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

BYRO IRON ORE PROJECT

SUCCESSFUL FIRST PASS UPGRADE OF BYRO HEMATITE

- Hematite Assay Results Confirm 4 Large Hematite Bodies
- Mass Separation Yields **65.8%** Recovery at First Rougher Stage
- Composite Feed Grade Assay 44.61% Fe Upgrades to **55.3% Fe**

**Think Big Prospect, (5.4 Km long). Average surface sample grade
43%Fe**

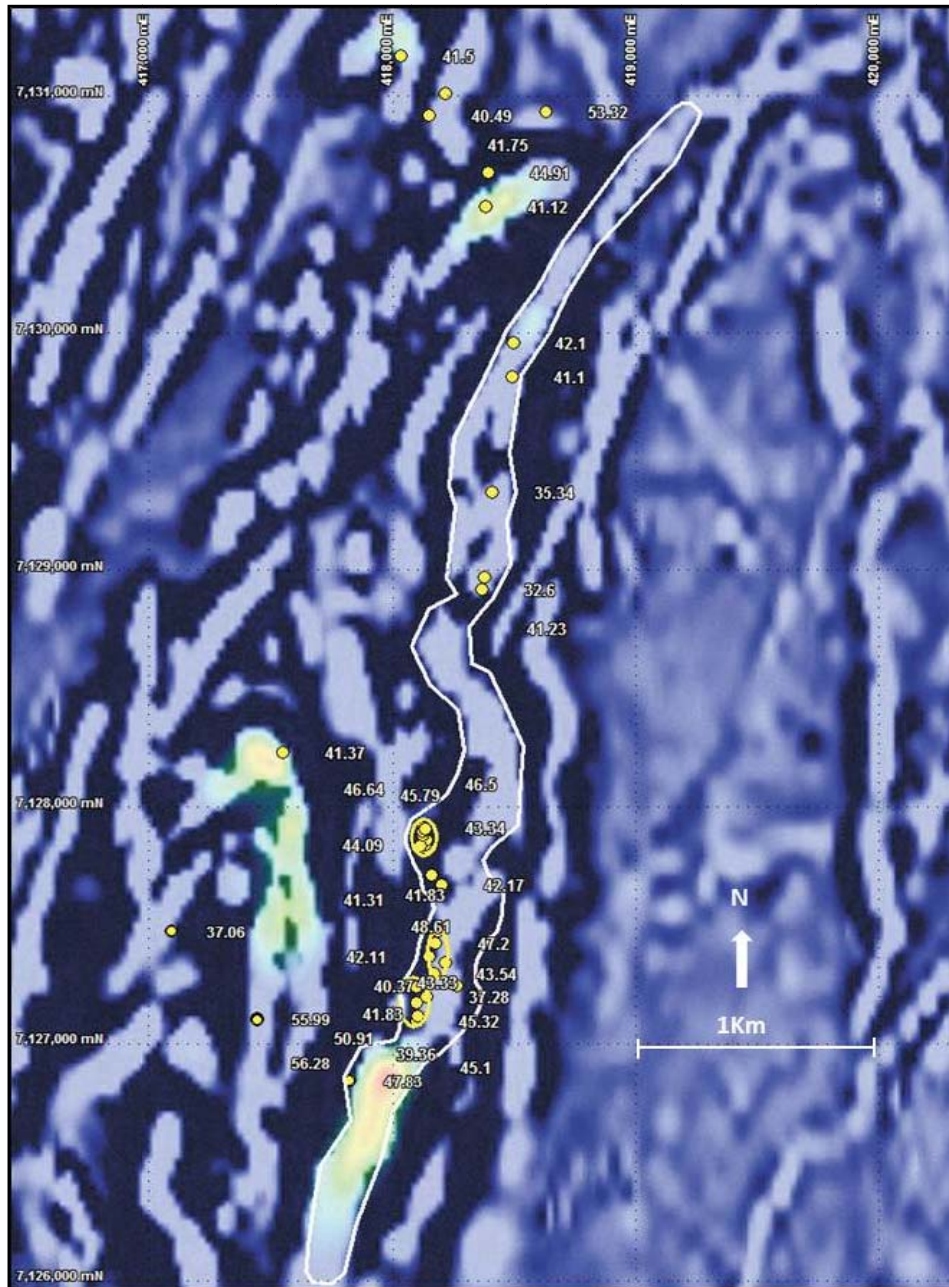
**Bonecrusher Prospect, (2.5Km long). Average surface sample grade
53.03%Fe**

