



DECEMBER - 2011 QUARTERLY REPORT

ATHENA RESOURCES LIMITED

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CONTACTS

Mr Ed Edwards
Managing Director

PROJECTS

Byro:

Iron Ore, Nickel-Copper-PGE's

Ashburton:

Gold and Base metals

SECURITIES

114M Shares - AHN
31M Options - AHNO

SHAREHOLDERS

Mr E Edwards	11.27%
Ishine International	7.22%
Mr D Kelly	6.70%
Hon A Thomson	3.82%

HIGHLIGHTS

BYRO PROJECT – IRON ORE

- **PRELIMINARY JORC RESOURCE Fe1 DEPOSIT**

- **RC and Diamond drilling at**

**Byro South,
Whistlejack and
The Whitmarsh Find**

BYRO EAST BASE METALS DRILLING

- **Diamond drilling results**

- **Best Nickel**
- **22.7m @ 0.301% Ni** from 232.3m
including **0.5m @ 0.64% Ni** from 254.5m
- **Best Chrome**
- **10.5m @ 0.61% Cr** from 354m
including **0.5m @ 1.03% Cr** from 360.5m
- **Best Copper**
- **10m @ 561ppm Cu** from 346.5m
including **0.5m @ 0.33% Cu** from 353.5m
- **Best Sulphur**
- **0.5m @ 0.31% S** from 254.5m

1. BYRO PROJECT (Athena Resources 100%)

BYRO IRON ORE

PRELIMINARY JORC RESOURCE for BYRO FE1 MAGNETITE DEPOSIT

In November 2011 Athena released the attached preliminary Byro Fe1 Inferred Mineral Resource prepared by AMC Consultants Pty Ltd.

DRILLING

During the December quarter the highly prospective Byro Iron Ore Project in the Mid-West region of Western Australia has been further expanded by the completion of drilling at the Byro South Ore Body, the Whitmarsh Find prospect and initial drilling at the Whistle Jack prospect.

The November/December 2011 Byro program comprised 1,899m of drilling including 1414m of reverse circulation drilling and 485m of Diamond drilling. Targeting was based on high definition aeromagnetic signatures, surface outcrop mapping and sampling as well as reported drilling results from September 2011.

Drill intersections for this round at Byro South demonstrate continued high grade ore from magnetic susceptibility (magsus) levels from the iron ore. Results are of similar high quality to the first section drilled at Byro South in September 2011. A direct comparison of grain size and Magnetic susceptibility of this ore can be made to Athena's Maiden Inferred Resource at the FE1 Ore Body.

BYRO SOUTH

Hole ID	Intersection	Magsus SI	From
AHRC0053D	80m	884	80m
AHRC0054D	53m	828	86m
AHRC0063D	53m	865	92m
AHRC0058	44m	492	67m
and	19m	765	117m
AHDH0005	19m	567	120m
AHRC0060	31m	803	51m
AHRC0061	28m	516	45m
AHRC0057	15m	438	70m

The Magnetite ore at Byro South appears within upper amphibolite facies gneissic rock in the form of a migmatite. The ore is matrix to massive localized in seams that range in thicknesses from 10m up to 50m width, dipping steeply to the west and strike dominantly north. Drilling has confirmed the high amplitude aeromagnetic anomalies are a direct result of the magnetite. The eastern boundary of the unit is well delineated by the laplucian magnetic imagery and aeromagnetic data. This successful round of drilling has completed testing of the western and eastern margins of the ore body at depth and demonstrates the characteristic of a continuous ore horizon with a strike length of the twin seam body in excess of 1 kilometre.

Drill intersections at the Byro Whitmarsh Find and Whistle Jack Prospects demonstrate continued high grade ore from magnetic susceptibility (magsus) levels from iron ore drill sample. Results are of similar high quality to the first section drilled at Byro South in September and November. A direct comparison of the quality of the Whitmarsh Find and Whistle Jack magnetite ore can again be made through grain size and magnetic susceptibility to Athena’s Maiden Inferred Resource at the FE1 as well as the Byro South Ore Body.

