

9 April 2013

The Company Announcements Office  
Australian Stock Exchange Limited  
4 Floor 20 Bridge Street  
SYDNEY NSW 2000



## **NICKEL SULPHIDE PROJECT BYRO.**

Athena Resources Limited (ASX: AHN) wishes to advise that it has expanded the Ni-Cu-PGE's Project at Byro with the purchase of E09/1938 containing broad scale target areas at Mt Narryer.

**TENEMENT IS LOCATED IN A UNIQUE GEOLOGICAL SETTING**

**HIGHLY PROSPECTIVE FOR Ni-CU AND PGE'S**

**HOSTS NORTHEAST STRIKING DOLERITE AND GABBRO INTRUSIONS**

**INTRUSIONS COINCIDENT WITH A SIGNIFICANT GRAVITY HIGH**

Tenement E09/1938 also has multiple features including potential to add significant tonnes to Athena's Mid-West, Byro Iron Project

- **A NUMBER OF STRONGLY MAGNETIC UNITS WITH HISTORIC ROCK CHIP IRON**

**ASSAYS**

<b>Sample number</b>	<b>572043</b>	<b>43.29% Fe</b>
<b>Sample number</b>	<b>572044</b>	<b>45.14% Fe</b>
<b>Sample Number</b>	<b>572045</b>	<b>40.60% Fe</b>
<b>Sample Number</b>	<b>572041</b>	<b>54.33% Fe</b>
<b>Sample Number</b>	<b>572042</b>	<b>50.51% Fe</b>

- **ELEVATED COPPER ASSAYS FROM SAMPLES NEAR MAFIC INTRUSION**

<b>Sample number</b>	<b>572041</b>	<b>202ppm</b>
<b>Sample number</b>	<b>572041</b>	<b>262ppm</b>

Relative Cu background of the surrounding Churla Granite and Gneiss only 2ppm to 6ppm