**Happy Union Prospect, (1.4 Km long). Average surface sample grade
54.96%Fe**

**Tabaroa South Prospect, (4 Km long). Average surface sample grade
45.41%Fe**

**EXPLORATION TARGET FOR HEMATITE WITHIN THE NEW BODIES
414,225,000t**

Figure 1. Think Big Prospect



The Think Big Prospect, is one of five hematite prospects. It is a 5.4 Km long hematite body outcropping at kilometer scale exposures. The average iron content from surface samples to date is 43% Fe. A composite of samples was processed to test potential for upgrade to a furnace grade product. The samples were from outcrop in three separate locations over a 1

kilometer strike, within the yellow circles in figure 1. The composite was crushed to 500µm and assayed, results below, in Table 1 show the composite sample had an Fe assay 44.6%. The sample was then processed through a gravity separation Wilfley table dividing the sample into seven fractions based on density. The various cuts were assayed and the cumulative results shown in Figure 2 and listed in Table 2.

Table 1. Composite feed grade

Conc Sample	Mass (g)	Scaled Mass (g)	% Retain	Cum % Passing	Grade (%) and Distribution					
					Fe	SiO ₂	Al ₂ O ₃	P	S	LOI1000
Calc head	2985	3000	100.00%		44.9	31.77	1.55	0.02	0.07	1.76
Assay Head					44.6	32.22	1.63	0.02	0.08	1.76

The whole rock feed grade iron content of 44.6% and silica 32.2% combined is approaching 77% of the rock mass. Removal of the silica from the rock mass by simple gravity has been proven possible in the first stage, (Rougher Phase).

Observation of free silica grains remaining in processed concentrate sample is also confirmed by concentrate assay results, Table 2. Tests are continuing to confirm separation of minerals, liberation of iron, and refine the process to remove the remaining silica grains left behind. Work will include petrology, determining a cleaning and scavenging stage to reduce silica content further and achieve a target grade of 60% Fe.

Figure 2. Recovery and Yield Vs Grade

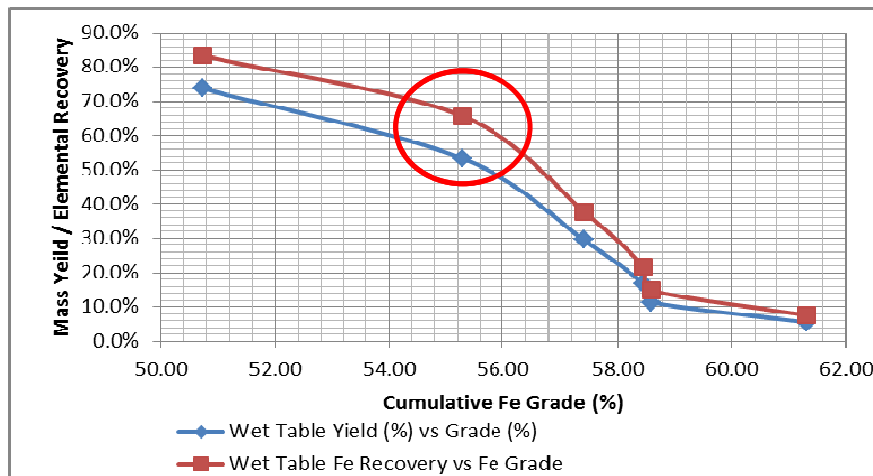


Figure 2 showing the significant upgrade of iron from whole rock assay to 55.3% with a 65.8% recovery as seen in red circled area.

Table 2. Cumulative Concentrate Grades

Cumulate Conc	% Retain	Cum.% Retain	Cumulative Concentrate Grade (%) and Distribution										
			Fe	SiO ₂	Al ₂ O ₃	P	S	LOI					
Cut 1	5.5	5.5	61.3	7.5	9.0	1.6	1.15	4.1	0.02	4.1	0.07	5.3	1.37
Cut 1 - 2	5.9	11.4	58.6	14.9	12.9	4.6	1.24	9.1	0.02	9.2	0.07	11.7	1.49
Cut 1 - 3	5.4	16.8	58.5	21.8	13.0	6.8	1.25	13.5	0.02	13.9	0.07	16.2	1.5
Cut 1 - 4	12.8	29.5	57.4	37.8	14.5	13.5	1.27	24.3	0.02	24.7	0.06	26.3	1.52
Cut 1 - 5	23.9	53.4	55.3	65.8	17.4	29.3	1.31	45	0.02	44.8	0.06	45.9	1.59
Cut 1 - 6	20.4	73.8	50.7	83.4	24.0	55.7	1.32	62.9	0.02	62.9	0.06	63	1.57