WHISTLEJACK

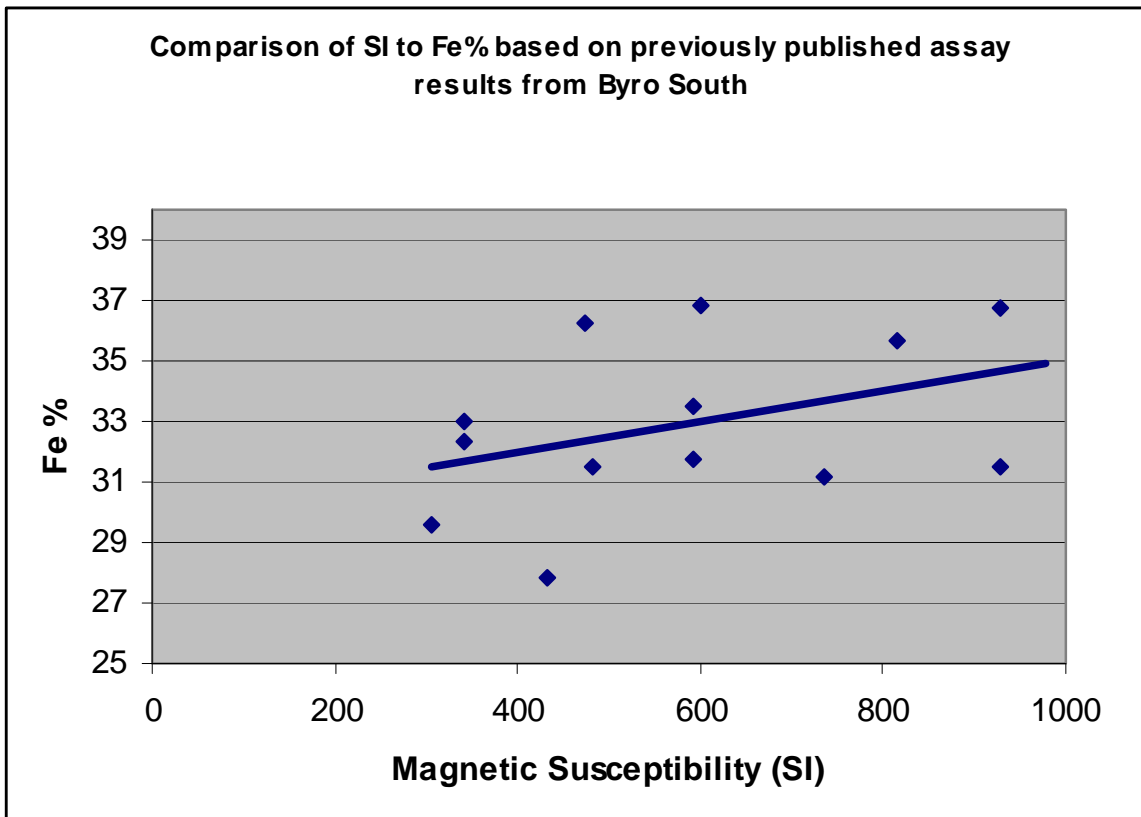
Hole ID	Intersection	Magsus SI	From
AHRC0065	68m	856	132m
AHRC0066	20m	993	87m
And	6m	329	57m

THE WHITMARSH FIND

Hole ID	Intersection	Magsus SI	From
AHRC0064	14m	530	57m
And	26m	838	90M

AHRC0056 (Haematite) a 24m intersection from surface assayed at 20.41% Fe and a 24m intersection from 52m assayed at 32.76% Fe