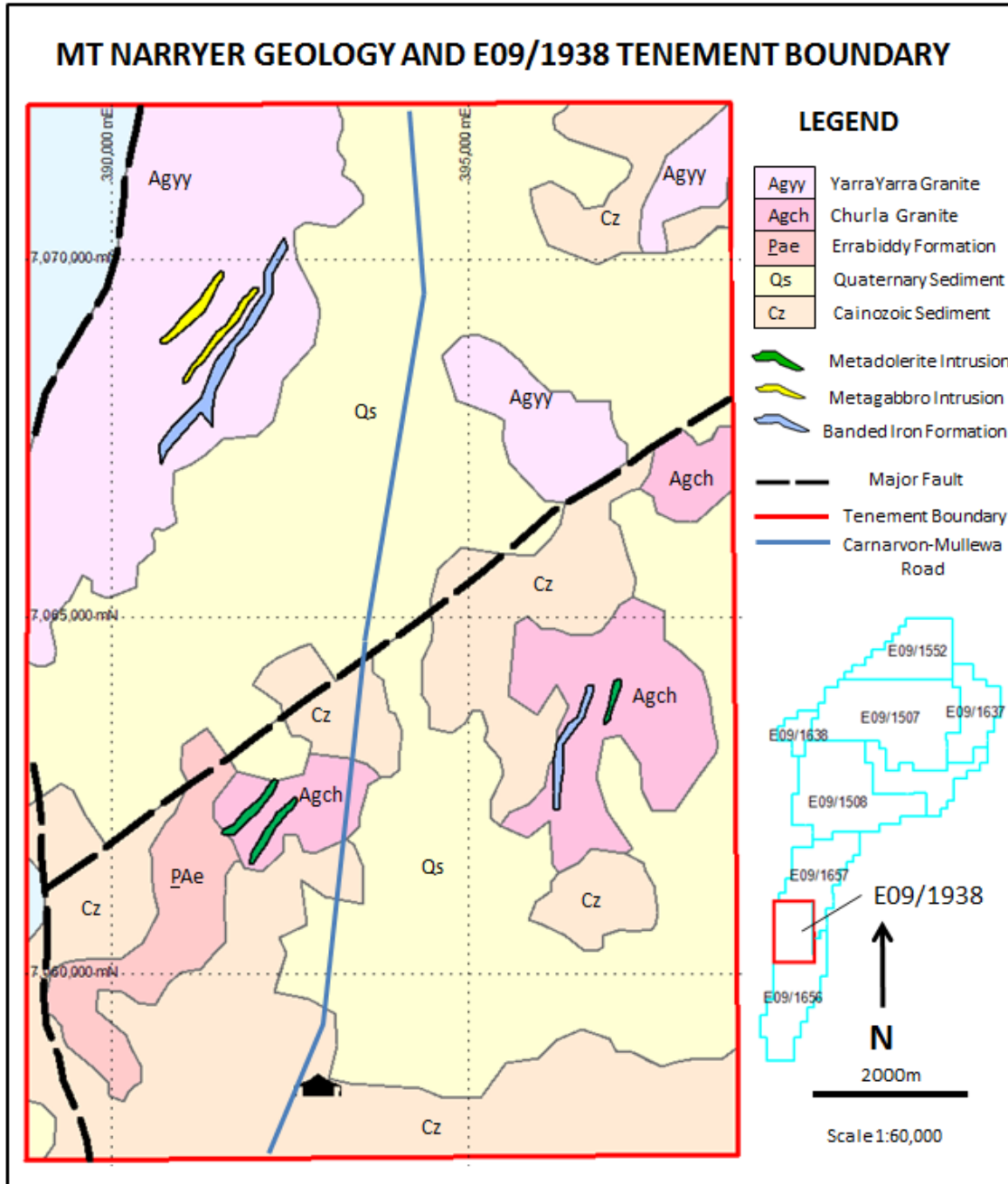
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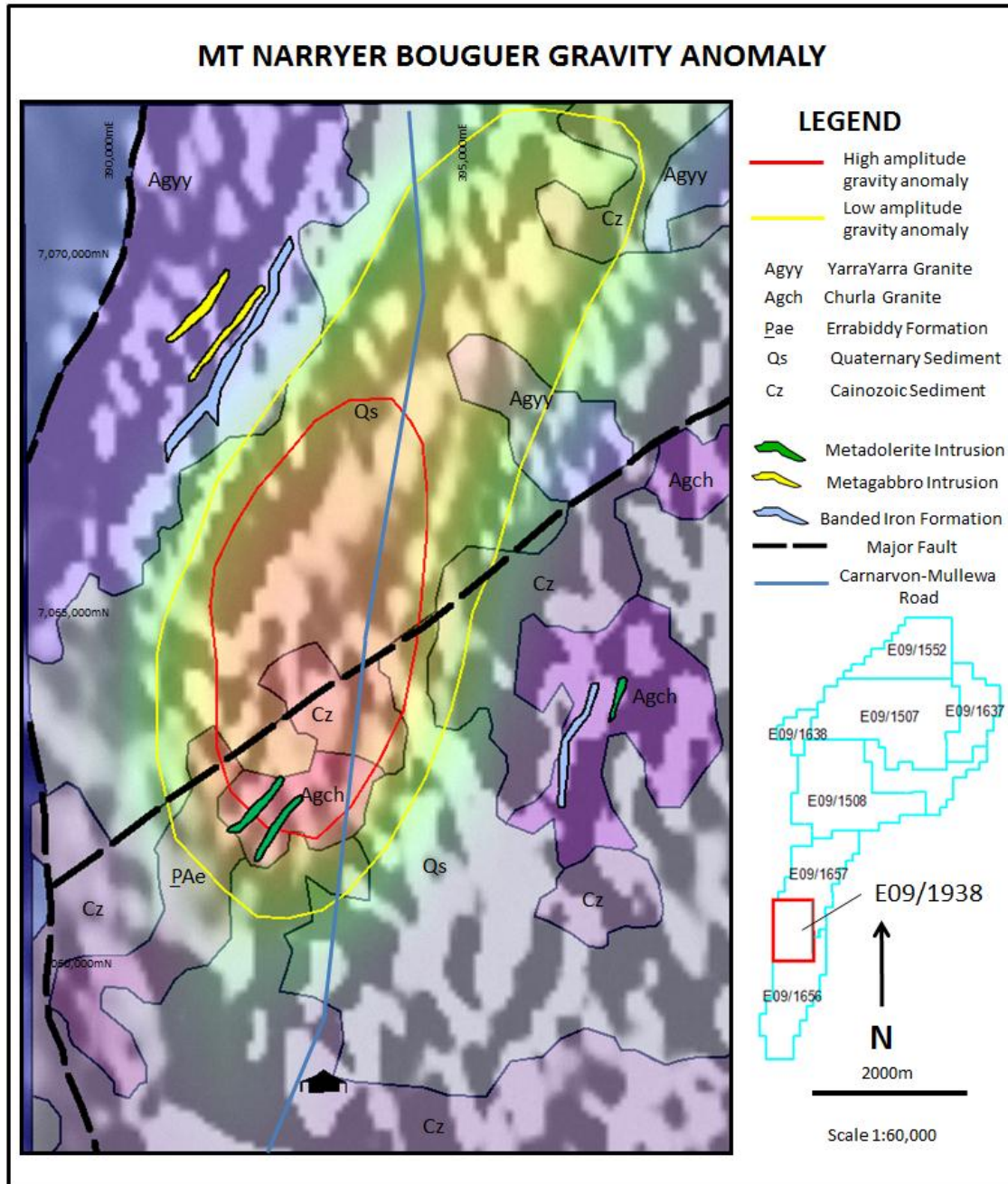
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Figure 1



Northeast striking dolerite intrusions, (green region, center and center right, Figure1), and the gabbro intrusions (yellow region top left, Figure1), within tenement have not been tested for mineralisation. Athena will conduct a greenfield exploration program including surface mapping and sampling to test the geochemistry and potential for sulphide development.

