DECEMBER - 2010 QUARTERLY REPORT

ATHENA RESOURCES LIMITED

ASX Symbol: **AHN**

ABN: 69 113 758 900

Address: 63 Lindsay Street, Perth
Western Australia 6000

Telephone: (08) 9428 2900
Facsimile: (08) 9428 2910
Email: ahn@athenaresources.com.au

www.athenaresources.com.au

CONTACTS

Mr Ed Edwards
Managing Director

PROJECTS

Byro: Iron Ore, Nickel-Copper-PGE's

Ashburton: Gold and Base metals

SECURITIES

93.1M Shares - AHN
33.8M Options - AHNO

SHAREHOLDERS

Mr Ed Edwards – 9.5%
Ishine International – 8.9%
Mr D Kelly – 7.0%

HIGHLIGHTS

BYRO PROJECT – IRON ORE

Excellent Rock Chip Results Extend Iron Ore Mineralisation

BYRO EAST PROJECT – BASE METALS

- **AHRC0027; 129.7m @ 0.26% Ni from 20m**
- **AHDH0001; 62.7m @ 0.29 % Ni from 149.7m**

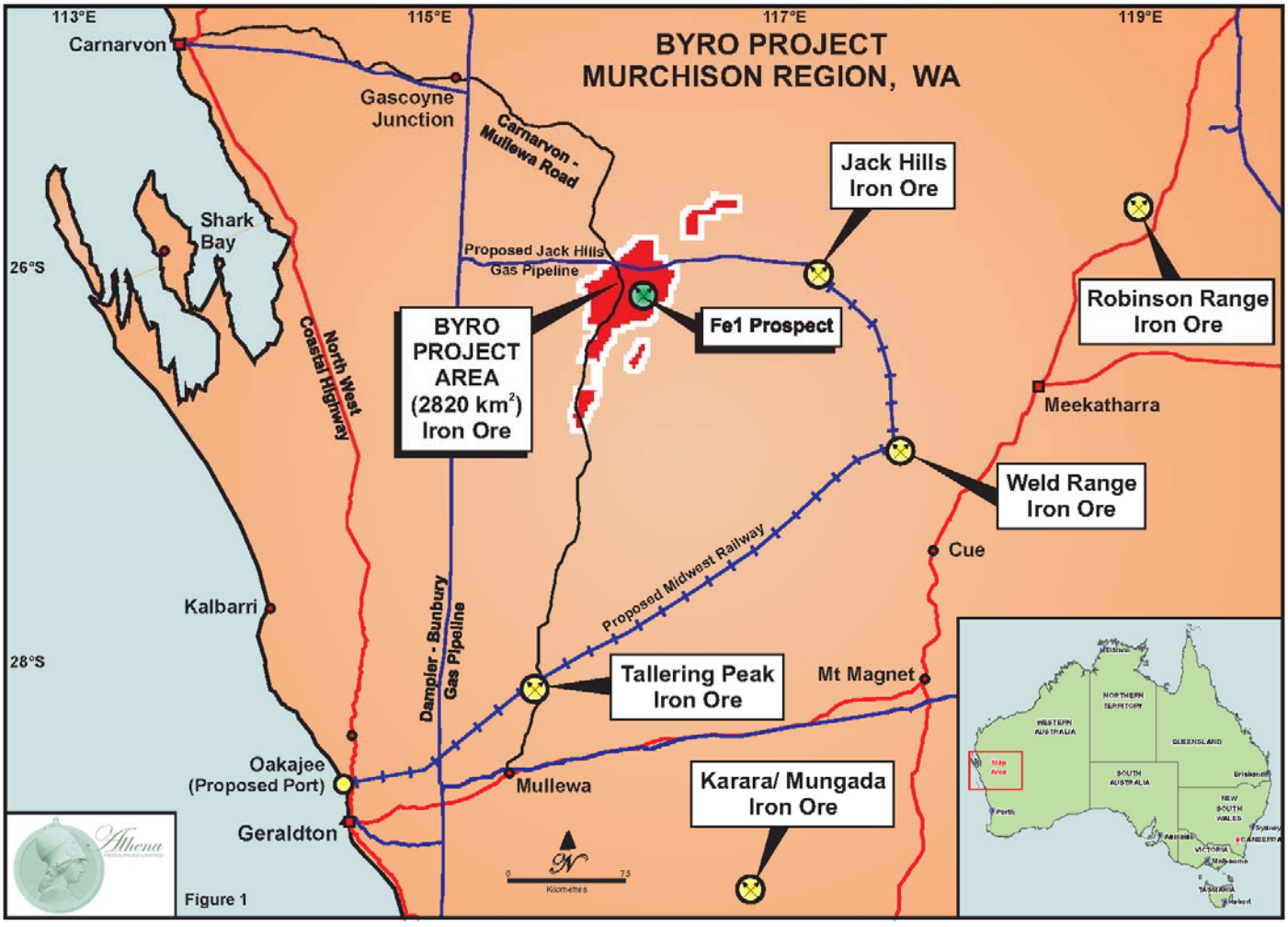
- Consistent primary Ni sulphide (averaging 2736 ppm).
- Anomalous zones of increased sulphur, chrome, nickel, copper and PGE's.
- Visible native copper in diamond core.
- Upgrade of pentlandite to millerite during serpentinisation.
- Fertile altered Serpentine Antigorite, (MgO up to 44%)

1. BYRO PROJECT (Athena Resources 80%, contributing 100%)

BYRO IRON ORE

Location

The Byro Iron Ore Project is strategically located some 100km west of the proposed Midwest Iron Ore Railway which is planned to link existing and future iron ore projects in the Mid West Region to the proposed Oakajee deep water bulk shipping port north of Geraldton (Figure 1).



Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

During the quarter Athena carried out an outcrop rock chip sampling program at Byro. This program was conducted as a follow up from refined high amplitude magnetic targeting. The results from this program have revealed outstanding Fe grades at selected anomalies shown in Table 1 below.

Rock Chip Results – Table 1

SAMPLE ID	Location	East	North	Fe%	SiO2%	Al2O3%	P%	S%	LOI%
MBRC250	Byro North 1	418034.1	7131170	**41.5**	37.88	1.01	0.026	0.065	1.37
MBRC251	Byro North 2	418149.9	7130920	**40.49**	40.33	0.57	0.034	0.021	0.76
MBRC252	Byro North 2	418217.4	7131013	**41.75**	37.29	0.99	0.041	0.035	1.69
MBRC253	Byro North 3	418392.8	7130679	**44.91**	33.22	0.57	0.038	0.043	1.49
MBRC254	Byro North 3	418382.5	7130533	**41.12**	38.13	0.97	0.039	0.044	1.78
MBRC264	Byro North 4	417549.5	7128231	**41.37**	37.76	0.83	0.037	0.071	1.74
MBRC265	Byro North 5	418123.3	7127913	**43.34**	35.03	0.99	0.021	0.087	1.04
MBRC266	Byro North 5	418133.7	7127850	**41.83**	35.25	1.97	0.031	0.207	1.67
MBRC267	Byro North 6	418098.8	7127100	**45.32**	31.1	0.73	0.026	0.099	2.64
MBRC262	Byro Northwest 1	414511.7	7124717	**42.91**	35.28	0.61	0.07	0.123	1.98
MBRC263	Byro Northwest 2	413409.6	7126312	**42.69**	35.62	0.69	0.032	0.085	1.96
MBRC255	Byro South 1	417040	7099349	**44.66**	32.63	0.74	0.04	0.082	2.18
MBRC256	Byro South 1	417040	7099349	**49.82**	23.94	0.91	0.046	0.163	3.27
MBRC257	Byro South 1	416890.2	7099708	**49.12**	20.91	1.79	0.065	0.147	5.7
MBRC258	Byro South 1	416774.5	7099807	**46.87**	29.89	0.68	0.026	0.065	2.05
MBRC260	Byro South 2	414966.5	7101515	**43.48**	34.91	0.93	0.036	0.059	1.46

Fe = Iron, SiO_2 = silica, Al_2O_3 = Aluminium, P = phosphorus, S = Sulphur

All samples analysed at Ultra Trace Pty Ltd - Canning Vale, Western Australia by method XRF202