The latter intersection had a corresponding Magsus SI of 865

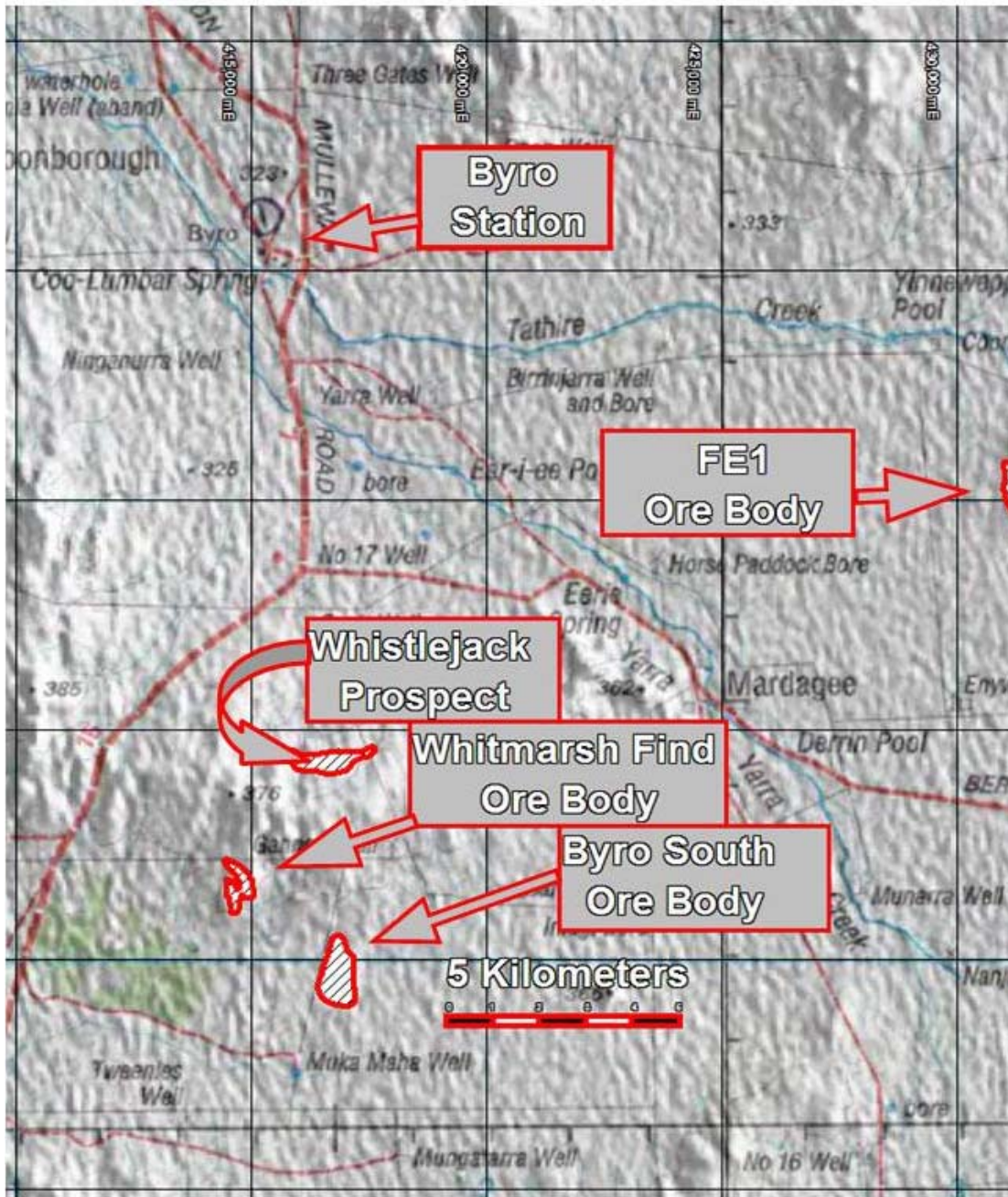


The magnetite ore at the Byro Whitmarsh Find and Whistle Jack Prospects appears within upper amphibolite facies gneissic rock in the form of a migmatite. The ore is matrix to massive, localized in seams that range in thicknesses from 10m to +70m width, dipping steeply to the southwest and strike dominantly northwest. Drilling has confirmed the high amplitude aeromagnetic anomalies are a direct result of the magnetite. The boundary of the unit is yet to be delineated by drilling, however, the geophysical aeromagnetic anomaly now drill tested indicates a near surface area of ~600,000m² of high quality magnetite at Whistle Jack and ~300,000m² of high quality magnetite at the Whitmarsh Find. This successful round of drilling has completed first pass