Table 2 shows the cumulative grades achieved with the cut 1 cumulate to cut 6, Cut 7 being dominantly fine clays, silica and Al₂O₃. The assay shows very low levels of contaminant minerals, sulphur Al₂O₃ and phosphorous. The results also show contaminant minerals are similar to the Byro magnetite both in JORC resource and from drilling at other locations. Grain size of the hematite within the rock varies from 0.25mm to 1.5mm with distinctive boundaries between the hematite and quartz. A grind size of 500µm was chosen on the basis of grain size and style of grain boundary. These initial results suggest this could be further optimized and will be confirmed with petrological study of the master composite grinds.

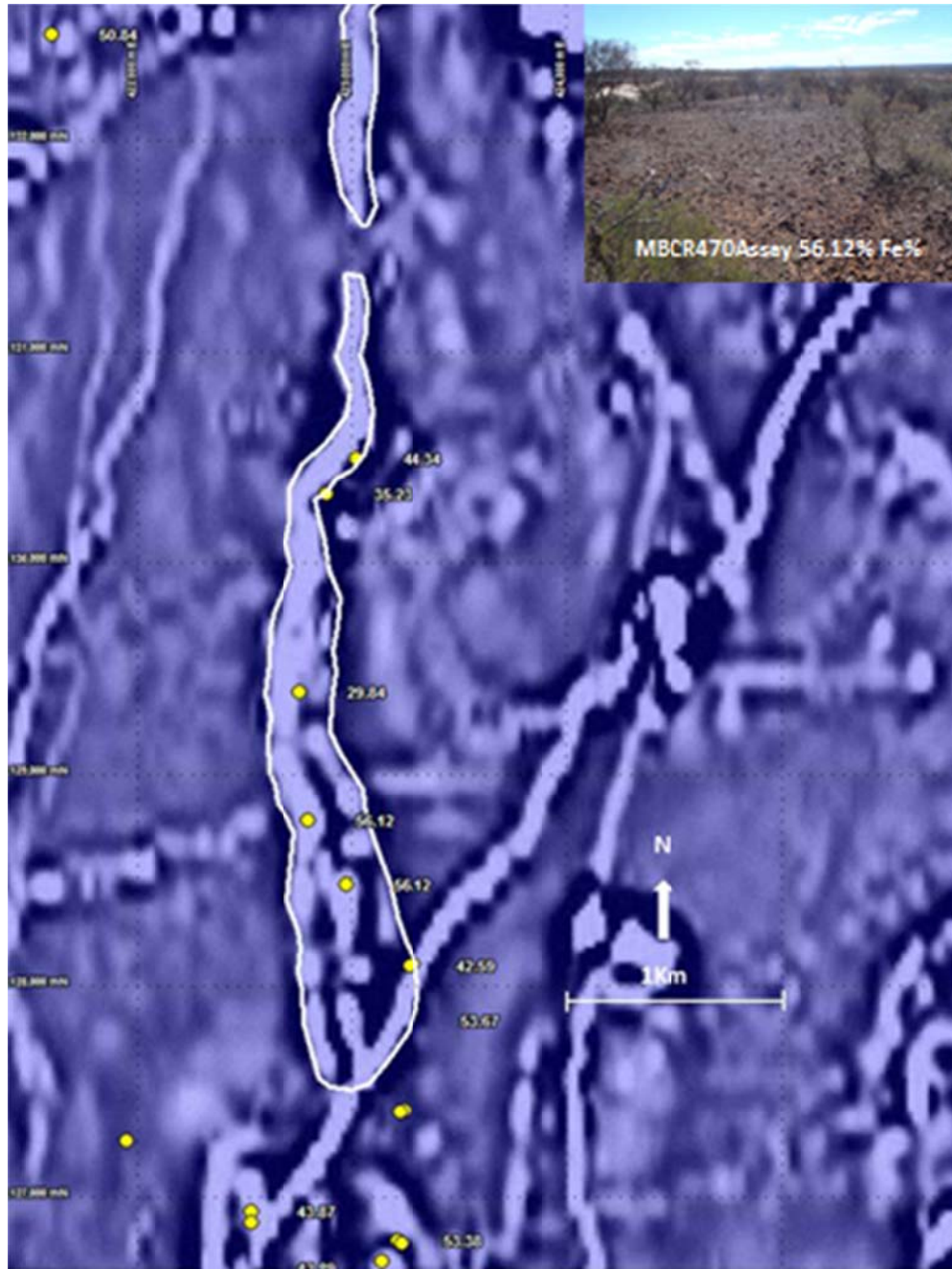
INSITU HEMATITE EXPLORATION TARGET ESTIMATE