Figure 2



The northeast striking dolerite and gabbro intrusions are coincident with a significant regional gravity high, (Figure 2). The orientation of the gabbro and dolerite intrusions relative to the gravity anomaly is of great interest. There is no indication as to the depth of the source of the anomaly which is surprisingly under explored given its amplitude.



In 2006, Athena was introduced to the prodigious geological credentials and potential for base metal exploration within the Byro area hosting the Milly-Milly intrusion and the Chromite discovery within the Imiagi Well layered ultramafic intrusion. Athena has since identified two new layered intrusive systems at Moonborough and at Central Byro.

Athena considers the E09/1938 tenement and greater Byro area to be highly prospective for Ni-Cu and PGE's, The deep sutures adjacent to the Byro tenements including the new Mt Narryer tenement could have sourced Ni-Cu-PGE bearing fluids from depth as seen in the Milly-Milly Ni-Cu and PGE intrusion at Byro East.

Athena has recently announced to the ASX, confirmation of the fertility of the previously under explored 6.5km x 1.5km Milly-Milly intrusion and successfully demonstrated its potential to host concentrations of Ni-Cu and PGE's. Here the copper appears in the form of native copper and has been shown to form in aggregates with the pentlandite nickel sulphide. The Ultramafic to mafic intrusions found at Byro are rare on a global scale due to the unique geological environment, If successful these systems can be extremely valuable. Best results at Milly-Milly to date are

**Best results from soil samples**

- Rock/laterite samples up to: 2.5%Ni
- Gossan samples up to: 9.0% Cu

**Best results from shallow drilling (Saprolite)**

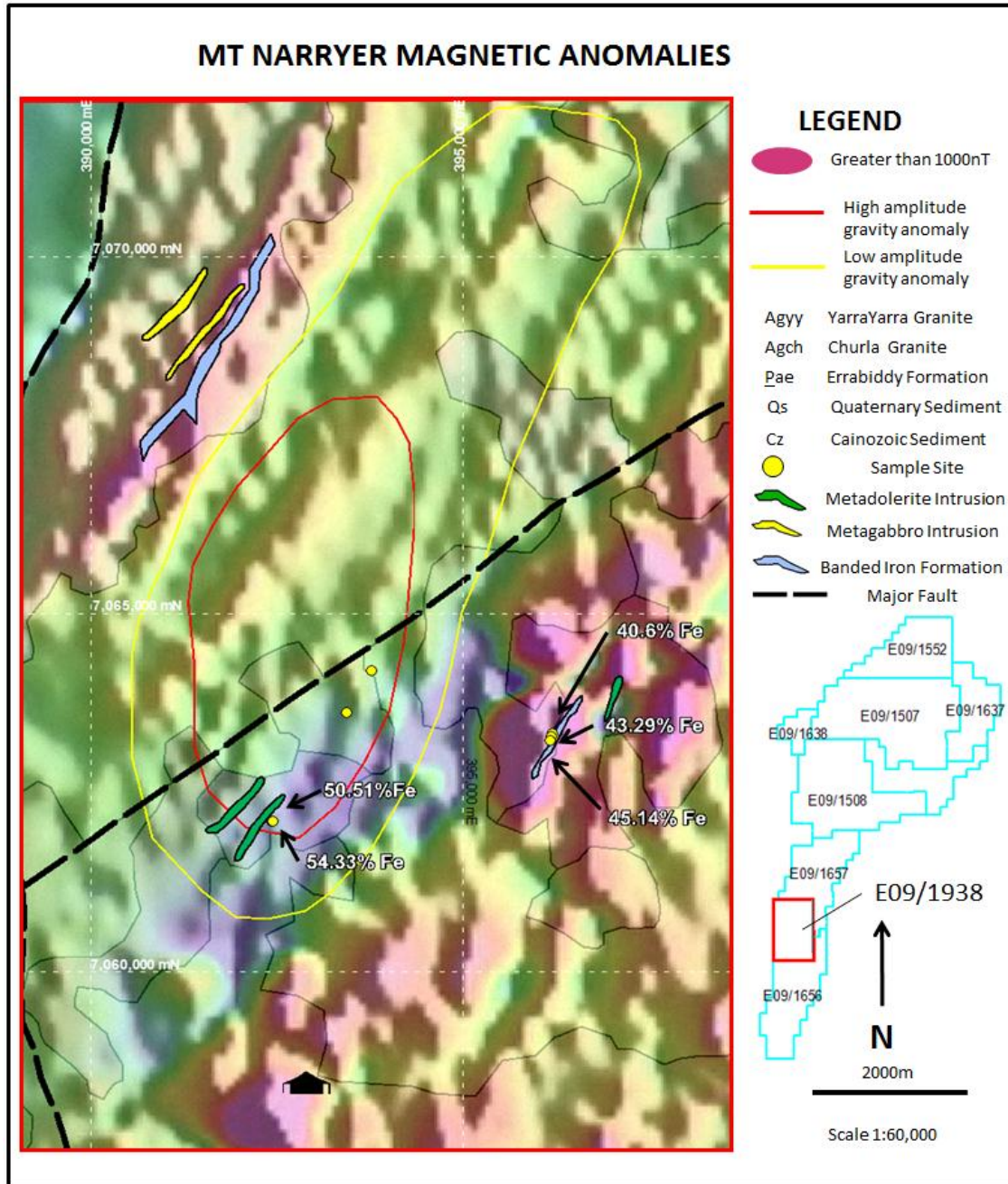
- Best nickel: 13.7 m @ 1.2% Ni
- Best copper: 67 m @ 0.7% Cu
- including: 18.3 m @ 1.14% Cu