testing of the two new bodies at depth and demonstrates the characteristic of a continuous ore horizon with strike lengths of 1 kilometer for the Whitmarsh Find and 1.7 kilometers for the Whistle Jack Body.

Comprehensive drilling completed in November at Byro South suggests a near surface potential body for infill drilling of 40 to 50 million tonnes¹, within 150m of surface. Drilling completed this December at Whitmarsh and Whistle Jack suggests a near surface body for infill of a further 50 to 70 million tonnes¹. Infill drilling will commence in April 2012 to define an Inferred Resource within JORC compliant standards.

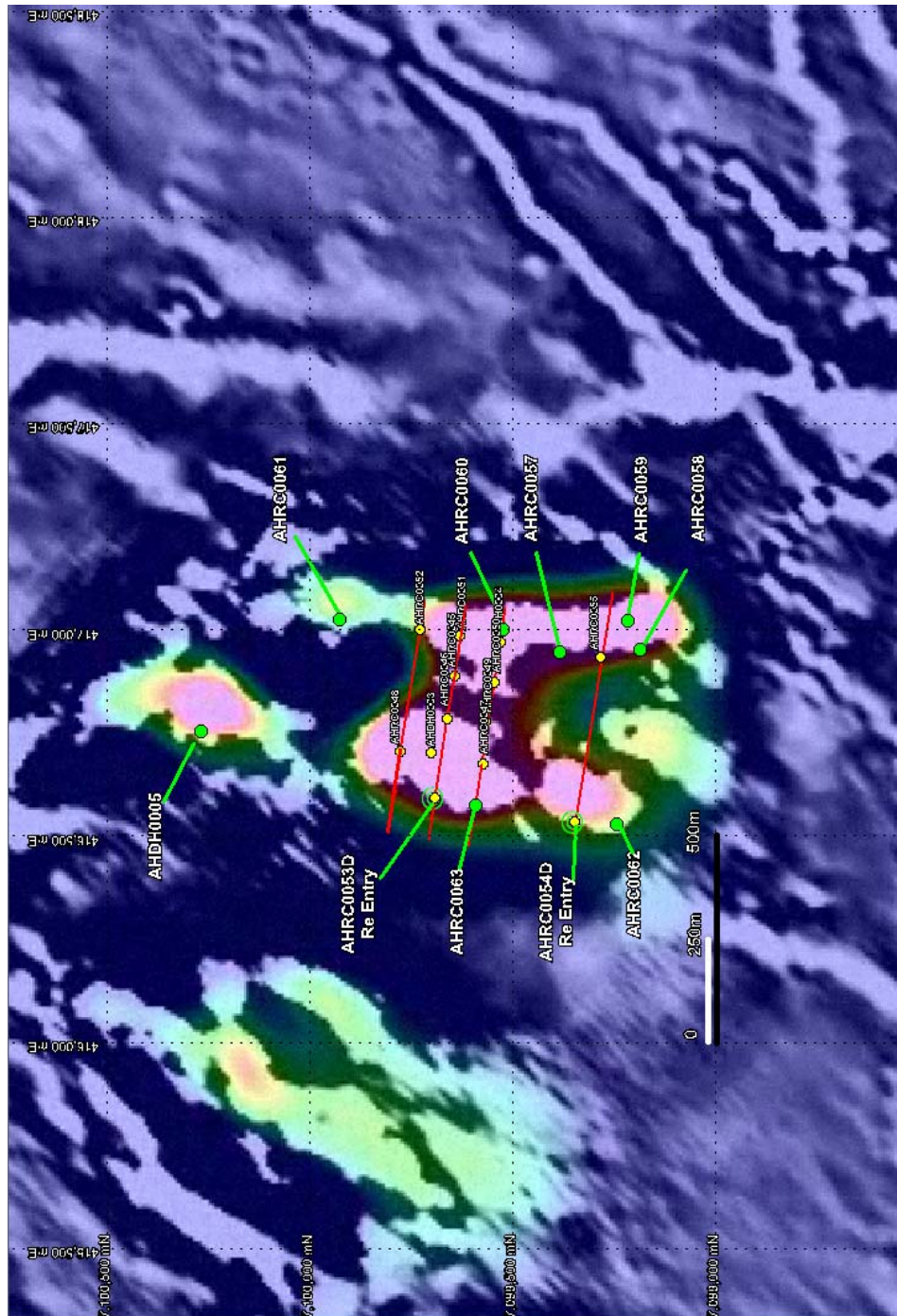
¹ *The potential quantity and grade of iron deposits reported as exploration potential is conceptual in nature. At this stage there has been insufficient exploration to define a Mineral Resource.*