Byro regional stratigraphy is dominated by northwest steeply dipping, north-northeast striking, and structurally aligned sequences of insitu rock with large areas of sheet wash cover. The insitu rock formations include iron migmatite which in some locations is oxidised to hematite. Where drilling has been undertaken into the Byro stratigraphy, surface orientations at outcrop tend to conform to orientation at depths tested to 150m. As well as regional drilling Athena has used surface mapping, outcrop sampling and processing of geophysical data and structural imaging to gain a predictable understanding of the area.

Athena now has a hematite exploration target of over 400 million tonnes of insitu stratigraphic iron ore to be drill tested. The target derives from the five large hematite bodies recently delineated, Think Big, Bonecrusher, Tabaroa South, Tabaroa North, and Happy Union. A conservative 150m depth and specific gravity of 3g/cm³ has been used in calculations for the tonnes below.

	<u>Prospect</u>	<u>Length (m)</u>	<u>est. Width</u>	<u>Lower Target</u>	<u>Upper Target</u>
Figure 1.	Think Big	5400	60~80	145,800,000	194,400,000
Figure 3.	Tabaroa South	4000	20~35	36,000,000	63,000,000
Figure 4.	Bonecrusher	2500	40~65	45,000,000	73,125,000
Figure 5.	Happy Union	1400	20~30	12,600,000	18,900,000
Figure 6.	Tabaroa North	720	15~20	48,600,000	64,800,000
LOWER TARGET LIMIT FOR STRATIGRAPHIC HEMATITE AT THE FIVE BODIES					288,000,000t
UPPER TARGET LIMIT FOR STRATIGRAPHIC HEMATITE AT THE FIVE BODIES					414,225,000t

