

Group Annual Report (ML23825, ML24429 & ML25721) 02/05/2014 - 01/05/2015

Map Sheets:1:250k – HUCKITTA SF53111:100k – JINKA 6052Project Operator:MOLYHIL MINING PTY LTDAuthor:R Bradey (rbradey@thormining.com)Date:June 26, 2015Target Commodity:tungsten, molybdenum

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Summary

Mine project development and permitting for the proposed Molyhil tungsten and molybdenum project continued over the year. No exploration work was undertaken on the mining leases however target development has been undertaken in preparation for drill evaluation subject to availability of funding. A product off-take agreement has now been secured and once project funding has been obtained, the Molyhil Mine construction phase will commence. Exploration activity planned for the mining leases during forthcoming period will comprise pattern bedrock geochemistry drilling to assess identified targets.

Introduction

This group report covers exploration completed on ML 23825, ML 24429 and ML 25721 comprising the Molyhil Mine project for the period 2 May 2014 to 1 May 2015. The tenements are summarised in Table 1 and Figure 1 below.

Title Number	Title Holder	Grant Date	Expiry Date
ML 23825	Molyhil Mining Pty Ltd	5 3 2003	1 5 2033
ML 24429	Molyhil Mining Pty Ltd	20 10 2004	1 5 2033
ML 25721	Molyhil Mining Pty Ltd	15 11 2006	1 5 2033

Table 1: Tenement Summary



Figure 1: Molyhil Mining Leases

Location and Access

The tenements are located on the Huckitta 1:250,000 map sheet (SF53-11) 330km northeast of Alice Springs (Figure 2). Access is via the Stuart Highway for 70km north of Alice Springs, then east for 230km along the Plenty Highway then north via the unsealed Jinka Station access and subsequent station tracks for approximately 20km to the Molyhil mineral licences situated near the southern boundary of the exploration licence EL22349 (Figure 3).



Figure 2: Molyhil Site Location

Native Title and Site Clearance

A Triparitite Deed exists between Molyhil Mining Pty Ltd (Thor), Central Land Council (CLC) and the Traditional owners. A mining agreement exists between the parties. The location of aboriginal sacred sites was investigated during exploration work undertaken in the area in 2003. Aside from the Molyhil pinnacle, no further aboriginal sacred sites have been identified in the project area.

A search of the Australian Heritage database was undertaken for the project with the coordinates -22°40'—22°50' and 135°40'— 135°50'. No sites were identified within the search area. The Dulcie Range, listed as an indicative place on the Register of National Estate, is located northeast of the project area and will not be impacted by the project.

The Authority Certificate from the Aboriginal Areas Protection Authority was issued on 20 March 2012.

Geology

The Molyhil tenement covers Early Proterozoic rocks with high magnetic relief along and flanking the Delny-Mt Sainthill Fault, a feature developed within a wide west-north-west tectonic zone. This structure was active during the 1800Ma Strangways Event, which affected the entire Arunta Orogenic Domain.

A second dominant east-north-east trending fracture zone (Oomoomilla Fault) intersects the west-north-west fracture west of Molyhil. This intersection has been the locus for repetitive granite intrusion, including the Marshall and Jinka Granites (Figure 2). Faults within this tectonic zone have been periodically reactivated with a major remobilisation during the Carboniferous Alice Springs Orogeny.



Figure 3: Molyhil on Huckitta 1:250,000 Geology Map

Magnetic rocks are variously metamorphosed up to granulite facies and polyphase granitoids intrude Arunta Division One and Two mafic and felsic volcanogenic sequences hosting proportions of pelitic and calcareous sediments.

The basement rocks are unconformably overlain by Adelaidian and Palaeozoic marine and terrestrial sedimentary sequences of the intracratonic Georgina Basin.

Mineralisation is widespread within the Huckitta 1:250 000 sheet with past production from the Jervois deposits (Cu, Pg, Zn, Ag, Bi) the Molyhil "skarn" (Mo, W, Cu) and numerous other Cu and W vein deposits. Resources of barite-fluorite have also been established within huge quartz (carbonate-haematite) veins ("Oorabra Reefs") cutting the Jinka Granite and other basement rocks. These veins also appear to penetrate the basal Adelaidean sedimentary sequence.

The area was subjected to deep weathering and laterisation during late Mesozoic to Miocene time. Most of this old surface has been eroded away with small remnants preserved at the top of Mt Sainthill.

The area was uplifted during the Late Tertiary and erosion continues to the present day. Extensive outwash fans have developed at the base of hills and obscure the basement rocks. A return to arid conditions during the Pleistocence produced sand plains, and loess was deposited throughout the hilly areas. The combination of the effects of deep weathering and extensive younger sedimentary deposits provide for a difficult environment for effective surface geochemical sampling.

The Molyhil deposit consists of two adjacent outcropping iron-rich skarn bodies that contain scheelite and molybdenite mineralisation. The mineralisation is coarse-grained and its distribution is irregular.

Molybdenum - tungsten mineralisation mostly occurs in the Molyhil skarn which is essentially a magnetite -rich hornfels unit, comprising up to 80% magnetite (massive 'black rock skarn' or BRS) or lesser magnetite (10-20%) to form a 'banded mineralized skarn' (or BMS). Both units are iron-rich (>18%) and contain minor pyrite and/or chalcopyrite along with molybdenum and tungsten. Occasional blebby (primary) molybdenum can be seen in the pink granite matrix that suggests the granite is the source of the mineralisation.

