ASX: AHN

Issued Capital
870,467,558 shares
75,000,000 @ $0.020 options
62,500,000 @ $0.018 options

Athena Resources Limited
ACN 113 758 900

Directors
Ed Edwards
Hau Wan Wai
Peter Newcomb

Company Secretary
Ed Edwards

About Athena Resources

AHN is an Australian ASX listed explorer and developer of high-grade iron ore assets in Western Australia.

The Company is focused on its Byro Project, strategically located in the Mid-West region 410km from the Port of Geraldton.

The Byro Iron Ore Project has potential to mine and supply premium grade, low impurity magnetite (>70% Iron Content) for the production of green steel, a fast-growing global market opportunity. The Byro Project also contains exciting base metal potential.

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BYRO MAGNETITE PROJECT

Further Assays at Byro hit 60M @ 70.3 Fe (DTR) including Magnetite in concentrate of up to 99.19%

Highlights

- The second and final batch of preliminary results for FE1 high-grade Davis Tube Recovery (DTR) have been received to undertake a JORC compliant Indicated Mineral Resource Estimation (MRE).
- DTR analysis to date demonstrate continued exceptional ultra-high grades and purity within the resource. Intersections include:

AHRC0118	**60.0m @**	**70.3%Fe**	from	**54m**
AHRC0108D	**12.8m @**	**70.9%Fe**	from	**116m**
AHRC0108D	**59.1m @**	**70.6%Fe**	from	**138m**
AHRC0107D	**28.0m @**	**68.2%Fe**	from	**81m**
AHRC0107D	**48.2m @**	**71.3%Fe**	from	**115m**

FE Concentrate grades of up to 71.76 % Fe.
Magnetite in concentrate of up to 99.19 %, (Fe3O4).
DTR Weight recoveries of up to 48.98 %.

- Preliminary assessment of the DTR concentrate demonstrates exceptionally low-impurities suitable for the growing global Green Steel demand for supply to Direct Reduced Iron (DRI), for Electric Arc Furnace systems, (EAF).
- These further preliminary results also expand the footprint of the orebody interpreted from the existing JORC compliant Inferred Resource.
- All data now forwarded to Entech for revised MRE.
- Pre Feasibility Study now in progress and pending results of MRE.
- Review of additional iron targets at Byro for further Mineral Resource definition.

Athena Resources Limited ("the Company") are pleased to announce further results for the unique FE1 magnetite project. Preliminary results (Table 1), show continued high-grade Davis Tube Recovery (DTR) from infill drilling. These results support the milestone MRE for the upgrade of the existing inferred resource to an indicated mineral resource.

DTR results reported in this announcement include drilling along east-west traverses on northings (MGA94 zone 50) 7,110,200mN, 7,110,300mN, 7,110,400mN, 7,110,500mN Figure 1 Collar location). These holes were designed to infill existing drill holes, including three twinned holes. Collar details are tabulated in Table 5 below.

Table 1. Significant Infill Intercepts to Date

Hole	Section (Northing)	Hole Type	Whole Rock Intersection	DTR Intersection
AHRC0118	7,110,200	Twin	60.0 m @ 28.2% from 54.0m	60.0 m @ 70.3% from 54.0m
AHRC0108D	7,110,300	Infill	12.8 m @ 33.8% from 116.0m	12.8 m @ 70.9% from 116.0m
			59.1 m @ 29.9% from 138.0m	59.1 m @ 70.6% from 138.0m
AHRC0107D	7,110,300	Infill	28.0 m @ 19.9% from 81.0m	28.0 m @ 68.2% from 81.0m
			48.2 m @ 31.9% from 115.0m	48.2 m @ 71.3% from 115.0m
			4.2 m @ 17.4% from 167.6m	4.0 m @ 69.0% from 167.6m
AHRC0116D	7,110,400	Infill	3.2 m @ 19.3% from 108.5m	3.2 m @ 70.8% from 108.5m
			6.9 m @ 18.0% from 124.6m	6.9 m @ 69.6% from 124.6m
AHDH0121D	7,110,500	Twin	17.9 m @ 17.1% from 126.2m	17.8 m @ 69.9% from 126.2m
			13.5 m @ 28.5% from 154.9m	13.5 m @ 70.9% from 154.9m

(All assays were completed using Xray Florescence (XRF) for an extended iron ore suite for 24 elements)

Table 1 contains meaningful intercept results from remaining assays for whole rock feed assay grades above a 10%Fe cut-off and DTR concentrate grades above 65%Fe cut-off.

Infill holes AHRC0108D, AHRC0107D (7,110,303mN) and AHRC0118 (7,110,205mN) on the below cross sections (Figures 2 to4), graphically demonstrate mineralisation outside the Inferred Resource block model. This new mineralisation will be incorporated into the new Mineral Resource Estimate to be completed in the coming weeks.

Twinned holes also intersected further mineralisation. Table 2 below shows the correlation between the latest twinned intercepts and previous reverse circulation drilling used in the inferred resource model. The purpose of twinning these holes with HQ diamond drilling was to identify contamination within and between intercepts and gain accurate understanding of internal dilution not achievable because of contamination inherent with reverse circulation drilling.