Figure 3. Tabaroa South

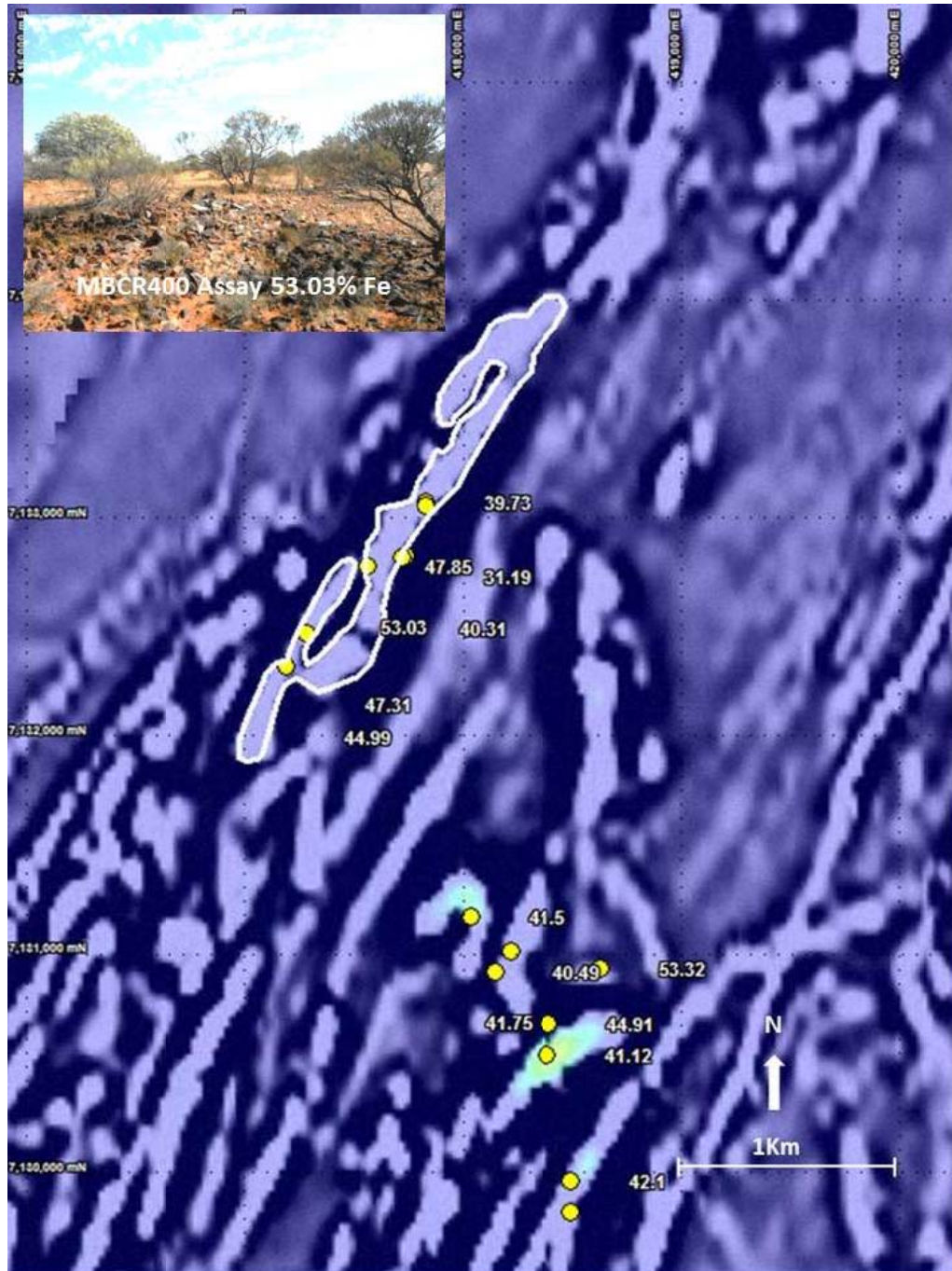


4Km in length

Average grade from surface outcrop sample 45% Fe

Highest grade from surface outcrop sample 56.12% Fe

Figure 4. Bonecrusher

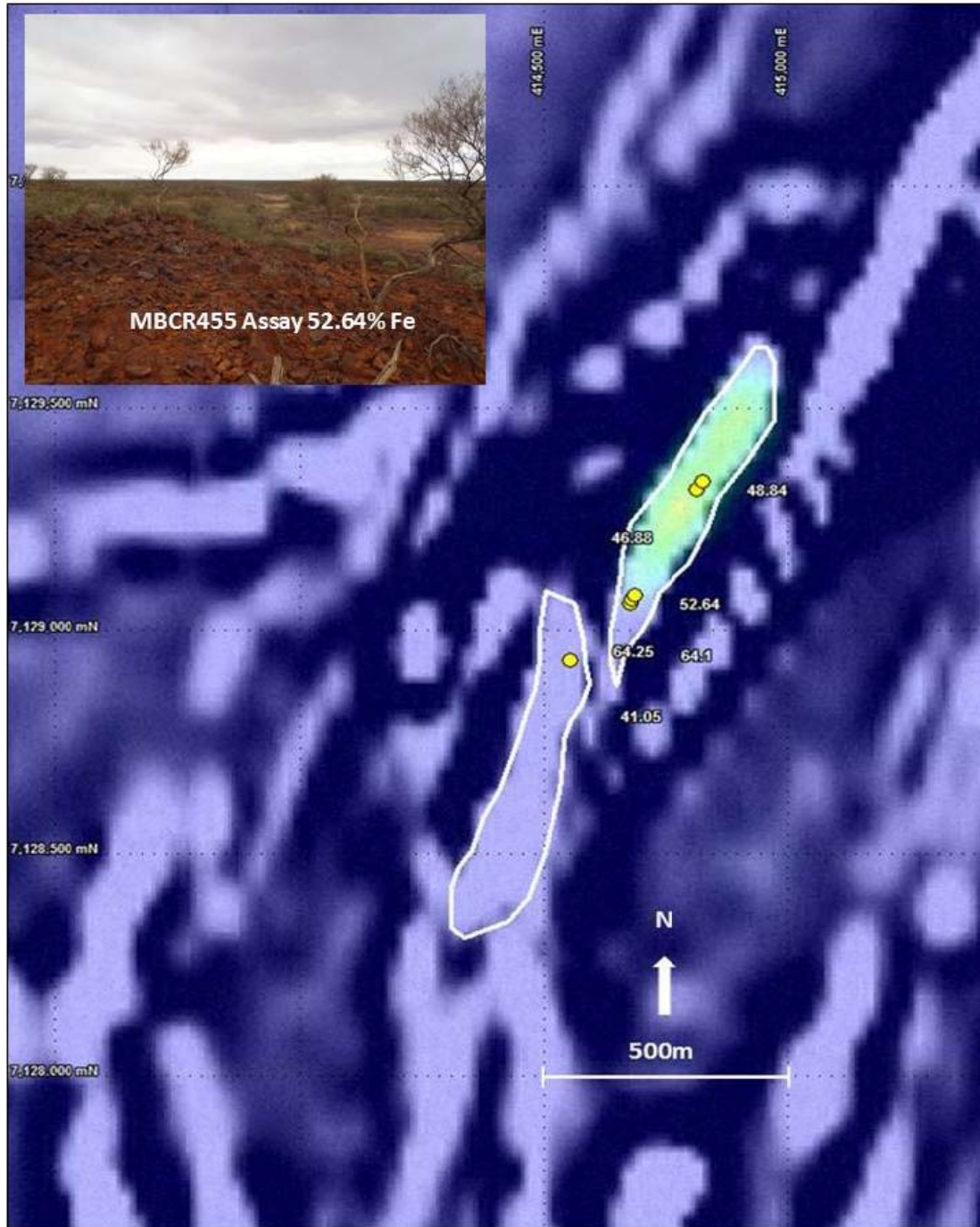


2.5Km in length

Average grade from surface outcrop sample 43.48% Fe

Highest grade from surface outcrop sample 53.03% Fe

Figure 5. **Happy Union**

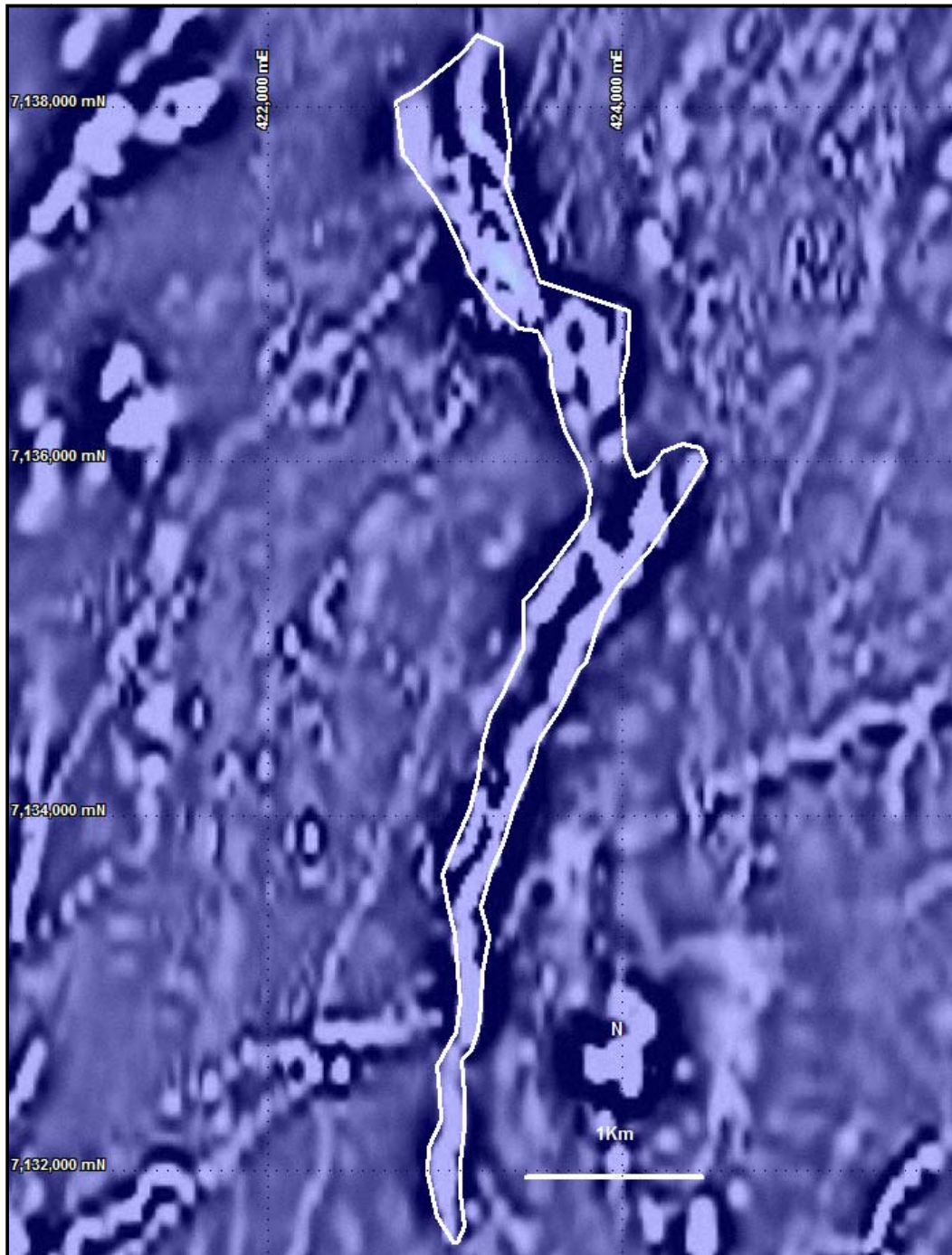


1.4Km length

Average grade from surface sample 54.96%Fe

Highest grade from surface outcrop sample 64.25% Fe

Figure 6. **Tabaroa North**



7.2 Km length

Average grade unknown

Northern continuation of Tabaroa South largely under cover.

Outcrops at mag high at centre of the 2.6Km northwest limb.

Table 3 Recent assays from the hematite bodies. Results previously released in the June Quarterly Report

Sample ID	East	North	Fe	SiO2	P XRF	S XRF	LOI1000
MBCR457	414685	7129082	64.25	4.8	0.026	0.046	1.61
