



ATHENA CONSOLIDATES LAND POSITION WITH BYRO EAST TENEMENT APPLICATION

HIGHLIGHTS

- **Athena has applied for an exploration license over the Byro East copper-nickel prospect, adjoining the existing tenement holding.**
- **Secondary copper-nickel mineralisation at Byro East indicates sulphide mineralisation within the system.**
- **Historic drilling results include 67m @ 0.67% copper and 0.33% nickel**

Details

Athena Resources Limited (Athena or the Company) has applied for an exploration tenement (E09/1637) (Figure 1) over the ultramafic hosted Byro East copper-nickel prospect. This tenement was recently surrendered by Brockman Resources Limited (formerly Yilgarn Mining Limited).

Athena's Byro Project is located in the Murchison District approximately 750km north of Perth and consists of eight exploration licence applications covering a combined area of approximately 2700 square kilometres. Athena's primary target is basal copper-nickel-platinum group metal (PGM) massive sulphide mineralisation, with stratiform PGM mineralisation as a secondary target.

Athena has located remobilised copper, palladium, platinum, and gold at Moonborough, 2 kilometres north of the Byro homestead and again 8 kilometres northeast of the homestead. With the acquisition of the Byro East tenement Athena has extended its already considerable land holding to include one of the more substantial intrusion related copper-nickel prospects in the region. At Byro East, the occurrence of secondary copper-nickel mineralisation in ultramafic rocks at surface provides direct evidence for primary sulphide mineralisation within the system.

Background

The Byro Project lies within the Archaean Narryer Terrane, a granulite metamorphic terrane on the northwest margin of the Yilgarn Craton. Chromitite bearing layered ultramafic and copper-nickel bearing ultramafic bodies occur throughout the area (Imagi Well and Byro East). Athena interprets these bodies to be small discrete layered igneous complexes and associated feeder dykes that are tapping a series of larger mafic complexes at depth. This interpretation is supported by Geoscience Australia's regional gravity surveys and the most recent aeromagnetic (2008) data from the Geological Survey of Western Australia (GSWA).

Athena used the gravity to map the extents of denser rocks that reflect the core of these igneous complexes and then applied for the available ground (Figure 1). Reconnaissance mapping by Athena within the Company's tenement areas has located area of metamorphosed ultramafic, mafic and anorthosite rocks typical of layered intrusions. Athena's tenement package also contains several low order copper, nickel, chrome and PGM geochemical anomalies from GSWA's regolith sampling program. Both the mapping and the geochemistry confirm the validity of Athena's area selection process.

Previous Exploration

Previous exploration, including drilling results of 67m @ 0.67% copper and 0.33% nickel, highlight the prospectivity of the Byro district. In late 2006, Mithril Resources Ltd (Mithril) reportedly completed a surface electromagnetic survey covering a small target area at Byro East using the BHP Billiton GeoFerret technology (available to Mithril under their alliance with BHP Billiton). Athena is in the process of completing a detailed assessment of past exploration at Byro East.

At Imagi Well, 15 kilometres south of Moonborough, historic exploration for chromitites returned a best result of 4m @ 13.5%Cr (Figure 1). In 2003 Platinum Australia carried out a drilling program. This drilling identified an extensive, 250 metres wide and up to 4 km long, supergene PGM geochemical anomaly. Platinum Australia reported assays from individual holes of up to 7 metres @ 270 ppb Pt + Pd from 16 metres within a +100 ppb Pt + Pd anomaly.

Regional Exploration Potential

In 2006 Geoscience Australia (Hoatson et al., 2006) published exploration guidelines for nickel sulphide deposits. The Byro area, and more specifically the area held by Athena, meets all of Geoscience Australia's regional, and most of the local, geological criteria for identifying prospective areas.

The Byro Project is located on the rifted margin of the Yilgarn Craton and hosts a number of tholeiitic mafic dominated intrusions and an extensive system of mafic dykes. The intrusions are associated with linear tectonic fault bounded belts of metasediments and metavolcanics, and elongate granitic bodies. Small to medium-sized (<3 km thick) differentiated ultramafic/mafic intrusions occur at Imagi Well and Byro East. The emplacement ages of these intrusions are interpreted between 2750 and 3050 million years. The copper-nickel mineralisation at Byro East indicates that the magma was not depleted by early-crystallising olivine or early sulphur-saturation events prior to emplacement, increasing the likelihood of the accumulation of economic primary sulphide mineralisation.

Tholeiitic mafic-dominated intrusions with thin sequences of ultramafic rocks in lower parts of the stratigraphy have been identified at Moonborough and Imagi Well. Athena has located layered bodies of cumulus textured rocks with remobilized and fractionated Cu-Pd-Pt-Au -enriched sulphides in country rocks at Moonborough. These lay within the high priority Ni-Cu-PGM target zones in Figure 1.

With this latest tenement application Athena now controls the major mafic and ultramafic occurrences in the district. The Company has planned an aggressive exploration program consisting of field mapping, geochemistry, geophysical surveying, and drilling. The Company's work to date has demonstrated the mineral potential of these systems and is excited about its commanding tenement holding.