The company is very pleased with the results which show each twinned hole intercepted greater mineralisation widths than the original hole while maintaining ore grade, with an average grade increase of 0.98%Fe

- AHRC0118D an increase of 22.0m of magnetite mineralisation.
- AHRC0112D an increase of 83.0m of magnetite mineralisation.
- AHRC0121D an increase of 5.3m of magnetite mineralisation.

Table 2. Comparison of Twinned Intersections

Hole ID	Hole Type	Whole Rock Intersection	DTR Intersection
AHRC0005	Original	38.0m @ 30.4% Fe from 64m	38.0m @ 69.0% Fe from 64m
AHRC0118	Twin	60.0m @ 28.2% Fe from 54m	60.0m @ 70.3% Fe from 54m
AHRC0030a	Original	4.0m @ 25.1% Fe from 96m	4.0m @ 71.1% Fe from 96m
and	Original	4.0m @ 17.8% Fe from 140m	4.0m @ 71.1% Fe from 140m
and	Original	30.0m @ 23.6% Fe from 152m	30.0m @ 71.4% Fe from 152m
and	Original	14.0m @ 21.1% Fe from 186m	14.0m @ 71.0% Fe from 186m
AHRC0112D	Twin	18.0m @ 19.5% Fe from 82m	18.0m @ 70.3% Fe from 82m
and	Twin	15.2m @ 26.4% Fe from 112m	15.2m @ 69.7% Fe from 112m
and	Twin	16.4m @ 17.6% Fe from 136m	16.4m @ 71.5% Fe from 136m
and	Twin	59.6m @ 19.5% Fe from 152m	59.6m @ 71.3% Fe from 152m
and	Twin	25.9m @ 19.3% Fe from 218m	25.9m @ 71.1% Fe from 218m
AHRC0041	Original	16.0m @ 30.3% Fe from 134m	16.0m @ 71.5% Fe from 134m
and	Original	4.0m @ 23.8% Fe from 156m	4.0m @ 67.4% Fe from 156m
and	Original	6.0m @ 23.4% Fe from 162m	6.0m @ 70.8% Fe from 162m
AHDH0121D	Twin	17.9m @ 17.1% Fe from 126m	17.9m @ 69.9% Fe from 126m
and	Twin	13.5m @ 28.5% Fe from 155m	13.5m @ 70.9% Fe from 155m

Revision and intersection update for Hole AHRC0112D.

All intercepts are calculated using weighted average Fe grade for each interval within a continuous intercept above 10% Fe.

Through the process of continuous data interrogation, the intercepts have now been checked using concentrate mass recovery / Fe recovery, over each interval. The correlation was accurate for all intersections excluding AHRC0112D for composites 15-18.

The table below shows the concentrate mass recovery / Fe recovery calculation table for the intersection from 136.0m to 152.4m.

Table 4 shows the revised intercept following addition of 12.4m of mineralisation omitted in error from the AHRC0112D intercept of 4m @ 17.9% Fe from 136.0m.

The recalculated intersection now shows 16.4m @ 17.6% Fe from 136.0m with a DTR concentrate of 71.5% Fe.

Mass and Recovery Balances

Comp ID	Mass Feed	Mass Conc	Mass Recovery %	Feed Fe%	Conc Fe%	Fe% Feed	Fe% Conc	Fe Recovery %
Comp 15	20.092	2.863	14.25	17.88	71.12	359.2	203.6	56.7
Comp 16	20.233	1.613	7.97	11.18	71.50	226.2	115.3	51.0
Comp 17	20.252	6.095	30.10	26.58	71.35	538.3	434.9	80.8
Comp 18	20.334	2.784	13.69	14.84	71.52	301.8	199.1	66.0
Comp 15-18	**80.911**	**13.355**	16.51	**17.62**	**71.35**	**1425.5**	**952.9**	**66.8**

Table 3. All significant intercepts from the infill program

This announcement

Hole	Hole Type	Whole Rock Intersection				DTR Intersection			
AHRC0118	Twin	60.0 m	@ 28.2%	from	54.0m	60.0 m	@ 70.3%	from	54.0m
AHRC0108D	Infill	12.8 m	@ 33.8%	from	116.0m	12.8 m	@ 70.9%	from	116.0m
		59.1 m	@ 29.9%	from	138.0m	59.1 m	@ 70.6%	from	138.0m
AHRC0107D	Infill	28.0 m	@ 19.9%	from	81.0m	28.0 m	@ 68.2%	from	81.0m
		48.2 m	@ 31.9%	from	115.0m	48.2 m	@ 71.3%	from	115.0m
		4.2 m	@ 17.4%	from	167.6m	4.0 m	@ 69.0%	from	167.6m
AHRC0116D	Infill	3.2 m	@ 19.3%	from	108.5m	3.2 m	@ 70.8%	from	108.5m
		6.9 m	@ 18.0%	from	124.6m	6.9 m	@ 69.6%	from	124.6m
AHDH0121D	Twin	17.9 m	@ 17.1%	from	126.2m	17.8 m	@ 69.9%	from	126.2m
		13.5 m	@ 28.5%	from	154.9m	13.5 m	@ 70.9%	from	154.9m

