geology and assay data sourced from the CRA company report CR28764. Best results from the drilling were DD95RL009 1m@0.44% Zn and 0.56% PB from 230m. Hole DD95RL010 2m@0.37% Zn and 900ppm Pb from 78m.

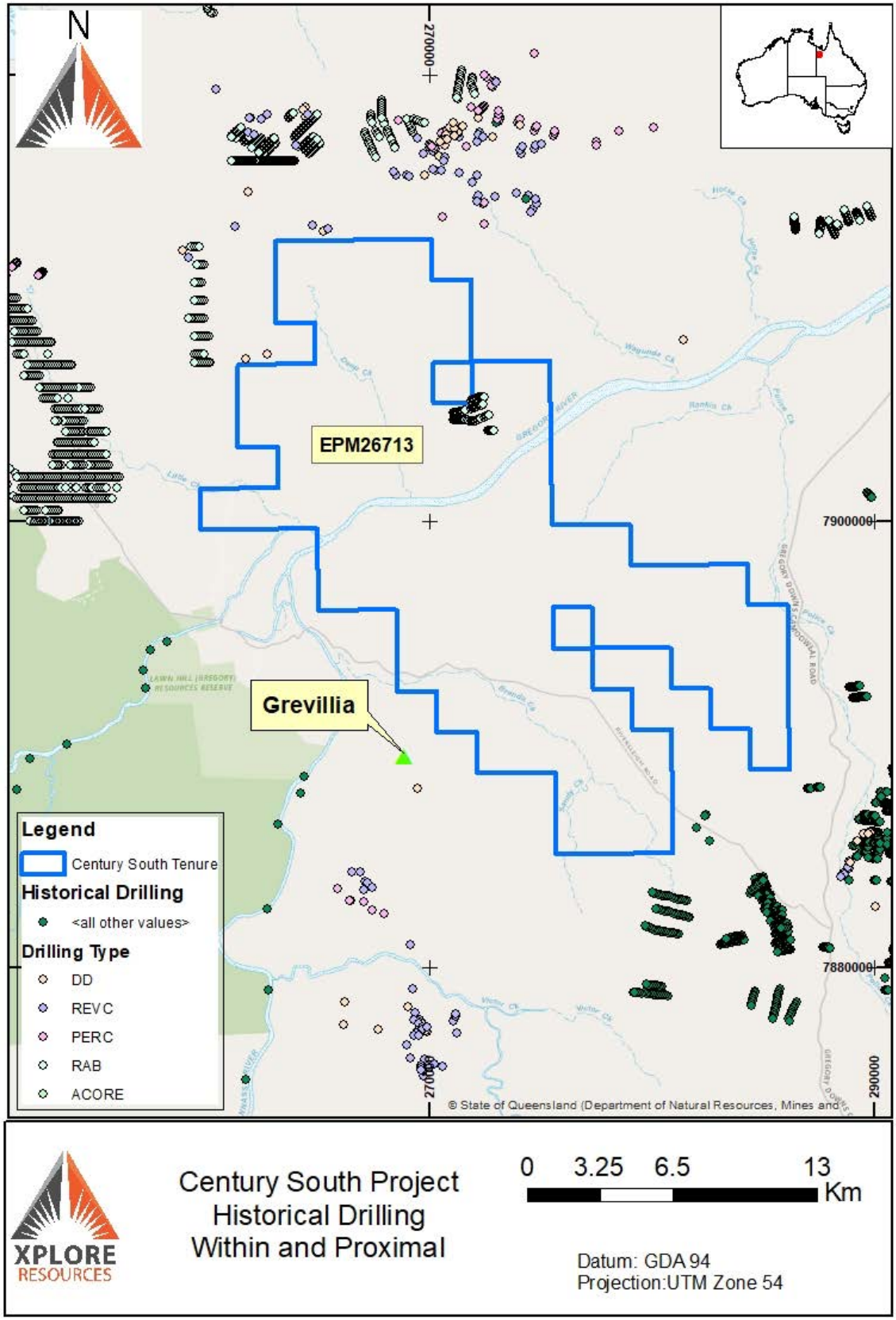


Figure 10.2 Drill Hole Location of within and close proximity to Century South EPM26713 [Data sourced from (Queensland Government(d), 2020)]

Table 10.2 Within and Proximal drill hole data, Century South Project Area

Hole ID	Lawn Hill DDH 83-5 (2849)	PDCM0011	PDCM0012	RCCM0037	RCCM0038	RCCM0039	RVR670
Historic Tenure	ATP327	EPM7651	EPM7651	EPM7651	EPM7651	EPM7651	EPM11711
Report No.	N/A	CR25629	CR25629	CR26967	CR26967	CR26967	CR44598
Licence Holder	Amoco Australia Exploration Company	Aberfoyale Resources Ltd	Aberfoyale Resources Ltd	Aberfoyale Resources Ltd	Aberfoyale Resources Ltd	Aberfoyale Resources Ltd	Nore
T.D.	582m	201m	186m	196m	200m	262m	11m
Drill Type	N/A	Not Recorded	Not Recorded	RC Percussion	RC Percussion	RC Percussion	RAB
Latitude	-18.987972	-19.17518	-19.16702	-19.13544	-19.10833	-19.15197	-19.18386
Longitude	138.814503	139.01615	139.00742	139.02013	139.01998	139.02302	138.96657
Sample Depth (m)	N/A	N/A	N/A	66-114	42-60	214-244	10-11
Ag (ppm)	N/A	N/A	N/A	N/A	N/A	N/A	0.3
Co (ppm)	N/A	N/A	N/A	N/A	N/A	N/A	10
Cu (ppm)	N/A	N/A	N/A	N/A	N/A	N/A	13
Mn (ppm)	N/A	N/A	N/A	N/A	N/A	N/A	817
Ni (ppm)	N/A	N/A	N/A	N/A	N/A	N/A	15
Pb (ppm)	N/A	N/A	N/A	40, 45	94, 336, 92	N/A	32
Zn (ppm)	N/A	N/A	N/A	292, 202	418, 663, 900	145, 134, 216, 137, 213	41
Ba (ppm)	N/A	N/A	842	N/A	N/A	N/A	365
Notes	Currently unable to source data on drill hole.	No significant results - Pyritic Black Shales accounted for EM readings above target position. Slight elevation in Zn core grind samples most likely attributed to contamination from galvanised steel core trays. Specific AMG datum not listed.	No significant results - Carbonaceous shales accounted for EM readings above target position. Specific AMG datum not listed.				

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

This section details the methods used in sample preparation, analyses and security.

As for all of the historical sampling that was done by other, unrelated companies over the years, there is little to no information recorded on how sample preparation, analyses and security were executed during the period of their own respective reporting.

To put this in a proper context, some background on the methods used in Australian States and Territories by each respective Mines Department on the recording and storage of historical, exploration data is warranted here.

In the case for all the respective State and Territory Mines Departments, there is mandatory, yearly reporting of all exploration activities conducted on every tenure whether its mineral, coal or oil and gas.

This annual report data is submitted by each tenure holder and kept in a confidential status until that company relinquishes part or all of the tenement.

Once that data is off the confidential status, it becomes part of the public domain ("Open File") and can be accessed, viewed and downloaded via each Mines Department's digital portal by any interested party.

Since the digital age of reporting came into effect more or less in the late 90s, all records were submitted electronically but prior to that, all records were submitted via hard copy. In order to have all data readily accessible in digital format, all the hard copy data had to be digitised.

As a result of this digitisation process, some older, hard copy records from the 1950s to the 1980s were in very poor condition and coupled with the inevitable misplacement and loss of physical data in a few cases, the available open file dataset is not quite 100% complete.

Furthermore, given the cyclical boom and bust periods throughout the last 50 years in the Australian exploration and mining industries, the amount of data submitted yearly can vary significantly and during boom times, Mines Departments have struggled to vet each and every submission into their respective systems.

As a consequence of this, some companies inadvertently did not submit all of their exploration data. This only has significance where sample data was assayed but the original lab data was not submitted and/or there were samples assayed but not recorded at all.

Where this has relevance in sample data preparation, analyses and security is the fact that in general mineral exploration reporting throughout Australia it is not compulsory to describe these three topics in any detail within the confines of regular annual reporting.

Consequently, the comprehensive research and checking that has been done for the compilation of this report has found very little record of how these three topics were covered by each of the historic tenure holders.

It is a recommendation from this report that Burtorn Silver ensure that they not only met their statutory obligations in reporting once they commence exploration work but also keep detailed records on sample preparation, analyses and security.

This will ensure future technical reporting, especially for public release, will comply with industry standards for the reporting of sampling techniques and security.

TYR PROJECT AREA

The 55 rock chip and grab samples from the Tyr Field Reconnaissance Trip were submitted to the independent laboratory used by Xplore Resources, ALS Brisbane, on Wednesday, December 16th 2020.

As some of the samples will have "highly mineralised type grade" base metal values as well as high sulphur content, it was necessary to use two assaying methods in order to accurately gauge the range of values for the base metals, especially those greater than 10 000 ppm or 1%.

The methods recommended and hence used for the base metals analyses were:
Sample Preparation:

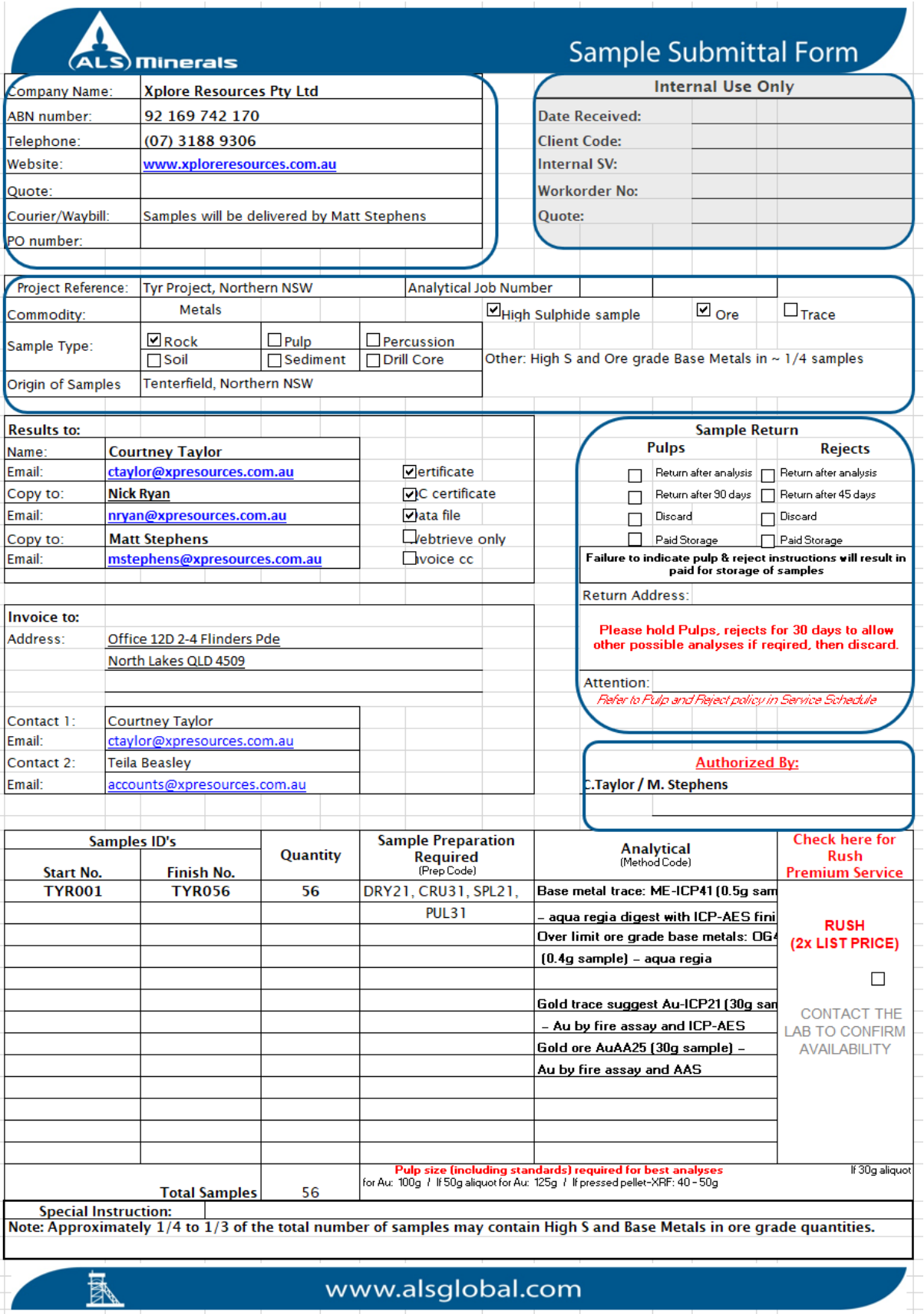
1. Dry for 24 hours.
2. Crush to a nominal 70% passing 2mm.
3. Split – riffle split 250g out.
4. Pulverise 250g to 85% passing 75 microns.

