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Athena Byro Iron Ore
Excellent Rock Chip Results Extend Mineralisation

SAMPLE ID	LOCATION	Fe%
MBRC250	Byro North 1	**41.50**
MBRC251	Byro North 2	**40.49**
MBRC252	Byro North 2	**41.75**
MBRC253	Byro North 3	**44.91**
MBRC254	Byro North 3	**41.12**
MBRC264	Byro North 4	**41.37**
MBRC265	Byro North 5	**43.34**
MBRC266	Byro North 5	**41.83**
MBRC267	Byro North 6	**45.32**
MBRC262	Byro Northwest 1	**42.91**
MBRC263	Byro Northwest 2	**42.69**
MBRC255	Byro South 1	**44.66**
MBRC256	Byro South 1	**49.82**
MBRC257	Byro South 1	**49.12**
MBRC258	Byro South 1	**46.87**
MBRC260	Byro South 2	**43.48**

The Directors of Athena Resources Limited (ASX: AHN) are pleased to advise the completion and results of an outcrop rock chip sampling program at Byro, conducted as a follow up from refined high amplitude magnetic targeting in December 2010.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

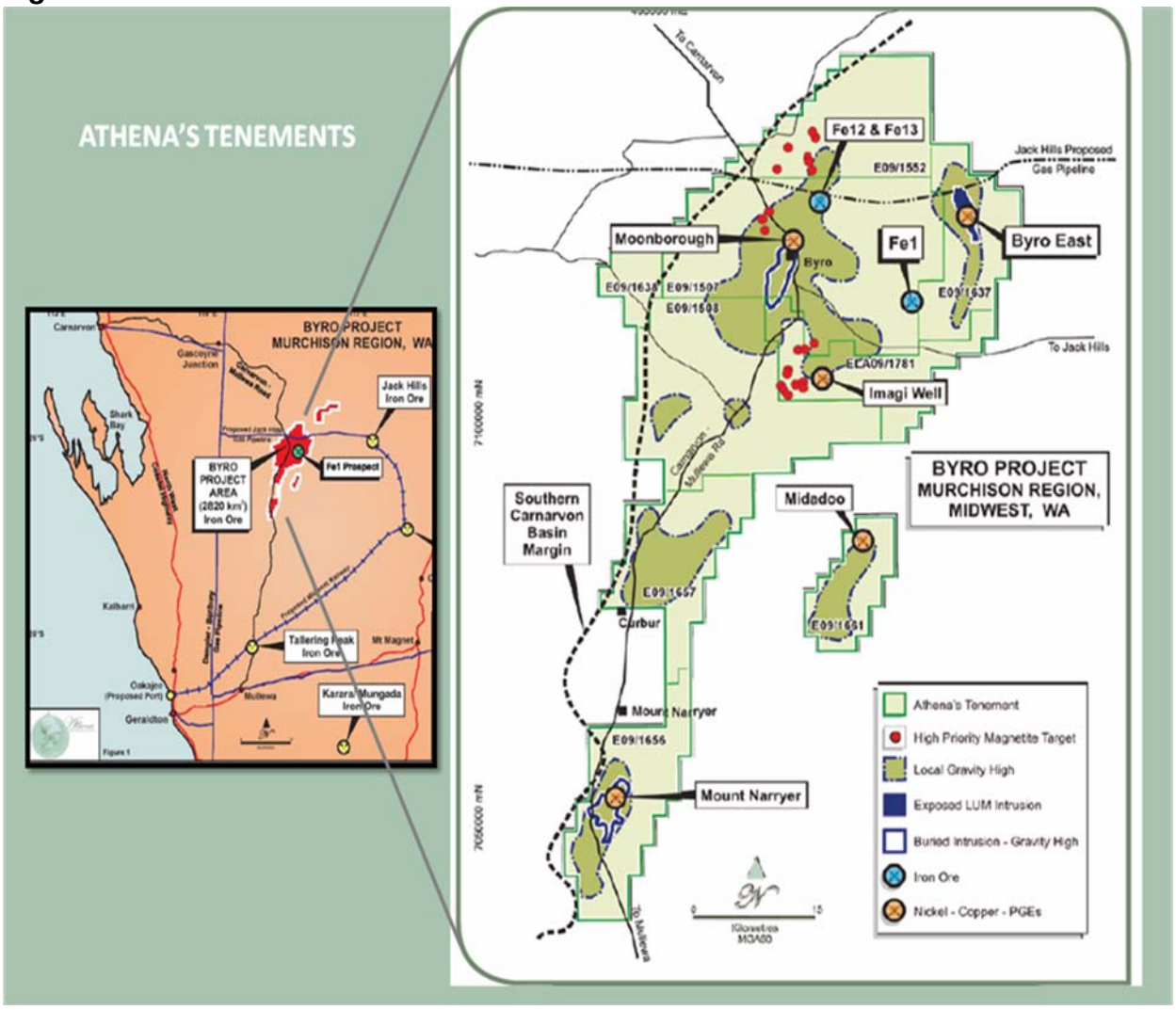
All samples analysed at Ultra Trace Pty Ltd - Canning Vale, Western Australia by method XRF202