Previous announcement

AHRC0110D	Infill	33.2 m	@ 20.0%	from	23.0m	33.2 m	@ 70.2%	from	23.0m
		27.7 m	@ 25.9%	from	60.5m	27.7 m	@ 70.5%	from	60.5m
		9.0 m	@ 15.7%	from	92.0m	9.0 m	@ 71.0%	from	92.0m
AHRC0111D	Infill	16.0 m	@ 19.3%	from	60.0m	16.0 m	@ 69.8%	from	60.0m
		103.6 m	@ 29.6%	from	91.3m	103.6 m	@ 70.9%	from	91.3m
AHRC0112D	Twin	18.0 m	@ 19.5%	from	82.0m	18.0 m	@ 70.3%	from	82.0m
		15.2 m	@ 26.4%	from	111.7m	15.2 m	@ 69.7%	from	111.7m
Revised		16.4 m	@ 17.6%	from	136.0m	16.4 m	@ 71.5%	from	136.0m
		59.6 m	@ 19.5%	from	152.4m	59.6 m	@ 71.3%	from	152.4m
		25.9 m	@ 19.3%	from	218.1m	25.9 m	@ 71.1%	from	218.1m
		3.5 m	@ 33.1%	from	247.4m	3.5 m	@ 71.0%	from	247.4m
AHRC0113D	Infill	10.5 m	@ 19.7%	from	90.0m	10.5 m	@ 70.5%	from	90.0m
		3.6 m	@ 19.5%	from	119.5m	3.6 m	@ 71.3%	from	119.5m
		22.1 m	@ 13.2%	from	127.9m	22.1 m	@ 70.5%	from	127.9m
		39.2 m	@ 18.9%	from	166.0m	39.2 m	@ 70.5%	from	166.0m
AHRC0114D	Infill	8.5 m	@ 18.1%	from	80.0m	8.5 m	@ 70.5%	from	80.0m
		79.0 m	@ 25.6%	from	105.0m	79.0 m	@ 70.8%	from	105.0m
		26.4 m	@ 23.9%	from	189.6m	26.4 m	@ 70.7%	from	189.6m
AHRC0115D	Infill	8.0 m	@ 12.4%	from	42.0m	8.0 m	@ 70.4%	from	42.0m
		124.3 m	@ 27.5%	from	62.0m	124.3 m	@ 70.6%	from	62.0m
AHRC0120D	Infill	12.6 m	@ 17.9%	from	42.0m	12.6 m	@ 70.2%	from	42.0m
		18.3 m	@ 27.1%	from	57.7m	18.0 m	@ 70.0%	from	57.7m
		18.1 m	@ 17.9%	from	80.0m	18.1 m	@ 71.0%	from	80.0m
		2.5 m	@ 32.2%	from	137.6m	2.5 m	@ 71.1%	from	137.6m
		8.0 m	@ 24.9%	from	155.0m	8.0 m	@ 70.5%	from	155.0m

All assays were completed using Xray Florescence (XRF) for an extended iron ore suite for 24 elements) Results to date for whole rock feed assay grades above a 10%Fe cut-off and DTR concentrate grades above 65%Fe cut-off.

Table 4. Resource Development Drilling Collar Details

Hole ID	Type	MGA North	MG East	RL	Dip	Azimuth	Diamond Tail Start Depth	Final Depth
AHRC0110D	DD	7110033.4	431096.9	346.4	-60	90	86.86	127.36
AHRC0111D	DD	7110036.8	430996.3	344.7	-60	90	108.16	198.28
AHRC0112D	DD	7110038.5	430948.8	344.1	-60	90	174.10	258.30
AHRC0113D	DD	7109972.4	430947.4	344.0	-60	90	116.60	209.90
AHRC0114D	DD	7109972.1	430997.9	344.7	-60	90	128.80	219.10
AHRC0115D	DD	7109972.3	431053.0	345.8	-60	90	139.67	186.27
AHRC0107D	DD	7110304.4	431006.2	344.3	-60	90	110.66	177.16
AHRC0108D	DD	7110304.0	430906.7	343.7	-60	90	95.40	195.40
AHRC0116D	DD	7110405.0	430969.7	344.1	-60	90	131.50	131.60
AHRC0117	RC	7110498.2	430947.8	344.4	-60	90	102.00	102.00
AHRC0118	RC	7110202.8	431043.7	345.2	-60	90	120.00	120.00
AHRC0119	RC	7109907.0	431013.5	344.7	-60	90	102.00	102.00
AHRC0120D	DD	7109974.8	431103.0	347.0	-60	90	138.60	165.30
AHRC0121D	DD	7110498.5	430951.8	344.5	-60	90	176.80	176.08

Coordinates: MGA94 Zone 50

Notes:

- RC Pre Collar AHRC0109 was designed to twin hole AHRC0035. It was deemed not required and the diamond tail was not drilled. The pre-collar was capped and can be drilled at a later date if required.
- RC Pre Collar AHRC0119 was designed to twin hole AHRC0011. It was deemed not required and the diamond tail was not drilled. The pre-collar was capped and can be drilled at a later date if required.
- Hole AHRC0117 was abandoned due to high torque drilling conditions and redrilled from surface at Collar AHRC0121D.

