

ACTIVITIES REPORT – JUNE QUARTER 2017

Summary

Koonenberry ELs 6400, 6424 and 6464, NSW

- Application to renew EL6400 has been made, with 65% area reduction, for 2 years from 31 March 2017 and confirmation of renewal was received on 25 July 2017 from the Department of Industry (“DPI”). Future plans will involve investigation for the potential of in-situ Cu (copper) leaching–extraction of existing JORC Code (2004) resource at Grasmere-Peveril.
- Following analysis of risks, no renewal application of EL 6424 was made when it expired on 25 May 2017. Compliance reports (Annual, Final and Environmental) have been submitted to the DPI.

Pooraka ELs 6413, 7564, and 8424, NSW

- The strongest TDEM conductors on ELs 6413 and 7564 were tested by 2 deep RC percussion holes in March 2017. The results were received in May 2017. The conductors turned out to be formational in origin (caused by saline, clay-rich rocks) and not related to sulphide-gold mineralization.
- Application for renewal has been made for EL 6413 (Pooraka 1) for 2 years from 16 May 2017. A proposed renewal instrument was received on 24 July 2017 from the DPI. EL 8424 (Pooraka 3) is renewed until 17 February 2019, and EL 7564 (Pooraka 2) until 17 June 2018. These 3 ELs cover possible WNW strike extensions of the Canbelago gold mine directly to the south, and also cover the Gilmore Suture.

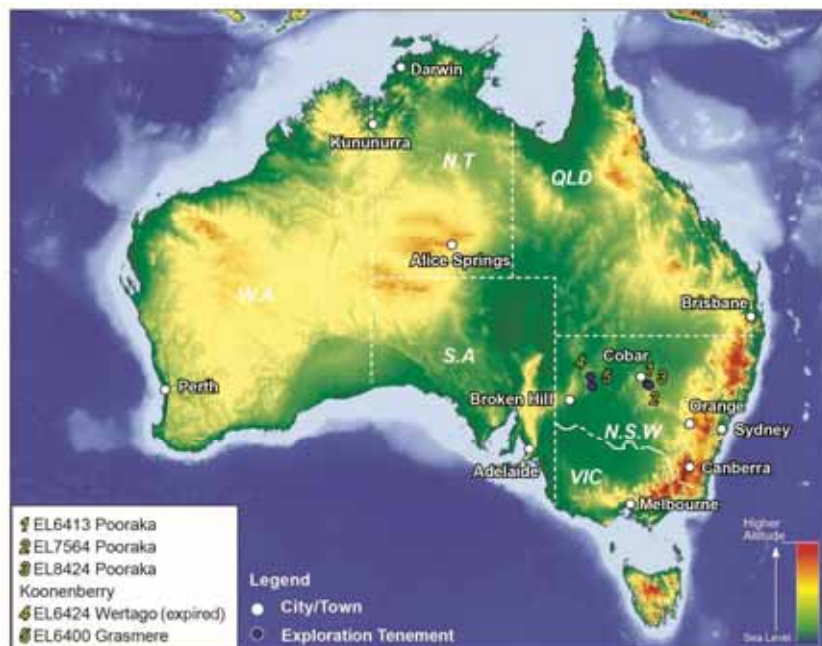


Figure 1 – List of Licences and their Locations in New South Wales, Australia

ACTIVITIES IN THE KOONENBERRY

EL 6400 NSW – 100% interest (was under renewal application and confirmed renewed on 25 July 2017)

EL 6424 NSW – 100% interest (expired on 25 May 2017)