Loss on Ignition (LOI) determined Gravimetrically

LOCATION

The Byro Iron Ore Project is strategically located approximately 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)

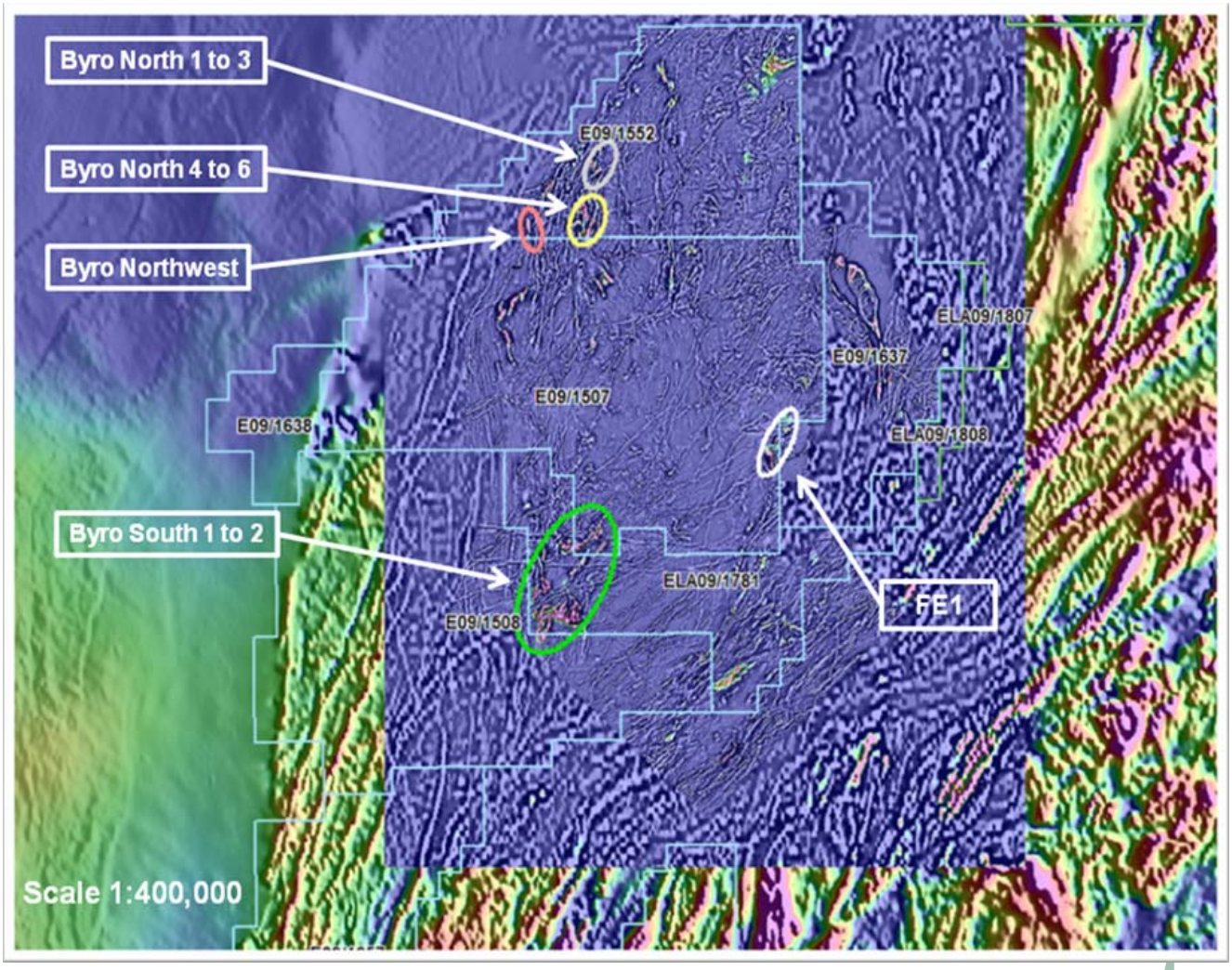