Base metal trace: ME-ICP41 (0.5g sample) – aqua regia digest with ICP-AES finish

Over limit grade base metals: OG46 (0.4g sample) – aqua regia

Gold metal trace Au-ICP21 (30g sample) – Au by fire assay and ICP-AES

Gold AuAA25 (30g sample) – Au by fire assay and AAS



ALS Minerals

Sample Submittal Form

Company Name:	Xplore Resources Pty Ltd
ABN number:	92 169 742 170
Telephone:	(07) 3188 9306
Website:	www.xploreresources.com.au
Quote:	
Courier/Waybill:	Samples will be delivered by Matt Stephens
PO number:	

Internal Use Only

Date Received:	
Client Code:	
Internal SV:	
Workorder No:	
Quote:	

Project Reference:	Tyr Project, Northern NSW		Analytical Job Number		
Commodity:	Metals			☑ High Sulphide sample	☑ Ore ☐ Trace
Sample Type:	☑ Rock	☐ Pulp	☐ Percussion		
	☐ Soil	☐ Sediment	☐ Drill Core	Other: High S and Ore grade Base Metals in ~ 1/4 samples	
Origin of Samples	Tenterfield, Northern NSW				

Results to:

Name:	Courtney Taylor	
Email:	ctaylor@xpresources.com.au	☑ ertificate
Copy to:	Nick Ryan	☑ C certificate
Email:	nryan@xpresources.com.au	☑ ata file
Copy to:	Matt Stephens	☐ /ebtrieve only
Email:	mstephens@xpresources.com.au	☐ voice cc

Invoice to:

Address:	Office 12D 2-4 Flinders Pde
	North Lakes QLD 4509
Contact 1:	Courtney Taylor
Email:	ctaylor@xpresources.com.au
Contact 2:	Teila Beasley
Email:	accounts@xpresources.com.au

Sample Return

Pulps	Rejects
☐ Return after analysis	☐ Return after analysis
☐ Return after 90 days	☐ Return after 45 days
☐ Discard	☐ Discard
☐ Paid Storage	☐ Paid Storage

Failure to indicate pulp & reject instructions will result in paid for storage of samples

Return Address:

Please hold Pulps, rejects for 30 days to allow other possible analyses if reqired, then discard.

Attention:

Refer to Pulp and Reject policy in Service Schedule

Authorized By:

C.Taylor / M. Stephens

Samples ID's Start No.	Samples ID's Finish No.	Quantity	Sample Preparation Required (Prep Code)	Analytical (Method Code)	Check here for Rush Premium Service
TYR001	TYR056	56	DRY21, CRU31, SPL21, PUL31	Base metal trace: ME-ICP41 (0.5g sam – aqua regia digest with ICP-AES fini	RUSH (2x LIST PRICE) ☐ CONTACT THE LAB TO CONFIRM AVAILABILITY
				Over limit ore grade base metals: OG4 (0.4g sample) – aqua regia	
				Gold trace suggest Au-ICP21 (30g san – Au by fire assay and ICP-AES	
				Gold ore AuAA25 (30g sample) – Au by fire assay and AAS	
Total Samples		56	Pulp size (including standards) required for best analyses for Au: 100g / If 50g aliquot for Au: 125g / If pressed pellet-XRF: 40 - 50g		If 30g aliquot

Special Instruction:

Note: Approximately 1/4 to 1/3 of the total number of samples may contain High S and Base Metals in ore grade quantities.

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Figure 11.1 Sample Submission/Instructions Form, Tyr Project Samples, Dec 2020

Figure 11.2 Bagged samples securely held in storage

CENTURY SOUTH PROJECT AREA

Seven (7) rock/chip samples were collected from a 30 x 30m (approximately) gossanous outcrop immediately to the east of the southern powerline service track.

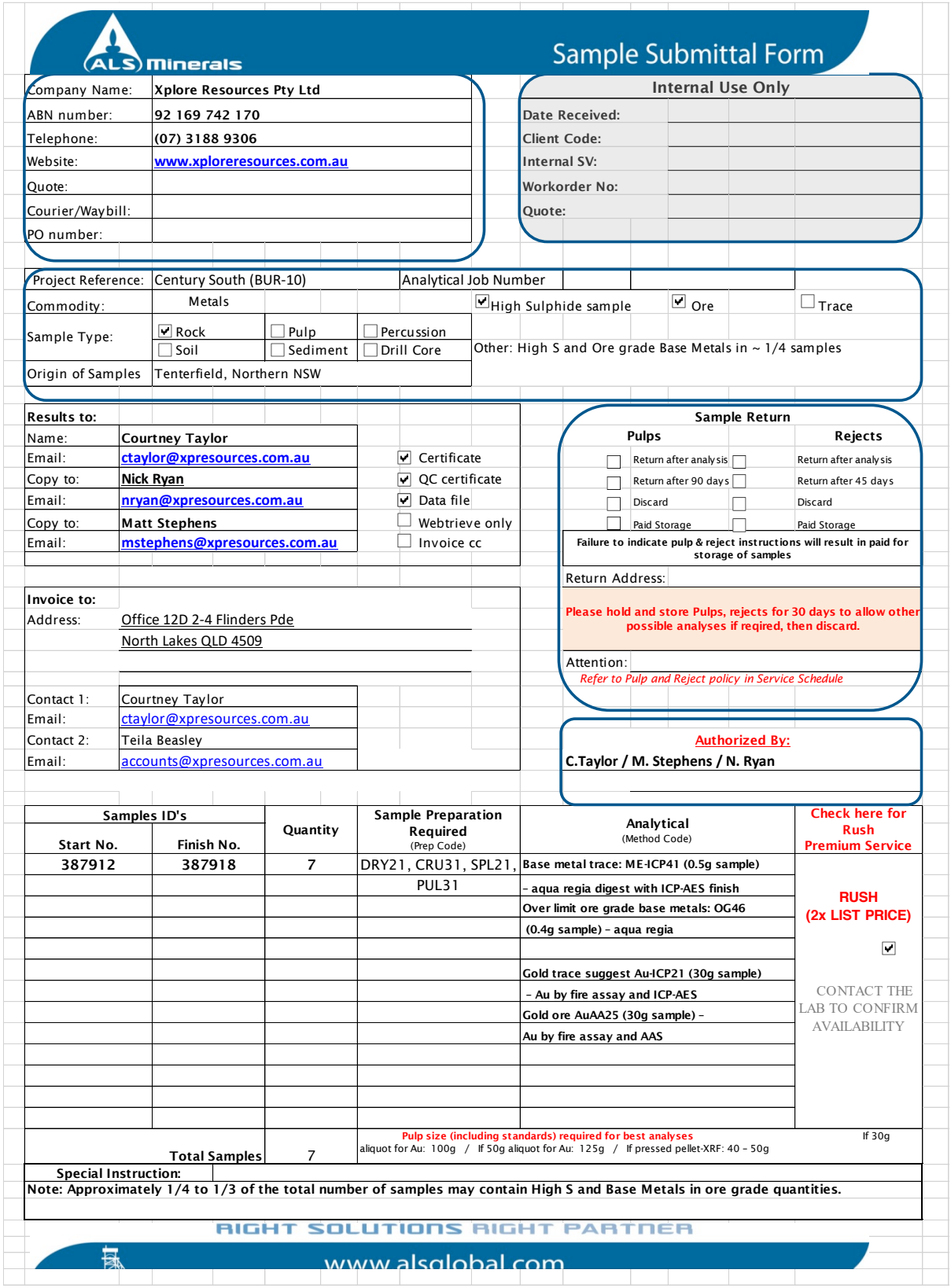
The Exploration geologist had noted an anomalous white quartz ridge about 1m high while driving southward along the powerline service track. The low quartz ridge outcrop shown in Figure 11.3 on page 155 is approximately 10m to the West of the service track.

The dark gossanous outcrop in Figure 11.4 on page 156 was found approximately 50 m to the east on the other side of the service track. It is behind the vehicle in the photograph.

The map co-ordinates of the gossan are 272471.0 m E and 7891220.0 m N (MGA94 zone 54). This locality was nicknamed ‘Electron’ after the nearby powerlines and one hydrothermal vein rock sample was taken here.

Figure 11.3 Prominent and anomalous quartz vein - location reference: Electron

Figure 11.4 Iron gossan outcrop 50 metres east of the prominent vein – location reference: Electron



ALS Minerals — Sample Submittal Form

Company Name:	Xplore Resources Pty Ltd
ABN number:	92 169 742 170
Telephone:	(07) 3188 9306
Website:	www.xploreresources.com.au
Quote:	
Courier/Waybill:	
PO number:	

Internal Use Only

Date Received:	
Client Code:	
Internal SV:	
Workorder No:	
Quote:	

Project Reference:	Century South (BUR-10)		Analytical Job Number		
Commodity:	Metals			☑ High Sulphide sample	☑ Ore ☐ Trace
Sample Type:	☑ Rock	☐ Pulp	☐ Percussion	Other: High S and Ore grade Base Metals in ~ 1/4 samples	
	☐ Soil	☐ Sediment	☐ Drill Core		
Origin of Samples	Tenterfield, Northern NSW				

Results to:

Name:	Courtney Taylor	
Email:	ctaylor@xpresources.com.au	☑ Certificate
Copy to:	Nick Ryan	☑ QC certificate
Email:	nryan@xpresources.com.au	☑ Data file
Copy to:	Matt Stephens	☐ Webtrieve only
Email:	mstephens@xpresources.com.au	☐ Invoice cc

Invoice to:

Address: Office 12D 2-4 Flinders Pde
North Lakes QLD 4509

Contact 1:	Courtney Taylor
Email:	ctaylor@xpresources.com.au
Contact 2:	Teila Beasley
Email:	accounts@xpresources.com.au

Sample Return

Pulps		Rejects
☐ Return after analysis	☐	Return after analysis
☐ Return after 90 days	☐	Return after 45 days
☐ Discard	☐	Discard
☐ Paid Storage	☐	Paid Storage

Failure to indicate pulp & reject instructions will result in paid for storage of samples

Return Address:

Please hold and store Pulps, rejects for 30 days to allow other possible analyses if reqired, then discard.

Attention:

Refer to Pulp and Reject policy in Service Schedule

Authorized By:

C.Taylor / M. Stephens / N. Ryan

Samples ID's Start No.	Samples ID's Finish No.	Quantity	Sample Preparation Required (Prep Code)	Analytical (Method Code)	Check here for Rush Premium Service
387912	387918	7	DRY21, CRU31, SPL21, PUL31	Base metal trace: ME-ICP41 (0.5g sample) – aqua regia digest with ICP-AES finish	RUSH (2x LIST PRICE) ☑
				Over limit ore grade base metals: OG46 (0.4g sample) – aqua regia	CONTACT THE LAB TO CONFIRM AVAILABILITY
				Gold trace suggest Au-ICP21 (30g sample) – Au by fire assay and ICP-AES	
				Gold ore AuAA25 (30g sample) – Au by fire assay and AAS	
	Total Samples	7	Pulp size (including standards) required for best analyses: aliquot for Au: 100g / If 50g aliquot for Au: 125g / If pressed pellet-XRF: 40 – 50g		If 30g

Special Instruction:

Note: Approximately 1/4 to 1/3 of the total number of samples may contain High S and Base Metals in ore grade quantities.

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Figure 11.5 Sample Submission/Instructions Form, Century South, Dec. 2020

12.1 DATA VERIFICATION

The data verification process involved in the compilation of this report was solely based on the interrogation of all publicly available data ("Open File Data") from historical records pertaining to the companies who have held tenure intersecting or in close proximity to the current tenement packages now held by Burtorn Silver.

Data verification involves the checking of all relevant quantitative and qualitative records associated with historical exploration programs. The type of data to be verified includes:

- ✓ Assay data – preferably from an independent, certified analytical laboratory where acknowledged and accredited QA/QS is performed.
- ✓ Locational data – co-ordinate data from either surveyed location and/or locations recorded by GPS or DGPS (Differential Global Positioning by Satellite).
- ✓ Lineal, areal or 3D measurements – this includes the measurement downhole by the sampling in intervals from drilling data e.g. a record of 3.5m @ 6.7g/t Au or an area measurement pertaining to a two dimensional area e.g. 1.5 square kilometres or a 3D measurement such as a volume or mass recorded in cubic metres and/or metric tons (tonnes) respectively.
- ✓ Orientation or directional data – this usually pertains to drilling where such parameters as dip, dip direction or azimuth and geotechnical data measured and recorded from oriented diamond drilling core.
- ✓ Qualitative data – this task is performed by reviewing the relevance of the descriptions and interpretations recorded in relation to the data highlighted or promoted by previous tenure holders.

Adjectives such as *significant, highly significant, high, very high, anomalous, very anomalous* and terms like *up to* and *as high as* can be sometimes misleading or even unwarranted and may need to be rephrased to better represent the significance of individual or group results or even the overall prospectivity of a Project.

The workload for the task of data verification was delegated to experienced, senior geologists, each with 30+ years' experience, to do the data validation of each respective tenement.

This process involved checking each individual statement of assay results pertaining to exploration sampling carried out on historical tenure that either intersected or was in close proximity to the current tenure and cross referencing those reported assay results against recorded assay result data from an independent, certified analytical laboratory.

Wherever possible, historical sampling data with co-ordinates and assay data and any other descriptive data was uploaded to GIS software, in this exercise MapInfo was utilised, after the data had been validated by a senior geologist.

Subsequent maps and plans (or cross sections, long sections) are then generated for validation as well as the general interpretation of each plot of data and its relevance to the overall understanding of the mineralisation and geology of the areas of interest explored.

12.2 QUALIFIED PERSON'S OPINION

In consideration of the author's personal involvement during most of the data verification process that took place at Xplore Resources' Brisbane office as well as the author's own high level review of all the data available, the author considers that the requisite amount of data verification and validation has been performed for this report.

Furthermore, given the author's association with Xplore Resources over the last three years, the author is confident that the research and verification done by Xplore personnel have been done at a level consistent with current industry standards.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

There are no mineral processing nor metallurgical testing data specifically for the Tyr Project nor the Century South Project.

14.0 MINERAL RESOURCE ESTIMATES

TYR PROJECT AREA

There are no current mineral resources for the Tyr Project.

There are some historical figures for the major producers such as Torny and Burra but those figures do not comply with current JORC standards in Australia and are therefore not reproduced here in this report.

CENTURY SOUTH PROJECT AREA

There are no current or historical mineral resources for the Century South Project.

The closest mineral resource to Century South is the Century Mine. The Century Zn-Pb-Ag deposit was discovered in 1990 by Rio Tinto Exploration Pty Ltd while drill testing a zinc, lead, silver soil geochemical anomaly.

The deposit contained a resource estimate of 118Mt @ 10.2% Zn, 1.5% Pb & 36g/t Ag (New Century Resources, 2020). The deposit was mined from 1999 to 2015, producing an average of 475,000tpa zinc concentrate and 50,000tpa lead concentrate (New Century Resources, 2020).

There are many other zinc-lead-silver prospects/ small mines throughout the area. Watsons Lode held by New Century Resources; located 10km south of the Century Mine open pit, is a significant high-grade mineralised prospect.