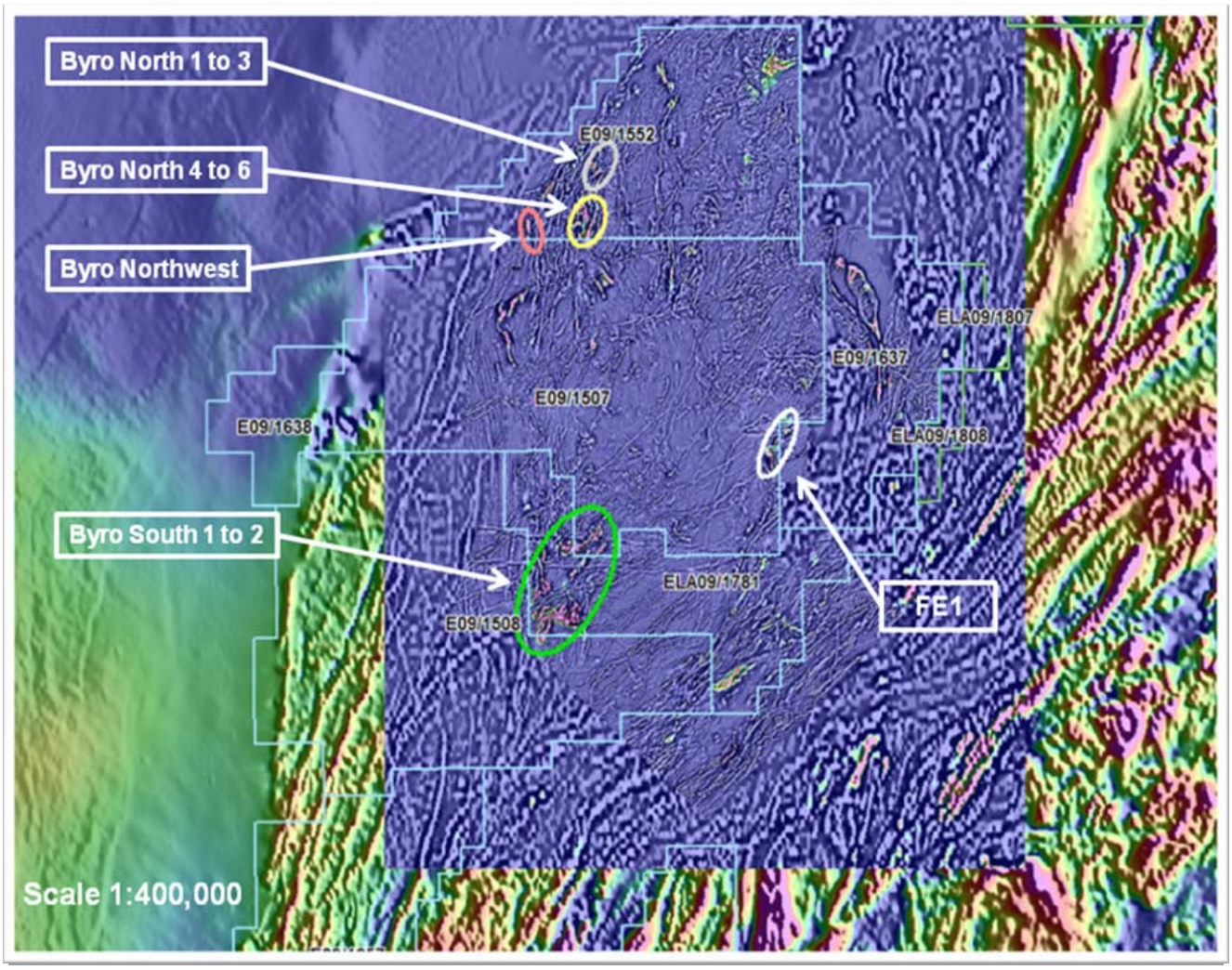
Loss on Ignition (LOI) determined Gravimetrically

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

The sampling program was designed to test high amplitude magnetic anomalies above 1500nT from fresh rock where outcrop was available. Due to the combined areal extent of the tenements containing the iron ore and for the purpose of this report, the anomalies have been grouped together by location.

FE1, located right of centre in Figure 2 below, was sampled in 2009 with results reported to the ASX in December 2009. FE1 was subsequently drill tested in September 2010 with results reported in October 2010 and is referred to for comparison of size and grade, (Figure 7)

Figure 2 Rock chip outcrop locations overlying filtered Aeromagnetic Response of 1500nT and above

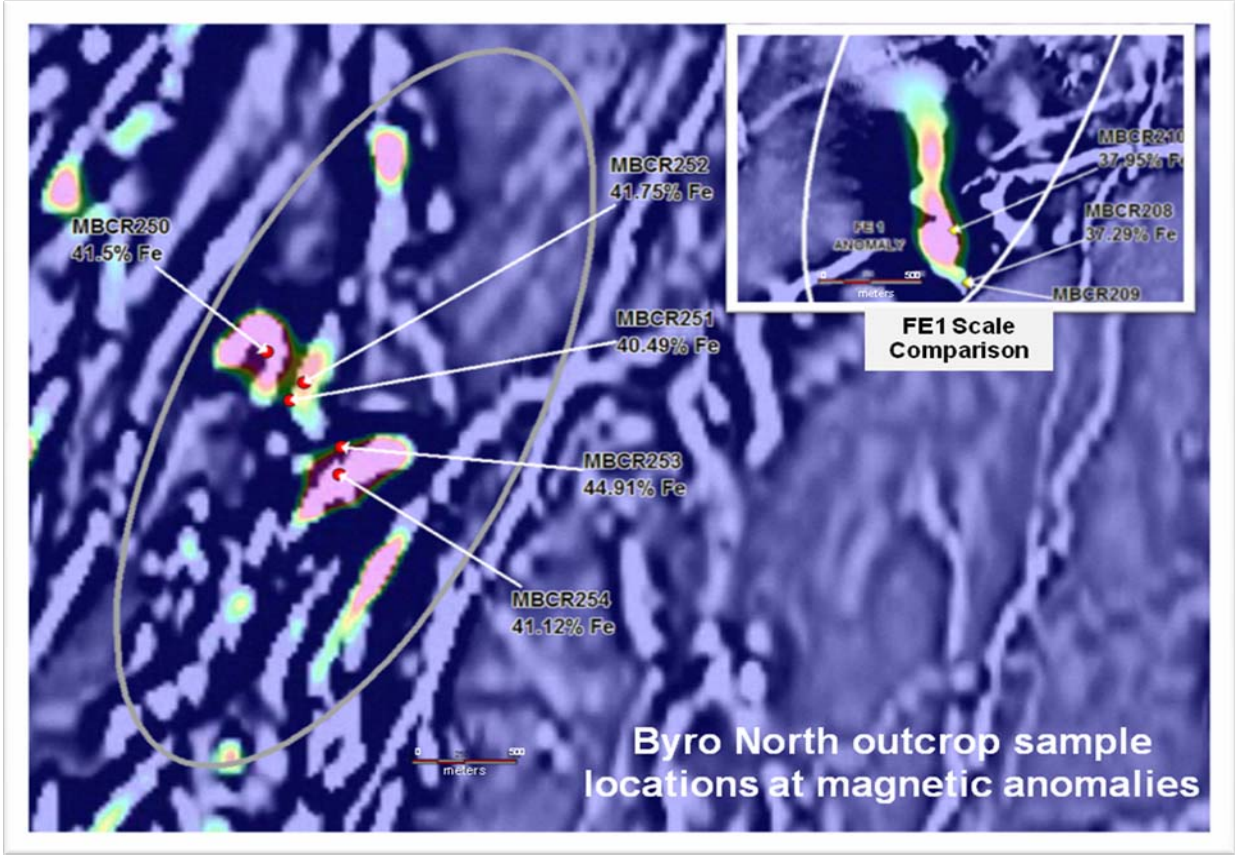


Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

Byro North

The majority of the magnetic units at the Byro North locations are under shallow cover with outcrop commonly situated at the edge of the aeromagnetic response. A direct comparison with the outcrop assay results and aeromagnetic intensity response has been calculated for each of the sample locations and averaged. The edges of the anomalies have lower amplitudes compared to the center of mass of the systems and tend to lower the averaged amplitudes.

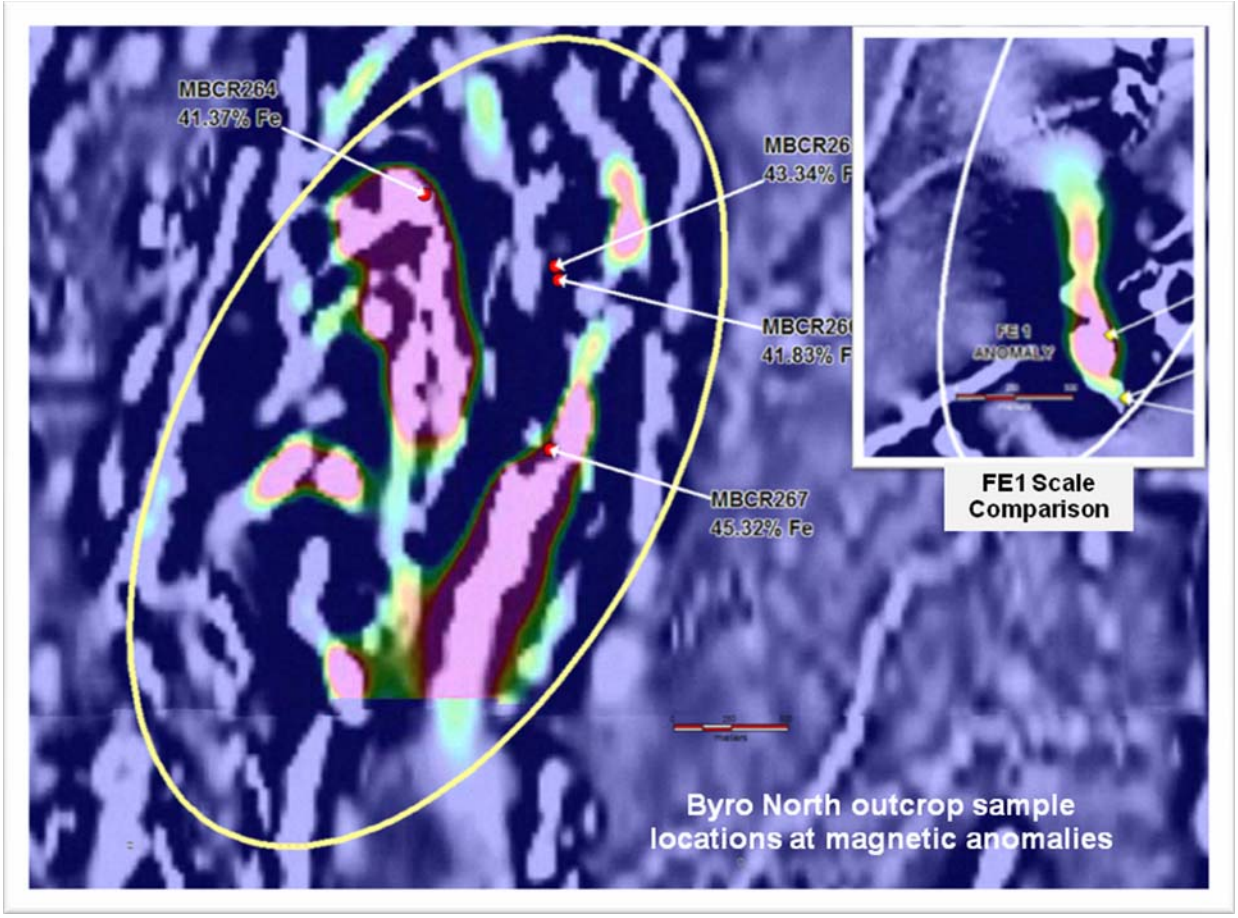
Figure 3 **Byro North, Anomalies 1 to 3,**
Rock chip outcrop locations overlying 1500nT Aeromagnetic Response



