# Quarterly Report For the Period Ending 30 June 2018





## Kurnalpi (Nickel-Cobalt)

- Two nickel targets prioritised for drill testing and EM geophysical surveying
- Drilling scheduled to commence first week of August 2018

## Billy Hills (Zinc)

- Project area expanded to over 315km² with a new tenement application east of the former Pillara
   Zinc Mine
- First of the project tenements granted
- Target generation continuing

#### Genoa Bore (Copper, Zinc)

- New exploration tenement prospective for copper and zinc mineralisation west of the Abra Deposit within a similar geological setting
- The tenement's prospectivity is highlighted by historic surface rock chip sampling and wide spaced drilling, some of which has returned strong indications of copper and zinc mineralisation;
  - Rock chip samples with individual assay values up to 17.5% copper, 2.4% lead, 3.70% zinc, and 120ppm silver
  - Drilling 48m @ 2,709ppm Zn from 54 metres in ISBD1, 5m @ 5,940ppm Zn from 130 metres in ISBD2, and 21m @ 3,488ppm Zn from 315 metres in ISBD3
- Data compilation, review and target generation underway

#### **Corporate and Cash**

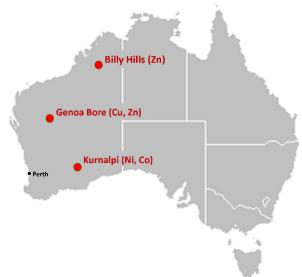
Cash reserves of \$0.86M at 31 March 2018.

Market Capital: A\$2.60 million

## **Exploration Overview**

Mithril Resources (**ASX: MTH** - "Mithril") and its exploration partners are exploring for a range of high-value commodities throughout the Meekatharra, West Kimberley and Kalgoorlie Districts of Western Australia, and the Coompana Province of South Australia (*Figure* 1).

During the June 2018 Quarter (the "Quarter") Mithril prioritised two nickel targets for drill testing and EM geophysical surveying at **Kurnalpi**, continued target generation at **Billy Hills**, and applied for a new exploration tenement ("**Genoa Bore**") which is prospective for copper and zinc mineralisation west of the Abra Deposit.



**Figure 1: Project Locations** 

# **Kurnalpi (Nickel - Cobalt)**

#### (Mithril 100%)

During the Quarter, Mithril prioritised two nickel targets on its 100%-owned Kurnalpi Project (*located 70 kms north east of Kalgoorlie, WA - Figure 1*) for drill testing and ground EM geophysical surveying.

Drilling undertaken by Mithril at the northern end of the project in March 2018 confirmed the presence of nickel sulphide mineralisation with a 4-metre zone of gossanous weathered ultramafic and several other narrow intervals of disseminated nickel sulphide mineralisation intersected beneath a flat-lying zone of near-surface nickel-cobalt mineralisation.

Subsequent downhole EM geophysical surveying identified a strong off-hole conductor lying adjacent to the sulphide mineralisation at approximately 150 metres depth (See ASX Announcement dated 20 April 2017).

The south-plunging conductor (85m wide x 500m long, conductivity thickness of 3,400S and visible at late times: Ch.36 - 200msec) has not been drill tested and lies within an interpreted shear zone that marks the eastern edge of the ultramafic unit that hosts the nickel sulphide mineralisation (*Figures 2, 3 and 4*).

The strength of the conductor is consistent with what could be expected from semi to massive sulphides and given its proximity to existing nickel sulphide mineralisation, is considered to be a high priority drill target.

As shown on *Figure 2*, the prospective ultramafic also continues south along strike from the nickel sulphides and EM conductor for over 7 kilometres within Mithril's tenements.