Strong mineralisation of 3-12% Zn + Pb and above are present with a cut-off grade of 3% (Zn + Pb) and a minimum intercept metal content of 9 [metres × %(Zn + Pb)] (New Century Resouces, 2017).

The Grevillea deposit which sits approximately 2km to the southwest of Century South has had no mining, but the mineralisation style suggests zinc, lead and silver could be mined if brought into production. Drilling has intersected mineralisation, but no mineral resource has reportedly been estimated.

Drilling conducted in 1994, yielded 25m of stratiform mineralisation with 5.2% Zn, 1.1% Pb and 29g/t Ag (McGoldrick & Hann, 2004). Currently, Ocean Magic Investments Limited hold the tenure licence for EPM16900; the area encompassing Grevillea. Displayed in Table 14.1 on page 160 is a list of resources of peer projects proximal to Century South.

Table 14.1 Nearby peer projects and resources to the Century South tenement area

Company	Project	Resources + Notable results	Distance from Century South
New Century Resources Ltd (ASX: NCZ)	Century Mine (Tailings Deposit) – Lawn Hill, QLD	Century Tailings Deposit stand at 77.3Mt at 3.1% Zn equivalent for 2,287,000 contained zinc tonnes	14km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (In-situ Deposits) – Lawn Hill, QLD	Total in-situ deposits including Silver King, South Block & East Fault Block. Inferred Mineral Resources is 9.3Mt at 6.1% Zn, 4.7% Pb and 66g/t Ag for 568,000t contained zinc, 433,000t contained lead and 19,850,000oz contained silver, with cut-offs of 15% for Zn, and 5% for Pb	21-22km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (Silver King Deposit) – Lawn Hill, QLD	2.7Mt at 6.9% Zn, 12.5% Pb and 120g/t Ag (20.5% Zn equivalent), reported above a 5% Pb cut-off, for a total zinc equivalent metal content of 553,500t.	21.85km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (South Block Deposit) – Lawn Hill, QLD	6.1Mt at 5.3% Zn, 1.5% Pb and 43g/t Ag.	21.6km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (East Fault Block Deposit) – Lawn Hill, QLD	520,000t at 11.6% Zn, 1.1% Pb and 48g/t Ag (12.3% Zn equivalent), for a total zinc equivalent metal content of 64,000t.	21.2km NW
New Century Resources (ASX: NCZ)	Watsons Lode Prospect	No Resource only high-grade mineralisation12%+ Zn + Pb, cut-off of 3% Zn + Pb.	16.3km NW
Ocean Magic Investments Limited	Grevillea Prospect - Northern Gossan Block	No resource only high-grade minerisation5.2% Zn, 1.1% Pb and 29g/t Ag.	2km SW

15.0 ADJACENT PROPERTIES

15.1 TYR PROJECT AREA

The Tyr Project (EL8728) is located next to EL8903 which is held by Tinone Resources Corp. The EL8903 tenement is contiguous to the west and south of the Tyr Tenement (Figure 15.1). Major minerals within the tenement are Group 1 type minerals including silver, lead and zinc. Significant occurrences of these minerals are located at the centre of the tenement and from the south-east to north-east of the tenement.

Other nearby tenements are outlined Table 15.1 in including information such as grant date, expiry date, and mineral group types.

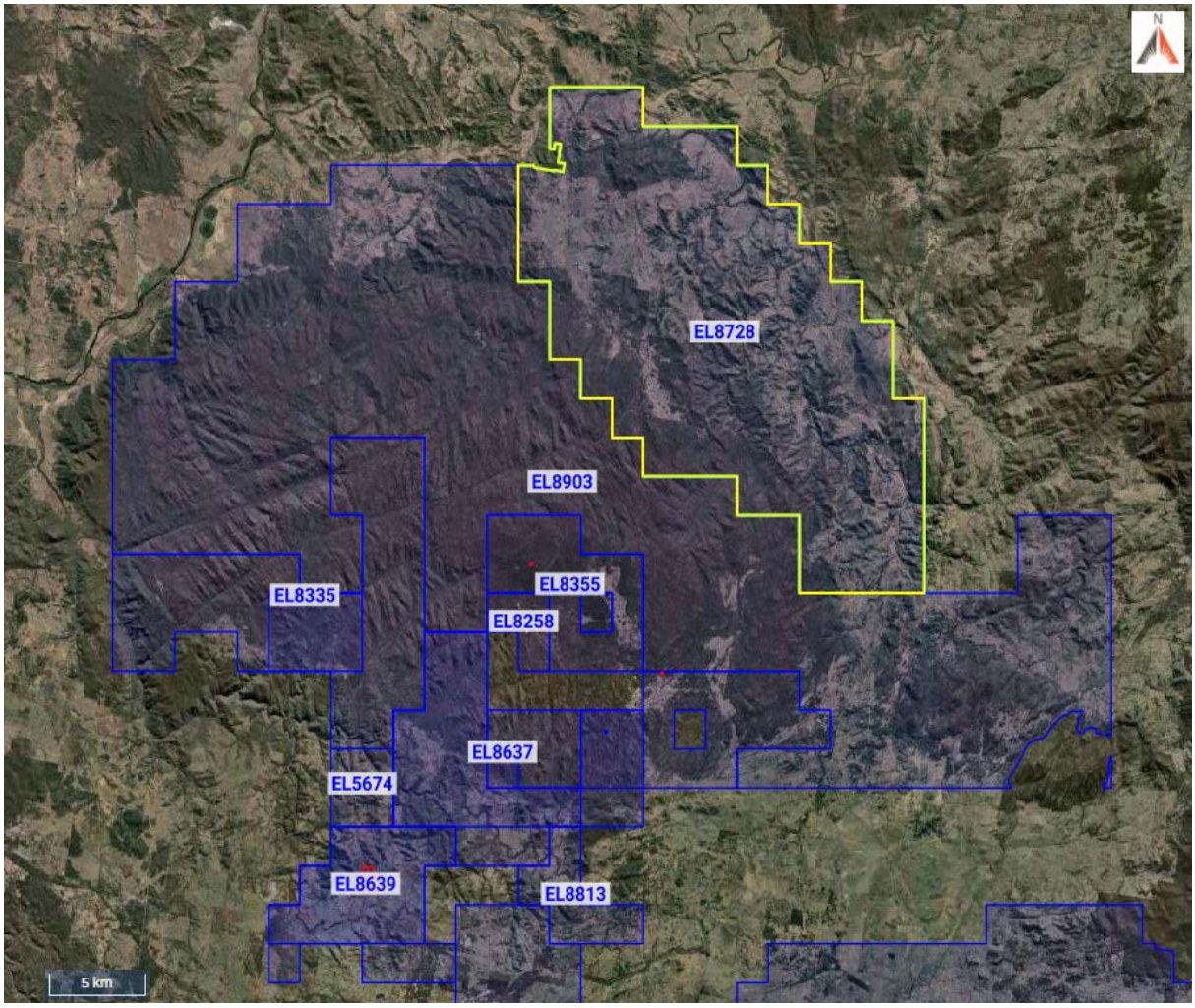


Figure 15.1 Nearby tenements to the Tyr tenure (EL8728) in yellow (Minview, 2019)

Table 15.1 Nearby Tenements for the Tyr tenure (EL8728)

Title	Holder	Grant Date	Expiry Date	Minerals	Title Area	Operation
EL5674	SILVER MINES LIMITED	13/01/2000	13/01/2023	Group 1	4 UNITS	EXPLORING
EL7800	TARONGA MINES PTY LTD	4/07/2011	4/07/2022	Group 1	36 UNITS	EXPLORING
EL8258	TORRINGTON MINERALS PTY LTD	16/04/2014	16/04/2020	Group 1, Group 2, Group 3	4 UNITS	EXPLORING
EL8335	TARONGA MINES PTY LTD	5/01/2015	5/01/2021	Group 1	56 UNITS	EXPLORING
EL8355	TORRINGTON MINERALS PTY LTD	18/03/2015	18/03/2021	Group 1, Group 2	13 UNITS	EXPLORING
EL8407	TARONGA MINES PTY LTD	4/11/2015	4/11/2023	Group 1	17 UNITS	EXPLORING
EL8637	TARONGA MINES PTY LTD	31/08/2017	31/08/2020	Group 2, Group 3	29 UNITS	EXPLORING
EL8639	TARONGA MINES PTY LTD	31/08/2017	31/08/2020	Group 2, Group 3	13 UNITS	EXPLORING
EL8728	NEW ZINC RESOURCES PTY LTD	29/03/2018	29/03/2024	Group 1	100 UNITS	EXPLORING
EL8813	ORIENTAL STAR INTERNATIONAL PTY LTD	14/12/2018	14/12/2024	Group 1	6 UNITS	EXPLORING
EL8903	TINONE RESOURCES CORP	21/10/2019	21/10/2023	Group 1	204 UNITS	EXPLORING
ML1774	TARONGA MINES PTY LTD	21/09/2018	21/12/2029	Copper, Lithium, Mica, Molybdenite, Rubidium, Silver, Tin, Topaz, Tourmaline, Tungsten and Its Ores	76.5 HA	MINING
ML5437	Frederick Lawrence; ESTATE OF WILLIAM JOHN SHERRATT	14/12/1954	14/12/2019	Beryllium Minerals, Bismuth, Tin, Topaz, Tungsten and Its Ores	2.01 HA	MINING
MPL1373	Frederick Lawrence; ESTATE OF WILLIAM JOHN SHERRATT	2/05/1969	2/05/2012	Nil Minerals	1.816 HA	MINING

15.2 CENTURY SOUTH PROJECT AREA

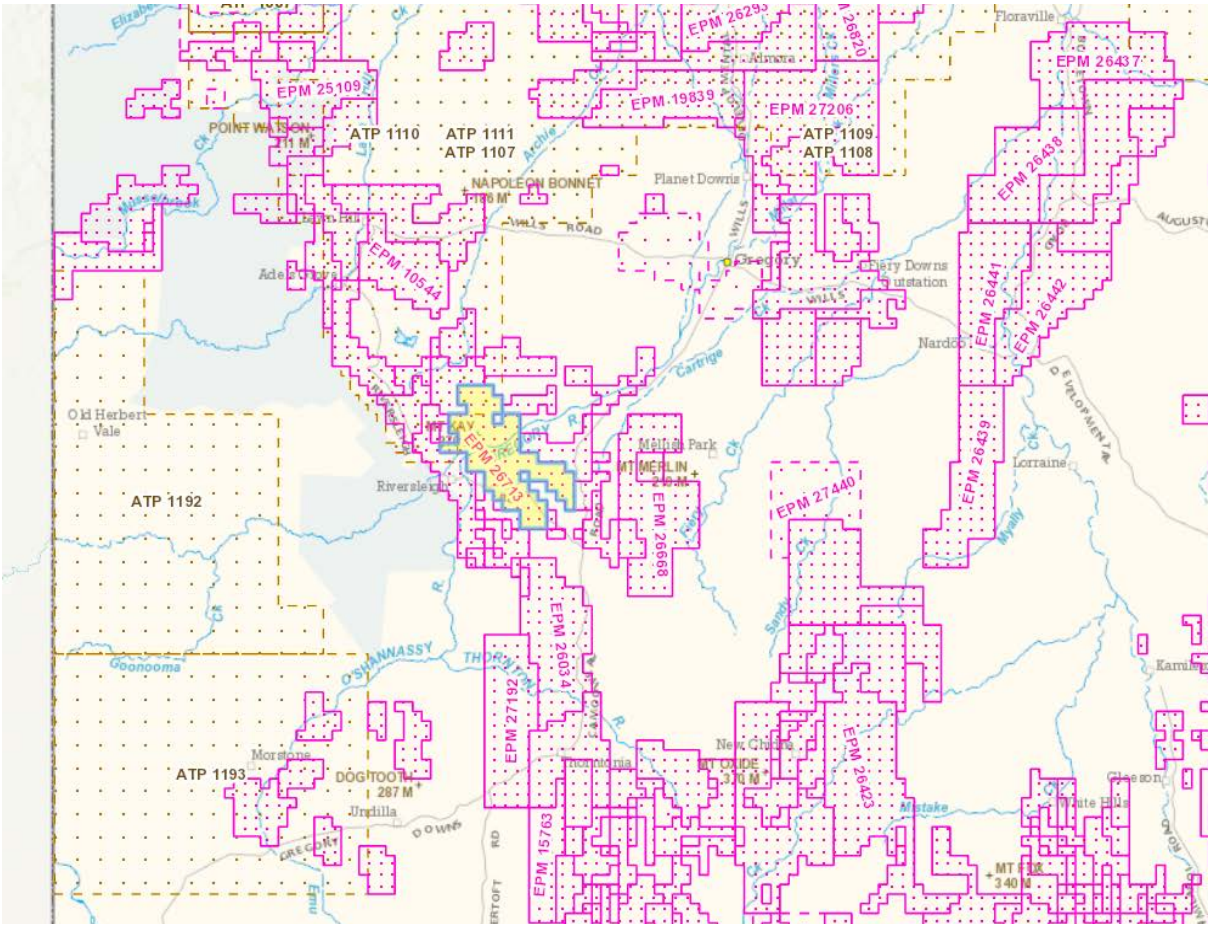


Figure 15.2 Location of EPM26713 within wider exploration area of the Century Domain [Data sourced from (Queensland Government, 2019)

There are many other zinc-lead-silver prospects throughout the area.

Watsons Lode held by New Century Resources; located 10 km south of the Century Mine open pit, is a significant high-grade mineralisation prospect. Strong mineralisation of 3-12% Zn + Pb and above are present with a cut-off grade of 3% (Zn + Pb) and a minimum intercept metal content of 9 [metres × %(Zn + Pb)] (New Century Resouces, 2017).

The Grevillea deposit which sits approximately 2km to the southwest of Century South. Grevillea has had no mining, but the mineralisation style suggests zinc, lead and silver could be mined if brought into production.