Average aeromagnetic amplitude at sample locations MBCR250 to MBCR254 is 1574nT with 41.95% Fe at outcrop.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

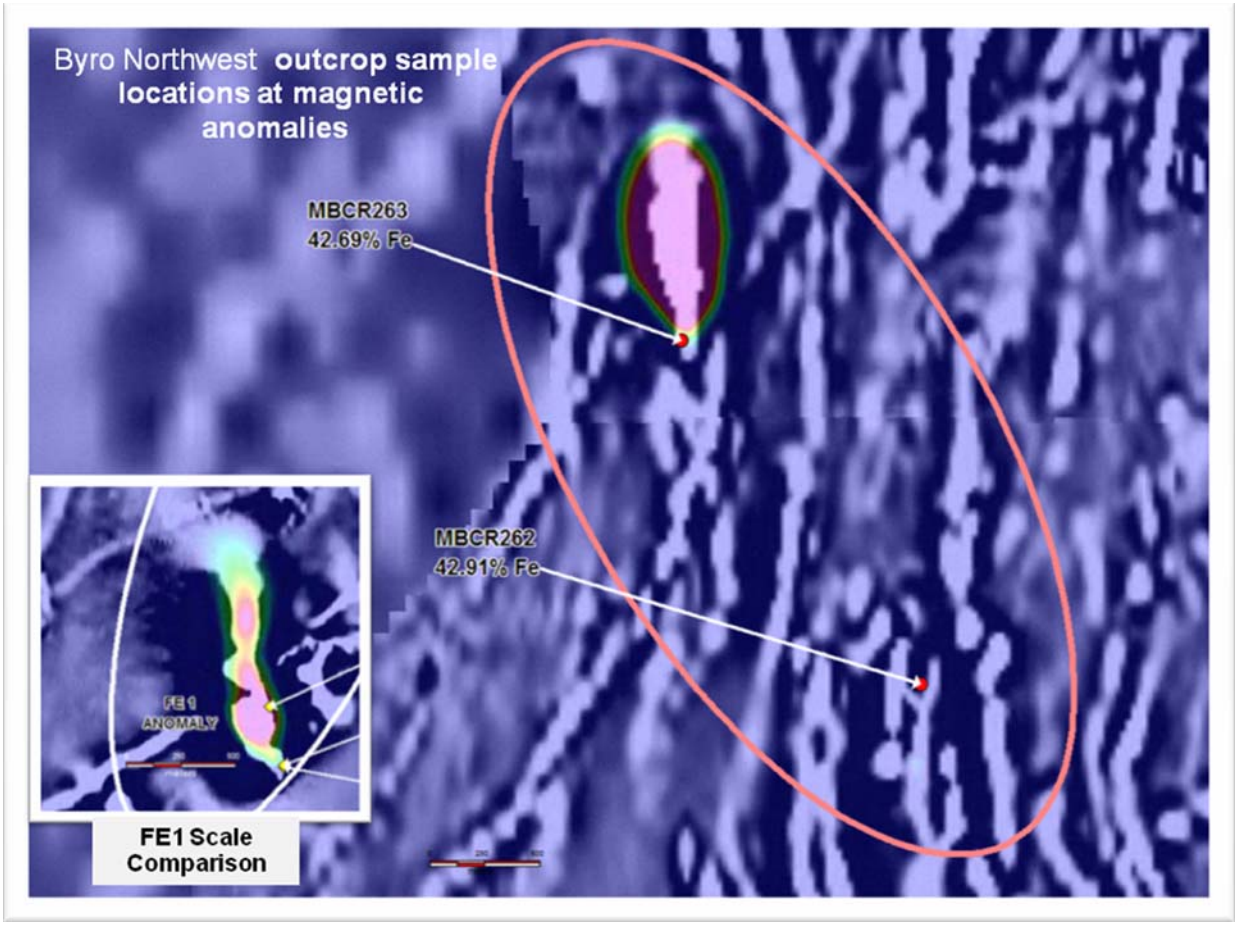
Figure 4 **Byro North, anomalies 4 to 6,**
Rock chip outcrop locations overlying 1500nT Aeromagnetic Response



Average aeromagnetic amplitude at sample locations MBCR264 and MBCR267 is 1973nT with 43.35% Fe at outcrop.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

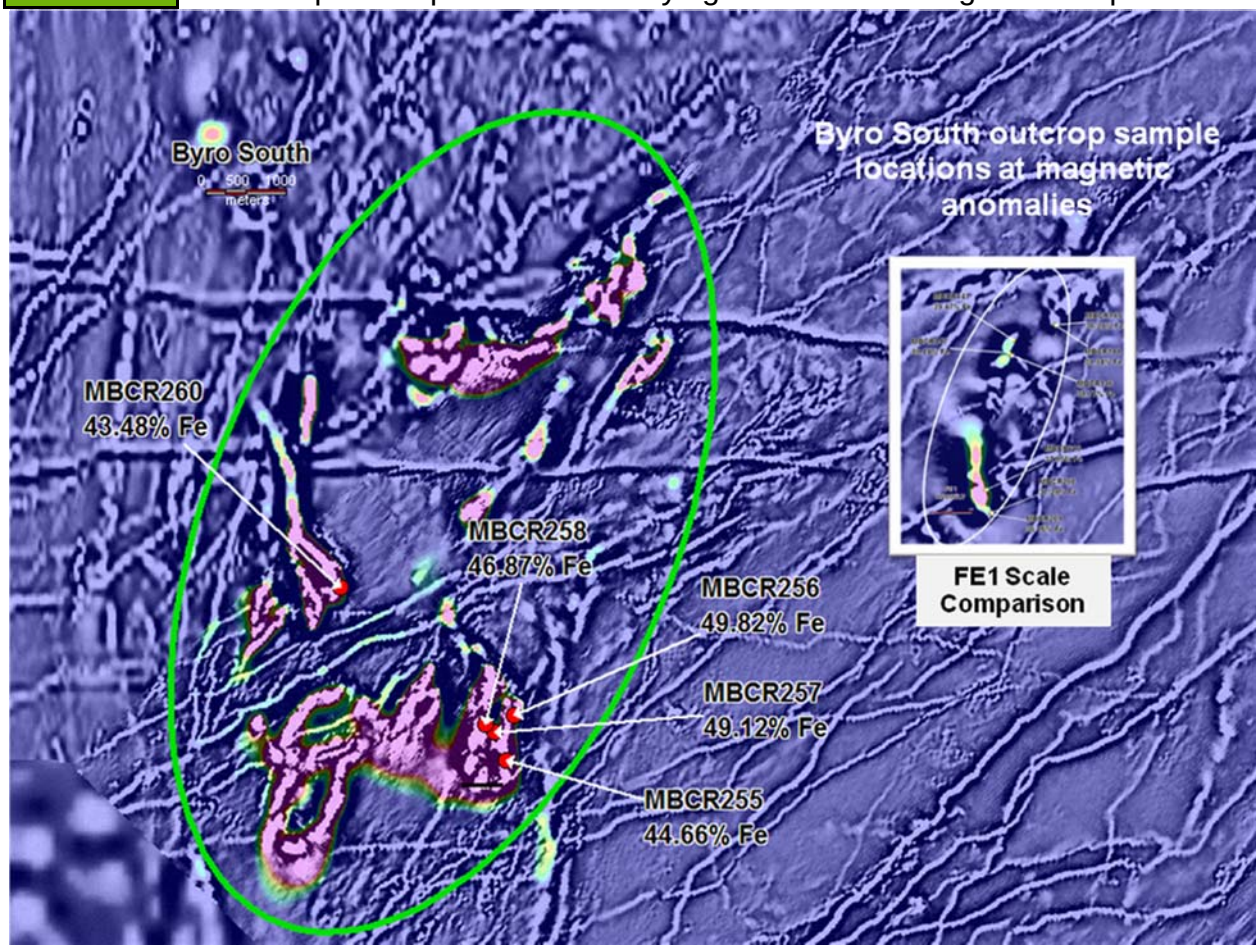
Figure 5 **Byro Northwest,**
Rock chip outcrop locations overlying 1500nT Aeromagnetic Response



Average aeromagnetic amplitude at sample location MBCR263 is 645.3nT with 42.69% Fe. This outcrop strikes north and dips moderately steeply west. The outcrop is to the south and outside the 1500nT cut off used for this high amplitude campaign and is a demonstration of Fe potential beyond the cut off point of 1500nT amplitude of some of these anomalies.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

Figure 6 **Byro South,** Anomalies 1 to 2
Rock chip outcrop locations overlying 1500nT Aeromagnetic Response



Byro South Anomaly 1 dips moderately steep to the west, strikes NNE and has a shallow plunge SSW. The outcrop occurs along the eastern margin for 800m on strike and 450m perpendicular to dip. Average aeromagnetic amplitude at sample locations MBCR255 to MBCR258 and MBCR260 is 3926.74nT with 46.79% Fe at outcrop, shown in the following photos.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

Photograph 1 Byro South Anomaly 2 Outcrop looking northwest

Photograph 2 Byro South Anomaly 1 Outcrop Looking west

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

SIGNIFICANCE OF THESE RESULTS

As reported in October 2010, the extent of the interpreted iron ore targets identified from the aeromagnetic surveys, within tenements E09/1552, E09/1507, E09/1508, E09/1637 and ELA09/1781, cover an area of 40 km by 30 km (or 1200 sq km). This included 20km strike length of prospective magnetite iron ore horizon.