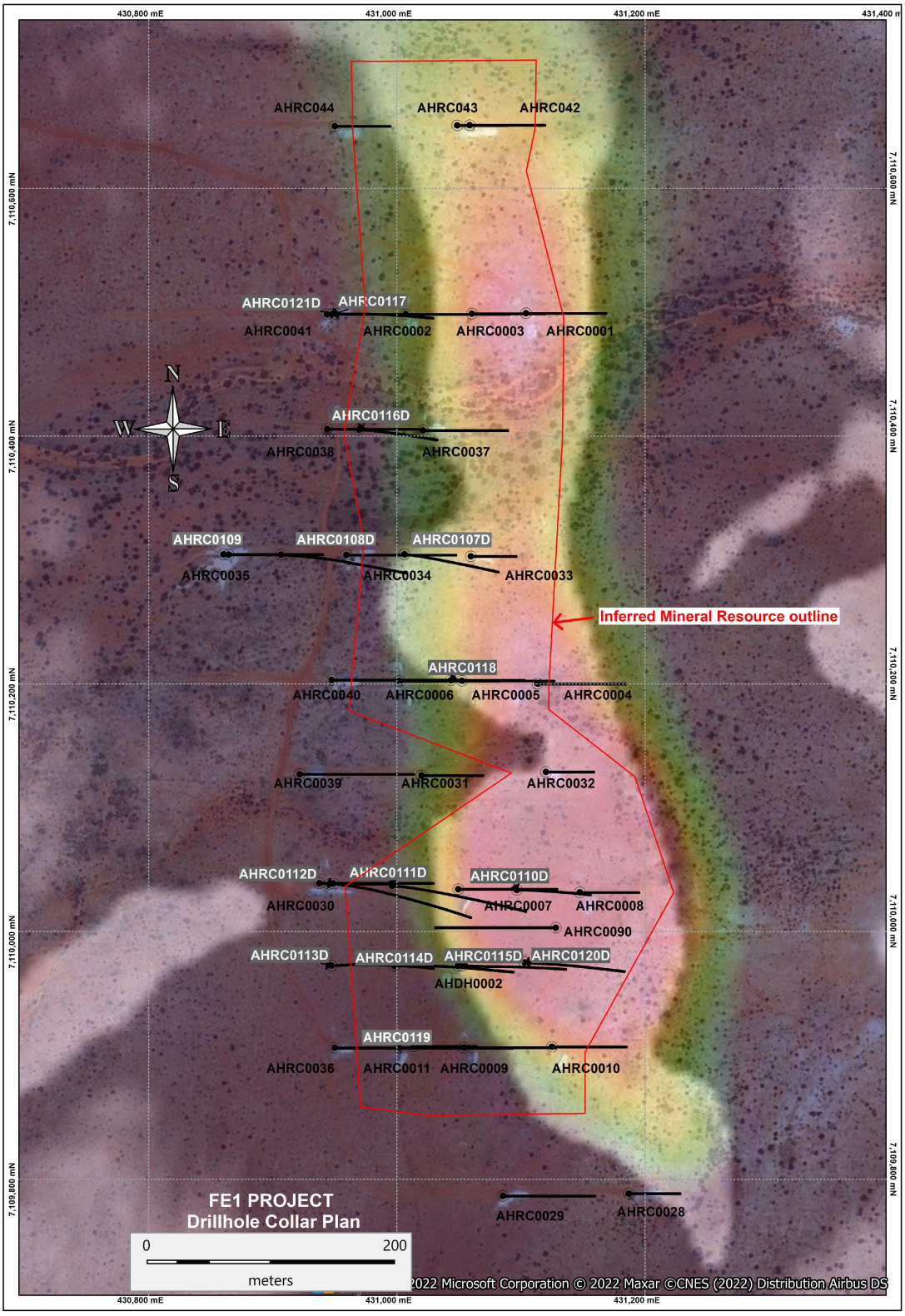

Figure 1. Collar Locations

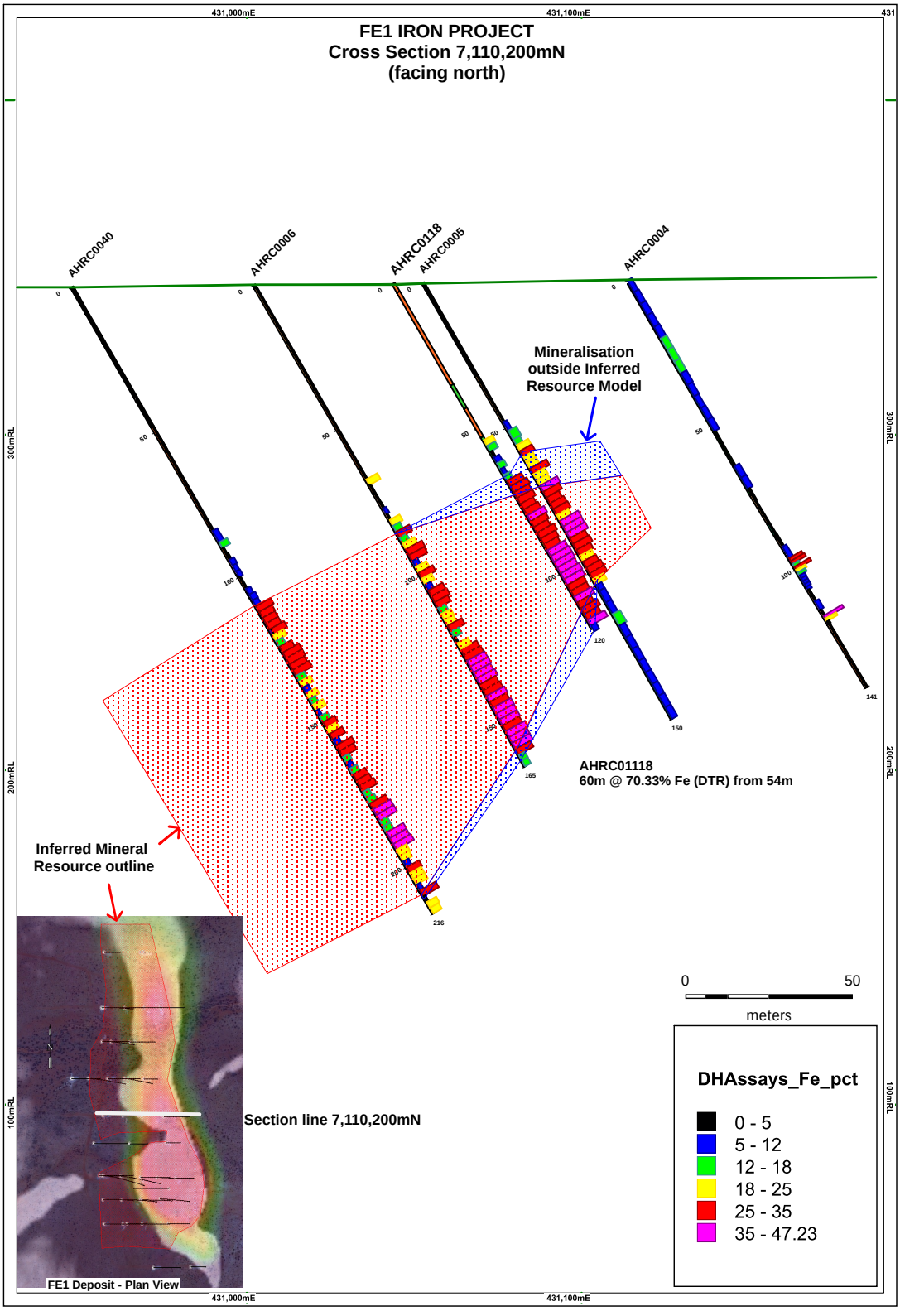