Figure 1



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)

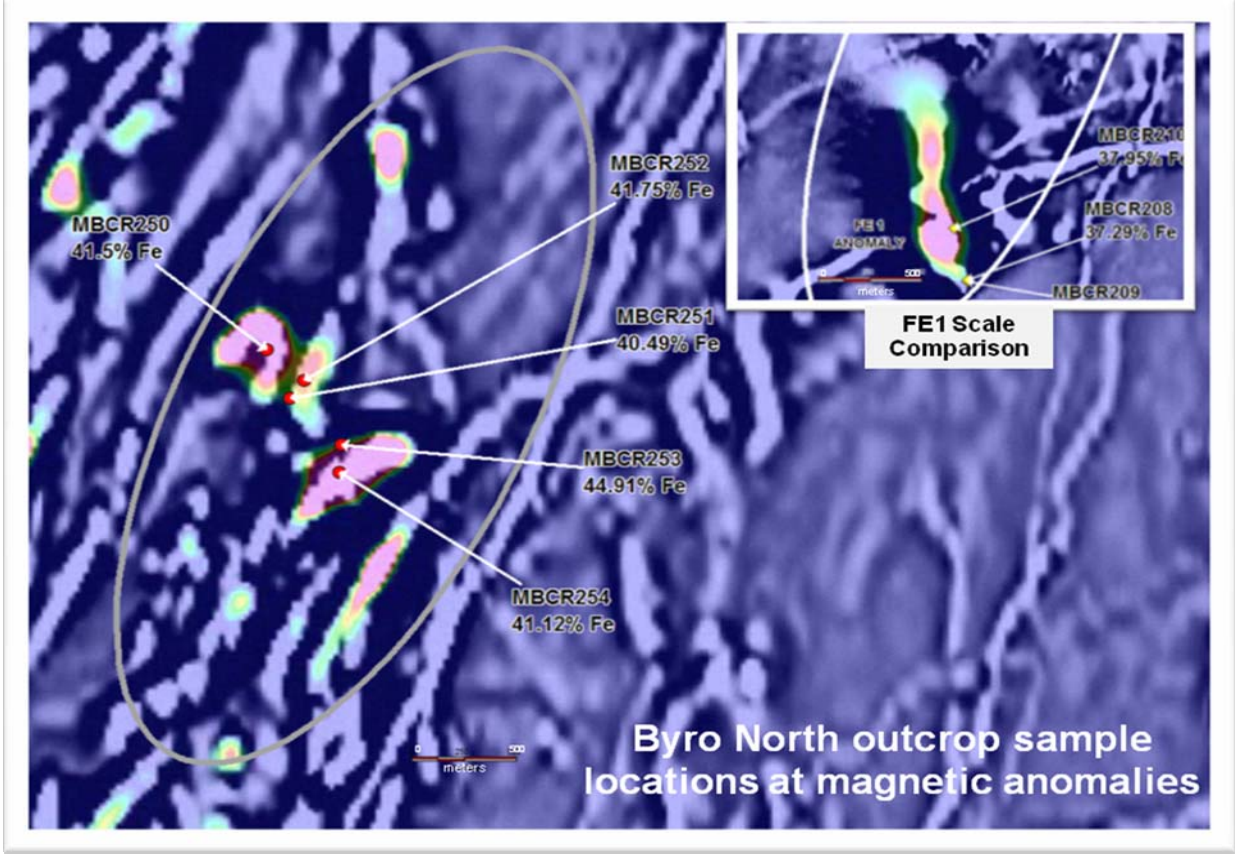
Figure 2 Rock chip outcrop locations overlying filtered Aeromagnetic Response of 1500nT and above