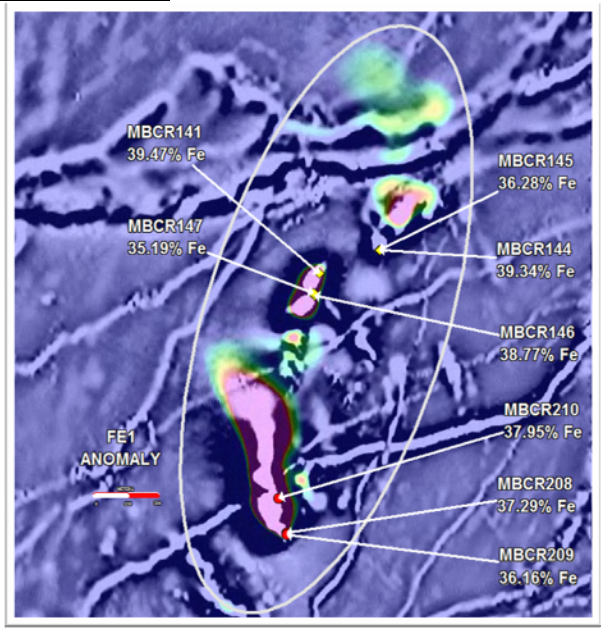
Results from this sampling program demonstrate that all outcrop sampled which had a magnetic signature above 1500nT amplitude returned Fe assays of greater than 40% and as high as 49.82% Fe. (Table 2)

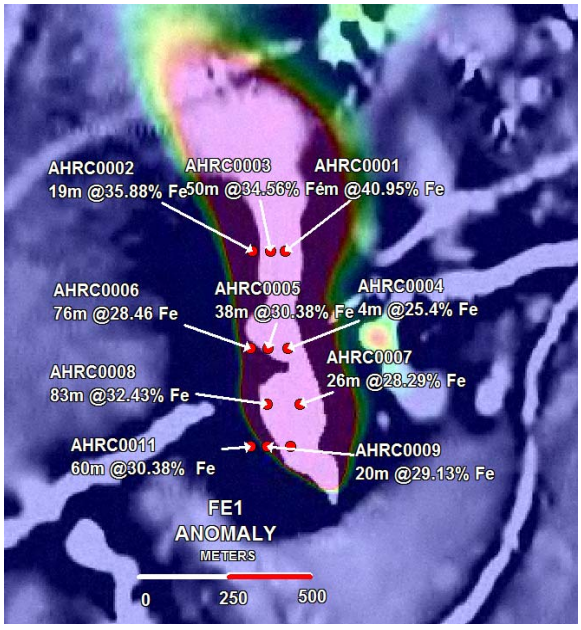
Table 2

Comparison of Average Assays							Average Aeromagnetic Response
Location	**Fe%**	**SiO2%**	**Al2O3%**	**P%**	**S%**	**LOI%**	**nT**
FE1	**37.55**	**42.14**	**1.23**	**0.038**	**0.065**	**1.57**	**2430**
Byro South 1 & 2	**46.79**	**28.45**	**1.01**	**0.043**	**0.103**	**2.93**	**3927**
All Others	**42.48**	**35.7**	**0.902**	**0.037**	**0.08**	**1.65**	**1558**

A comparison between outcrop rock samples and subsequent **drilling** at FE1 show high Fe grades at the edge of the response are indicative of continued high Fe grades throughout the anomaly.

Figure 7	**Byro (FE1) Samples.**	**Byro (FE1) Drilling results**





Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

- **Concentrates grades of up to 71.6% Fe.**
- **Concentrates grades of up to 93.8% Fe_3O_4 (Magnetite)**
- **DTR Weight Recoveries of up to 56%**

Results from this current program show the assay spread is comparable, The most important exceptions at this stage are average Fe grade is greater and SiO_2 average less, (tables 3 and 4).

Table 3

Outcrop Sample Assay Comparison									
SAMPLE ID	**Location**	**East**	**North**	**Fe%**	**SiO2%**	**Al2O3%**	**P%**	**S%**	**LOI%**
MBRC141	**FE1**	431536	7111904	39.47	38.81	1.05	0.02	0.03	2.5
MBRC144	**FE1**	432022	7112091	39.34	41.67	0.66	0.06	0.07	0.82
MBRC145	**FE1**	432031	7112094	36.28	40.92	2.67	0.05	0.1	3.51
MBRC146	**FE1**	431500	7111724	38.77	40.3	1.76	0.04	0.05	1.74
MBRC147	**FE1**	431490	7111747	35.19	45.66	1.43	0.03	0.13	1.63
MBRC208	**FE1**	431269.46	7109806.07	37.29	43.73	0.61	0.033	0.034	0.77
MBRC209	**FE1**	431269.68	7109793.46	36.16	43.54	1.43	0.031	0.1	1.21
MBRC210	**FE1**	431202.56	7110083.94	37.95	42.51	0.23	0.044	0.006	0.37
MBRC250	**Byro North 1**	418034.07	7131169.97	**41.5**	37.88	1.01	0.026	0.065	1.37
MBRC251	**Byro North 2**	418149.85	7130920.18	**40.49**	40.33	0.57	0.034	0.021	0.76
MBRC252	**Byro North 2**	418217.35	7131012.89	**41.75**	37.29	0.99	0.041	0.035	1.69
MBRC253	**Byro North 3**	418392.84	7130678.96	**44.91**	33.22	0.57	0.038	0.043	1.49
MBRC254	**Byro North 3**	418382.52	7130533.27	**41.12**	38.13	0.97	0.039	0.044	1.78
MBRC264	**Byro North 4**	417549.48	7128230.95	**41.37**	37.76	0.83	0.037	0.071	1.74
MBRC265	**Byro North 5**	418123.27	7127912.58	**43.34**	35.03	0.99	0.021	0.087	1.04
MBRC266	**Byro North 5**	418133.7	7127849.72	**41.83**	35.25	1.97	0.031	0.207	1.67
MBRC267	**Byro North 6**	418098.78	7127100.23	**45.32**	31.1	0.73	0.026	0.099	2.64
MBRC262	**Byro Northwest 1**	414511.66	7124717.01	**42.91**	35.28	0.61	0.07	0.123	1.98
MBRC263	**Byro Northwest 2**	413409.64	7126312.04	**42.69**	35.62	0.69	0.032	0.085	1.96
MBRC255	**Byro South 1**	417040.04	7099349.38	**44.66**	32.63	0.74	0.04	0.082	2.18
MBRC256	**Byro South 1**	417040.04	7099349.38	**49.82**	23.94	0.91	0.046	0.163	3.27
MBRC257	**Byro South 1**	416890.17	7099707.7	**49.12**	20.91	1.79	0.065	0.147	5.7
MBRC258	**Byro South 1**	416774.53	7099806.54	**46.87**	29.89	0.68	0.026	0.065	2.05
MBRC260	**Byro South 2**	414966.49	7101514.71	**43.48**	34.91	0.93	0.036	0.059	1.46

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

An aggressive reverse circulation (RC) drilling campaign has been planned and work to obtain statutory clearances to drill test these priority iron ore targets is underway.

CHINESE TECHNOLOGY DEVELOPMENT CONTRACT

An agreement has been signed in China with the Changsha Research Institute of Mining and Metallurgy (CRIMM) for test work to be carried out on the high grade Byro Iron Ore magnetite.

Founded in 1955, CRIMM which is located in Hunan Province China is a state owned metallurgical research institute specialized in metallurgical testing, beneficiation process testing and design. It is a world leading institute for magnetite iron ore process testing and beneficiation process design and optimizations. CRIMM is a subsidiary of China Minmetals Corp, China's largest steel and metals trader.

The purpose of the test work is as follows;

Process Mineralogy Study

- Carryout multi-element analysis of the ore to identify the chemical composition and particularly identify the beneficial components plus any detrimental components;
- Identify the type of ore, the main iron minerals and gangue mineral compositions together with disseminated features and symbiotic relationships;
- Chemical phase analysis of the iron to identify which mineral form that the iron exists in the ore;
- Determination of particle liberation sizes for the disseminated iron minerals;

Experimental Research on Potential Beneficiation Methods

- Evaluate the effect of various grind sizes on low intensity magnetic separation. Identify the optimum grind sizes to produce concentrate grades of 63%, 65%, 67% or higher;
- Conduct low intensity magnetic separation tests at various magnetic field strengths, to determine the appropriate magnetic field intensity for efficient magnetic separation;
- Conduct a series of magnetic separation tests, including scavenging tests and other tests, aimed at producing acceptable grades/recoveries of concentrates and tailings. Objectives of these tests include:- the definition of a suitable process flow sheet, an understanding of process equipment and costs, including studying the benefits of a stage grinding/recovery process particularly in relation to possible reduced grinding equipment and lower costs;

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

Multi-element chemical analysis for the iron ore concentrates and the tailings, to identify content of harmful elements including Sulphur, Phosphorous, Arsenic etc, plus the identification of any distribution trends in regard to various chemical elements during processing.