Drilling conducted in 1994, yielded 25m of stratiform mineralisation with 5.2% Zn, 1.1% Pb and 29g/t Ag (McGoldrick & Hann, 2004). Currently, Ocean Magic Investments Limited hold the tenure licence for EPM16900; the area encompassing Grevillea.

Table 15.2 Nearby peer projects and resources to the Century South tenement area

Company	Project	Resources + Notable results	Distance from Century South
New Century Resources Ltd (ASX: NCZ)	Century Mine (Tailings Deposit) – Lawn Hill, QLD	Century Tailings Deposit stand at 77.3Mt at 3.1% Zn equivalent for 2,287,000 contained zinc tonnes	14km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (In-situ Deposits) – Lawn Hill, QLD	Total in-situ deposits including Silver King, South Block & East Fault Block. Inferred Mineral Resources is 9.3Mt at 6.1% Zn, 4.7% Pb and 66g/t Ag for 568,000t contained zinc, 433,000t contained lead and 19,850,000oz contained silver, with cut-offs of 15% for Zn, and 5% for Pb	21-22km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (Silver King Deposit) – Lawn Hill, QLD	2.7Mt at 6.9% Zn, 12.5% Pb and 120g/t Ag (20.5% Zn equivalent), reported above a 5% Pb cut-off, for a total zinc equivalent metal content of 553,500t.	21.85km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (South Block Deposit) – Lawn Hill, QLD	6.1Mt at 5.3% Zn, 1.5% Pb and 43g/t Ag.	21.6km NW
New Century Resources Ltd (ASX: NCZ)	Century Mine (East Fault Block Deposit) – Lawn Hill, QLD	520,000t at 11.6% Zn, 1.1% Pb and 48g/t Ag (12.3% Zn equivalent), for a total zinc equivalent metal content of 64,000t.	21.2km NW
New Century Resources (ASX: NCZ)	Watsons Lode Prospect	12%+ Zn + Pb, cut-off of 3% Zn + Pb.	16.3km NW
Ocean Magic Investments Limited	Grevillea Prospect - Northern Gossan Block	5.2% Zn, 1.1% Pb and 29g/t Ag.	2km SW

Table 15.3 Nearby Tenements, Century South Project Area

Tenement No	Tenement Holder	Target Minerals	Grant date	Expiry date
EPM14712	Aeon Walford Creek Limited	Lead, Silver, Zinc, Sphalerite, Phosphate	21-August-2006	20-August-2024
EPM14935	Aeon Walford Creek Limited	Lead, Silver, Zinc, Sphalerite, Phosphate	21-August-2006	20-August-2024
EPM10544	Century Mining Limited	Lead, Zinc	23-June-1995	31-December-2022
EPM26722	Century Mining Limited	Lead, Silver, Zinc,	25-September-2018	24-September-2024
ML90045	Century Mining Limited	Lead, Silver, Zinc,	19-September-1997	18-September-2037
ML90058	Century Mining Limited	Lead, Silver, Zinc,	19-September-1997	18-September-2037
EPM17222	Duyfken Explorations Pty Ltd	Silver, Gold, Copper, Uranium	31-May-2011	30-May-2021
EPM17230	Duyfken Explorations Pty Ltd	Silver, Gold, Copper, Uranium	31-May-2011	30-May-2021
EPM16900	Ocean Magic Investments Limited	Lead, Zinc, Silver, Copper	17-May-2010	16-May-2022
EPM17466	Ocean Magic Investments Limited	Lead, Silver, Zinc	04-August-2010	03-August-2021
EPM18512	Ocean Magic Investments Limited	Lead, Silver, Zinc,	21-November-2012	20-November-2021

16.0 OTHER RELEVANT DATA AND INFORMATION

16.1 TYR PROJECT – KEY ASX ANNOUNCEMENTS – NEARBY TENURES

The key ASX (Australian Stock Excange) announcements from companies near tenure have been summarised within this section of the report in Table 16.1 and Table 16.2 on page 167.

It is highly probable that future drilled desktop studies and/or a detailed review of the relevant ASX announcements, will facilitate the documentation of key mineralisation surface assay results, drillhole intercepts with assay results, and other relevant data into an appropriate database.

Table 16.1 Silver Mining Limited (ASX: SVL) Key Announcements

Date	ASX Announcement Title	Summary for Silver Mining Limited (ASX: SVL) ASX Announcement
29.11.2013	2013 Silver Mines AGM Presentation	(In Mole River) Mineralised lodes are associated with disseminated zones and locally massive veins of pyrite/pyrrhotite, sphalerite, galena with local arsenopyrite and chalcopyrite. 1m @ 162g/t Ag, 0.1% Cu, 2.8% Pb and 2.4% Zn from 28m in hole TORC001 at Torny.
01.02.2013	Drill Untersections On Regional Targets	Silver Mines believes the style of mineralisation in the area is similar to that occurring at the Webbs Silver deposit. That is higher grade silver-base metal lodes are enveloped by lower grade altered and mineralised country rock containing a geochemical halo of Zn-Pb and Ag.
31.01.2013	Quarterly Activities Report	Higher grade intersections include: • 1m @ 460g/t Ag, 0.2% Cu, 9.6% Pb and 3.7% Zn from 24m in hole HZRC010; • 1m @ 251g/t Ag, 0.9% Cu, 3.7% Pb and 2.4% Zn from 37m in hole MMRC003; and • 1m @ 200g/t Ag, 0.2% Cu, 5.9% Pb and 7.3% Zn from 48m in hole EQRC004.
01.11.2012	Sulphide Intersections on Regional Silver Targets	Rock chip and soils sampling conducted by Silver Mines and previous explorers has delieated a broad district scale zone of highky anomalous geochemistry. A total of 647 rock chip samples consisting of a combination of waste dump samples, outcrop and channel samples plus local soil sampling programs have returned anomalous to highly elevated levels of Ag, Pb, Zn and Cu in common association with As, Bi and locally elevated Sb, Sn and W.
26.11.2008	Shareholder Presentation AGM	New England area of NSW offers excellent potential for identification of metallic mineral deposits
27.10.2008	Annual Report 2008	Silver results in both rock chip and soil geochemistry at specific areas, in particular the Torny, Heffernan's, Spring Road and Mosman prospects provide impetus to these areas being followed up with moredetailed work with ground based geophysics and drilling warranted.The prospects have returned a number of samples exceeding 200ppm Ag with coincidence highly anomalous values of zinc, lead and copper.

Table 16.2 Chase Mining Corporation Limited (ASX: CML) Key Announcements

Date	ASX Announcement Title	Summary for Chase Mining Corporation (ASX: CML) ASX announcements. Prior to 2019 CML was known as Top Tung Limited ASX: TTW
31.01.2019	Quarterly Activities Report	Quantifiable results in conversion of NSW topaz into mullite) which contained an update on major processing breakthroughs in the production of mullite fibre from Torrington sourced topaz concentrate. These results have been ignored or discounted by investors and the market but may prove to be an important event in the fortunes of the company.
15.01.2019	Quantifiable Results in Mullite Fibre Production	the most recent report from the University of New South Wales ("UNSW") contains quantifiable results and a major processing breakthrough in the production of mullite fibre from Torrington sourced topaz concentrate: - Separable mullite fibre is being produced (Ultimate aim of the research program) - Topaz being fed into the furnace no longer requires grinding or pelletising (Cost saving) - Lower furnace operating temperatures are now possible (Cost saving)
02.10.2018	Update on Quebec Ni-Cu Drilling and NSW Project Activities	The Forestry Corporation of NSW has granted Torrington Minerals Pty Ltd (wholly owned subsidiary of TopTung Ltd – now CML) a permit to harvest rainwater run-off over the entire Torrington State Forest area of 1, 593 hectare in the Torrington State Forest in two dams and using it for processing minerals to be mined under MLA 547 once granted. This constitutes a sole right to the harvestable water rights except for firefighting purposes. The company will now restart its Mining Lease Ap
23.03.2018	Company Update and future strategy	The company yesterday announced its updated mineral resource estimates for the Torrington Project based on its comprehensive drilling program completed in 2017. The drilling program severely reduced the tungsten resources as outlined in the document and this will affect the company's future strategy.
06.02.2018	Status of Torrington Resource Modelling	while the silexite host rock to the tungsten mineralisation at the Wild Kate Prospect appears to be a continuous semi-flat lying sheet or sill as previously modelled, the tungsten mineralisation is not evenly distributed throughout the silexite body. The detailed drilling has confirmed the lack of grade continuity for the tungsten mineralisation which is likely to cause a reduction in the size of the resource estimate.
11.09.2017	Torrington Tungsten and Topaz Project Update	Assays from final holes include: Hole 385: 6m at 0.34% W (4,280ppm WO3) from 25 to 31m Hole 396: 8m at 0.32% W (4,030ppm WO3) from 27 to 35m; and 4m at 0.22% W (2,770ppm WO3) from 41 to 45m. • Mining Licence application being compiled for lodgement. • Federal Government ARC Linkage Grant funds received by the UNSW. • New high-temperature furnace purchased for the topaz fibre research Project to be installed and commissioned late October
13.09.2017	Additional Assays	Additional assays for diamond core (DC) Hole 277 increases mineralised zone to 26m at 0.51% W (6,384ppm WO3).
20.07.2017	Torrington Drilling Update	Assay results from a further 71 Reverse Circulation percussion (RC) holes completed to 8 May 2017 have been received and checked. All these holes are located on the Wild Kate Prospect

Date	ASX Announcement Title	Summary for Chase Mining Corporation (ASX: CML) ASX announcements. Prior to 2019 CML was known as Top Tung Limited ASX: TTW
		area (Figure 1). Drilling is now nearing completion with only limited RC holes remaining at Wild Kate
14.07.2017	Torrington Drilling Update	Assay results from a further 60 Reverse Circulation percussion (RC) and 3 Diamond Core (DC) drill holes completed to 13 April 2017 have been received and checked.
21.04.2017	Torrington Drilling Update	Assay results from the 129 Reverse Circulation percussion (RC) drill holes completed to 10 March 2017 have been received and checked. Before being halted, the planned grid-based shallow RC drilling program to locate additional silexite (host rock to both the tungsten and topaz) around the greater Mt Everard area only located silexite bodies beneath the metasedimentary cover in three holes away from the historic workings.
15.03.2017	Torrington Project Update	RC percussion and diamond drilling commenced on 24 January 2017 and is ongoing; Topaz fibre research Project at the UNSW has commenced;

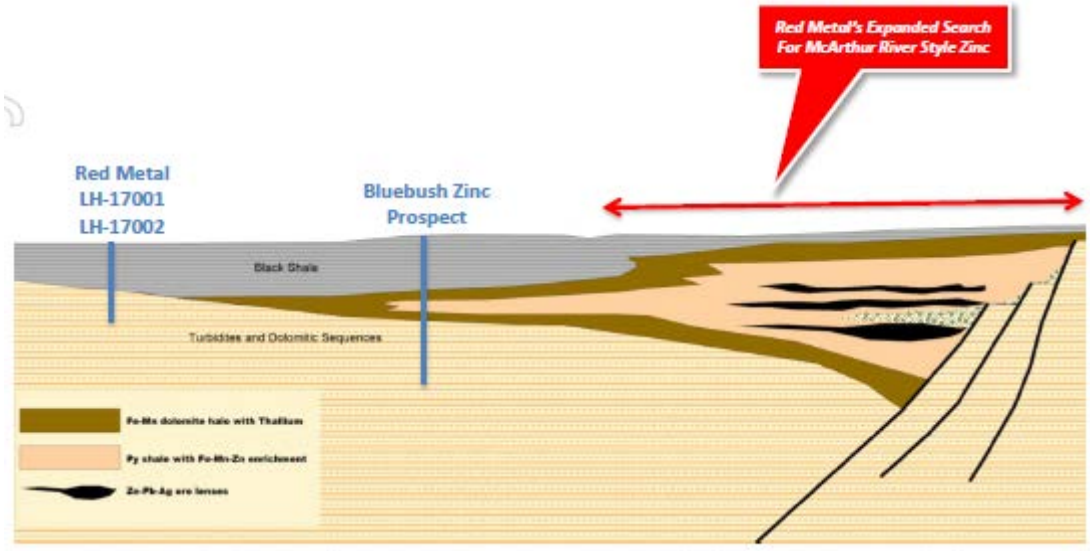
16.2 CENTURY SOUTH – KEY ASX ANNOUNCEMENTS- NEARBY TENURES

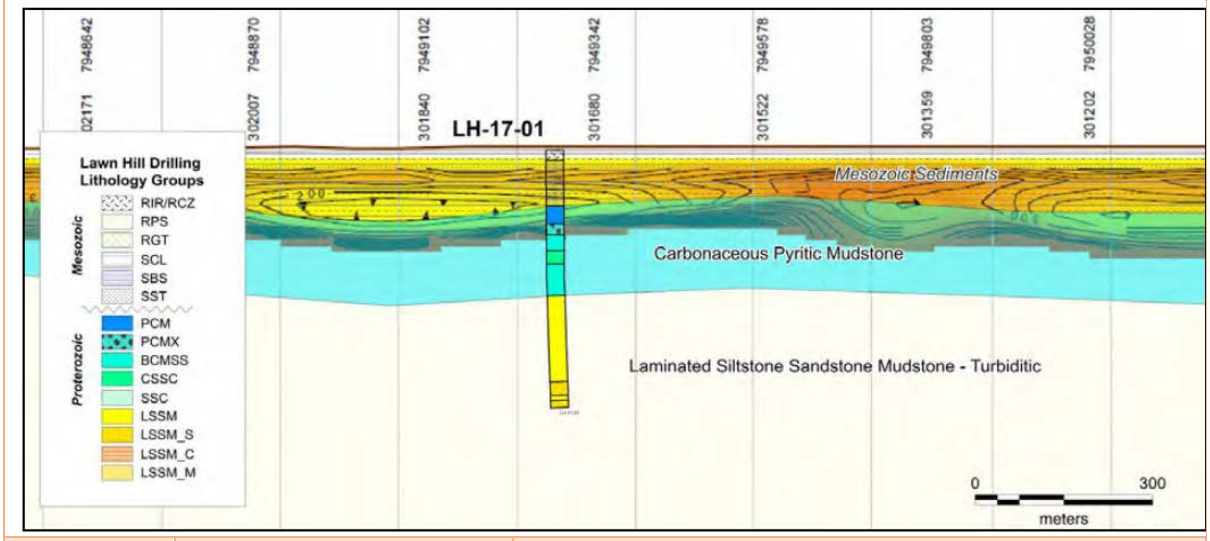
The key ASX announcements from companies near tenure have been summarised in Table 16.3 to Table 16.4.