Figure 2. Section 7,110,200mN

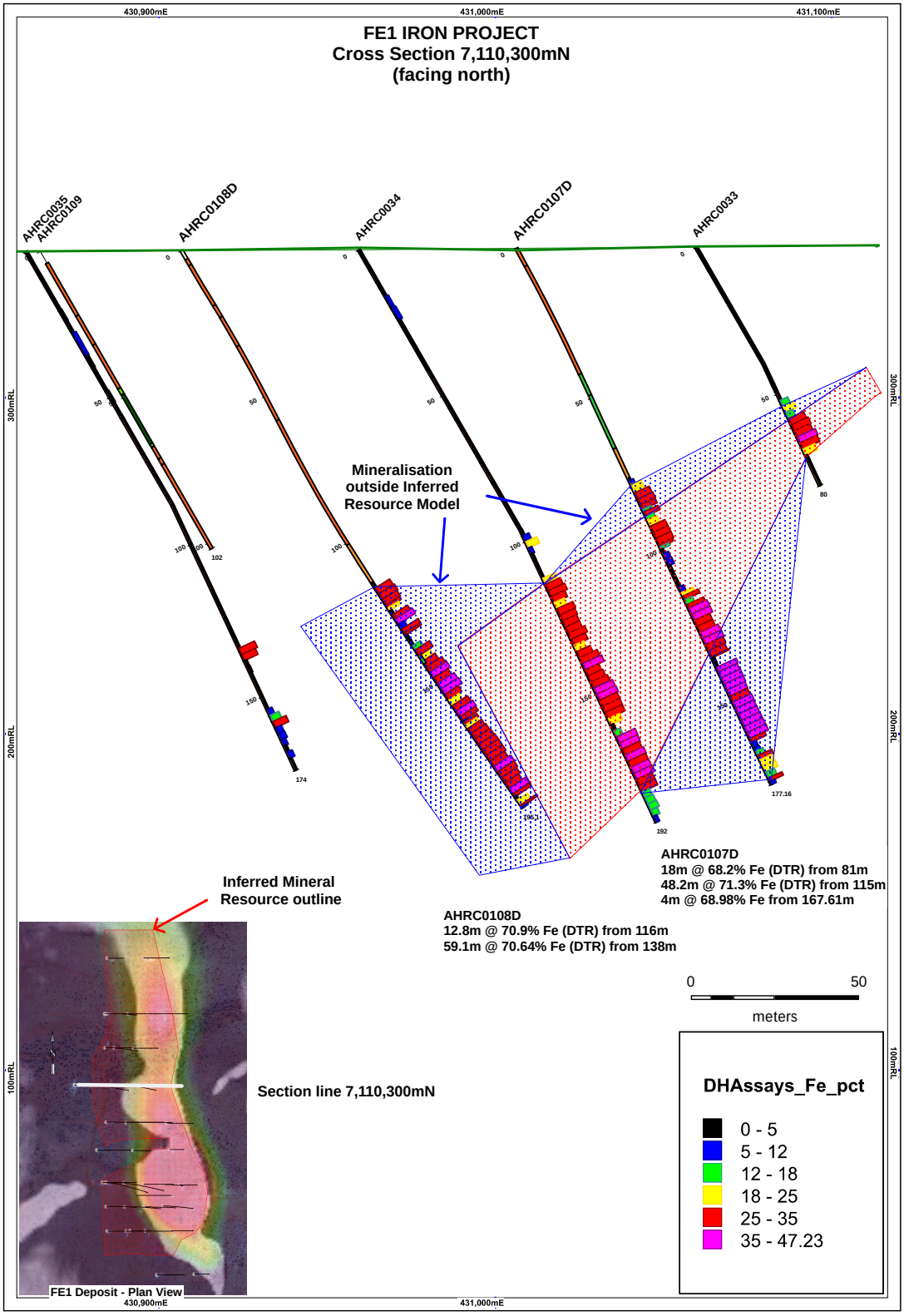

Figure 3. Section 7,110,300mN.