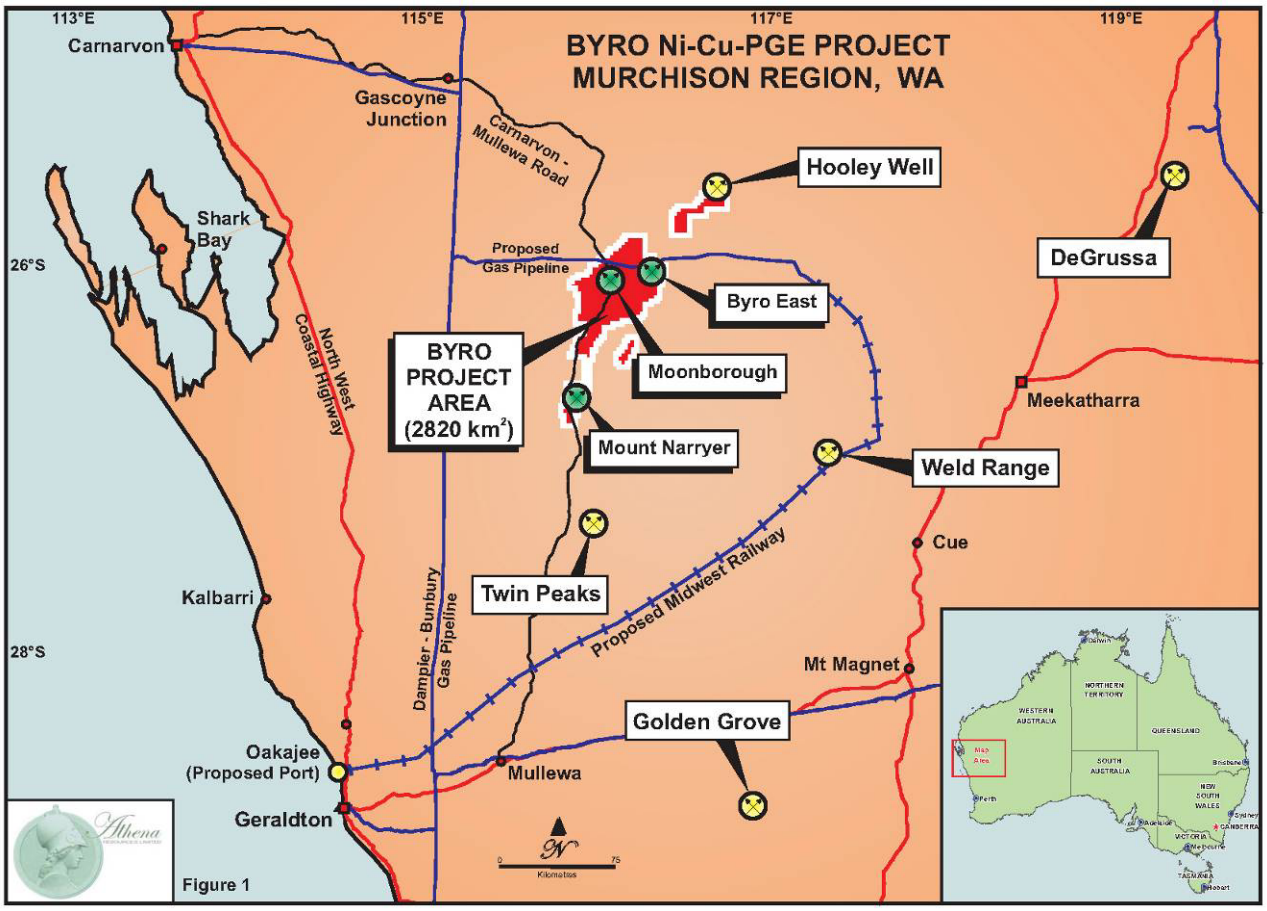
The 230kg bulk magnetite iron ore samples have been shipped to CRIMM for the testing.

Athena's non executive director Dr Caigen Wang (right) signed the agreement together with Professor Zen Weilong, the Head of the Department of Mineral Process Technology of CRIMM

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

BYRO BASE AND PRECIOUS METALS

During the quarter Athena announced the completion of a 1286 metre, 9 drillhole Reverse Circulation (RC) program, including 1 NQ diamond drill hole as a tail off an RC drillhole. The program was designed to test Ni-Cu-PGE targets on E09/1507 and E09/1637 as a first pass drill testing of the new discovery of mineralisation at Moonborough and the fertile intrusive system at Byro East which form part of the highly prospective Byro Base Metals Project (Figure 8).



Historic drilling within the Byro East intrusion previously included only 3 drill holes testing the geochemistry and mineralisation below 100 metres depth and no diamond drilling.

The Byro East intrusive drilling was co-funded by the Western Australian Government – Industry Drilling Program which enabled a diamond drill hole at Byro East to be included in Athena's RC drilling program.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

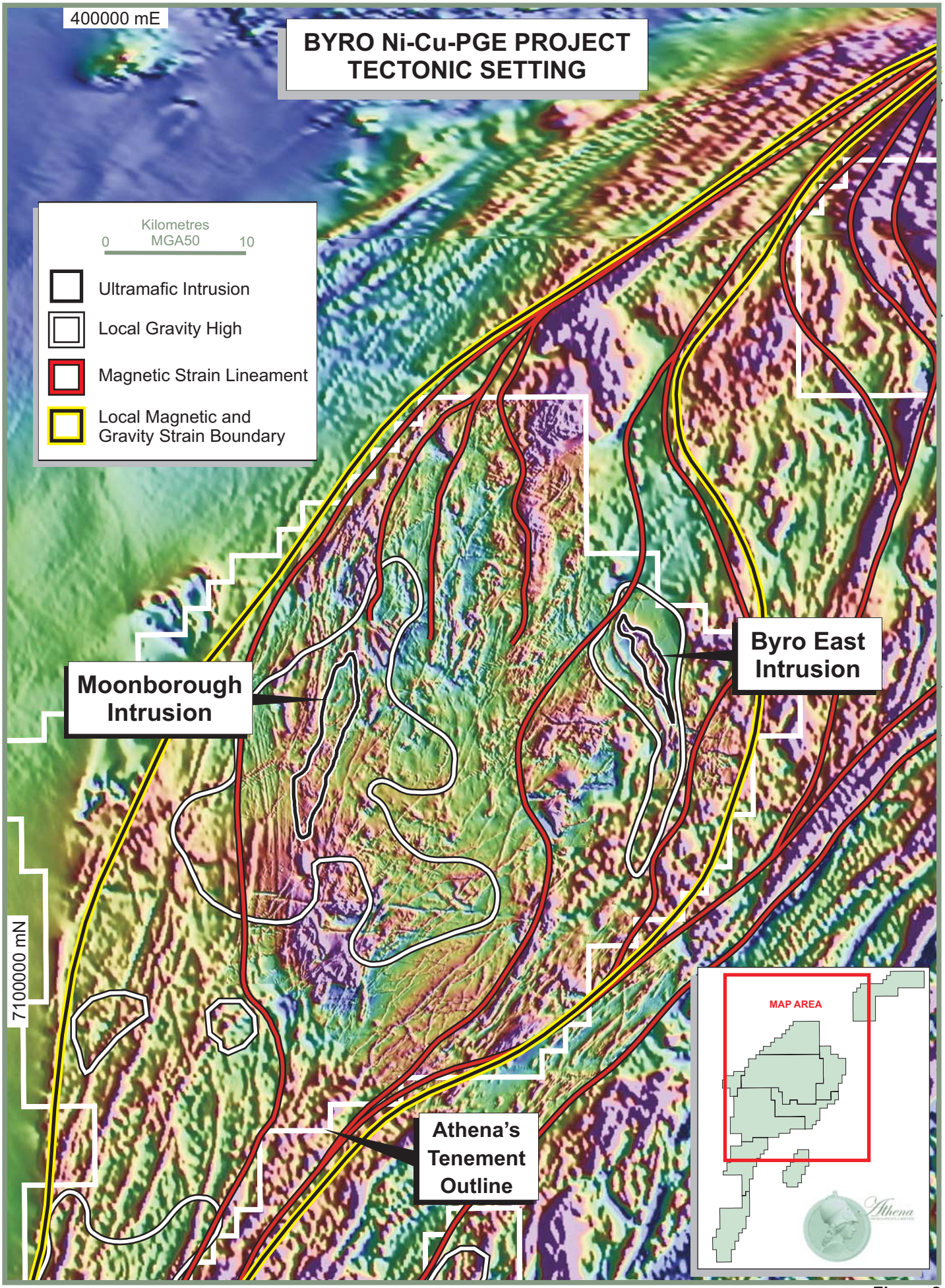


Figure 2

D1011ASXplanBaseMetals-Tectonic

The drilling program within the Moonborough intrusive has confirmed a southern continuation of approximately 3.8 kilometres south from the previously identified Moonborough outcrop. The outline of the Moonborough intrusive has been identified using soil sample and rock chip geochemistry in conjunction with geophysical gravity and aeromagnetic surveys, and now RC drilling. The total strike length of the Moonborough intrusive system is interpreted to be more than 12km long and 1.5km wide, with anomalous copper and nickel as well as highly elevated chalcophile elements having a strong affinity with sulphur and hence sulphide mineralisation.