Exploration History

Tungsten and Molybdenum mineralisation was originally discovered at Molyhil in 1973. Fama Mines Pty Ltd selectively mined approximately 20,000 tonnes of ore during 1976 - 1977.

Petrocarb Exploration NL acquired the operation in 1978 and production continued until late 1981 when Tungsten prices collapsed. Petrocarb published an indicated open cut reserve of 1.8 million tonnes at 0.6% WO₃ and 0.3% MoS₂. The reserve ore grade was primarily based on statistical analysis of mining head grades. Mining reconciliation indicated the resource estimate based on drill data was substantially and consistently less than production and process recovery.

In June and July 2004, Tennant Creek Gold completed 5 diamond drill holes for 675.59 metres and 23 Reverse Circulation (RC) holes for 3,146.7 metres. A JORC compliant drill indicated resource was subsequently calculated at 2,065,009 tonnes grading 0.304% WO₃ and 0.182% MoS₂. The resource remained open at depth down plunge to the south.

In December 2004, 3 crosscutting trenches were excavated spaced over an 80-metre strike length of the southern orebody. A 15 tonne ore sample was extracted for metallurgical test work. An average grade of 0.70% WO₃ and 0.58% MoS₂ was calculated for the sample and is an almost identical grade to Petrocarb historical mined grade. The bulk sample results were considerably higher than assayed intersections from nearby RC drillholes, and provide further evidence that the drill indicated grade substantially underestimated the true grade of the deposit.

In July 2005 Sunsphere commenced a trial underground mining program to confirm the head grade of the deposit relative to the previous drilling and historical grades. Three shafts and

crosscuts were mined in the Southern Lode totalling 96 vertical and 102 horizontal metres of development. The extracted ore was crushed, sampled and assayed. Further samples were used for metallurgical test work.

The bulk sampling was used to upgrade the JORC resource to a Measured Resource of 370,000t at 0.52% WO₃ and 0.32% MoS₂, an Indicated Resource of 1,750,000t at 0.52% WO₃ and 0.26% MoS₂, and an Inferred Resource of 250,000t at 0.7% WO₃ and 0.2% MoS₂. This resource has been estimated to a depth of 150m (RL250m). The Measured Resource is to a depth of 45m (RL 355m).

Two RC programmes were completed during year 5 exploration for a total of 56 holes (TMRC024-054 and 07MHRC001-025). The first programme was completed in September and October 2006 (TMRC024-054) and included 14 reconnaissance water bores (TMRC037-050) supervised by hydrogeology consultants, KH Morgan and Associates.

The second RC programme was completed in March 2007 (07MHRC001-025). 5,723 metres of RC drilling was completed in total. 3,281 samples were sent to ALS and Genalysis in Perth for assay. The additional drill data led to a revised Measured Resource of 530,000t at 0.42% WO₃ and 0.27% MoS₂, an Indicated Resource of 2,400,000t at 0.39% WO₃ and 0.17% MoS₂, and an Inferred Resource of 800,000t at 0.15% WO₃ and 0.1% MoS₂. This revised resource has been estimated to a depth of 265m (RL135m).

Search Exploration Services of Adelaide were contracted to complete a dipole-dipole IP survey over the Molyhil deposit in August 2007. The aim was to outline magnetite skarn lode positions down to a vertical depth of 300m.

The results from the IP survey identified the down plunge position of the Southern and Yacht Club Lodes at the south end of the deposit and a near surface anomaly to the south on line 19600N at approximately 10250E. Additional conductors were identified at the north end of the deposit on line 20240N.

Year 7 Exploration included 16 RC holes completed by McKay Drilling of WA for a total of 2,340m (09MHRC001-016). RC holes drilled to the north and south of the main pit area failed to identify any magnetite skarn associated with the previously identified IP anomalies.

All other holes drilled in and adjacent to the existing pit intersected good widths of mineralised magnetite skarn. The existing model and the notion of two separate lodes (Southern and Yacht Club) were revised and updated during Year 8.

After incorporation of the 2009 drilling results into the database the Molyhil scheelitemolybdenite deposit is estimated to contain a Measured Resource of 540,000t at 0.33% WO3 and 0.24% MoS2, an Indicated Resource of 2,300,000t at 0.38% WO3 and 0.18% MoS2.

A further 2,676m reverse circulation (RC) and diamond drilling program was undertaken in July 2011 to test the results of shallow RC data and to test the down plunge extension of mineralisation. The revised resource estimate comprised Indicated and Inferred 4.7 million tonnes @ 0.28% WO₃, & 0.13% Mo (0.22% MoS₂).

Further metallurgical testing was undertaken to address the following:

- improve tungsten recovery by flotation
- suppression of deleterious elements within the concentrate product
- evaluation of x-ray ore sorting for pre-concentrating ore and upgrading marginal material to ore grade
- evaluating flotation as a replacement for gravity and magnetic recovery

Following the revision of the metallurgical process and operating expenditure, a reoptimisation of the mineral resource resulted in an increased probable mining reserve of: 3.0Mt at 0.31%WO3 and 0.12%Mo. The revised ore reserve results in a six year mine project life.

Completion of the revised project feasibility is awaiting the outcome of the flotation test work.

Exploration Activity

Work undertaken on the tenements during the reporting period has been predominantly focussed on finalising metallurgical test work, the revised feasibility study and in preparation of the mining management plan.

Exploration work undertaken during the reporting period has been limited to the development of exploration targets in the vicinity of the mineral licences.

Proposed Exploration Activity

Pending project funding, the Molyhil Mine project will commence mine construction.

Exploration activity planned for the ML during forthcoming period will comprise pattern geochemistry drilling to assess identified targets.