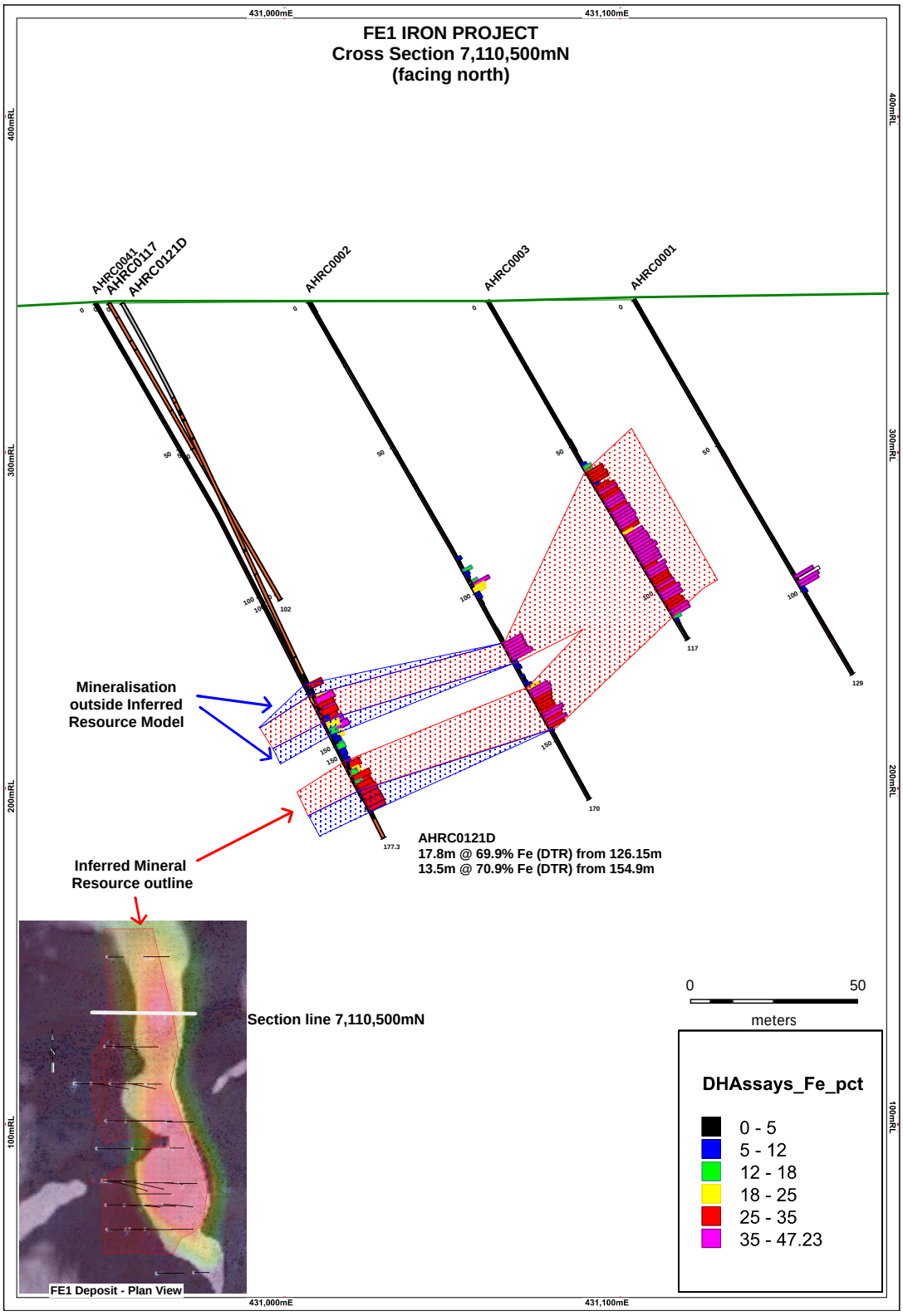

Figure 4. Section 7,110,500mN.

Athena Resources Limited (ASX:AHN), which is based in Perth was listed on the ASX in 2006. Athena owns a 100% interest in the Byro Project through its subsidiaries Complex Exploration and Byro Exploration where it is exploring for iron ore, copper, nickel, and PGE's.

This announcement has been authorised by the Board of Directors

Ed Edwards
Executive Director
28 November 2022

CAUTIONARY NOTES AND DISCLOSURES

Disclosures

All data and Information of material nature referred to within this Report with reference to historical drilling have previously been reported on the ASX platform in compliance with the relevant JORC compliance reporting format at the time of data acquisition.

Cautionary Notes and Forward Looking Statements

This announcement contains certain statements that may constitute "forward looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward looking statements.

JORC Code Compliance Statement

Some of the information contained in this announcement is historic data that have not been updated to comply with the 2012 JORC Code. Some information referred to in the announcement was prepared and first disclosed under the JORC Code 2004 edition. It has not been updated since to comply with the JORC Code 2012 edition on the basis that the information has not materially changed since it was last reported.

Competent Persons Disclosure

Mr Kelly is an employee of Athena Resources and currently holds securities in the company.

Competent Person Statement

The information included in the report was compiled by Mr Liam Kelly, an employee of Athena Resources Limited. Mr Kelly has had over twenty years' experience as a geologist in mining and exploration and is a Member of the Australasian Institute of Mining and Metallurgy, (306501). Mr Kelly 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 2012 Edition)". The historical information included is compliant with the relevant JORC Code, 2004 Edition, and new information announced post that version of the JORC Code is compliant with the JORC Code 2012 Edition. Mr Kelly consents to the inclusion of the information in the report in the context and format in which it appears.

INTERESTS IN MINING TENEMENTS

Athena Resources Limited 100%	Tenement Type
Byro Exploration	E – Exploration License
E09/1507	
E09/1552	
E09/1637	
E09/1781	
E09/1938	
Byro Project Mining	M - Mining Lease
M09/166	
M09/168	

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Drill core and cuttings were lithologically and geotechnically logged and measured for magnetic susceptibility. Solid core was measured and core recovery was recorded. All core runs where possible were ORI marked and an orientation line applied to the core. The measurement tool used for Magnetic susceptibility was a handheld KT-10 with serial number # 8791.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Multiple magnetic susceptibility readings were taken over lithological units/intervals with the average reading noted from scanning mode.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Reverse Circulation drilling, (RC) was used to obtain 2m composite samples from which 5 kg samples were taken for assay per 2-meter interval' • Sampling from solid core did not overlap lithological boundaries. • Although the nature of RC drilling includes reduced inherent contamination from previous intervals it is an appropriate drilling method to determine basic lithology and to complete pre-collars for diamond tails.