Moonborough

The Moonborough Intrusive body of is one of a cluster of mafic/ultramafic bodies in the Byro Project area that align along major regional faults at the margin of the Yilgarn Craton within the Narryer Gneiss Complex (Figure 9). The Narryer Gneiss is inferred to be uplifted, consisting of older and higher grade metamorphic rocks than those found in the interior of the Yilgarn Craton. This implies a deep crustal emplacement of yet to be determined timing, possibly Early Proterozoic.

Drilling and assay results have confirmed the presence of a large mafic/ultramafic body containing anomalous copper, nickel and PGE's (see Appendix 1). The PGE's (up to a max of 145ppb Pd and 31ppb Pt), occur at several locations within the interpreted Moonborough intrusive. These essential indicators preference bonding with sulphur and are key indicators of sulphide mineralisation. Figure 3 shows the location of the recently completed RC drillholes, previously reported soil geochemistry results, extent of the high resolution gravity survey, and the interpreted outline of the Moonborough Intrusive body overlying the recently acquired high resolution aeromagnetic data. These exciting exploration results confirm that Athena has identified a new large, fertile ultramafic/mafic igneous complex at Moonborough.

Moonborough Drilling Results

AHRC0019: maximum down hole assays include **15ppb** platinum, **15ppb** palladium, **10ppb** gold, **96ppm** copper and **1010ppm** nickel.

AHRC0021 maximum down hole assays include **10ppb** platinum, **80ppb** palladium, **17ppb** gold, **620ppm** copper and **114ppm** nickel.

AHRC0022 maximum down hole assays include **31ppb** platinum, **72.86ppb** palladium, **200ppb** gold, **2700ppm** copper and **114ppm** nickel.

Water Bore Hole maximum down hole assays include **18ppb** platinum, **16ppb** palladium, **3ppb** gold, **140ppm** copper and **1350ppm** nickel.

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

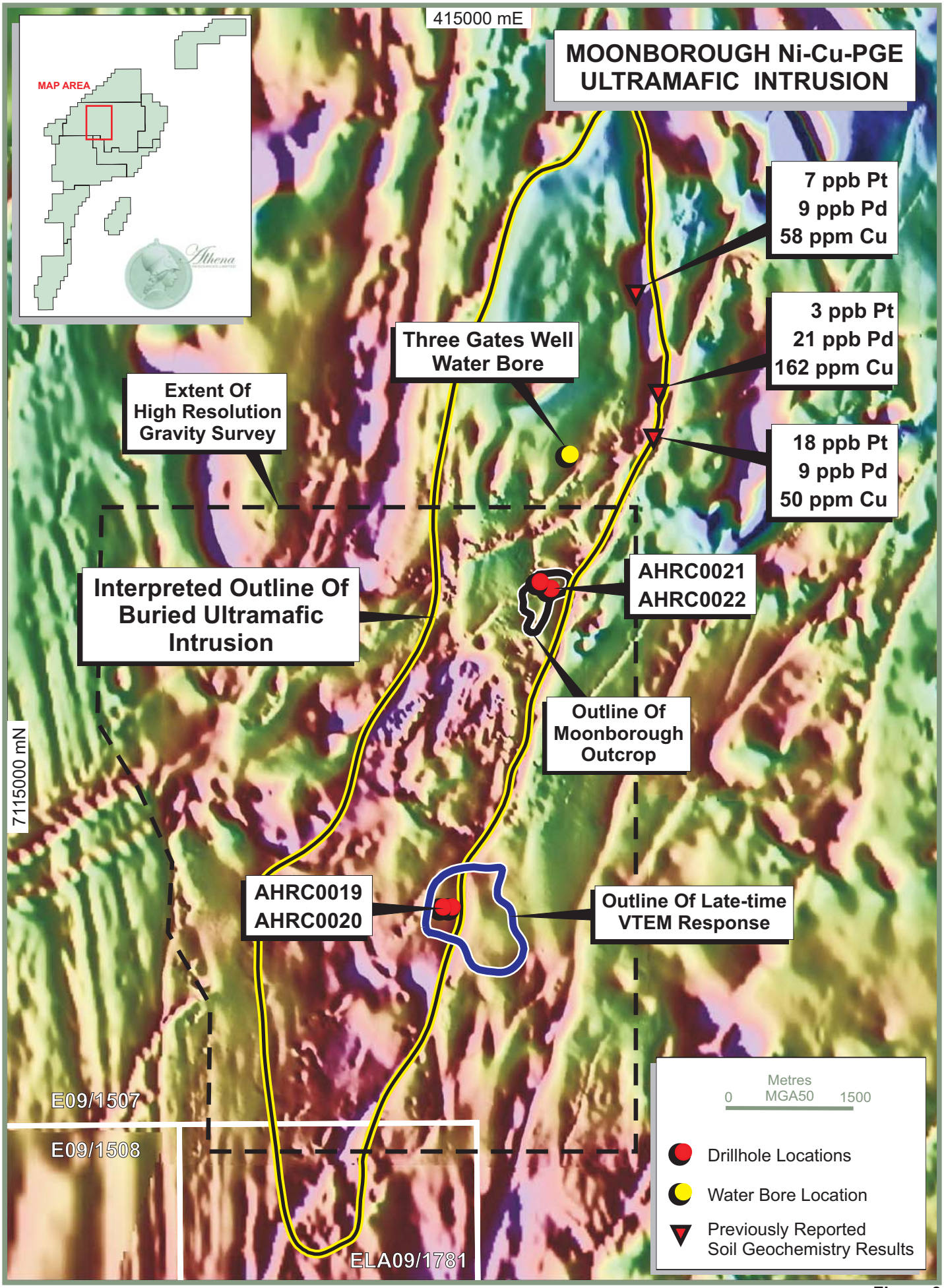


Figure 3

D1011ASXplanBaseMetals-Moonborough

Byro East

Initial inspection of the Byro East intrusion assays show variable geochemistry within the intrusion, delineated by sharp boundaries, indicating some form of differentiation, (Appendix 2). The zones are identified by relative variations of sulphur, chrome, nickel, copper and PGE's. Sharp zonation can be caused by structural controls, fractional crystallisation or a pulsed series of magma flows from sub chambers. Further geochemical assessment is underway.

The location of the three RC drillholes and one NQ diamond tail added to AHRC0027 are shown in Figure 11, along with the historical interpreted outline of the Byro East Intrusion, as defined by the aeromagnetic data.

During the acquisition of the high resolution gravity survey at Moonborough (Figure 10) Athena completed several gravity traverses over the Byro East Intrusion to test the applicability of gravity surveying as an exploration method. The results show an increasing gravity response towards the west (Figure 11), outside of the known surface expression of the intrusion. This suggests a root to the intrusive system, and hence a possible feeder zone under the mapped sediments on the western side of the Byro East Intrusion.

Byro East Drilling Results

AHRC0025; 36m @ 0.34% Ni from 0m, (In laterite).

AHRC0027; 4m @ 0.53% Ni from 16m (in Laterite)

AHRC0027; 129.7m @ 0.26% Ni from 20m

AHDH0001; 62.7m @ 0.29 % Ni from 149.7m (in Serpentinite)
Including
0.80m @ 0.33% Ni from 151.4m
1.73m @ 0.31% Ni from 157.4m
4.00m @ 0.31% Ni from 208.4m

Thin section analysis conducted by Roger Townend and Associates from the diamond core at 151.7m has identified several types of serpentine, including lizardite and antigorite as well as millerite alteration in pentlandite (SEM 66% Ni, see Plate 1 in Appendix 3). The process of Serpentinisation appears to have occurred throughout the Byro East intrusive body which has now been linked to an upgrade of accumulations of pentlandite to millerite.