Copper-Zinc-(Silver) Exploration

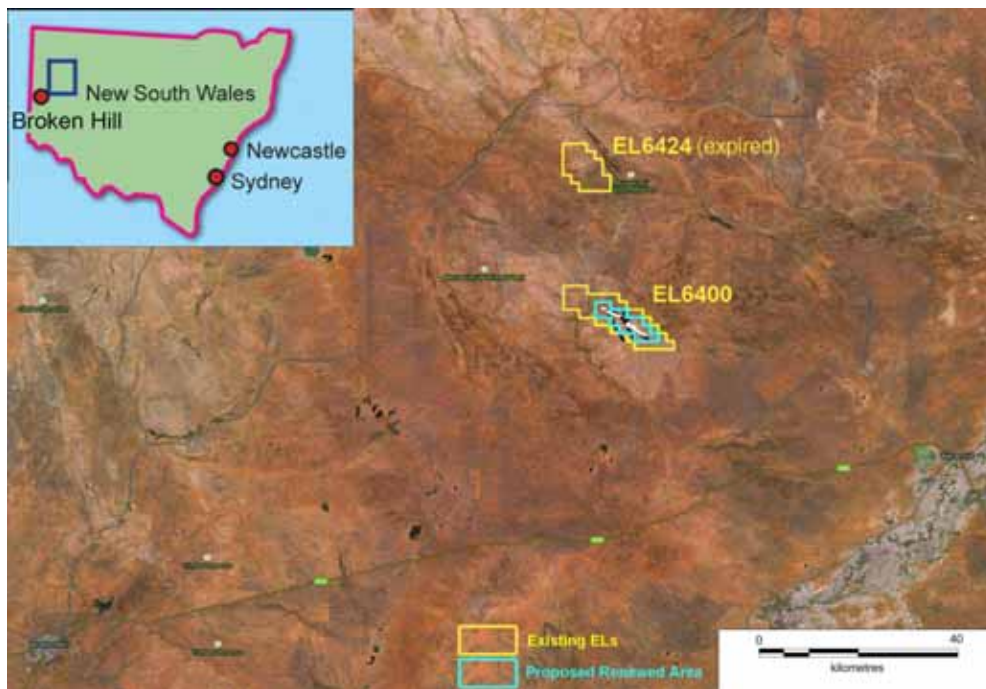


Figure 2 - Locations of Current and lapsed Koonenberry Exploration Licences

Note: Line of mineralization – white; Faults- black

EL 6400: Application for renewal of this EL has been made, with 65% area reduction to 17 units, for 2 years from 31 March 2017 and the renewal was confirmed by the DPI on 25 July 2017. It is of principal interest to the Company as it covers the Grasmere-Peveril Cu-Zn-(Ag) deposits, which contain a significant indicated and inferred JORC Code 2004 compliant resource of 5.75mt @ 1.03% Cu, 0.35% Zn, 2.3g/t Ag and 0.05g/t Au (Inferred: 2.73 mt grading 0.9% Cu, 0.4% Zn, .04 g/t Au and 2.05 g/t Ag. Indicated: 3.02 mt grading 1.15% copper, 0.3% Zn, 0.06 g/t Au and 2.53 g/t Ag). Information relating to this mineral resource was prepared and first reported in accordance with the JORC Code 2004 in 2006. It has not been updated since, to comply with the JORC Code 2012, on the basis that the information has not materially changed since it was reported in 2006.

Following unsuccessful attempts in early 2015 to locate WNW extensions to the line of lode (9 RC percussion holes drilled) the Company has decided to investigate the potential of *in-situ leaching* (“ISL”) techniques to extract Cu from known lodes. ISL of copper was first undertaken in China around 980 AD, and probably as early as 200 BC. Copper is usually leached using acid (sulfuric acid or hydrochloric acid), then recovered from solution by *solvent extraction-electro-winning* (SX-EW) or by chemical precipitation, e.g. using iron as a precipitant. Ores most amenable to ISL include the copper carbonates malachite and azurite, the oxide tenorite, and the silicate chrysocolla. Other copper minerals, such as the oxide cuprite and the sulfides chalcocite and chalcopyrite require addition of oxidizing agents such

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as ferric sulfate and/or oxygen (air) to the leachate before the minerals can be fully dissolved. In some situations oxidation can be speeded up by introduction of the bacteria *Thiobacillus ferrooxidans* which feeds directly on sulfide minerals.