Byro North

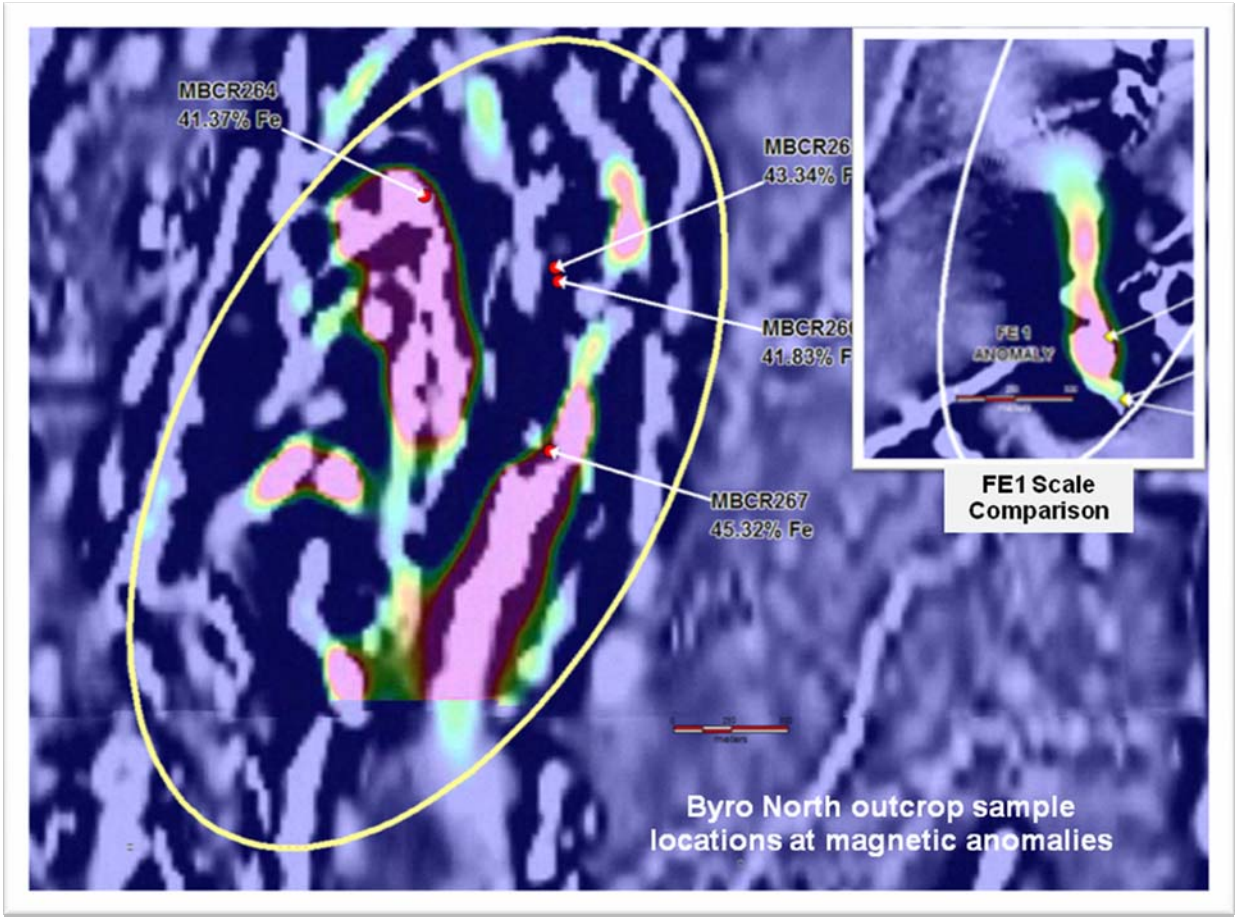
The majority of the magnetic units at the Byro North locations are under shallow cover with outcrop commonly situated at the edge of the aeromagnetic response. A direct comparison with the outcrop assay results and aeromagnetic intensity response has been calculated for each of the sample locations and 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