Table 16.3 Superior Resources Limited (ASX: SPQ) Key ASX announcements

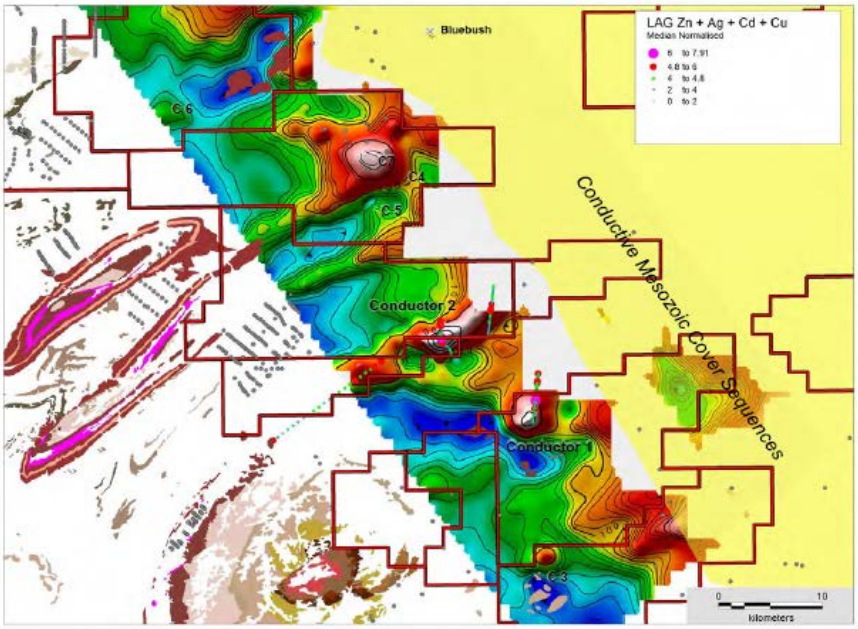
Date	ASX Announcement Title	Key Points for Tenement EPM26720: Grant date: 30/08/2018, Expiry date: 29/08/2023
31/03/2020	Quarterly Activities Report Period ending 31 March 2020	As of the latest quarterly report no further work on EPM26720 has been undertaken.
30/09/2018	Amended Quarterly Activities Report Period ending 30 September 2018	New Cu-Co Project Victor Extended (EPM26720 tenement) was granted. Rock chip samples collected by Superior during 2009 returned elevated cobalt assay results of up to 1600 ppm cobalt.
31/03/2018	Quarterly Activities Report Period ending 31 March 2018	Following Cobalt Assays in region. Rock chip samples collected in 2009 returned evaluated cobalt assays of up to 1600ppm cobalt. The application of EPM26720 tenure was put forward.

Table 16.4 Red Metal Limited (ASX: RDM) Key ASX announcements

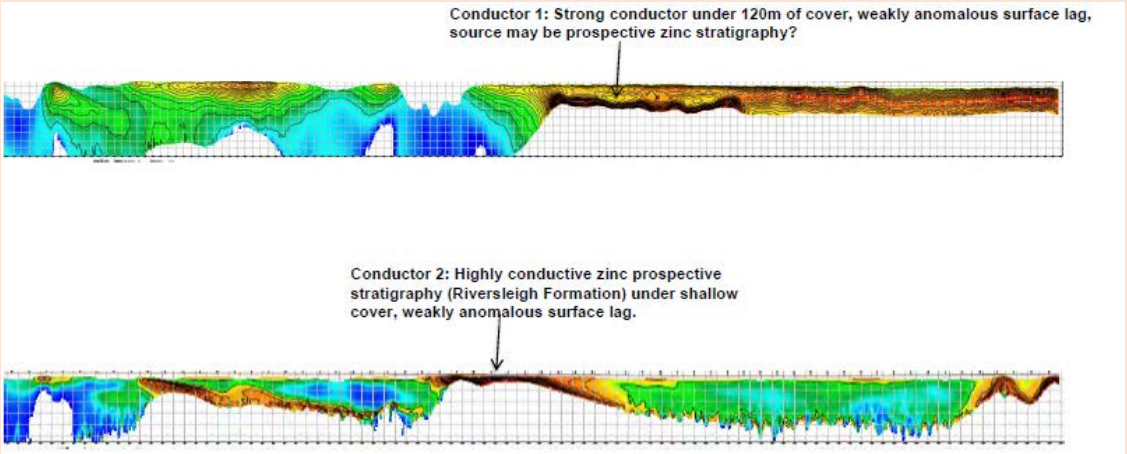
Date	ASX Announcement Title	Key Points for Tenement EPM26157: Grant date: 25/10/2016, Expiry date: 24/10/2021
30/04/2020	March 2020 Quarterly Report	New strategic arrangement with IGO Limited will see significant exploration activity in the mine region.
23/10/2019	September 2019 Quarterly Report	Delays on MT surveying have pushed back planned start of Lawn Hill survey back to early 2020.
29/07/2019	June 2019 Quarterly Report	OZ Minerals proposes Magneto-Telluric (MT) surveying to map prospective stratigraphy.
31/01/2019	December 2018 Quarterly Report	RDM executes *Greenfields Discovery Alliance* between RDM and OZ Minerals Limited, with a minimum $1.5M committed towards proof of concept exploration programs over the next 2 years. RDM share 49%, OZ Minerals Ltd 51%.
29/10/2018	September 2018 Quarterly Report	RDM proposes to use high resolution gravity in combination with deep penetrating, ground EM surveying methods to prioritise zinc targets for drill testing.
30/07/2018	June 2018 Quarterly Report	Land access preparations for electromagnetic trails were undertaken this quarter.
30/04/2018	March 2018 Quarterly Report	This quarter RMD plans to trail modern, deep penetrating, ground EM surveying methods over expanded search area to the east, with the aim of mapping thickened regions of zinc prospective and the highly conductive Riversleigh Siltstone. In these regions' basement rocks occur 300-400m below younger sediment cover (below).
		
30/01/2018	December 2017 Quarterly Report	Drillholes of EM conductors C1 and C2 intersected thick sequences of heavily carbonaceous pyritic mudstone

Date	ASX Announcement Title	Key Points for Tenement EPM26157: Grant date: 25/10/2016, Expiry date: 24/10/2021
		belonging to the Zn prospective Riversleigh Siltstone that explain the anomaly. Assays from regular spaced samplings down each drill hole returned low levels of Zn, Pb and Ag mineralisation. Interpretation of trace element signatures and ratios used to vector towards any nearby McArthur River style zinc mineralisation are in progress (below).
		
30/10/2017	September 2017 Quarterly Report	Conductors identified by VTEM will be tested for zinc potential with separate percussion/diamond core holes drilled to ~600m.
31/07/2017	June 2017 Quarterly Report	Processed VTEM survey data revealed 2 significant stratiform conductors. Conductor 1: Flat lying, 5km x 6km overlain by 120m of younger sedimentary cover. Conductor 2: 25km long w/ 30^{o} dip to the northwest, overlain by 50-200m of younger sedimentary cover. Both these conductors are interpreted as pyritic and carbonaceous sediments in areas of equivalent stratigraphy of the McArthur River Zn-Pb-Ag deposits. Surface lag sampling by RDM has identified low anomalous zinc, silver, cadmium, copper above these conductors and preparations for land access is being organised to begin groundwork and drill tests (below).

Date	ASX Announcement Title	Key Points for Tenement EPM26157: Grant date: 25/10/2016, Expiry date: 24/10/2021



[Figure 3] Lawn Hill Project: Conductivity depth slice at 200 metres below surface showing thematic zinc, silver, cadmium, copper surface lag geochemistry, main conductive targets (C1 to C7) for follow-up investigations, historic drill holes (grey dots) and Red Metal tenements (red lines). Mapped outcrop geology shows the McArthur River equivalent stratigraphy (Riversleigh Formation) highlighted in pink. Conductive Mesozoic cover sequences, where VTEM surveying failed to penetrate, is highlighted as yellow frosting.



[Figure 4] Lawn Hill Project: Example of reprocessed conductivity depth images from airborne VTEM lines flown in December 2016. Grid spacing on the imagery is 200 metres horizontal by 40 metres vertical on the top image and 200 metres horizontal by 200 metres vertical on lower image.

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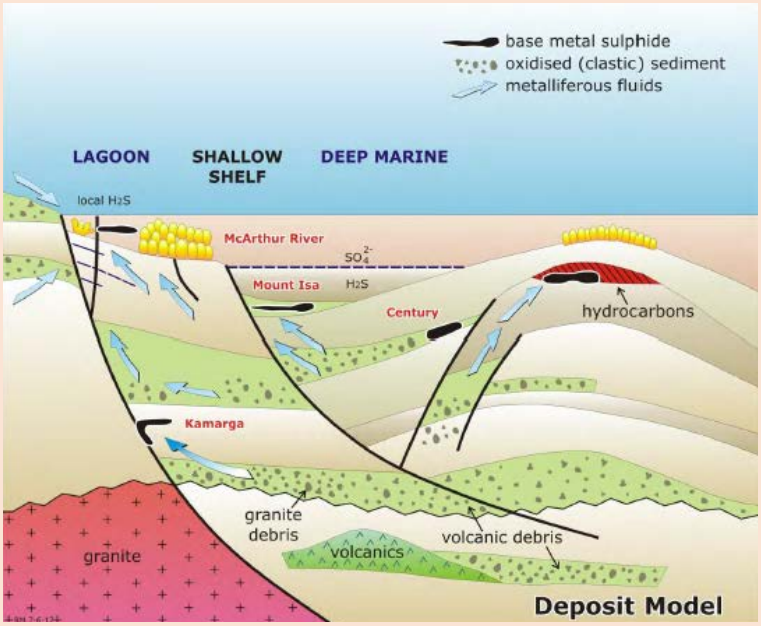
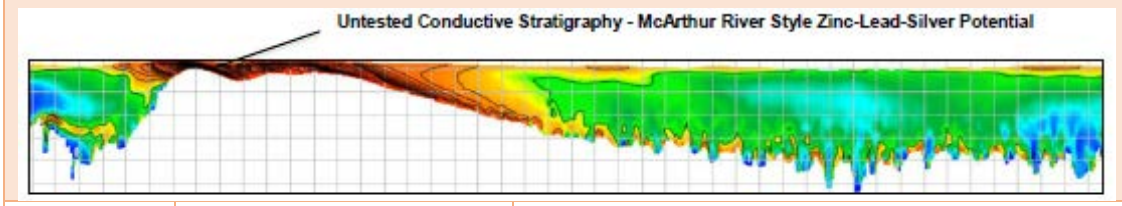
 **Lawn Hill Project: Simplified geological model highlighting the potential for zinc deposits in a range of geological settings within the one province**		
28/04/2017	March 2017 Quarterly Report	Conductivity depth images were produced from VTEM survey data, other products from GSQ/GA surveying anticipated soon. Planning for drilling at Lawn Hill approved by government, drilling anticipated to commence next quarter (below).
		
30/01/2017	December 2016 Quarterly Report	Geological Survey of Queensland (GSQ) with Geoscience Australia (GA) completed regional Airborne EM survey (VTEM) over Lawn Hill which incorporated some of RDM tenements. RDM funded an additional 110-line km of VTEM surveying to assist with targeting. EPM26157 tenure application granted.
31/10/2016	September 2016 Quarterly Report	Reprocessing of wide spaced ground EM data was conducted, where cover was believed to be <100m. Field inspection ascertained airborne EM surveying is most cost-effective tool to map lateral extent of anomalies. Lag sampling trailed across conductive anomalies, found low level elevations of Zn, Ag, Cd, Cu.

Date	ASX Announcement Title	Key Points for Tenement EPM26157: Grant date: 25/10/2016, Expiry date: 24/10/2021
26/04/2016	March 2016 Quarterly Report	RDM secured large area surrounding the giant Century Zn-Pb-Ag deposit following basin-wide structural and stratigraphic analysis. Tenement acquisitions have been secured were prospective targets are interpreted to have shallow cover sequences. Reviews of past exploration data and target generation are ongoing.

Announcements Summary

The Century Domain has extensive mineralisation of base metals. Association of zinc, lead, silver, Copper and Cobalt; all have had exploration regimes to ascertain if there are economically viable amounts for mining of each element present.

Zinc is now being considered as a primary economic target in the region. With several exploration regimes searching specifically for zinc anomalies across existing mining leases. This is evident with joint ventures such as Greenfields Discovery Alliance; a partnership between Red Metal Ltd & OZ Minerals Limited.

Their aggressive approach to the exploration of zinc using various pioneering techniques can attribute to the confidence seen in peers regarding the potential prospectivity of zinc in the area.

Red Metal Limited have undergone substantial activity in exploration compared to other peer company's in the area. A summary of what RDM has done since acquiring the EPM26157 tenement a little over 4 years ago, are as follows:

- After securing the tenement, review on past exploration data immediately commenced;
- Reprocessing of wide spaced EM over cover of less than 100m ensued;
- Field inspections and subsequent lag sampling commenced from knowledge acquired from EM;
- RDM then funded a component of a new regional airborne EM survey, headed by GSQ & GA;
- After the new airborne EM data was analysed, a drilling program was initiated;
- Separate percussion and diamond core holes were planned;
- Promising conductors confirmed as mineralisation bearing carbonaceous/pyritic Riversleigh Siltstone;
- Further plans to extent exploration to deeper sections of the basement where cover is up to 400m thick; via use of deep penetrating ground EM and high-res gravity instruments;
- RDM has JV with OZ Minerals to shares costs; named, Greenfields Discovery Alliance;
- OZ Minerals proposes alternative exploration techniques such as Magneto-Telluric (MT) deep penetrating EM method to survey prospective stratigraphy.