Copper ISL is normally undertaken by *stope leaching* where broken low-grade ore is leached in a current or former underground mine. Leaching can also take place in backfilled stopes or caved areas. By 1994 ISL of copper was reported at some 16 mines in arid parts of the USA. The most successful was the San Manuel mine in Arizona where ISL was initially used on waste solutions from underground mining, but later improved using the *well-to-well recovery* method. That method has since been applied to many other copper deposits in Arizona. At the San Manuel Mine by 1996 with over 900 leach wells installed, annual recovered copper production reached 15,000t of metal at an operational cost of about \$900t. ISL also has the benefit of having a low environmental impact, with little infrastructure and capital investment required.

In the case of the Grasmere-Peveril line of lode the 600+ existing drill holes could be selectively re-entered (cleaned out) and used as leach wells or extraction wells. The leach wells would introduce an oxygenated acidic leaching liquid with a fine suspension of quartz grains, into the lodes under sufficient pressure to frack them and deposit quartz grains in cracks as the *propping agent*. Oxygen would react with the abundant contained pyrite, and, in the presence of the aqueous leach liquid, should rapidly produce ferric sulfate and additional sulfuric acid, which would speed up dissolution of chalcopyrite. The reaction is exothermic (generates heat) which also enhances the process. In the unlikely event that acid leaching was found to be difficult ammonia-oxygen leaching could be used.

The Grasmere-Peveril mineralization exhibit a number of features that appear efficacious for ISL extraction of copper, using sulphuric acid. Firstly, the ore consists largely of broken and fractured pyrite grains, with chalcopyrite and lesser sphalerite conveniently located in cracks and crevices between pyrite grains. Hydraulic fracking should preferentially open those cracks and crevices, and the abundant pyrite, when oxidized, should produce new (additional) sulphuric acid. The low proportion of acid reactive carbonate minerals (gangue) in the ore means that acid would not be consumed reacting with non-sulphide minerals. The consistent sulphide mineralogy all along the 5 km line of lode means that once an ISL acid extraction process is optimized in one area, it can then be applied in all other areas.

The retained units of the EL, which were under renewal application at the end of the quarter (confirmed renewed on 25 July 2017) cover the line of lode and immediate environs. It is intended that bench test metallurgical studies together with further field studies, including hydrogeological assessments, will be undertaken as part of a preliminary feasibility assessment of using ISL to commercially exploit the Grasmere-Peveril mineralization.

Subject to successful outcomes from the work described above there may be scope for commercialisation of the existing JORC Code (2004) resource which is not suitable for conventional mining and treatment due to the small scale, narrow shoots, remote location and high capital costs.

EL 6424: This EL covers the Wertago copper diggings and Netherungie silver field, where a detailed gravity survey in 2014 outlined several gravity lows (possible porphyry intrusions) considered to be worthy of deep drilling. Two 450m long inclined RC pre-collared diamond holes were planned to test for hidden porphyry Cu-Mo-Au mineralization beneath the silver field. Following an analysis of economic risks (expected economic target size, remote location) and environmental risks (close proximity to indigenous national parks and sensitive archeological sites) it was decided to withdraw from the venture and allow this EL to expire on 25 May 2017. Compliance reports (Annual, Final, and



Environmental) have been submitted to the DPI and the security should be returned to the Company shortly.

ACTIVITIES NEAR COBAR

Pooraka ELs 6413 (under renewal application), 7564 and 8424 – NSW - 100% interest Gold, Silver and Base Metal Exploration