**Best results from deep drilling at Milly-Milly (only one hole to 500m)**

1.73m@	0.31%Ni	from 157.4m	Including	0.06m @	0.57%Ni	from 159.13m
22.7m @	0.30%Ni	from 232.3m	Including	0.5m @	0.64%Ni	from 254.5m
6m @	0.30%Ni	from 271m	Including	0.2m @	0.46%Ni	from 276.5m
1.5m @	0.31%Ni	from 320m	Including	0.5m @	0.35%Ni	from 321.5m
2.5m @	0.31%Ni	from 328.5m	Including	0.5m @	0.38%Ni	from 328.5m



Figure 4



The outlined light blue region top left and center right are magnetite outcrops within the Narryer Gneiss Terrane. Samples show iron from assay are encouraging, above 40%. The assays reported in the center of the tenement are from a nonmagnetic ferruginous saprock. These assays are very promising and will be followed up as a priority to add to the high grade iron sources being accumulated by Athena as part of the Byro Iron Ore Project.

**Table 1** Significant Iron assay results within E09/1938, locations shown in Figure 4 above.

Sample	Cu ppm	Ni_ppm	Pb_ppm	Fe%	P_ppm	S%	Al2O3_%	SiO2%	TiO2%
572041	202	80	22	54.33	990	0.11	2.73	8.26	0.11
572042	262	84	10	50.51	500	0.09	4.17	14.77	0.53
572043	6	20	9	43.29	360	0.09	1.03	33.95	0.06
572044	2	32	12	45.14	710	0.06	1.42	30.61	0.09
572045	2	16	17	40.6	470	0.08	2.35	36.68	0.1

Samples 572041 and 572042 were taken from within 150 meters of a GSWA mapped metadolerite intrusion, (Figure 4). The assays showed elevated copper at 202ppm and 262ppm, relative to the background of the surrounding Churla Granite and felsic gneiss of only 2ppm to 6ppm Cu. This is an exciting marker and a good start location for a sampling program within the gravity anomaly

**Table 2** Sample descriptions

Sample ID	Grid ID	East	North	Sample Description
572041	MGA94_50	392438	7062102	massive lateritic ironstone
572042	MGA94_50	392440	7062104	ferruginous saprock (sub crop)
572043	MGA94_50	396177	7063253	Fe rich gneiss
572044	MGA94_50	396191	7063282	Fe rich gneiss
572045	MGA94_50	396210	7063285	Fe rich gneiss

*Competent Persons Statement*

The technical information relating to Athena's exploration projects was compiled by Mr Liam Kelly, an employee of Athena Resources Limited. Mr Kelly 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 Kelly consents to this inclusion of the information in this report in the context and format in which it appears

**MT NARRIER PURCHASE**

Athena has purchased 100% of E09/1938 from 818205 Pty Ltd for \$15,000. 818205 Pty Ltd is not related to Athena Resources Pty Ltd or Athena directors.

**ASHBURTON PROJECT**

Athena has sold E08/1954 and its 95% interest in P08/493 to 818205 Pty Ltd. The sale consideration was \$15,000. The sale will allow Athena to concentrate its resources to the North West Yilgarn Copper and Nickel Sulphide exploration and the Byro Iron Ore exploration in the Murchison

Yours faithfully

E W Edwards  
Managing Director