The adjacent Grevillea Prospect; to the immediate west of Century South, has had historical data collected for EPM7797. Held by Smart Trans, they entered into a joint venture with

Zinifex (later OZ Minerals). A similar exploration regime to that of RDM was exhibited, and like RDM the target host unit was the Riversleigh Siltstone.

Field work was undertaken in the area, followed by drilling and geophysical work. A gravity survey ensued, whereby multiple drill targets where identified.

Drilling confirmed the presence of mineralisation; albeit minor, lending further credence the area on the south side of the main fault complex (proximal to Grevillea) may yield an economic deposit discovery.

Zinc mineralisation potential within the Century domain is recognised as a regional target, with many companies performing desktop studies on the area. Preliminary study into historical exploration shows high Zn-Pb-Ag in the Lawn Hill Formation.

Soil assays returning significantly higher zinc proportions (6-9x; EPM11711), in regions analogous to the Century South tenement.

Significant secondary targets of lead have also been targeted. As well as zinc and lead, other base metals such as copper and cobalt that have been reported historically, as well as elevated quantities of precious metal; silver.

17.0 INTERPRETATION AND CONCLUSIONS

17.1 TYR PROJECT AREA INTERPRETATIONS AND CONCLUSIONS

The New England Fold Belt contains hundreds of occurrences of silver, gold, tungsten, antimony, tin, molybdenum and base metals and has been classified as a major tin province with many large to very large-zoned intrusion-related Sn–W and related base metal vein systems (Blevin & Dowes, 2017).

Metal zoning is well developed around the I-type Mole Granite and small, distal, high-grade, Ag-rich polymetallic systems exist within the Tyre project area. These polymetallic systems are structurally controlled and are within the zoned hydrothermal system centred around the Mole Granite.

The mineral zoning is typical of the district; comprising proximal Sn-W dominated systems, with distal Cu-Pb-Zn-Ag. Studies show the main mass of the Mole Granite was emplaced at a depth of about 7 km, seemingly followed by migration to shallow depths (~2 km), emplacement of microgranites and expulsion of mineralising fluids.

The granite melt also underwent extensive fractional crystallisation, which could have enriched fluid-mobile elements such as F, B, Sn, W and Bi in the melt prior to fracturing and development of the hydrothermal system (Norman, 2019). The sulphide rich base metal vein systems/lodes that form peripheral to Sn-W systems can host significant high Ag-Pb-Zn-Cu-(In) grades besides Sn (Blevin & Dowes, 2017).

For example, the Conrad base metal system, which is located approximately 65 km south west of Tyr, is one of the largest in the region. It is over 1,500 m long, has a mineralised envelope

up to 8.4 m wide surrounding narrow high-grade quartz sulphide and massive sulphide filled fractures that extend down dip to at least 260 m (Mears, 2007).

The Webb's Silver Project is another silver rich polymetallic system. It is located 13 km northwest of Emmaville, immediately south of the Mole Granite and is currently owned by Silver Mines Limited.

The Tyr Project area is located within the southern New England Fold Belt and has over 145 mineral occurrences have been recorded in the tenement. Those occurrences are hosted by the Early Permian Bondonga beds form two main clusters; the Mole River group in the northern part of the tenement and the Clive group in the southern part.

At these two areas, the mineral occurrences are structurally controlled and are related to the emplacement of the Mole Granite, which is classifies as a I-type Sn-W granite. Metal zonation around the granite is well developed, with proximal Sn-W, grading outwards from the intrusion to distal polymetallic Cu-Pb-Zn-Ag mineralisation.

Evidence suggests that the Tyr Project Area is underexplored and there is significant potential for structurally controlled silver rich polymetallic vein/lode systems.

Obvious areas that warrant further exploration include the areas containing the Mole River and Clive group of mineral occurrences. Both of these areas are strongly mineralised and detailed field mapping and surface geochemical sampling suck as rock chip and soil sampling, followed by ground geophysical surveys including IP or even sub-audio magnetics (SAM) and drilling is recommended.

Surface geochemical surveys within the Tyr Project Area have been completed by most of the past explorers. The geochemical surveys have included rock chip/grab, stream sediment, panned concentrate, soil sampling programs and high silver grades have been returned. Silver rich polymetallic veins are mainly restricted to the Early Permian Bondonga beds which crop out in the project area as a 5 km wide, northeast trending belt.

Modern exploration techniques are proposed to fully exploit the potential of the tenement, particularly the mineralised clusters of historical silver-zinc-lead mines, significant silver assays from adits, shaft, and other workings, significant silver assays from surface samples, and significant assays from drilling samples.

The mineral occurrences are structurally controlled and are associated with joints, faults, shear zones and lithological boundaries that have more or less controlled the emplacement of mineralising fluids.

Despite the large number of mineral occurrences and historical workings and significant silver assays (selective grab samples have results as high as 4,710 g/t, there has been little drilling in the Tyr Project area. While past exploration focused almost exclusively on the historical working, there was little emphasis on testing the strike potential of the structures and/or lithologies that control mineralisation.

17.2 CENTURY SOUTH PROJECT INTERPRETATIONS AND CONCLUSIONS

Data interrogation for the compilation of this report has made available more historical exploration data pertaining to Century South than was initially thought.

Publicly available data, including government sources such as the Queensland Government mining and exploration Open Data Portal, the Queensland Government geological mapping website (GeoResGlobe), the Geoscience Australia mapping resources website, relevant publications and reports, including previous work (survey, drilling) available in the Century Domain.

This report has also relied on academic and commercial research and regional geological assessments. Additionally, ASX and company information has been included for analogous near tenure peer deposit comparison.

The main data source has been the Mt Isa West 2016 database package which is one of the 5 databases that make up the Queensland Exploration Geochemistry and Drill hole Database (Queensland Government(c), 2020).

The database is a comprehensive record of information extracted from open file company reports archived in the Geological Survey of Queensland's("GSQ") Open Data Portal.

The Grevillia Deposit is hosted in unit 3 of the Riversleigh Siltstone. The Riversleigh Siltstone outcrops within Century South. The Grevillea area was targeted by Coolgardie Gold in 1993 when it conducted a regional drainage sampling geochemical program in conjunction with regional mapping.

Several anomalous catchments were identified, including one in the south west corner of the tenure area. The area was also targeted for its structural complexity, comprising a prominent domal feature combined with strong faulting. Follow up of the anomalism resulted in discovery of the Grevillea gossan, which was ferruginous, jarositic and baritic over approximately 200 m length by 80 m width.

Rock chip results were anomalous in Pb (3560ppm), As (650ppm) and Ag (16ppm) but zinc was low (101ppm). In September 1994, reverse circulation drill hole RVC001 intersected 25 m @ 5.2% Zn, 1.1% Pb and 29 g/t Ag from 88 m depth (Jenkins & al, 1998). Grevillia is defined by a subtle EM high and there are other EM anomalies within EPM26713 which need to followed up.

A review of historical company report (CR6577) over EPM14716 held by MMG Australia Limited who commissioned a detailed geochemical study over their extensive tenement holdings at the time. The report was completed by consultants IoGlobal Pty Ltd. and is very detailed being some 190 pages in length.

The report highlighted two areas within EPM14716 #14 and #27 which is within Century South EPM26713 and thorough review of this geochemical report is warranted. Some of the key findings a listed below:

- A large number of geochemical anomalies (~150 in total in the study area) have been identified in the available surface soils and stream sediment data.
- Geology was found to exert a significant control on the response of individual elements, with a number of elements being highly anomalous over the Thorntonia Limestone in the west of the study area.
- Partial leach and Mag Lag anomalies have also been identified.

Zinifex Ltd participated in a CRC "one-on-one" Project, CRC G14involving CSIRO, University of Melbourne, Monash University and Geoscience Australia. The aim of the Project was to create a 3D model of the Lawn Hill region using geophysical, geological and lineament analysis data to undertake fluid flow modelling in an attempt to identify possible sites of lead-zinc mineralisation.

The 3D model covers an area of approximately 30,000 km^2 extending from the Fiery Creek Dome in the south to the Murphy Inlier in the north. It includes the Lawn Hill 1:250,000 scale sheet, the northern part of the Camooweal sheet and the southern part of the Westmoreland sheets. A review of this report is required.

All surface geochemistry presented in this report is a collection of many different sampling programs and as such has not been levelled for differences in sampling medium, size fraction and geochemical analysis.

The Grevillea gossan was the subject of an Honours Thesis by Hann (1999), who found that Tl, Pb, Si and Fe are surface indicators of mineralisation at the Grevillea deposit. Hann (1999) found that there were two types of gossans present overlying the massive pyrite zone: the jarositic limonites and the haematitic limonites.

This contrasts with the Century deposit where the gossan lacks iron oxides and is dominated by barite. This needs to be kept in mind when conducting field work in the region. There are untested (drilling) surface geochemical anomalies to review.

The Century South Project area has the potential to be highly prospective for zinc and lead. Century South is located approximately 170 km to the southwest of the Gulf of Carpentaria. The region has access to critical infrastructure, including a rail network connecting the port town of Karumba; which lies 274 km to the northeast of the tenement.

New Century Resources already use the facilities at Karumba for transport of materials from Century Mine. As such, potential direct routes to key Asian markets are readily accessible via the port of Karumba. The demand for zinc has seen a steady increase in recent years due to general economic growth and increased industrialisation.

Other geopolitical and social trends; including the growing demand for electric vehicles (primarily in China), has seen the increased demand for lead. Lead being a major component in car batteries has attributed to its increase in price.

Generally, the Century South tenement has been sparsely sampled considering its proximity to the major Zn-Pb massive sulphide deposit of Century Mine.

Crucially, the tenement covers land on the exact same major fault strike as the mine. The major fault complex of the Termite Range Fault crosscuts the centre of the tenement NW-SE.

This faulted area would be the likely source of mineralisation across the tenement and should be explored and further defined. These constituents conform to a genetic model eluding to a potential deposit, indicative of other massive sulphide deposits found around the world.

Enough data from stream sediment, rock chip and soil assays, suggest that elevated levels of zinc and lead do exist within the tenement area.

Recent airborne EM surveys and subsequent exploration drilling programs conducted by peer companies (such as Red Metal Limited) targeting the mineralisation bearing unit of the Riversleigh Siltstone Formation have yielded promising but ultimately uneconomical levels of Pb and Zn. However, the results have been auspicious enough to ramp up exploration in the area immediately to the west of Century South.

A suggested exploration regime of starting at highlighted areas of magnetic anomalies with elevated stream sediments, may allow more targeted sampling. There are several outcrops visible from satellite imagery that could be easily inspected. Identifying boundaries this way may be a cost-effective way of defining lithologies.

This may be of benefit as some research suggests; particularly at Grevillea, that the mineralisation in the area is stratabound.

The thickness of the regolith is substantial in the southern areas, adjacent to Grevillea, west of Century South. The regolith cover overlaying the mineralisation bearing units can present multiple obstacles. Deeper penetrating EM methods such as Magneto-Telluric (MT) can be used but at a greater cost.

Ultimately, this factor may be unavoidable as exploration progresses deeper into the bedrock. Therefore, targeting the more oxidised gossans and obvious outcrops would be the quickest way to gain preliminary knowledge of the likelihood of mineralisation in the area.

18.0 RECOMMENDATIONS

18.1 TYR PROJECT AREA

Further work is recommended including the plotting of all surface geochemistry data based on sample type and filed mapping/sampling to confirm historical results. Obvious areas that warrant further exploration include the Mole River and Clive group of mineral occurrences.

Both areas are highly mineralised and field mapping and surface sampling is required.

Also recommended is a trial ground magnetometer survey to be run over known mineralised structures as there are several reports that sulphide mineralisation from some historical mines in the area contained pyrrhotite, a magnetic mineral (McClatchie, 2005) (McClatchie, 2006). In addition, the magnetometer survey may detect zones of magnetite destruction caused by hydrothermal alteration associated with the polymetallic mineralisation.

Historical fieldwork identified dykes and potentially mineralised zones extending from the existing shafts, these warrant further investigation. Additionally, there are other dykes in the area, which have not been investigated sufficiently in terms of the potential to contain mineralisation.

The key recommendations regarding areas of focus in the high level Project strategy are;

1. A database should be constructed/updated to host all boreholes from peer deposits, with as much data as reasonably possible from all government and commercial sources;
2. A thorough review of earlier ASX announcements with cataloguing of all notable results from previous tenement holders should be added to the database, as these may not be publicly available from other sources;
3. Further geological review to revisit the aforementioned gaps in the data and study of historic data including; geological units, surface (soil and rock chip) geochemistry and the contouring of any drilling and surface geochemistry samples to determine field targets;
4. A physical data review pertaining to surface sampling results from surrounding tenements;
5. Commence landholder negotiations and formalise land access agreements;
6. Ongoing monitoring of markets, commodity prices and peers;
7. Plan and undertake Low Impact Exploration initial field work including;
    a. Field logging;
    b. Geological mapping of previous drilling areas;
    c. Surface geochemical sampling including areas where historical mines exist;
    d. Surface geochemical sampling where historically high grades of surface sampling exist; and
    e. Geophysical surveys and other suitable activities to be determined.
8. Inspection of any available drill cores held in NSW core storage facilities;
9. High level reviews of any geophysical surveys, ground or air based and associated imagery as a guide to delineating more defined target areas; and
10. The planning and execution of drill target generation/identification and subsequent exploration drilling program should be completed, with the drillholes sampled and analysed to appropriate depths as to adequately understand the geology, geochemistry and stratigraphy of the area.