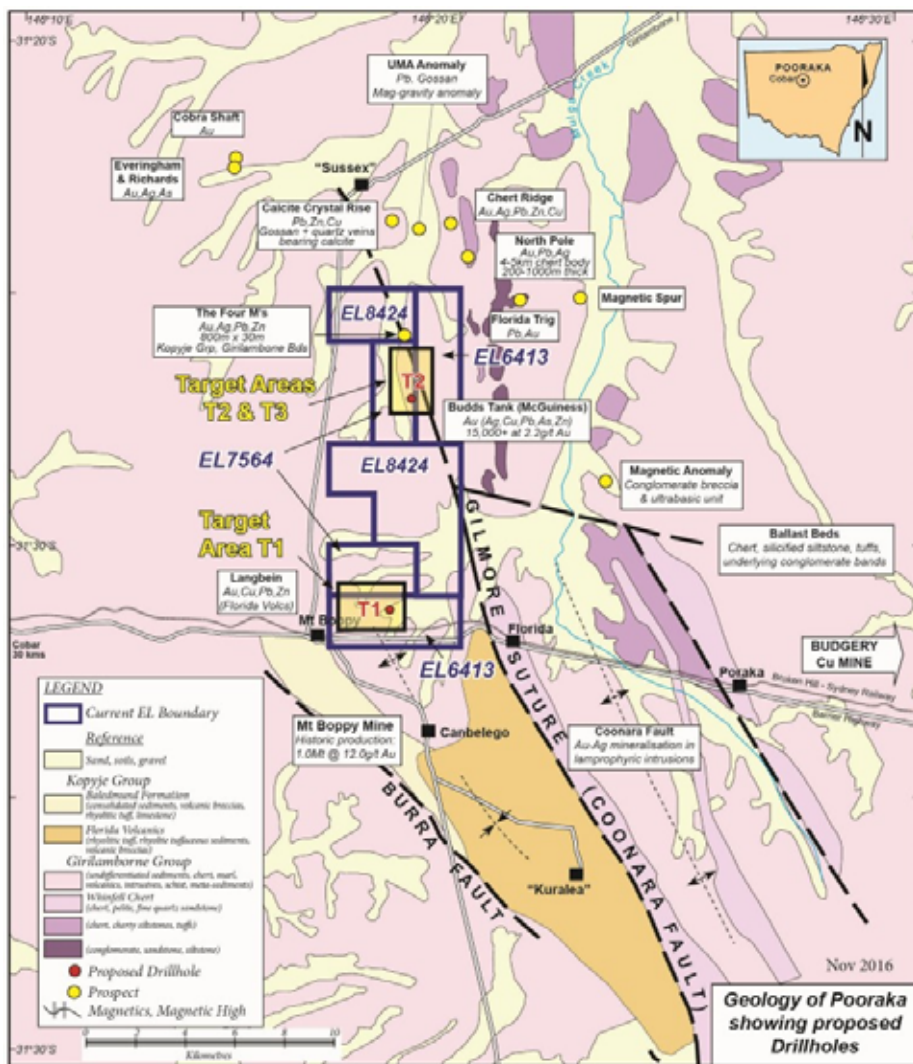


Figure 3 – Geology and Prospect Locations - Pooraka Project

Contiguous ELs 6413, 8424 & 7564 (Figure 3) at Pooraka, 50 km east of Cobar, contain several gold and base metal target areas gleaned from earlier exploration results. Due to the extent and thickness of magnetic palaeo channels, aeromagnetic data were noted to be of limited use, so in 2014, the Company decided to undertake a ground based EM survey to seek hidden conductors. Target areas were chosen using bedrock geochemical data and historic air-core/RC drilling data. Those data highlighted two sub-areas: T1, Langbein – Langbein West and T2/T3, Mc Guinness -



McGuinness North (see Figure 3). During April and May 2015, a ground based 200m x 200m geophysical survey was undertaken over the two target areas using the time domain electromagnetic (TDEM) technique. TDEM data were processed to define anomalies caused by conductors. Using CSIRO/AMIRA computer programs targets data were further analysed to ascertain geometry-depth, orientation, thickness – and electrical properties. The results were considered by geotechnical advisers to the Company to be very encouraging. At T1, Langbein - Langbein West target area a broad formational conductive zone was detected, however a small discreet strong conductor (open to the east) was detected proximal to where the Company’s 2009 RC-percussion drilling encountered low grade mineralization in bedrock. Lying directly on strike from the nearby historic Mt Boppy gold-base metal mine at Canbelego, this became a significant drill target. In the T2/T3, Mc Guinness - Mc Guinness North, target area, which takes in the Gilmore Suture, a large strong, discreet, north running 1200m x 800m conductor, was also outlined. This was interpreted to be most probably caused by hidden low-grade sulphide concentrations.