Figure 1 Location Map



The Fe1 Ore body is approximately 20 kilometers northeast from the Byro South Ore Body. The two ore bodies are bisected by the southeast running Milly Milly Road. Access to The Byro South Ore Body is from the Carnarvon-Mullewa Road and the Milly Milly Road.

Figure 2 Byro South Ore Body Drilling 2011 shown over a 1500nT aeromagnetic filter



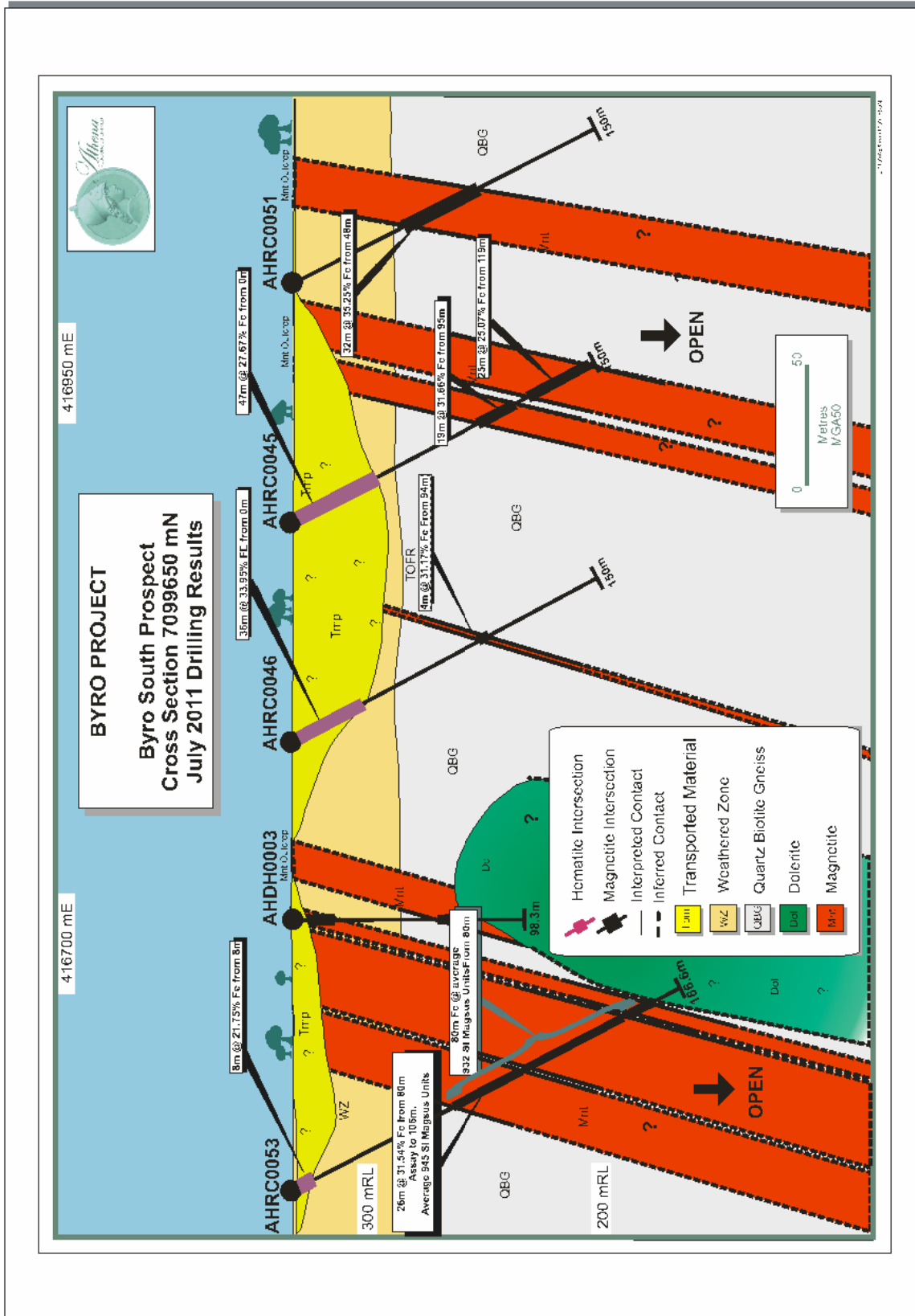
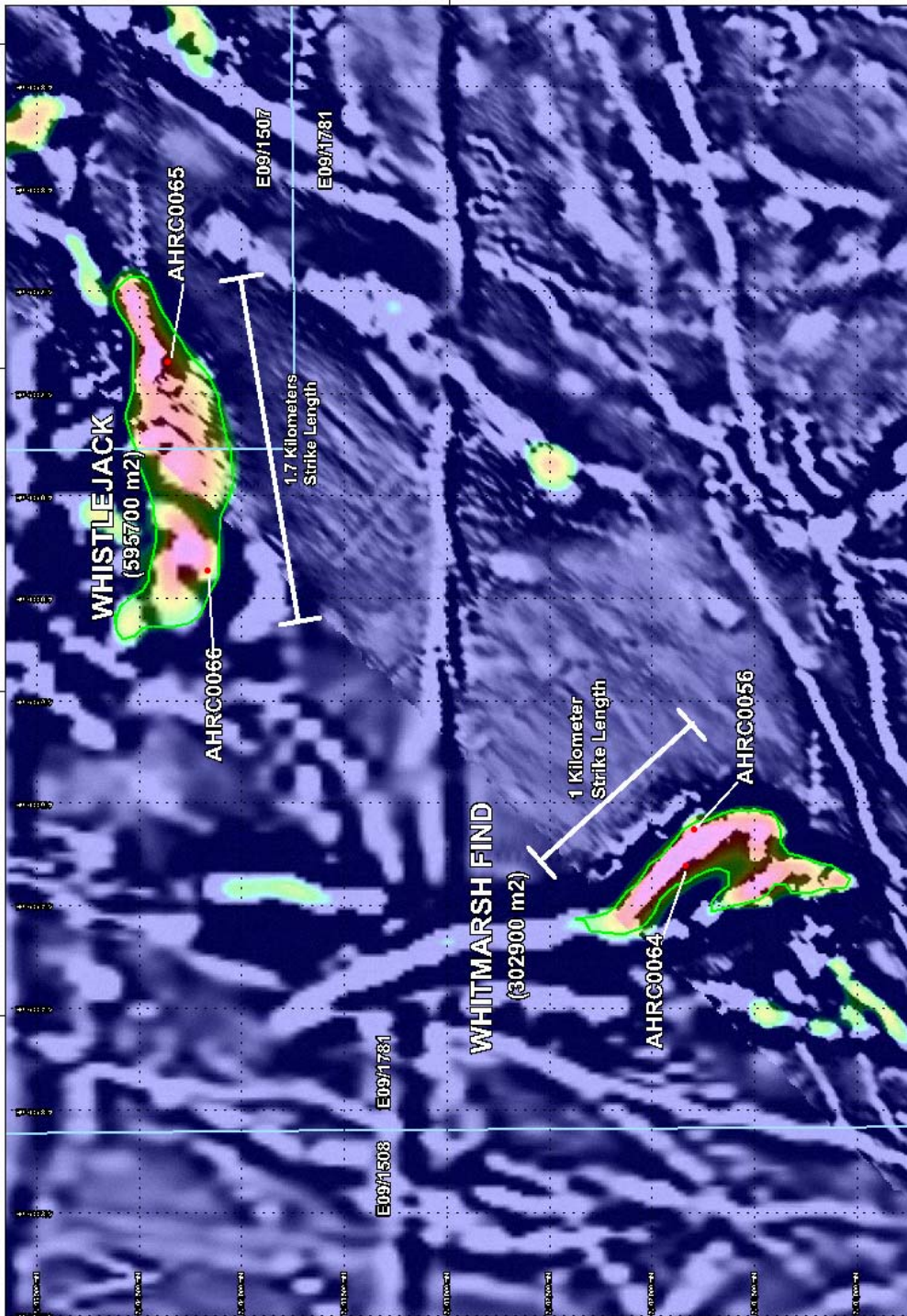


Figure 4. Whitmarsh Find Ore Body Drilling 2011 shown over a 1500nT aeromagnetic filter



BYRO BASE AND PRECIOUS METALS

The Byro Intrusives are in a marginal setting on the north western edge of the Yilgarn Craton characterised by large scale crustal sutures cutting through once deeply buried Archean continental crust subjected to extensional continental rifting resulting in the Byro Sub basin and Carnarvon Basin. Athena has confirmed a greater than previously recognised occurrence of undifferentiated mafics, mineralised pyroxenite, gabbros and dunite ultramafic rocks in this terrain. These rocks have intruded through once deeply buried upper amphibolite facies gneissic and metapelitic rocks.