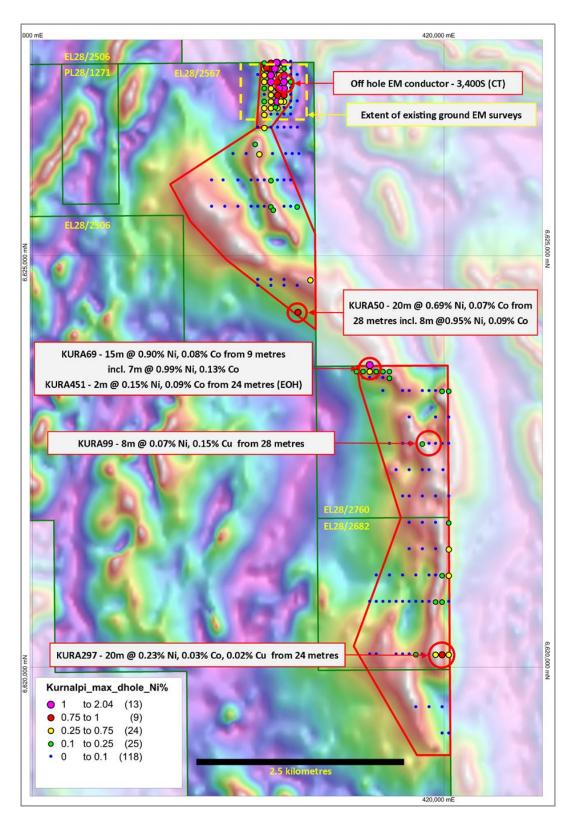


Figure 2: Kurnalpi Project magnetic image showing all target areas for future ground EM (red polygons), drill hole collar locations (colour coded by maximum downhole % nickel), and key drill intercepts.

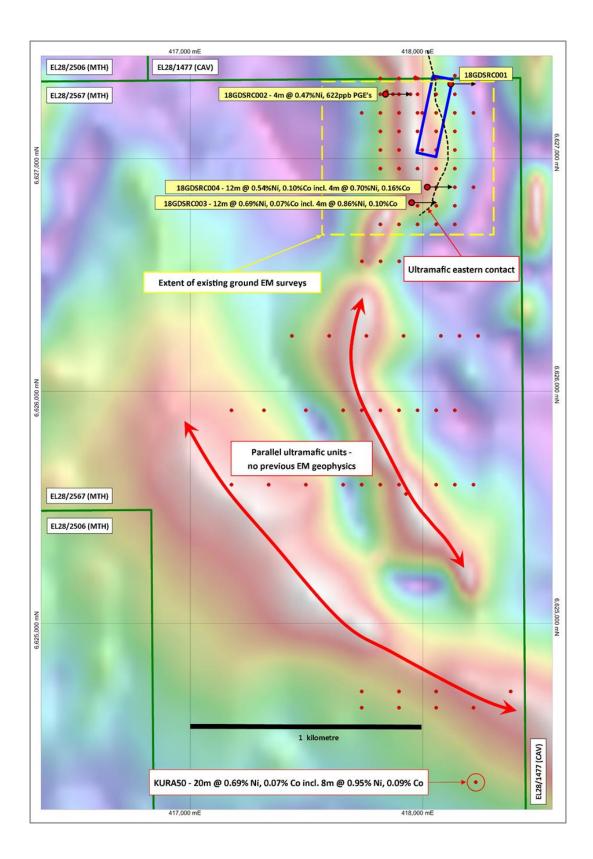


Figure 3: Kurnalpi Project northern target area showing priority down hole EM conductor plate (blue outline), extent of ground EM surveys and ultramafic units. Location of 18GDSCR002 section shown. Magnetic image background.

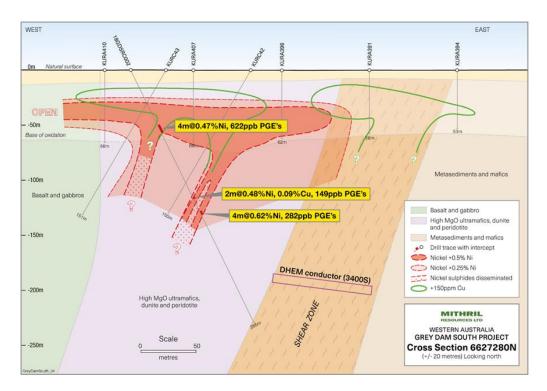


Figure 4: 6,627,280N (18GDSRC002) section showing geology, nickel-copper geochemistry and the off-hole EM conductor.