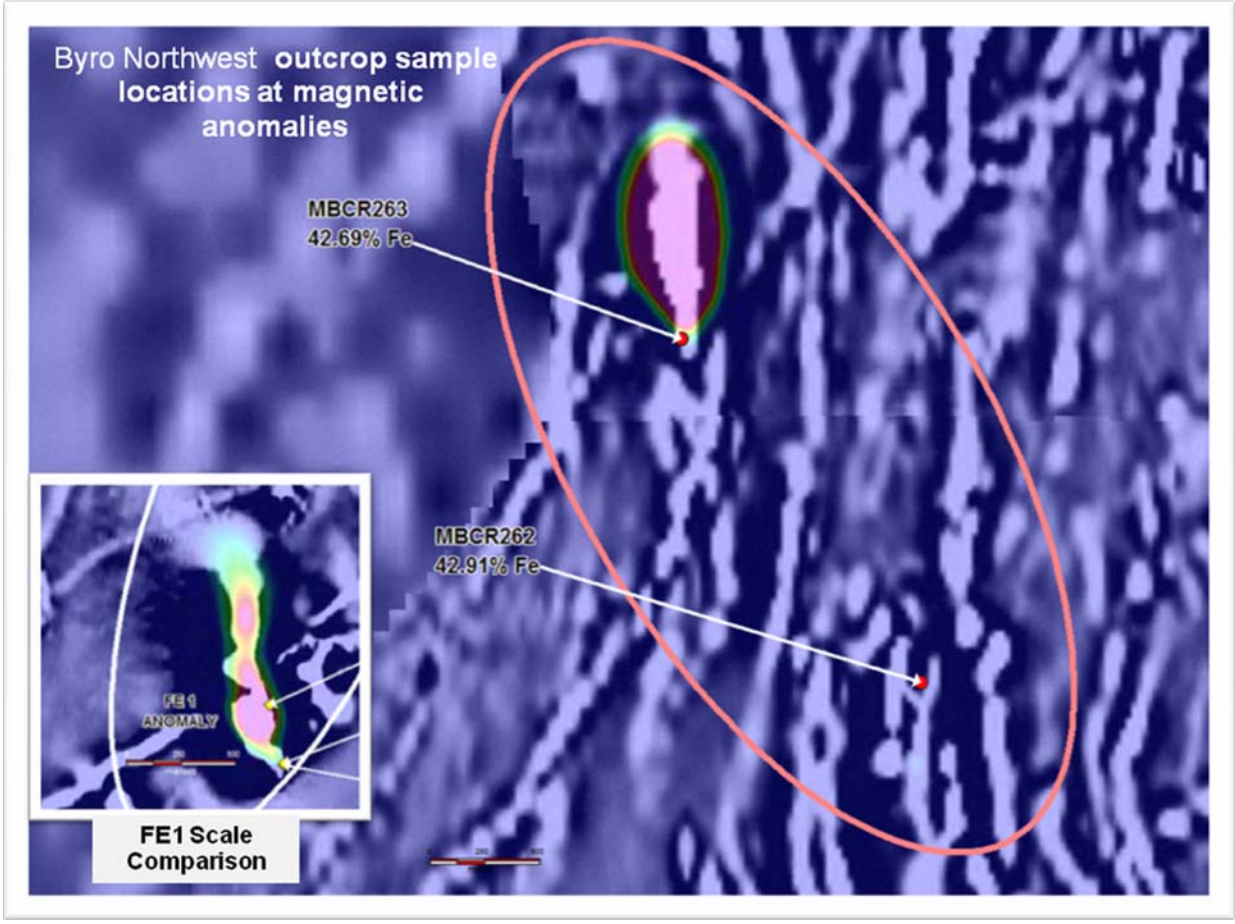
Average aeromagnetic amplitude at sample locations MBCR250 to MBCR254 is 1574nT with 41.95% Fe at outcrop.