Responses from the two conductor targets were modelled in 2016 by the Company’s geophysical consultant, who also designed 2 deep, inclined, RC percussion holes to test the nature of their conductivities (Figure 4).

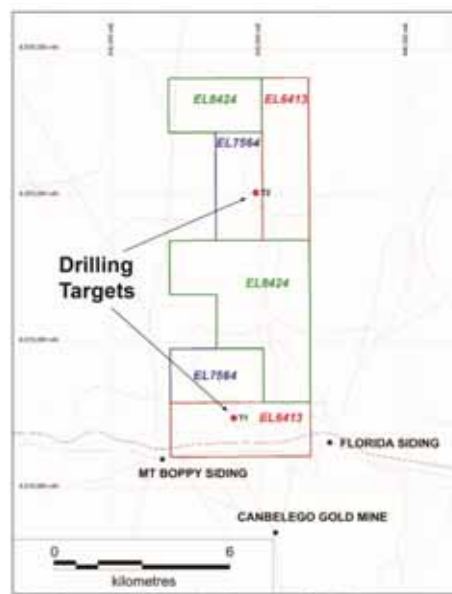


Figure 4 – Pooraka ELs showing Drill Holes 1 and 2

Hole 1 (150m) was drilled and sampled on 18 and 19 March 2017. The RC percussion rig was then moved and set up to drill Hole 2 (250m) on 20 and 21 March 2017, but heavy rains intervened preventing access. When tracks dried out Hole 2 was quickly drilled on 28 March 2017, and sampled on 28 and 29 March 2017. Sampling of both holes was at 1m intervals, generating 400 x 25Kg bags of drill returns plus 400 x 1.5-2 Kg of split samples. Split samples were dispatched by road freight to ALS in Orange on 29 March 2017. Samples selected for analysis- 290 of the 400 collected- covered the down-hole extents of the two TDEM target zones which also closely matched logged zones of interest in both holes. Samples selected for analysis were 1 to 110 in Hole 1 and 1 to 180 in Hole 2. During April 2017 the 290 samples were analyzed for key elements- Au, Ag, Cu, Pb, Zn, As, and S.



In both holes shales and acid to intermediate volcanic rocks were noted to be slightly weathered, with RC returns containing fines plus recognizable chips; however what were thought to be weathered felsic volcanic rocks were also noted. These consisted almost entirely of clays of varying colors and hues - light to dark brown, khaki, red-brown, and purple-brown. No sulphide minerals were noted in returns, but that would be expected in a strongly weathered environment. Nevertheless, while logging, other signs of potential mineralization - quartz veins, very dark grey clays, black flecks, iron-staining, and stronger alteration were noted in about 10% of returns.

In summary, the following lithologies were noted in returns from the 2 holes (down-hole distance in metres);

Hole 1 intersected clay-rich brown/yellow/khaki weathered (possibly weathered felsic volcanics) to 41m, weathered andesitic volcanics to 50m, less weathered andesitic volcanics to 97m, a chert-shale “transition zone” to 107m, then monotonous dark grey shales to 150m- EOH (end of hole).

Hole 2 intersected light brown - grey shales to 29m, clay rich brown/yellow/khaki material (weathered possibly felsic volcanics) to 104m, medium grained rhyodacitic volcanics to 143m, a weathered transition zone of similar but altered rhyodacitic volcanics to 152m, clay-rich felsic volcanics (as above, but with interesting dark bands) to 170m, an altered rhyodacitic “transition zone” to 180m, rhyodacitic volcanics (as above) to 232m, then dark fine grained acid (rhyolitic) volcanics to 250m- EOH.