MBCR456	414681	7129070	64.1	3.6	0.021	0.058	2.48
MBCR493	409237	7115859	59.18	5.63	0.05	0.091	6.59
MBCR470	422976	7128485	56.12	10.36	0.036	0.141	6.52
MBCR471	422796	7128783	56.12	10.25	0.02	0.062	7.08
MBCR455	414677	7129061	52.64	7.8	0.018	0.153	9.92
MBCR496	394111	7051223	52.61	18.91	0.087	0.076	4.2
MBCR438	418098	7127241	50.91	20.55	0.029	0.081	2.85
MBCR475	421606	7132500	50.84	19.5	0.035	0.104	4.82
MBCR414	408375	7114089	49.27	11.59	0.016	0.166	10.47
MBCR459	414815	7129317	48.84	26.84	0.043	0.132	1.5
MBCR446	418163	7127712	48.61	25.38	0.021	0.177	2.26
MBCR497	394194	7051344	47.67	26.17	0.12	0.051	4.34
MBCR443	418178	7127427	47.2	24.84	0.017	0.099	6.08
MBCR460	414825	7129336	46.88	29.35	0.026	0.091	1.69
MBCR449	418142	7127862	46.64	29.32	0.031	0.174	1.7
MBCR452	418124	7127882	46.5	30.6	0.013	0.071	1.47
MBCR498	394202	7051372	46.42	29.59	0.036	0.04	3.07
MBCR488	396410	7063709	46.38	27.9	0.039	0.112	2.95