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Reverse Circulation Drilling, (RC) was used to pre-collar holes for diamond tails. • Pre-collars were drilled through the regolith to interpreted depths above the ore body upper contact with the Diamond tails coring through the ore body and up to 10m into the footwall.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Original samples recovered from RC drill cuttings at 2m intervals. • Collection of RC cuttings both chips and fines were retrieved from a cyclone splitter. • No bias was observed between recovery and sample quality or loss or gain. • Solid core was measured, and core recovery was recorded. All core runs where possible were ORI marked and an orientation line applied to the core.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Original RC drill chips were geologically logged as well as recording geotechnical features observable in chip over the full depth of the holes by a qualified geologist. • RC Sample piles and chip trays were photographed. • All RC intercepts were logged to an accuracy of 1m intervals. • HQ diameter core have been geologically and geotechnically logged using standard techniques to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • All core was photographed. • Further intersections are still being calculated and will be finalised on completion of QA-QC process on assays..
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• HQ diamond core has been quarter cut for assay and DTR work. Remainder in storage for metallurgy.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• Original RC sample splits were retrieved directly from dry rotary cyclone for assay.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Samples were collected directly from cuttings and core, and are representative of the interval. • Samples are suitable for application of best practice XRF and DTR analysis as per ALS Laboratories.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Industry standard sampling preparation procedures were used such as Blanks, Standards and Repeat assays. Lab results will be reviewed and checked for deviation using lab certified references and in house analysis.
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• 5kg splits were collected directly from cyclone using industry standard procedures and sent directly to lab. • Core was cut representing lithological boundaries and ore variation. • Blanks, Standards and Repeat assays have been included at set intervals throughout sampling.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Original average RC drill sample size retrieved was 5kg, average chip size is 2-20mm. Sample sizes taken are large enough to be representative of the whole rock constituents. • Diamond quarter core samples ranged from minimum interval 100mm to maximum interval of 2m and are appropriate to the grain size.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All assays were completed using Xray Florescence (XRF) for an industry standard extended iron ore suite for 24 elements. • The nominal DTR procedure used the following conditions: • Stroke Frequency 60/minute • Stroke length – 38mm • Magnetic field strength – 3000 gauss • Tube Angle – 45 degrees • Tube Diameter – 25mm • Water flow rate – 540ml/min • Washing time 10 minutes or until the water runs clear • Concentrate collected and assayed • The tailings sample not collected