While the southern area is relatively poorly explored, several wide-spaced shallow RAB / aircore drilling undertaken in the mid 1990's has intersected strongly anomalous levels of nickel +/- cobalt and copper with no follow-up, i.e.;

- 20m @ 0.69% nickel, 0.07% cobalt from 32 metres in KURA50 including 8m @ 0.96% nickel, 0.09% cobalt from 36 metres,
- 15m @ 0.90% nickel, 0.08% cobalt from 9 metres in KURA69 including 7m @ 0.99% nickel, 0.13% cobalt from 10 metres.
- 2m @ 0.15% nickel, 0.09% cobalt from 24 metres in KURA451 (hole ended in mineralisation),
- 8m @ 0.07% nickel, 0.02% cobalt, 0.15% copper from 18 metres in KURA99, and
- 20m @ 0.21% nickel, 0.03% cobalt from 24 metres in KURA297.

The elevated nickel and cobalt in the drill holes is characteristic of weathered ultramafic rock types while the presence of elevated copper is potentially an indication of magmatic nickel sulphide mineralisation at depth.

Collectively the results highlight the nickel prospectivity of the southern extensions of the ultramafic and make it a priority target for follow-up.

Up to three Reverse Circulation holes (750 metres in total) will be drilled as an initial test of the off-hole EM conductor and the gossan / disseminated sulphide intercepts. Moving Loop ground EM geophysics will also be undertaken over the southern continuation of the ultramafic to define additional specific targets for drill testing.

Drilling is due to start in the first week of August 2018.

## Billy Hills (Zinc)

### (Mithril 100%)

During the Quarter, the Company continued target generation activities (primarily data compilation and interpretation) on the project and especially over a new tenement application (EL80/5191) that covers zinc-prospective host rocks east of the former Pillara Zinc Mine (located 25 kms southeast of Fitzroy Crossing in the West Kimberley region of Western Australia - *Figures 1 and 5*).

Also, during the Quarter, the Company met with members of the Gooniyandi Aboriginal Corporation, the Registered Native Title Claimants for the project area to establish Heritage Protection protocols for future Mithril exploration activities at Billy Hills.

Billy Hills comprises three tenements (EL's 04/2497, 2503 and  $80/5191 - 315 \text{km}^2$ ) with the first of the project tenements (EL04/2503) granted on 17 July 2018 and with the remaining tenements to be granted during the September 2018 Quarter or shortly thereafter.

In addition to covering the interpreted extensions to the key faults that control the Pillara mineralisation, the Billy Hills Project also contains a number of significant historic drill intersections and a 1.2-kilometre-long gossan, directly along strike from previous drill intercepts of more than 10% zinc + lead over multiple metres at the Pillara West Prospect, adjacent to Mithril's tenement holding (see Mithril ASX Announcement dated 21 August 2017).

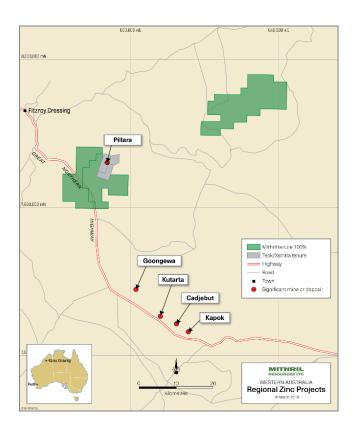


Figure 5: Billy Hills Location Plan

## Genoa Bore (Copper, Zinc)

#### (Mithril 100%)

During the Quarter the Company applied for a new 100% - owned Exploration Licence called "Genoa Bore" (340km²) that lies west of Galena Mining Limited's Abra Deposit within a similar geological setting (*located 300 kms north west of Meekatharra, WA - Figure 1*).

Genoa Bore covers the interpreted western extension of the Lyons River Fault Zone, a large regional scale structure that controls mineralisation at Abra 140 km to the East, within an area of similar Proterozoic sediments that host the Abra deposit (See Figure 6).

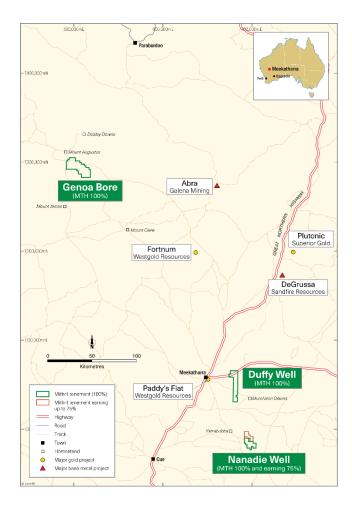
A 2012 JORC Code Compliant Indicated and Inferred Resource of 36.6Mt @ 7.3% lead, 18g/t silver has been recently estimated for the Abra Deposit (see ASX Announcement by Galena Mining Limited dated 14 March 2018).