In terms of a proposed budget for forthcoming exploration at the Tyr Project Area, the following is proposed:

TYR PROJECT PROPOSED NEXT PHASE EXPLORATION BUDGET		
	Proposed Activity or Item	Cost (Est.)
		($A)
	Completion of landholder contacts, negotiations and access	$ 7,500
	Mapping and Sampling around Torny and Burra	$ 27,600
	XRF sampling along major trend zones of mineralisation	$ 19,900
	Ground Based Magnetometer Survey	$ 6,500
	Drilling of high priority areas outlined from results of above items	$ 154,600
	TOTAL BUDGET PROPOSAL	$ 216,100

18.2 CENTURY SOUTH PROJECT AREA

There is a large quantity of historical data covering the Century South Project area and surrounds and a detailed review of the data is recommended and should include the following:

- Levelling of the geochemical data set utilising IOGAS software or similar;
- Construct a database of previous drilling and geochemistry to enable meaningful data: interrogation in particular the Mount Isa West Data Package, and data released after the compilation of the Mount Isa West Data Package;
- Understand Structural controls on mineralisation in the region and apply to the Century South tenure;
- Geophysical review the available data including EM, Aster and Hymap data in house or external; and
- Review the EM highs located within the Century South tenure (EPM26713).

Other key recommendations for the Century South tenure area are;

1. A database should be constructed to host all boreholes from within tenure and peer deposits, with as much data encoded into the database from a variety of sources (ASX reports, core shed data, open file/publicly available reports etc);
2. A thorough review of earlier ASX announcements with cataloguing of all notable results from previous tenement holders should be added to the database, as these may not be publicly available from other sources;
3. Ongoing monitoring of markets, commodity prices and peers;
4. Further geological review and study of historic data including surface (stream sediment, soil and rock chip) geochemistry and the contouring of any surface geochemistry samples;
5. Inspection of drill core from “Lawn Hill DDH 83-5” stored at Queensland’s Exploration Data Centre core storage facility. Reviewed for lithology, key mineralisation target units, and laboratory analysis should be completed where possible, also examining handheld XRF analysis results if available;
6. All publicly available geophysical data (open file and for purchase) over the tenure should be reviewed to identify any exploration targets/focus areas within the tenure as this desktop study has primarily focused on zinc, however other significant mineralisation (i.e. Pb, Cu, Ag) has been noted within and near tenure;
7. All geophysical data should be reviewed and interpreted by a specialist consultant, familiar with the mineralisation style and local area;

8. Once the geophysical data should be reviewed and interpreted, further geophysical surveys should be considered to provide additional target information on the subsurface;
9. Plan and undertake Low Impact Exploration initial field work including field logging, geological mapping of previous drilling area (drillhole Lawn Hill DDH 83-5) of geological structures along strike of main fault complex, outcrop and soil sampling, geophysical surveys and other suitable activities to be determined;
10. The planning and execution of an exploration drilling program should be completed, with the drillholes planned to depth of termination in the bedrock of the ultramafic units (Kamarga Volcanics), to adequately correlate the stratigraphy of the region;
11. Drilling regime should focus in areas around mapped parasitic (third order) faults relative to main Termite Range Fault as PDS has previously identified these areas to have higher probability of yielding elevated base metal results; and
12. In depth mapping of surface and drilling sampling results based on mineralisation targets.

In terms of a proposed budget for forthcoming exploration at the Tyr Project Area, the following is proposed:

CENTURY SOUTH PROPOSED NEXT PHASE EXPLORATION BUDGET		
	Proposed Activity or Item	**Cost (Est.)**
		($A)
	Completion of landholder contacts, negotiations and access	**$ 1,000**
	Completion of data review, including database construction	**$ 4,000**
	Field work, geochemistry, rock chip and soil sampling, mapping	**$ 25,000**
	Field work, ground based geophysics, method(s) to be confirmed	**$ 15,000**
	Design drilling programme for next stage of exploration	**$ 10,000**
	TOTAL BUDGET PROPOSAL	**$ 55,000**

19.0 REFERENCES

The reference list below has the references for both Century South and Tyr Project area.

Andrews, S. (1998). *the Regional Setting of Base Metal Mineralisation in the Mid Proterozoic Upper McNamara Group Lawn hill Region (PhD Thesis).*

Australian Bureau of Meteorology. (2020, 07 06). *Australian Bureau of Meteorology*. Retrieved from BOM: http://www.bom.gov.au/water/groundwater/index.shtml

Australian Bureau of Statistics. (2015). *Australian Bureau of Statistics*. Retrieved from https://itt.abs.gov.au/itt/r.jsp?RegionSummary&region=35300&dataset=ABS_REGIONAL_LGA&geoconcept=REGION&datasetASGS=ABS_REGIONAL_ASGS&datasetLGA=ABS_REGIONAL_LGA&regionLGA=REGION&regionASGS=REGION

Australian Bureau of Statistics. (2019). *Census.* Tenterfield: Australian Govenment.

Australian Government Department of Agriculture and Water. (2016). Land Use Map. https://www.agriculture.gov.au/sites/default/files/abares/aclump/documents/clum_data_2016/CLUM_map_December2016_ALUM_secondary.pdf.

Australian Government Department of Agriculture and Water Resources. (2018). *Land Use Map*. Retrieved from https://www.agriculture.gov.au/sites/default/files/abares/aclump/documents/clum_data_2018/CLUM_map_December2018_ALUM_secondary.pdf

Bagci, B., Tomko, C., & Taylor, C. (2020, 03 24). Preliminary Desktop Study Year 2: Tyr Silver Project NSW, EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_PDS_0162.02.

Betts, P. G. (2004). Aeromagnetic patterns of half-graben and basin inversion: implications for sediment hosted massive sulfide Pb–Zn–Ag exploration. *Journal of Structural Geology (26)*, 1137-1156.

Blevin, P., & Dowes, P. (2017). *A mineral system model for Palaeozoic Sn-W deposits of the southern New england Orogen. Geological Survey of New South Wales.*

Blight, D. F. (1985). Economic potential of the lower Fortescue Group and adjacent units in the southern Hamersley Basin:. *Western Australia Geological Survey, Report 13, 25 p.*

Broadbent, G. C., & Waltho, A. E. (1998). Century zinc-lead-silver deposit: in Berkman D A, Mackenzie D H (Eds), Geology of Australian and Papua New Guinean Mineral Deposits. . The AusIMM, Melbourne pp 729-736.

Broadbent, G. M. (1998). Geology and origin of shale-hosted Zn–Pb–Ag mineralization at the Century Deposit, Northwest Queensland, Australia. Metallogeny of the McArthur River–Mount Isa-Cloncurry minerals province. *Economic Geology (93)*, 1264-1294.

Brown, M. (2020). Geological Review Report - Year 2 - Century South Proejct EPM26713. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_BUR_GRR_0356.01.

Brown, M. (2020, 03 24). Landholder Identification and Access Report – Year 2 Tyr Project EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_LIA_0283.01.

Brown, M. (2020). Landholder Identification and Access Report Year 3 Tyr Project EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_LIA_0353.01.

Bulner, W., & Brown, M. (2020, 10 20). Landholer Identification and Access Report - Year 2 - Century South Project EPM26713. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_LIA_0354.01.

Bureau of Meteorology. (2019). *Climate statistics for Australian locations*. Retrieved from Beureau of Meteorology: http://www.bom.gov.au/climate/averages/tables/cw_056032.shtml

Bureau of Meteorology. (2020, July 13). *Australian Groundwater Explorer*. Retrieved April 30, 2018, from http://www.bom.gov.au/water/groundwater/explorer/map.shtml

Champion, D. (2016). Geodynamic Synthesis of the Phanerozoic of eastern Australia. . Geoscience Australia, (2).

Clifford, M. K. (2003). *Pasminco Century Mine mineral resource statement. Annual Report.* Garbutt, Queensland.

Craig O'Neil, Cara Danis. (2013, 06 16). Retrieved from https://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0005/32972/NSW-Geology-Paper-ONeill-and-Danis-MQU.pdf

Croft, J. B., & Garman, M. R. (1972). *Wentworth Mining Corporation Pty Ltd Quarterly Report on Exploration Licences Nos 411, 413 & 477 (Digs report GS1972/033 - R00023966).*

Davey, G. (2019, 10 18). Data Room and Folder Structure Report - Year 1 - Century South Project EPM26713. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_DFR_0160.02.

Davey, G. (2019, 10 18). Landholer Identification and Access Report - Year 1 - Century South Project EPM26713. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_LIA_0267.01.

David Hobby. (2012). *Fourth Annual Report EL6114 For the 12 month period 14/08/2010 to 13/08/2011 Pyes Creek Project.*

Denaro, T., & Culpeper, L. (1992). *Mineral Exploration in the Lawn Hill 1:250,000 Sheet are, North-West Queensland. Queensland Geological Record 1999/2.* Department of Mines and Energy Queensland.

Denaro, T., & Culpeper, L. (1999). *Mines and mineralisation of the Lawn Hill 1:250,000 Sheet area, North-West Queensland. Queensland Geological Record 1999/5.* Queensland Department of Mines and Energy.

DPI. (2019, 06 16). *Department of Primary Industries NSW Government*. Retrieved from http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/266522/New_England_Orogen_Deposits.pdf

Elliot, S. (2009.). *Siver Mines Limited Annual Report EL6114 'PYES CREEK' For the period 13/8/07 to 1/7/09Digs report GS2009_067R00037680.* Siver Mines Limited.

Feltrin, L., McLellan, J., & Oliver, N. (2009). Modelling the giant, Zn–Pb–Ag Century deposit, Queensland, Australia. *Computers & Geosciences (35)*, 108-133.

Fox, M., & Taylor, C. (2019, Oct 18). Preliminary Targeting Study Report Year 1 Century South Project EM 26713. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_PTS_0277.01.

Fox, M., Taylor, C., & Ryan, N. (2019, Oct 18). Preliminary Desktop Study QLD Lead-Zinc-Silver Project Century South EPM 26713. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_ PDS_0266.01.

Geological Survey of Queensland. (2020). *GSQ Open Data Portal*. Retrieved from https://geoscience.data.qld.gov.au/dataset?type=spectral

Geoscience Australia. (2020,). *Geoscience Australia*. Retrieved from Elevation and Depth - Foundation Spatial Data.Retrieved July 2020, from http://elevation.fsdf.org.au/ : http://elevation.fsdf.org.au/

Glen, R. (2013). Refining accretionary orogen models for the Tasmanides of eastern Australia. Australian Journal of Earth Sciences, 60(3), pp.315-370.

GSQ. (2020). *GeoResGlobe - Queensland government digital mapping resource*. Retrieved from https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/online-services/georesglobe

Gustafson, L. W. (1981). Sediment-hosted stratiform deposits of copper, lead, and zinc. *Economic Geology (75)*, 139-178.

Henley, H & Brown, RE. (2000). *Exploration data package Clive 1:100 000sheet, vol1 geol, min occurrences, expl & geochem; vol 2 min deposit data sheets, list, maps (explanatory notes) (Digs Report GS1998/125 R00031737).* Geological Survey of NSW.

Henley, H., & Brown, R. (2000). *Exploration Data Package, Cline 1:100 000 Sheet Area, Volume 1 Geology, Mineral Occurrences, Exploration and Geochemistry. Geological survey of New South Wales.*

Henley, H., & et al. (2001). *Grafton–Maclean 1:250 000 Metallogenic Map SH/56-6 and SH/56-7: Metallogenic Study and Mineral Deposit Data Sheets.* Geological Survey of New South Wales.

Henley, H.F; etal. (2001). *Grafton–Maclean 1:250 000 Metallogenic Map SH/56-6 and SH/56-7: Metallogenic Study and Mineral Deposit Data Sheets.* Geological Survey of New South Wales.

Hutton, L., Denaro, T., Dhnaram, C., & Derrick, G. (2012). *Mineral Systems in the Moount Isa Inlier.*

J.D.Elliot. (2008). *ANNUAL REPORTEL6512 'Mole River' Tenterfield District NSW.*

Jenkins, D., & al, e. (1998). Grevillea zinc-lead-silver deposit. *Geology of Australia and Papua New Guinea Mineral Deposits*, pp753-758.

Jessop, k. D., & Piazolo, S. (2019). Tectonic cycles of the New England Orogen, eastern Australia: A Review. Australian JOurnal of Earth Sciences, 66(4), pp. 459-496.

L. Feltrin, J. M. (2009). Modelling the giant, Zn–Pb–Ag Century deposit, Queensland, Australia. *Computers & Geosciences (35)*, 108-133.

L. Gillespie. (2010). *SILVER MINES LIMITED ANNUAL REPORTEL6114 'Pyes Creek' For the period 01/07/09 to 13/08/10.*

M. Brown. (1982). *Report to the NSW Department of Mineral Resources EL 1474 and EL 1670 for the 6 months ending 27 April, 1982.* Kennecott Explorations LTD.

McClatchie, L. (2005). *Report on Exploration Licence 6114, Pyes Creek (Period 14.08.2004 - 13.08.2005). Central West Gold NL.R00054196.*

McClatchie, L. (2006). *Exploration Licence 6114, Pyes Creek. Report for Period 14.8.2005 to 13.8,2006. Central West Gold N. R00041425.*

McGoldrick, P., & Hann, V. (2004). *Grevillea Zn-Pb-Ag Prospect, NW Queensland.* Hobart, TAS: Centre for Ore Deposit Research, University of Tasmania.

McGoldrick, P., & Hann, V. (2007). *Grevillea Zn-Pb-Ag Prospect, NW Queensland.*

Mears, R. (2007). *Mineralisation styles at the Conrad silver mine, Mines & Mines 2007, AIG Bulletin 46.*

Minview. (2019). Retrieved from Minview exploration and mining titles: https://minview.geoscience.nsw.gov.au/

MinView. (2019a). *Minview Contours 10m*. Retrieved from MinView: minview.geoscience.nsw.gov.au

Minview. (2019b). *Minview Surface Geochemistry*. Retrieved from Minview: https://minview.geoscience.nsw.gov.au/

Minview. (2019c). *Data Sourced from NSW Resources and Geoscience, Minview*. Retrieved from https://minview.geoscience.nsw.gov.au/

Minview. (2019d). Retrieved from Minview, drillholes: https://minview.geoscience.nsw.gov.au/

MinView. (2020). Retrieved from MinView: minview.geoscience.nsw.gov.au

Nationalmap. (2020, 07 06). Retrieved from nationalmap.gov.au: https://nationalmap.gov.au/

New Century Resouces. (2017, August 24). IDENTIFICATION OF SIGNIFICANT HIGH GRADE MINERALISATION. Melbourne, VIC, Australia.