MBCR450	418116	7127836	45.79	29.71	0.016	0.103	2.02
MBCR453	418127	7127897	45.54	31.55	0.013	0.088	1.47
MBCR435	418107	7127120	45.1	32.23	0.017	0.053	2.27
MBCR413	421336	7126561	44.86	21.93	0.039	0.08	8.41
MBCR474	423019	7130496	44.34	33.29	0.016	0.118	2.23
MBCR448	418137	7127844	44.09	34.18	0.017	0.089	1.26
MBCR454	418138	7127911	43.98	33.26	0.043	0.246	1.75
MBCR489	396541	7063755	43.84	34.99	0.036	0.045	0.94
MBCR485	396115	7063143	43.58	34.31	0.028	0.123	1.77
MBCR439	418174	7127300	43.54	34.76	0.027	0.079	1.42
MBCR499	395483	7053213	43.52	35.91	0.008	0.041	0.6
MBCR432	414389	7124796	43.45	33.74	0.046	0.068	2.43
MBCR444	418185	7127477	43.33	32.21	0.027	0.128	3.08
MBCR495	394181	7051104	42.42	34.72	0.093	0.103	3.21
MBCR445	418201	7127673	42.17	36.81	0.085	0.023	1.86
MBCR442	418152	7127368	42.11	37.17	0.03	0.045	1.41
MBCR441	418216	7127345	41.83	35.59	0.028	0.103	2.9
MBCR447	418141	7127827	41.31	38.06	0.01	0.095	1.23