Drilling and Assay Results

The Diamond component of the Byro East intrusive drilling is co-funded by the Western Australian Government – Industry Drilling Program which enabled a diamond drill hole at Byro East. During the quarter the diamond hole drilled in the Second Quarter was continued passed the proposed depth of approx 400m to 500M. The hole continued due to persistent nickel sulphides. The Sulphides occurred at elevated levels as disseminated pentlandite and millerite in aggregates that included native copper and chalcopyrite in a proven fertile intrusion.

Byro East Thin Section Petrology

Diamond drill hole AHDH0001 was drilled in three stages; RC precollar to 150m then diamond tail to 212.4m. The hole was re-entered and continued from 212.4m to a depth of 500m in 2011. Thin section petrology was commissioned in the December Quarter to investigate the relationship of multi element sulphides and native copper observed in core logging.

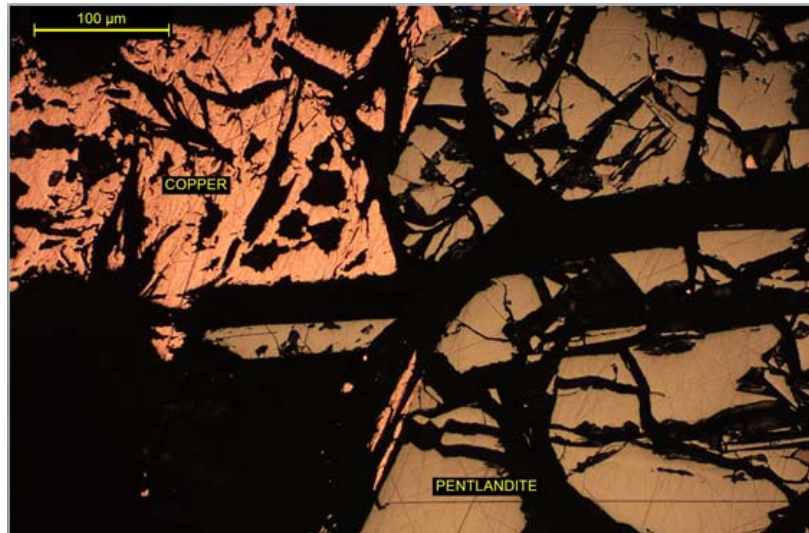
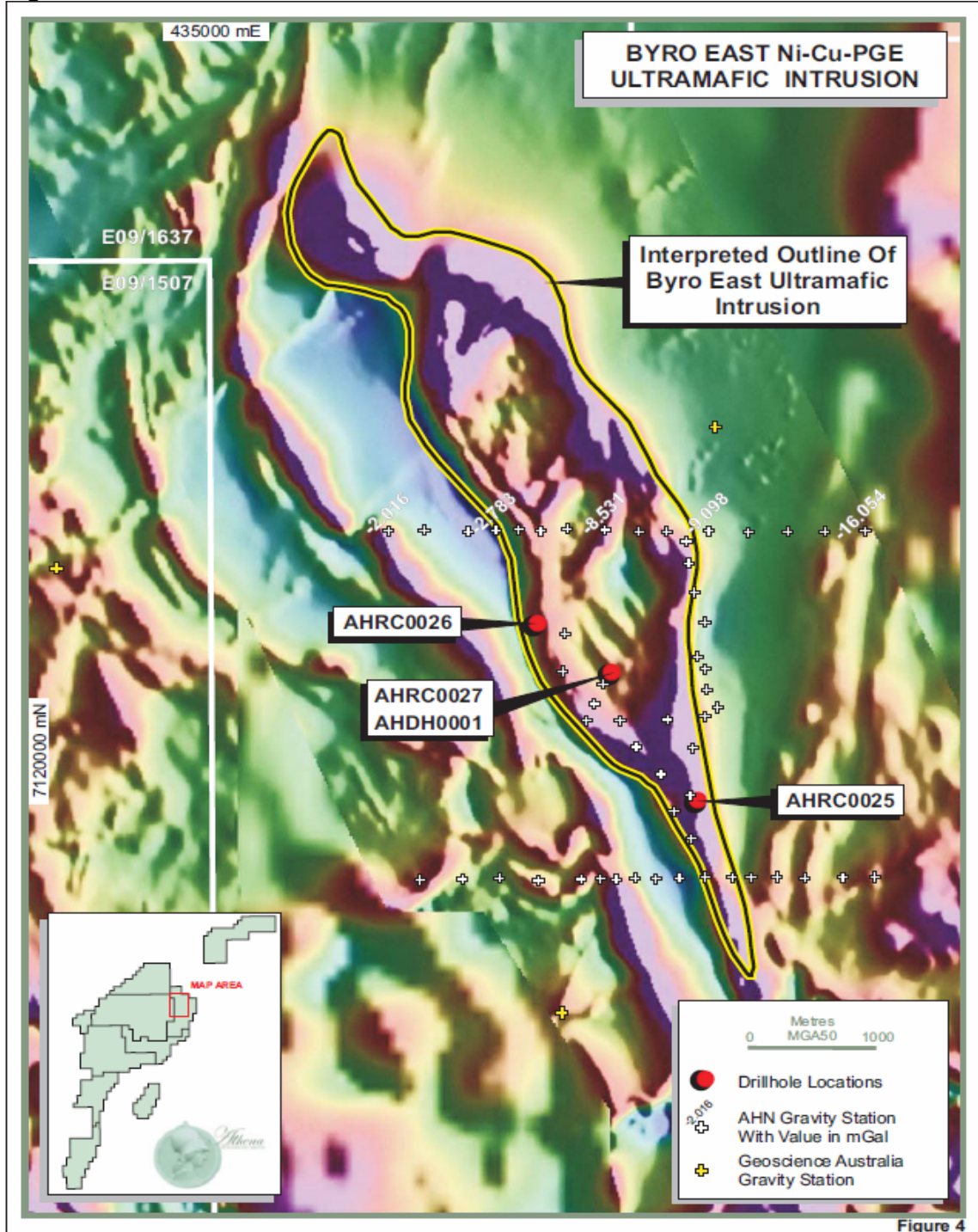