New Century Resources. (2020). *Geology and Resources*. Retrieved from https://www.newcenturyresources.com/century-mine-project/geology-resources/

Norman, M. (2019). *composition, source, and petrogenesis of the Mole Granite, New England Batholith, NSW. The australia National University, Canberra.*

O'Dea, M. L. (1997). Geodynamic evolution of the Proterozoic Mount Isa terrain. *Geological Society of London Special Publication*, 99-122.

O'Rourke, A. J. (2017). Century Zn-Pb-Ag deposits. *Australian ore deposits*, 485-492.

Queensland Government. (2019). *GeoResGlobe*. Retrieved from https://georesglobe.information.qld.gov.au/

Queensland Government(a). (2020). *GeoResglobe*. Retrieved from https://georesglobe.information.qld.gov.au/

Queensland Government(c). (2020). *GSQ Open Data Portal*. Retrieved from https://geoscience.data.qld.gov.au/

Queensland Government(d). (2020). *Queensland surface and drillhole geochemistry database*. Retrieved from https://www.business.qld.gov.au/industries/mining-energy-water/resources/geoscience-information/maps-datasets/digital-data/exploration-geochemistry

Rimas Kairaitis, Joe Xie. (2008). *EXPLORATION LICENCE 6442 – SILENT GROVE ANNUAL REPORT TO 07/07/2007.* YTC Resources Ltd.

Rosenbaum, G. (2018). The Tasmanides: Phanerozoic Tectonic Evolution of Eastern Australia. . Annual Review of Earth and Planetary Sciences, 46(1), pp.291-325.

Ryan, N. (2019, 03 26). Data Room and Folder Structure Report. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_DFR_0128.02.

Ryan, N. (2019, Oct 18). Field Reconnaissance Planning Report Year 1 Century South Project EPM26713. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_FPR_0278.01.

Ryan, N. (2020, 12 20). Dataroom and Folder Structure Report: Tyr Project, NSW EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_FDR_0218.01.

Ryan, N. P. (2020, 03 24). Field Reconnaissance Planning Report – Year 2: Tyr Silver Project, NSW EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_FPR_0285.01.

Ryan, N., & Bagci, B. (2020, 03 24). Preliminary Geological Review of Silver Mines: Tyr Silver Project, NSW EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_PGR_0284.01.

Ryan, N., Gray, C., & Roberts, W. (2019, 03 28). Preliminary Desktop Study Year 1 Tyr Project EL8728. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_PDS_0088.01.

Ryan, N., Taylor, C., & Fox, M. (2019, 10 18). Preliminary Desktop Study - QLD Lead-Zinc_Silver Project - Century South Project EPM26713. Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_PDS_0266.01.

S. Elliott. (2009). *SILVER MINES LIMITED Annual Report EL6114 'PYES CREEK' For the period 13/8/07 to 1/7/09.*

Stephens, M. (2020, Oct 18). Field Reconnaissance Planning Report Year 2 Century South Project EPM26713. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_NZR_FPR_0331.01.

Stephens, M., & Bagci, B. (2020, 10 13). Field Reconnissance Planning Report Tyr Project EL8728 Year 3. Unpublished Report from Xplore Resources Pty Ltd. Xplore Resources Doc. No.: XR_BUR_EPP_0321.01.

Straw, C., & Hobby, D. (2012). Silver Mines Ltd-Investors Presentation .

Sweet, I., & Hutton, L. (1982). Lawn Hill region, Queensland. 1:100 000 geological map commentary. . Bureau of Mineral Resources, Australia, Canberra.

Szulc, J. (1993). Early Alpine tectonics and lithofacies succession in the Silesian part of the Muschelkalk basin. A synopsis. In: Hagdorn, H. & Seilacher, A. (eds) Muschelkalk SChontaler Symposium 1991. . Goldschneck-Verlag, Werner K. Weidert, Korb 19-28.

Tawa, R. (2013). *Annual Report EL 6114 'PYES CREEK' For the 12 month period 14/08/12 to 13/08/13Digs report GS2013_13205 - RE0004641.* Silver Mines Limited.

Tawa, R. (2013a). *Annual Report EL6771 For the 12 month period 9/5/12 to 8/5/13 (Digs report GS2013_1125RE0004452.* Silver Mines Limited.

University of Queensland. (2020). *NW Mineral Province Deposit Atlas*. Retrieved from https://smi.uq.edu.au/project/nw-mineral-province-deposit-atlas

Valenta, R. (2018). *NW Queensland Mineral Province Deposit Atlas Prototype Report – the Mount Isa and Ernest Henry Deposits.* The Sustainable Minerals Institute, The University of Queensland, Australia. .

20.0 CERTIFICATION OF QUALIFIED PERSON

I, Matthew Francis Stephens, B. App. Sc, FAIG of Middle Ridge, Queensland, Australia, am a Senior Consultant Geologist with Xplore Resources with a business address at 12d/2-4 Flinders Parade, North Lakes, Brisbane, Queensland, Australia, 4509.

I, Matthew Francis Stephens, B. App. Sc, FAIG of Middle Ridge, Queensland, Australia, do here by certify that as a Qualified Person:

- This certificate applies to the Technical Report entitled 'Independent Technical Report (NI 43-101) on the Tyr Project and Century South Project areas, Northern NSW and Northwest Qld respectively, Australia,' dated April 28th, 2021 (the "Technical Report"), prepared for 'Megawatt Lithium and Battery Metals Corp;

- Consent to the public filing of the 'Technical Report';

- Consent to the use of extracts from, or a summary of, or images from the 'Technical Report'; and

- Confirm that as a Qualified Person the document has been read and that it and accurately represents the information in the 'Technical Report' or part that the Qualified Person is responsible for.

I, Matthew Francis Stephens, B. App. Sc, FAIG of Middle Ridge, Queensland, Australia, do hereby certify that:

- I am responsible for all Sections of the Technical Report, with the exception of "Section 16.0 OTHER RELEVANT DATA AND INFORMATION".

- I am a graduate of the University of Southern Queensland, (B. App Sc., 1983).

- I am a Fellow (FAIG) in good standing of the Australian Institute of Geoscientists, member # 4788.

- My relevant experience is 37 years in metalliferous mining, development and exploration, including several years working in base metal deposits in Queensland and New South Wales.

- I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").

- Due to the global COVID pandemic occurring during the period of the compilation of this report, travel between Australian States was restricted and I had to rely on locally based geologists to perform the site visit under my direction and guidelines.

- I am independent of Megawatt Lithium and Battery Metals Corp as defined by Section 1.5 of the Instrument.

- I have no prior involvement with the Properties that are the subject of the Technical Report.

- I have read the Instrument and the Technical Report has been prepared in compliance with the Instrument (NI 43-101).

- As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 28th day of April 2021 at Brisbane, Queensland Australia.

"Original document signed and sealed by Matthew Francis Stephens

Matthew Stephens, FAIG, B. App. Sc.
Senior Consultant Geologist
Xplore Resources Pty Ltd

AUSTRALIAN INSTITUTE OF GEOSCIENTISTS

Supporting Geoscientists

Annual Membership Certificate 2020/2021

The Council of the Australian Institute of Geoscientists hereby certifies that

Mr Matthew Francis Stephens FAIG

(# 4788)

is a current, financial member of the Institute, as stipulated in the Articles of Association, has agreed to be bound by the Institute's Code of Ethics, and holds the membership level of Fellow.

Andrew Waltho
President

Beau Nicholls
Councillor for Membership

Current to 30th June 2021

Joining date: 14th September 2011

Australian Institute of Geoscientists
www.aig.org.au

21.0 ABBREVIATIONS, ACRONYMS AND GLOSSARY

Term	Abbreviation
Australian Institute of Geoscientists	AIG
Australian Laboratory Services	ALS
Gold	Au
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
Exploration Licence	EL
Fellow of the Australian Institute of Geoscientists	FAIG
Grams per tonne	g/t
Joint Ore Reserves Committee	JORC
Joint Venture	JV
Kilometre	Km
Square kilometre	Km2
Metre	m
Million	M
Million years	Ma
millimetre	mm
Mining Licence	ML
Million tonnes	Mt
Mount	Mt
Prospecting License	PL
Propriety Limited	Pty Ltd
Quality assurance and quality control	QAQC
Qualified Person	QP
Rotary air blast drilling	RAB
Reverse circulation drilling	RC
Targeted sample	TS
Western Australia	WA
Three dimensional	3D
one millionth of a metre	µm
percentage	%
Degrees Celsius	°C
Number	#
Degrees	°

Term	Explanation
aerial photography	Photographs taken from an aircraft or other flying object
alluvial	Associated with sedimentary processes involving water
alluvium	Loose, unconsolidated sediment that has been eroded by water
Archaean	A geological period from 4,000 to 2,500 million years before present day.
assay	The process of determining the content of a mineral or metal through a range of physical or chemical techniques.
basalt	A fine grained igneous rock consisting mostly of plagioclase feldspar and pyroxene.
basement/bedrock	In general terms older, typically crystalline rocks which are often covered by younger rocks.
basin	Large low-lying area, often below sea level, in which sediments collect
bedrock	Undisturbed, lithified rock that lies beneath surface layers of soil or other material
colluvium	Loose, unconsolidated sediments that have been deposited at the base of hillslopes by either rainwash, sheetwash, slow continuous downslope creep, or a variable combination of these processes
concentrate	End product of the crushing, grinding, and flotation processes.
conglomerate	A coarse-grained sedimentary rock composed of a substantial component of rounded to subangular rock fragments embedded in a matrix of fine grained or cementing material
contact	A boundary which separates one rock type from another
craton	An old stable portion of the earth's crust, generally of Archaean age
database	A collection of information that is organized so that it can be easily accessed, managed and updated
diamond drilling	Drilling method that uses a rotating bit encrusted with diamonds to collect a cylinder of rock. Drilling fluids may be used.
fault	A planar fracture or discontinuity in a volume of rock, across which there has been significant displacement as a result of rock-mass movement
felsic	Rocks that are relatively rich in elements that form feldspar and quartz
fire assay	The quantitative determination in which a metal or metals are separated from impurities by fusion processes and weighed in order to

	determine the amount present in the original sample
formation	The fundamental unit of lithostratigraphy. A formation consists of a certain amount of rock strata that have a comparable lithology, facies or other similar properties
geochronology	The science of determining the age of rocks, fossils, and sediments using signatures inherent in the rocks themselves
geotechnical	A generic term for work carried out using the mechanical properties of rocks.
granite	A coarse-grained igneous rock composed of mostly two minerals: quartz and feldspar
gravel	Rock that is between 2 to 63 mm in its longest dimension
halo	A secondary dispersion pattern due to the supergene migration of elements in the regolith or soil
Inferred Mineral Resource	An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drillholes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101. (CIM Standards, 2014)
Instrument	The guidelines and rules of the National Instrument 43-101 Rules and Policies
intrusion	The action or process of forcing a body of igneous rock between or through existing formations, without reaching the surface
joint venture	A business entity created by two or more parties, generally characterized by shared ownership, shared returns and risks, and shared governance
JORC Code	The JORC Code is an Australian reporting code which is applicable for companies listed on the Australian Securities Exchange. It provides minimum standards for public reporting to ensure that investors and their advisers have all the information they would reasonably require

	for forming a reliable opinion on the results and estimates being reported. The current version is dated 2012.
lithology	The study and description of rocks, including their mineral composition and texture.
mafic	A silicate mineral or igneous rock that is rich in magnesium and iron
matrix	The fine-grained materials that surround larger grains in a rock
matrix-supported	A sedimentary rock of which a defined majority is the fine-grained matrix as opposed to the clasts, clasts constitute less than 15% of its volume.
Memorandum of Agreement (MOA)	A written document describing a cooperative relationship between two parties wishing to work together on a project or to meet an agreed upon objective. A MOA serves as a legal document and describes the terms and details of the partnership agreement
microbial reefs	Bar of rock produced by microbial activity beneath the surface of the water
Mineral Resource	The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing. (CIM Standards, 2014)
mineralisation	The process by which a mineral or minerals are introduced into a rock, resulting in a valuable deposit.
Native title	Native title rights and interests are those rights in relation to land or waters that are held by Aboriginal or Torres Strait Islander peoples

	under their traditional laws and customs, and which are recognised under common law.
outcrop	A visible exposure of bedrock or ancient superficial deposits on the surface of the Earth
percussion drilling	Drill technique which works by repeatedly raising and dropping a large hammer bit into a well, each time removing a layer of sediment
petrology	The study of the composition of rocks, utilising the fields of mineralogy, petrography and optical mineralogy to describe and understand the origin of rocks
proximal	Relating to or denoting an area close to a centre of a geological process such as sedimentation or volcanism
QAQC	Quality Assurance/Quality Control – a set of tests to ensure precision, accuracy and lack of bias of grade and bulk density measurements.
QP	Qualified Person, as defined in National Instrument 43-101
reverse circulation drilling (RC)	Drilling method that uses compressed air and a hammer bit to produce rock chips.
rock chips	Crushed fragments of rock from a percussion or rotating bit in an exploration drillhole
sandstone	Sedimentary rock consisting of sand or quartz grains cemented together
sedimentary	Rock forming process where material is derived from pre-existing rocks by weathering and erosion.
stratigraphy	The sequence of rock units through time.
stromatolites	Layered mounds, columns, and sheet-like sedimentary rocks originally formed by the growth of layer upon layer of cyanobacteria, a single-celled photosynthesizing microbe
tail/tailings	The residue from a mineral processing plant, generally pulverised waste rock.
tenement	A generic term for an exploration or mining licence or lease.
trench	A narrow excavation used is exploration sampling
tuffaceous	Used to describe a rock which consists of volcanic detritus such as ash or cinder, which is typically stratified
volcanic	An igneous rock of volcanic origin.
volcaniclastic	Relating to or denoting a clastic rock which contains volcanic material
3D geological model	Computerised representation of the geology, incorporating stratigraphy, structural features and other important geological features