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

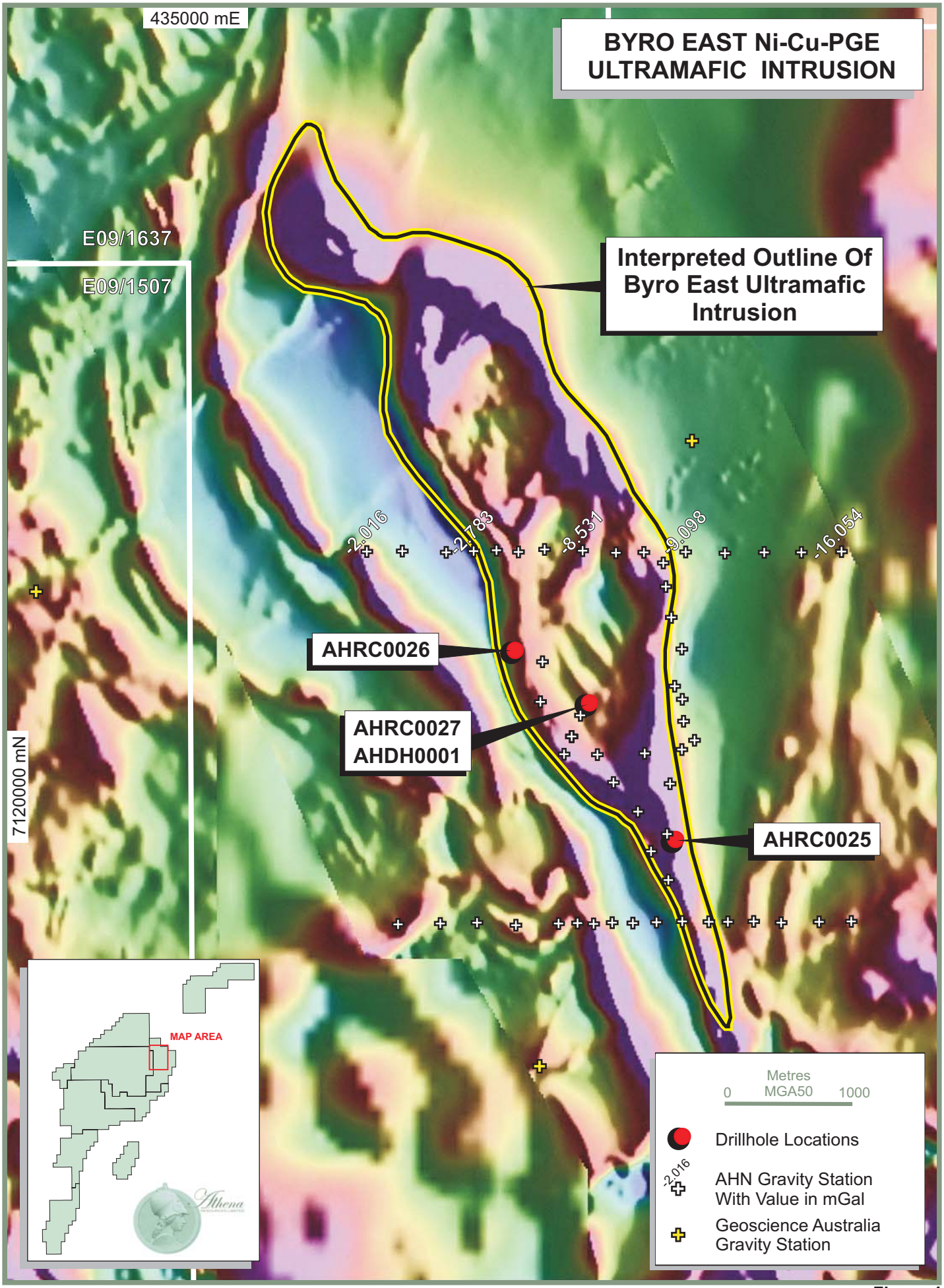


Figure 4

D1011ASXplanBaseMetals-ByroEast

This can now be added to the prospectivity attributes of the Byro East Intrusive, which include,

- Fertile altered Serpentine Antigorite c/w abundant olivine adcumulate of consistently high MgO (37.3 %< 44.8%).
- Consistent primary Ni sulphide averaging 2736 ppm.
- Anomalous zones of increased sulphur, chrome, nickel, copper and PGE's.
- Upgrade of pentlandite to millerite during serpentinisation.

Athena's exploration of this intrusive body will now advance to indentifying the variation in geochemistry and define possible pulses while exploring for concentrations of sulphides, feeder pipes and potential trap sites through which fertile magma has flowed.

Significance of These Results

The Byro intrusives are in a tectonic setting (see Figure 2) of large scale crustal sutures and rifting, broadly comparable to the major Jinchuan, Voisey's Bay and Raglan deposits. Athena has confirmed the coincidence of undifferentiated mafics, mineralised pyroxenite, gabbros and ultramafic rocks intruding through deeply buried high grade metamorphic country rocks. This derivation is indicative of a mafic intrusive parentage in an extensional environment through feeder conduits incorporating potential assimilation of country rock. Levels of Ni-Cu and PGE development as determined by assays indicate a fertile system. Figure 2 shows the Byro tenements on the northwestern edge of the Yilgarn Craton, bordering the Carnarvon Basin to the west.

3. ASHBURTON PROJECT (Athena Resources 100%, P08/493 95%, M08/189 90%)

No field work was carried out on the Ashburton Project in the December Quarter.

3. CORPORATE

In December Athena announced that it has agreed with Phillip Capital Pty Ltd to raise $2.2 million by the placement of approximately 27.5 million ordinary fully-paid shares in Athena, at 8 cents per share.

The placement consisted of two tranches. The first was the placement of 9,840,000 shares, which did not require shareholder approval (not exceeding 15% of the Company's capital) and the second was, subject to shareholder approval which was obtained on 12 January, for an additional 17,660,000 shares.

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

Phillip Capital, through its stockbroking arm Intersuisse, has acted as sole and exclusive Lead Manager to the placement and the shares were placed with sophisticated and professional investors.

The proceeds of the placements will be used for the ongoing exploration program on the Byro Iron Ore project including production of a JORC Resource and working capital, including costs of the raising;

E W Edwards

Managing Director
21 January 2011

The technical information relating to Athena's exploration projects was reviewed 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.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

APPENDIX 1

MOONBOROUGH DRILLING RESULTS

AHRC0019 (Moonborough South)

Intersected a strongly sheared talc chlorite part-serpentinised ultramafic of moderate Magnesium Oxide (MgO) from fresh rock at 160m to End of Hole (EOH) at 197m. Original fabrics have been obliterated by shearing and amphibolite grade metamorphism. This drillhole was sampled at 1m intervals.

Assays Include

- 38m of talc chlorite ultramafic from 160m in fresh rock, (average MgO = 22%).

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	10.3	7.4	3.2	52	880
Max	15	15	10	96	1010

AHRC0020 (Moonborough South)

This hole was abandoned due to excessive water discharge and collapse of clays in the channel sediments.

AHRC0021 (Moonborough)

Intersected an undifferentiated mafic followed by gabbro then pyroxenite intercalated with gabbro.

Assays Including

- From 0m to 28m; Strong, grading to weakly weathered undifferentiated mafic saprock

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	5.8	43.6	8.6	419	74.8
Max	10	80	17	620	88

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

- From 28m to 52m; weakly weathered, moderately sheared pyroxenite grading to fresh rock.

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	6.2	23.3	3.6	219	107
Max	10	30	5	266	114

- From 52m to 76m; meta-gabbro (fresh rock)

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	<5	<5	<1	44	45.6
Max	5	5	1	82	66

- From 76m to 123m (EOH); pyroxenite intercalated with gabbro

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	5.5	6	4	71	56.3
Max	10	10	6	230	80

AHRC0022 (Moonborough)

This RC drillhole started in ultramafic saprolitic clay grading to ultramafic saprock overlying a pyroxenite fresh rock unit. The last 8m of the hole intersected a weakly-mineralised gabbro.

- From 0m to 28m; strong to weekly weathered ultramafic saprolitic clay grading to saprock

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	13.3	72.9	33.1	1546	50.8
Max	30	145	200	2700	84

- From 28m to 84m weakly weathered pyroxenite grading to fresh rock

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	6.2	32.5	9.42	340.1	96.1
Max	31	10	31	674	114

- From 84m to 92 (EOH), meta-gabbro

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

	Pt (ppb)	Pd (ppb)	Au (ppb)	Cu (ppm)	Ni (ppm)
Average	5	<5	<1	73	76
Max	5	5	1	92	84

Byro_BW

A water bore hole was drilled within the interpreted Moonborough intrusive margin to refurbish the Three Gates Water Bore on the Byro Station, (nominated as Byro_BW). Saprolitic clay of probable talc chlorite ultramafic origins was intersected. Samples were collected from the surface to 24m down hole and 4m composites were assayed;

- From 0 to 24m; ultramafic saprolitic clay

	Pt (ppb)	Pd (ppb)	Au (ppb)	CuO ppm	NiO ppm
Average	17.08	13.16	1.5	111.6	1290
Max	18	16	3	140	1350

Table 1: Moonborough Drillhole Collar Locations (MGA50).

Hole ID	East	North	RL	Dip	Azi	Depth
AHRC0019	414703	7113530	314	-60.1	270	197
AHRC0020	414617	7113527	319	-59.8	270	141
AHRC0021	415835	7117089	338	-60.1	125	123
AHRC0022	415737	7117144	330	-60.9	125	92
Byro_BW	416067	7118607	320	-90	0	24

All drillholes have been cased with PVC for follow up with Down Hole ElectroMagnetic (DHEM) surveying.

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

APPENDIX 2

BYRO EAST DRILLING RESULTS

In the tables below the colours reference the following:

Mineralised Regolith
Mineralised Serpentinite (poor)
Mineralised Serpentinite (moderate)
Fertile Serpentinite
Sediment

AHRC0025 (Byro East, eastern contact)

36m @ 0.34% Ni from 0m, (In laterite).

AHRC0025 intersected an enriched laterite overlying a saprolitic zone before entering fresh rock at 50m consisting of a completely altered meso to adcumulate ultramafic, (Serpentinite). This was followed by a 24m section of highly sheared part-carbonate altered Serpentinite before entering a highly sheared intercalated pelitic sediment and ultramafic with granite. There was no significant intercept at the intrusive contact.

Assays Including

Hole ID	From-To	Pt (ppb)	Ni %	Mg %	Cr %	Cu %	S %	Zone
AHRC0025	0 - 36	9.3	**0.3426**	8.9	0.3500	0.0045	0.0338	Laterite
AHRC0025	36 - 68	5.0	0.1821	18.1	0.2174	0.0092	0.0191	Part Weathered UM. Fresh Rock at 50m
AHRC0025	68 - 92	33.3	0.0849	13.3	0.1358	0.0010	0.0045	**Elevated PGE's** Throughout Sheared UM
AHRC0025	92 - 120	5.0	0.0154	2.3	0.0218	0.0012	0.0045	Sheared sed/Granite

AHRC0026 (Byro East, western contact)

AHRC0026 intersected a 15m highly silicified zone before entering strongly weathered, foliated ultramafic saprock grading to fresh rock at 78m. Fresh rock samples consist of meso to adcumulate, almost completely serpentinised ultramafic, including lizardite and antigorite with trace nickel sulphides. From 92m a shear hosting anomalously high PGE's was followed by a 63m

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

zone which includes relatively elevated S, Ni, Cr and increased MgO to 156m. This was followed by a very strongly sheared serpentinite and minor intercalation with fine grain pelitic sediment. No significant intercept at the intrusive contact. The end of hole was at 180m.