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



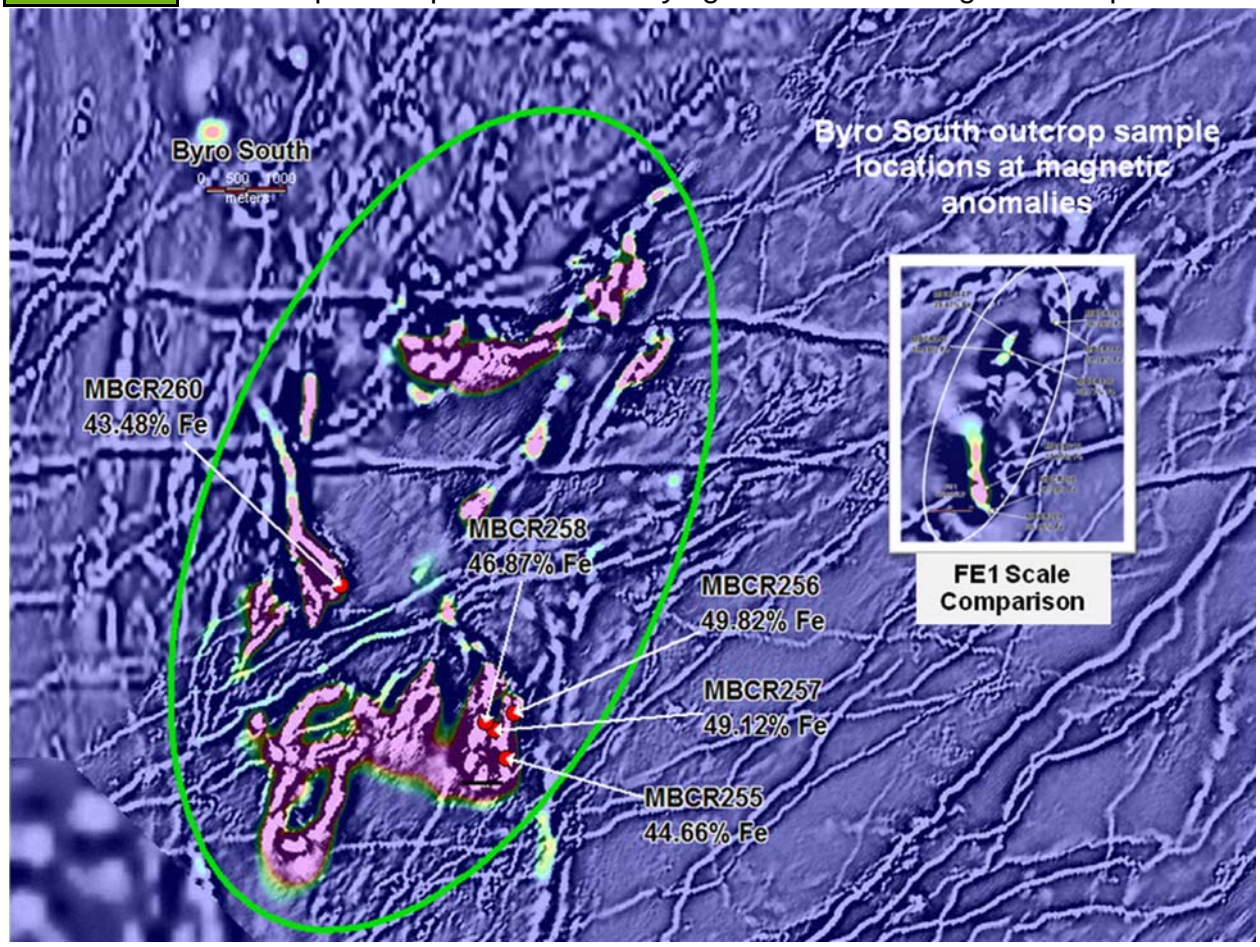
Average aeromagnetic amplitude at sample locations MBCR264 and MBCR267 is 1973nT with 43.35% Fe at outcrop.