At Genoa Bore, Mithril is targeting an economic accumulation of copper and zinc mineralisation.

The area's prospectivity is highlighted by historic surface rock chip sampling and wide spaced drilling, some of which has returned strong indications of copper and zinc mineralisation (see Mithril ASX Announcement dated 5 June 2018);

- Rock chip samples with individual assay values up to 17.5% copper, 2.4% lead, 3.70% zinc, and 120ppm silver
- Drilling 48m @ 2,709ppm Zn from 54 metres in ISBD1, 5m @ 5,940ppm Zn from 130 metres in ISBD2, and 21m @ 3,488ppm Zn from 315 metres in ISBD3

Mithril will now conduct a data compilation, review and target generation exercise at Genoa Bore ahead of the tenement's grant which is expected within the next 12 months.



**Figure 6: Murchison Location Plan** 

# **Other Projects**

No work was undertaken during the Quarter on the following projects:

- Duffy Well (Mithril 100%),
- Leaky Bore (Mithril 100%),
- Coompana (Mithril right to earn 20% / OZ Minerals 100%),
- Lignum Dam / North Scotia (Mithril 100%),
- Murchison (Mithril 100% EL's 20/846 and 57/1069, and earning up to 75% on EL's 51/1040 and 20/797 "Nanadie Well JV"), and
- Spargos Reward (Mithril 35%, Corona Minerals 65%)

# **Exploration Plan for next Quarter**

- RC drilling and EM geophysical surveying at Kurnalpi
- Continuation of target generation activities for the Billy Hills and Genoa Bore Projects

## **Corporate**

During the Quarter, the Company spent \$0.20M on the exploration activities outlined in this Report and at 30 June 2018, the Company had cash reserves of \$0.86M.

The Company raised \$0.82M (before costs) through an oversubscribed Share Purchase Plan ("SPP") and Placement (see Mithril ASX Announcement dated 26 and 27 June 2018). Following completion of the capital raising, the Company had 200,342,380 fully paid Ordinary Shares on issue.

## **Notes Specific**

## June 2018 Quarter ASX Announcements

The following announcements were lodged with the ASX during the Quarter. Further details (including JORC 2012 Code Reporting Tables, where applicable) for each of the sections outlined above can be found in the announcements listed below.

- LR7.1A Disclosure Statement 29.06.2018
- Section 708A Notice and Appendix 3B 29.06.2018
- Successful capital raising to drive Kurnalpi search 27.06.2018
- Appendix 3B 26.06.2018
- Oversubscribed Share Purchase Plan 26.06.2018
- Kurnalpi Nickel Project Update 14.06.2018
- Investor Presentation June 2018 13.06.2018
- New copper-zinc project strengthens Mithril's exploration portfolio 05.06.2018
- Drilling and geophysics to test Kurnalpi nickel targets 30.05.2018
- Share Purchase Plan Terms and Conditions 28.05.2018
- Share Purchase Plan Offer Documents 28.05.2018
- Cleansing Statement SPP Notice 28.05.2018
- Junior Minerals Exploration Incentive 18.05.2018
- Share Purchase Plan to fund nickel search 18.05.2018
- Strategy Update Presentation 23.04.2018
- Quarterly Activities & Cashflow Report Mar 2018 20.04.2018

#### **ENDS**

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#### **Competent Persons Statement:**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr David Hutton, who is a Competent Person, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Hutton is Managing Director and a full-time employee of Mithril Resources Ltd.

Mr Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Hutton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **About Mithril Resources Ltd:**

Mithril Resources is an Australian resources company whose objective is the creation of shareholder wealth through the discovery and development of mineral deposits.

The Company is actively exploring throughout the Western Australian Goldfields and Kimberley Districts for economic nickel, cobalt, copper, zinc and gold.

The Company is also exploring South Australia's far western Coompana Province for magmatic nickel – copper deposits with OZ Minerals Limited.