Table 3 continued

Sample ID	East	North	Fe	SiO ₂	P XRF	S XRF	LOI1000
MBCR451	418376	7128972	41.23	38.03	0.076	0.064	1.48
MBCR458	414556	7128935	41.05	38.77	0.024	0.054	0.92
MBCR415	407946	7114120	40.95	19.33	0.032	0.054	6.82
MBCR478	390441	7066679	40.53	38.83	0.019	0.236	1.98
MBCR440	418266	7127249	40.37	38.66	0.013	0.062	1.64
MBCR487	396206	7063646	40.33	38.38	0.019	0.041	2.47
MBCR434	414412	7124775	40.09	37.27	0.032	0.056	3.43
MBCR484	396108	7063029	40.04	39.93	0.024	0.109	1.39

Table 3 shows assayed results collected in the last two field campaigns from the hematite outcrops described above. The assays presented are a selection with a cut off at 40% Fe. Athena is delighted with these results and looking forward to the next phase of this program. Work will include ongoing sampling and metallurgical testing.

Competent Persons Statement

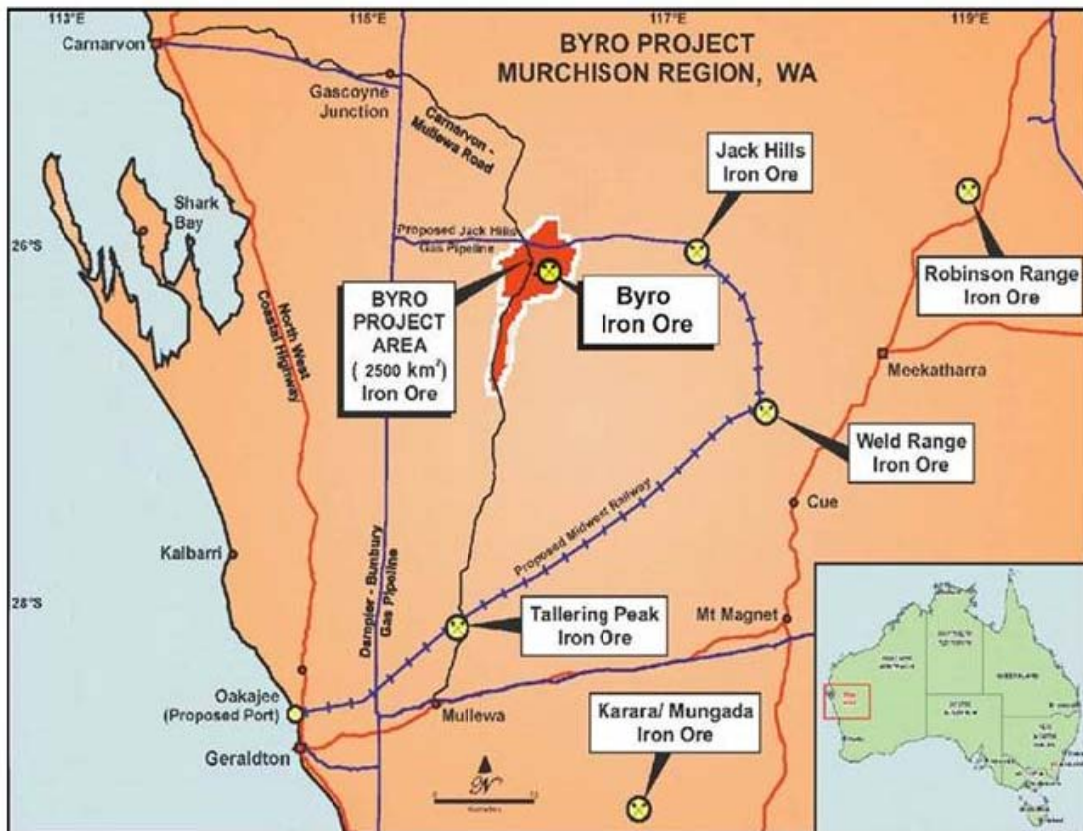
The technical information relating to Athena's exploration projects was compiled by Mr Liam Kelly, an employee of Athena Resources Limited. Mr Kelly is a Member of the Australasian Institute of Mining and Metallurgy, and has sufficient relevant experience in the styles of mineralisation and deposit styles 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

ABOUT ATHENA

Athena Resources Limited (ASX:AHN), which is based in Perth, was listed on the ASX in 2006 and currently has 123 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 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 7. Byro Location Map



E W Edwards
Managing Director
26 August 2013