Analytical results

Results were received from the laboratory in early May 2017. Weak anomalism was evident over 7 intervals, or zones, as follows: (Note: metal concentrations in ppm, S concentration in %; distances down hole in m);

Hole 1A. (3 anomalous intervals)

3-26m (clay rich rock) - Pb anomalous zone (up to 403 vs background 20) in part associated with high As (up to 51 vs background 5-10), S (0.02-0.03 vs background 0.01), and Zn (up to 976 vs background 20-30).

48-95m- (andesitic volcanic rock) - S anomalous zone (up to 0.08 vs background 0.01).

96-110m (chert-shale transition zone) - Pb anomalous zone (up to 306 vs background 20) associated with As (up to 21 vs background 5-10), and Zn (up to 450 vs background 50).

Hole 2A (4 anomalous intervals).

71-74m (clay rich rock) - Ag anomalous zone (up to 5.5 vs background less than 0.20) with anomalous Cu (up to 283 vs background 30) and S (up to 0.09 vs background 0.01).

87-90m (clay rich rock) - Au anomalous zone (up to 0.16 vs background less than 0.01).

162-168m (clay rich rocks with dark material)—As anomalous zone (up to 12, background less than 2), with Pb (up to 387 vs background 5-10), and Au (up to 0.02 vs background less than 0.01).

174-180m (altered rhyodacite transition zone)—S anomalous zone (up to 0.08 vs background 0.01).

Conclusions

In both holes the TDEM anomalies closely align to the clay-rich zones which in the field were observed to be quite saline (to taste & also clays flocculated (settled quickly) in fresh water when wet sieving). Salt water bearing clay-rich zones would be highly conductive. Also they are sandwiched between non-conductive, non-permeable rocks (shales and





volcanic rocks). The strong suspicion is that in areas where this occurs at detectable depths (20m to 200m) it can create convincing, but spurious, TDEM anomalies—described by geophysicists as “strong formational anomalies”, which in some situations can mimic low grade sulphide anomalies.

The above findings cast doubt on the cost effectiveness of the TDEM geophysical technique to locate hidden low-grade sulphides at Pooraka, but it does not follow that similar targets are the result of similar strong formational anomalies. Other deep targets (bedrock Au anomalies) are known in the McGuiness-Buds Tank area (Sub-Area 2/3). At that location earlier explorers (1986-1992) discovered significant inferred shallow Au resource in three pods to a depth of 12m. Also, at Langbein West (Sub-Area 1) the Company’s early (2010) bedrock sampling (shallow air core drilling) detected bedrock Au anomalies.

LICENCES STATUS

Minerals tenements held at 30 June 2017 and acquired or disposed of during the quarter and their locations are as follows:

Tenement	Project Name	Location	Beneficial Interest	Expiry
EL 6400	Koonenberry	NSW	100%	31 March 2017 (Renewal applied for 2 years and confirmed on 25 July 2017)
EL 6424	Koonenberry	NSW	100%	25 May 2017 (Expired. Renewal not sought)
EL 6464	Koonenberry	NSW	100%	18 September 2016 (Expired. Renewal not sought)
EL 6413	Pooraka 1	NSW	100%	16 May 2017 (Renewal applied for 2 years and proposed renewal instrument has been received on 24 July 2017)
EL 7564	Pooraka 2	NSW	100%	17 June 2018
EL 8424	Pooraka 3	NSW	100%	17 February 2019

There were no other tenements acquired or disposed of or change in beneficial interests under farm-in or farm-out agreements during the quarter

(The information in the report above that relates to Exploration Results is based on information compiled by Dr Pieter Moeskops, a member of The Australasian Institute of Mining and Metallurgy. Dr Moeskops has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activities which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Editions of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Moeskops consents to the inclusion in this report of matters based on his information in the form and context in which it appears.)

John Wang
Managing Director

26 July 2017