Donald Thomson
Technical Director

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References

Hoatson, D.M., Jaireth, J., Jacques, A.L., 2006. Nickel sulfide deposits in Australia: Characteristics, resources, and potential, *Ore Geology Reviews* - 29 (2006), 177 - 241.

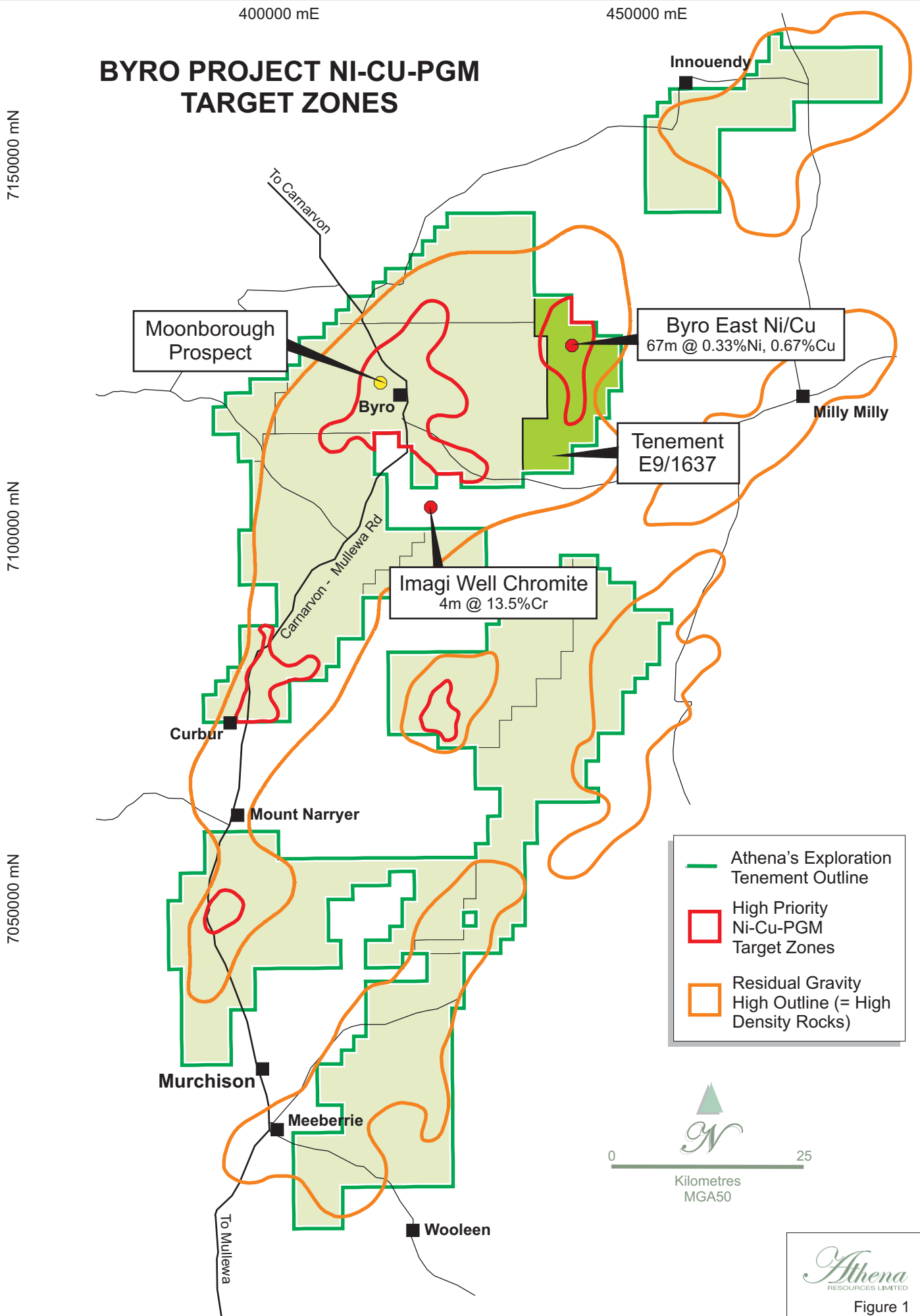
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The technical information relating to Athena's exploration projects was compiled by Mr Donald Thomson, an employee of Indigo Exploration Services Pty Ltd. Mr Thomson is a Member of the Australasian Institute of Mining and Metallurgy, and has sufficient relevant experience in the styles of mineralisation and deposit styles under consideration to qualify as a Competent Person as defined in "The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 edition)". Mr Thomson consents to this inclusion of the information in this report in the context and format in which it appears.

BYRO PROJECT NI-CU-PGM TARGET ZONES



— Athena's Exploration Tenement Outline
□ High Priority Ni-Cu-PGM Target Zones
□ Residual Gravity High Outline (= High Density Rocks)




Figure 1