Figure 5 BYRO EAST DRILL HOLE LOCATIONS



The results from drilling completed in the Second Quarter included;

AHDH0001 Results from 0m to 212.4m (2010)					
Interval	Ni Grade	From	Interval	Grade	From
4m @	0.530%	16m			
129.7m @	0.260%	20m			
62.7m @	0.290%	149.7	Including	0.8m @	0.330% 151.4m
				1.73m	0.310% 157.4
				@	
				4m @	0.310% 208.4m
AHDH0001 Results from 212.4m to 500m (This Quarter 2011)					
Interval	Ni Grade	From	Interval	Grade	From
0.5m @	0.301%	214.4m			
1m @	0.301%	217.5m			
0.5m @	0.315%	227m			
1m @	0.302%	231m	Including	0.3m @	0.330% 231m
22.7m @	0.301%	232.3m	Including	0.5m @	0.640% 254.5m
0.72m @	0.302%	259.8m			
6m @	0.300%	271m	Including	0.2m @	0.460% 276.5
1.5m @	0.306%	320m	Including	0.5m @	0.350% 321.5
2.5m @	0.314%	328.5m	Including	0.5m @	0.380% 328.5
1m @	0.305%	335m			
2.5m @	0.302%	343m			
1m @	0.302%	351.5m			
0.5m @	0.308%	355.5m			
0.5m @	0.340%	370m			
0.5m @	0.303%	372m			
1m @	0.303%	381.5m			
7.5m @	0.304%	424m			
1m @	0.314%	467m			

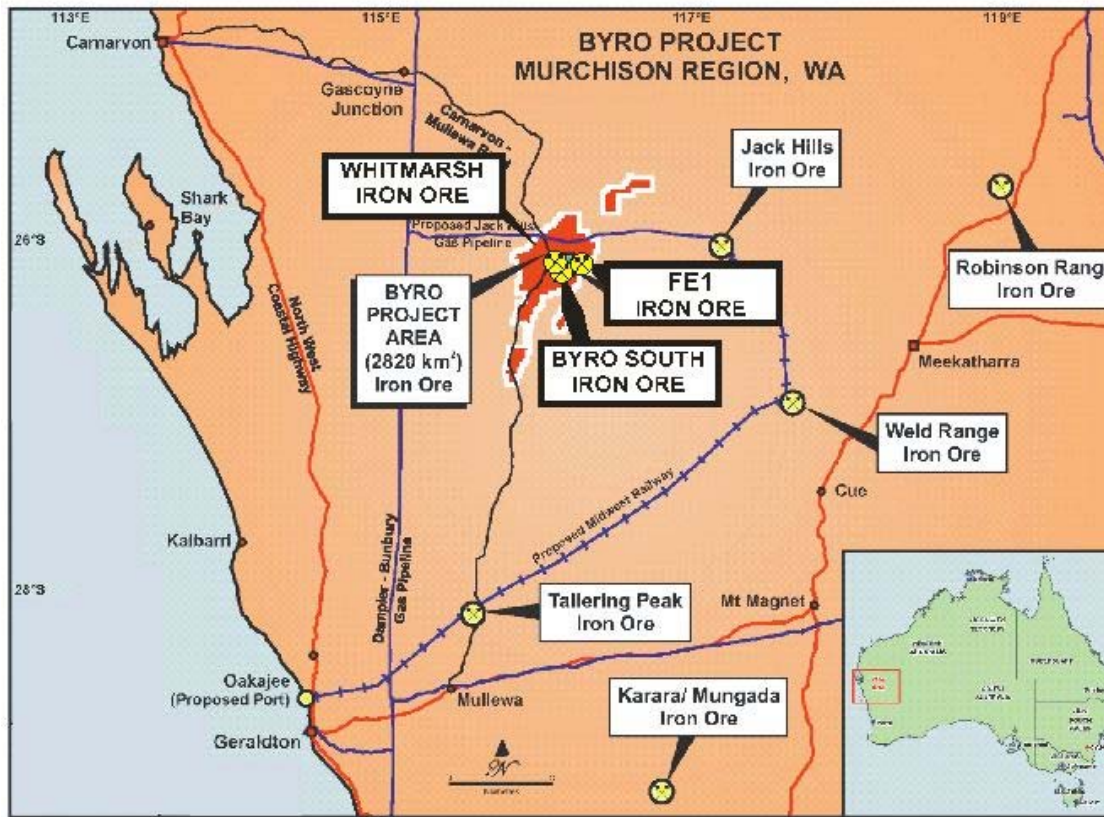
- **Best Nickel**
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- **Best Copper**
- 10m @ 561ppm Cu from 346.5m including **0.5m @ 0.33% Cu** from 353.5m
- **Best Sulphur**
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ABOUT ATHENA