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.

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.

Photograph 1 Byro South Anomaly 2 Outcrop looking northwest

Photograph 2 Byro South Anomaly 1 Outcrop Looking west

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.

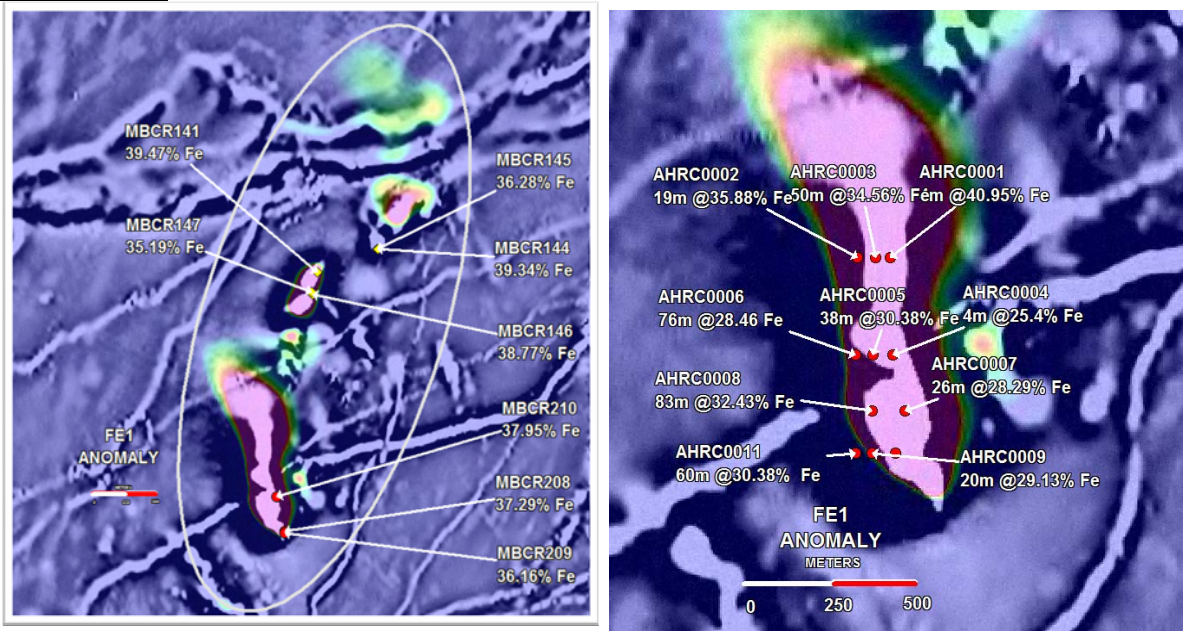
Results from this sampling program demonstrate that all outcrop sampled which had a magnetic signature above 1500nT amplitude returned Fe assays of greater than 40% and as high as 49.82% Fe. (Table 2)

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**



- **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

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.

E W Edwards
Managing Director

Athena Resources Limited (ASX: AHN), a Perth, Western Australia, based explorer, listed on the ASX in 2007 and currently has 93.1 million shares on issue. Athena's major asset is its 80% interest in the Byro Project where it is exploring for iron ore, copper, nickel, and PGE's. The company also has significant gold, lead and silver targets in the Ashburton region of WA, (ref 2010 Annual Report).

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.