Assays Including

Hole ID	From-To	Pt (ppb)	Ni %	Mg %	Cr %	Cu %	S %	Zone
AHRC0026	0 - 15	5.0	0.1686	13.2	0.1200	0.0009	0.0120	Silicified zone
AHRC0026	15 - 92	5.7	0.0709	16.8	0.2695	0.0006	0.0045	Fresh Rock. Serpentinite
AHRC0026	92 - 156	5.0	0.1808	21.8	0.3921	0.0005	0.0340	Serpentinite with higher S, Ni, Cr, MgO and Elevated PGE's (45 ppb Pt - 97 ppb Pd) in shear at top of Zone
AHRC0026	156 - 180	5.0	0.0691	14.1	0.2050	0.0014	0.0125	Sheared intercalated serpentinite with minor pelitic sediment

AHRC0027 and AHDH0001 (Byro East, central: RC pre collar to 149.7m, followed by NQ diamond tail to 212.4m)

4m @ 0.53% Ni from 16m in Laterite
172.4m @ 0.28%Ni from 40m in Serpentinite

AHRC0027 and AHDH0001 intersected a 20m laterite zone including **4m @ 0.53% Ni from 16m** before entering a strongly weathered ultramafic saprock with minor intervals of leached saprolitic clay grading to fresh rock which commenced at 40m.

Assays Including

Hole ID	From-To	Pt (ppb)	Ni %	Mg %	Cr %	Cu %	S %	Zone
AHRC0027	0 - 24	6.7	0.2156	0.4	0.1125	0.0020	0.0166	Laterite
AHRC0027	24 - 40	5.0	0.1887	19.8	0.0712	0.0008	0.0075	UM Saprock Zone
AHRC0027	40 - 44	27.5	0.2590	25.2	0.2860	0.0012	0.0400	**Eleveted PGE's (Pd 37.5 ppb)** shear at top of Serpentinised UM Zone
AHRC0027	44 - 88	13.3	0.2658	26.2	0.1760	0.0043	0.1950	Serpentinised UM zone with elevated anomalous PGE's and elevated chrome and sulpher
AHRC0027	88 - 149.7	5.0	0.2809	26.2	0.0820	0.0013	0.0791	Serpentinised UM Zone
AHDH0001	149.7 -152.2	5.0	**0.3136**	24.2	0.0972	0.0373	0.1630	Serpentinised UM Zone, high chrome and sulpher including 0.8m @

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910

								0.33% Ni from 151,4m and 1.73m @ 0.31%Ni form 157.4m
AHDH0001	152.2 -208.4	5.0	0.2872	26.3	0.0821	0.0020	0.0543	Serpentinised UM Zone
AHDH0001	208.4 -212.4		**0.3043**	26.3	0.0940	0.0024	0.1025	Serpentinised UM Zone with high chrome and sulpher including 4m @ 0.3043% Ni form 208.4

A shear hosting anomalously high PGE's from 40 to 44m defined the start of **172.4m @ 0.28%Ni, from 40m,** of serpentinised meso to adcumulate ultramafic to end of hole at 212.4m This zone is strongly altered, including lizardite and antigorite with minor chlorite, pyroaurite, carbonate, chrome spinel, millerite, copper and pentlandite. Veins include magnetite and carbonate. Within this package of serpentinite are broad boundaries defined by sharp contrast in sulphur and chrome with occasional elevated nickel above 0.3%.

AHDH0001 was abandoned at 212.4m due to loss of water return in a void.

Table 2: Byro East Drillhole Collar Locations (MGA50).

Hole ID	East	North	RL	Dip	Azi	Depth
AHRC0025	438808	7119583	382	-60	075	120
AHRC0026	437533	7121079	398	-60	260	180
AHRC0027	438121	7120662	385	-90	0	149.7
AHDH0001	438121	7120662	385	-90	0	212.4

All drillholes have been cased with PVC for follow up with Down Hole ElectroMagnetic (DHEM) surveying.

APPENDIX 3

THIN SECTION ANALYSIS

Visible native copper (Cu) was observed at 151.7m in diamond core and was evident in elevated Cu in assay from 151.4 to 152.8. Petrographic/ mineralogical identification from a polished thin section from 151.7m has confirmed this, (see Plate 2). Other sulphides present are pentlandite, millerite and traces of chrome spinel. The genesis of the native copper (Plate 3) in relation to the parent peridotite and subsequent metamorphism is now being investigated.

Millerite, (SEM composition 66%Ni) replacing pentlandite is also present (Plate 3). This secondary metamorphic occurrence most likely occurred during serpentinisation of the Byro East Intrusion. The presence of millerite has significant potential for upgrading the nickel equivalent percentage of pentlandite sulfide in a disseminated accumulation.

Athena Resources Limited ASX: AHN Email: ahn@athenaresources.com.au
63 Lindsay St, Perth WA 6000 Telephone: +61 8 9428 2900
Website: www.athenaresources.com.au Facsimile: +61 8 9428 2910

Sulphides in Thin Section

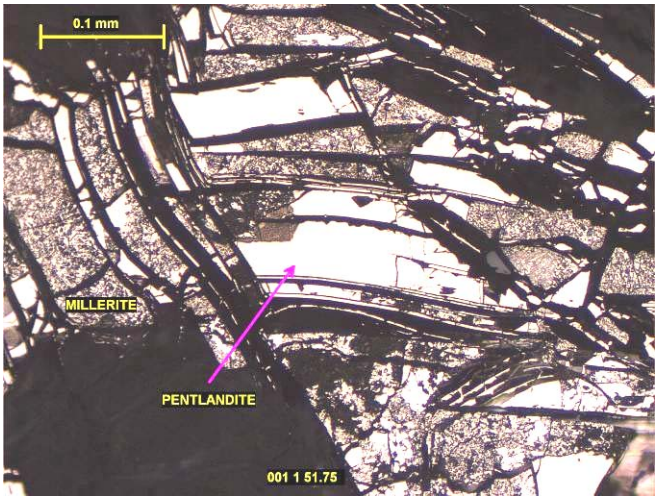


Plate 1 from thin section

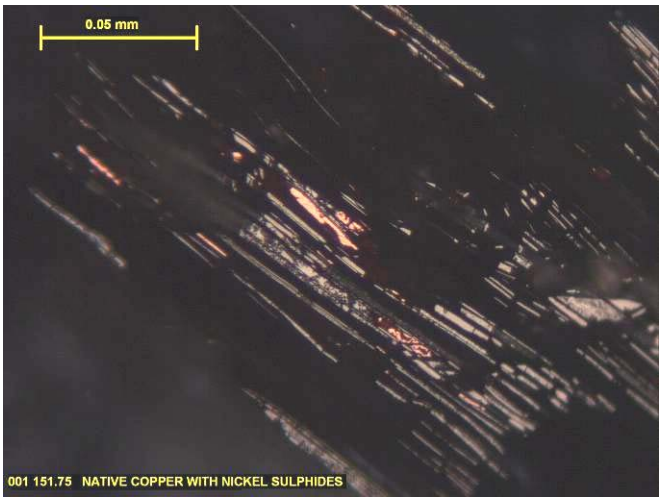
Thin Section showing Primary Pentlandite altered to Millerite. (Left)

Formed by removal of sulphur from the pentlandite during metamorphism and reconstituted into metamorphic millerite

Plate 2 from thin section

Nickel Sulphides, Millerite and Pentlandite with Native Copper. (Right)

Native copper as fine linear shaped particles in the serpentine with nickel sulphides.



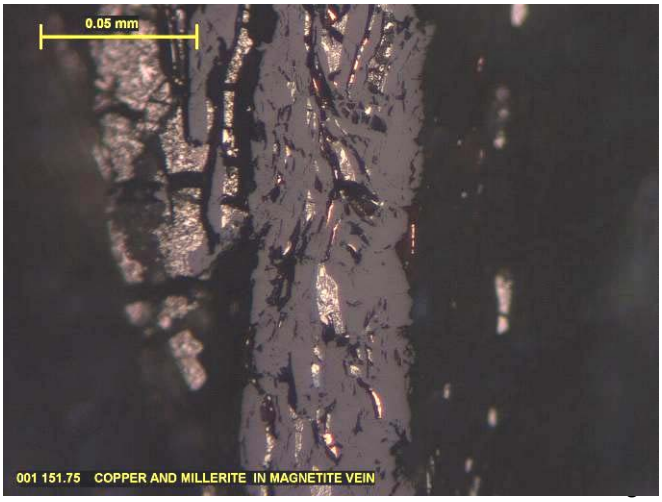


Plate 3 from thin section

Vein Hosting Magnetite-Millerite and Copper. (Left)

The assemblage association millerite - magnetite strongly indicates a secondary metamorphic occurrence most likely associated with the serpentinisation processes. It is unclear if the copper has been remobilised from within the system or related to the metamorphic event.

Athena Resources Limited ASX: AHN
63 Lindsay St, Perth WA 6000
Website: www.athenaresources.com.au
Email: ahn@athenaresources.com.au
Telephone: +61 8 9428 2900
Facsimile: +61 8 9428 2910