Athena Resources Limited (ASX:AHN), which is based in Perth, was listed on the ASX in 2006 and currently has 114 million shares on issue. Athena’s major asset is its 100% interest in the Byro Project where it is exploring for copper, nickel, PGE’s in addition to iron ore. The company also has significant gold, lead and silver targets in the Ashburton.

The Byro Iron Ore Project (Athena 100% through its wholly owned subsidiaries) is strategically located some 330km north east of Geraldton and about 250km north of the Mt Gibson Talling Peak Project. It is 100km west of the proposed Midwest Iron Ore Railway 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 6. Byro Location Map



E W Edwards
Managing Director
31 January 2012

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.

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28 November 2011

Mr Liam Kelly
Senior Geologist
Athena Resources Ltd
63 Lindsay Street
PERTH WA 6000

Dear Mr Kelly

**BYRO FE1 MAGNETITE DEPOSIT
MINERAL RESOURCE STATEMENT
AMC REFERENCE NUMBER: 211021
28 NOVEMBER 2011**

AMC Consultants Pty Ltd (AMC) has completed a Mineral Resource estimate of the Byro Fe1 magnetite deposit for Athena Resources Ltd as summarized below. The Mineral Resource estimated is listed in Table 1 using no cut-off grade. The Mineral Resource estimate has been classified and reported in accordance with the JORC Code¹.

Table 1 Byro Fe1 Mineral Resource Estimates (no cut-off grade applied)

BYRO FE1 INFERRED CONCENTRATE ESTIMATES									
OXSTATE	Mt	DTR_Fe %	DTR_SiO ₂ %	DTR_Al ₂ O ₃ %	DTR_P %	DTR_S %	DTR_LOI %	DENSITY (t/m ³)	DTR %
Fresh	18.1	70.7	1.16	0.32	0.003	0.014	-3.26	3.5	35.1

BYRO FE1 INFERRED WHOLE ROCK ESTIMATES								
OXSTATE	Mt	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	LOI %	DENSITY (t/m ³)
Fresh	22.7	25.7	49.2	5.3	0.050	0.072	-0.08	3.5
Oxide	0.1	22.1	53.5	6.7	0.045	0.090	0.27	2.8
Total	22.8	25.6	49.2	5.3	0.050	0.072	-0.08	3.5

Notes: (i) Due to the effects of rounding, totals may not be able to be reproduced exactly from the above data.

(ii) The estimated Concentrate Mineral Resource is wholly contained within the Whole Rock Mineral Resource, and they are not cumulative.

Byro Fe1 magnetite mineralisation is confined to a magnetite rich migmatite that occurs within an Archean Gneiss belt which trends north-northeast for approximately 200 km.

The drilling coverage has allowed the Byro Fe1 deposit to be modelled to a strike length of approximately 800 m and the main mineralised zone has a width of approximately 200 m. The mineralised zone has been interpreted to extend vertically to depths >240 m below surface.

¹ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code 2004 Edition, Effective December 2004, Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Minerals Council of Australia (JORC).

Separate Mineral Resource estimates have been produced for the whole rock (head grade) data and the Davis Tube Recovery (DTR) concentrate data for the mineralised zone.

Drill coverage is generally 100 m x 50 m east-west along the deposit comprising nine drill lines.

The drillhole dataset for Byro Fe1 deposit comprises 1 532 sample intervals from 29 drillholes for the head grade data.

Resource classification of the estimate was derived from consideration of a range of confidence indicators, including geological understanding, data density and location, and grade estimation and quality parameters.

Grade estimation was undertaken using ordinary kriging, with samples composited to 2 m as the input. An inverse distance squared estimate was also completed for verification.

The Mineral Resource was completed using Datamine mining industry software. A volume model was developed with a 20 m east x 50 m north parent cell. Subcelling was utilised to ensure domain boundaries were honoured as accurately as possible.

The model was validated by statistical and visual comparison of data and estimated grades, and by alternate estimates.

Yours sincerely



Jonathan Sharp
Senior Geologist

The information in this report that relates to Mineral Resources is based on information compiled by Jonathan Sharp who is a full-time employee of AMC Consultants Pty Ltd and a Member of the Australian Institute of Mining and Minerals.

Competency for the Mineral Resource estimates is taken by Sharron Sylvester who is a full-time employee of AMC Consultants Pty Ltd and a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code). Sharron Sylvester consents to the inclusion of this information in the form and context in which they occur.