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Initial inspection and logging by onsite Geologist. • Holes have been twinned to interpret variability. • Samples and assays verified using standard QA QC methods • All primary data from drilling is recorded in the Company data base. • All Assays completed. • QA-QC completed on data contained in this announcement. • QA-QC underway on remaining results. • Significant Intersections Reported by company personnel only • Documentation and review is ongoing prior to final enter into database.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• GPS +/- 10m Drill hole locations were measured with Garmin hand held GPS. Accuracy is within +/- 5m. • MGA_GDA94 Zone 50. • Topographic surface recorded with handheld Garmin. • Continuous down hole surveys were completed with a down hole north seeking gyro camera Axis/Reflex.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Initial sample intervals were routinely 2m or less dependent on geology and mineralisation and are appropriate for the mineral resource estimation being considered. • DTR composites were combined from sequential initial sample intervals. • DTR composites form up to 5m intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• This report refers to testing down dip lithology with vertical hole orientations at -60° dip. • This report makes no interpretation or reference to the shape or size of the structure.
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No orientation-based sampling bias has been identified in this data at this point.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is being maintained from sample site to lab.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No reviews of data management systems have been carried out.

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Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The tenement referred to in this report, M09/166 is 100% Athena owned and operated within native title determined claim WAD 6033/98, made on behalf of the Wajarri Yamatji People.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The tenement is in good standing and no known impediments exist. • See tenement listing attached.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historic exploration within the greater project area largely confined to south of a line extending from Imagi Well to the Byro East intrusion (Melun Bore). The earliest work with any bearing on Athena's activities is that of Electrolic Zinc Co (1969) exploring for chromatite at Imagi Well, followed closely by Jododex Australia (1970-1974) at Byro East. Much of the exploration of a more regional nature is of limited use either because of the vagaries of the accuracy of positional information and the limited range of elements analysed. More recent surveys pertinent to Athena's current investigations include that of Redback Mining (1996-2002), Yilgarn Mining Limited (2003-2008) and Mithril (2007, JV with Yilgarn) at Byro East, and Western Mining Corporation (1976-1979) and Precious Metals Australia at Imagi Well. Newcrest Mining carried out a limited reconnaissance RAB drilling programme for platinum just to the east of Byro homestead (1998-1990).
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Upper amphibolite to granulite metamorphic facies with mafic to ultramafic intrusive. Granite and migmatite are common.

Criteria	JORC Code explanation	Commentary

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
		• Refer to body of text for collar location, elevation, dip, azimuth, and EoH for holes drilled.

	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No information has been excluded.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Whole rock feed assay grades reported from above a 10%Fe cut-off. • DTR concentrate assay grades reported from above a 65%Fe cut-off.
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• No metal equivalent are referred to in this report.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No metal equivalent are referred to in this report.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	
	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported*	• There is no relationship to the geometry of mineralisation or drill hole angle.
	• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• There is no relationship to the width or depth extent of the body only down hole length.

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• All relevant data is tabulated within the body of the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• This report contains all meaningful results to date for whole rock feed assays grades above a 10%Fe cut-off. • This report contains all meaningful results to date for DTR concentrate assay grades above a 65%Fe cut-off. • Further assays are pending.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• This report contains all meaningful results to the completion of drilling. • This report contains all meaningful results to date for whole rock feed assays grades above a 10%Fe cut-off. • This report contains all meaningful results to date for DTR concentrate assay grades above a 65%Fe cut-off. • Further assays are pending.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further metallurgical work will be undertaken to obtain definitive and conclusive data to be incorporated into the exploration database. If warranted further drilling will be undertaken to gain better understanding of the body shape, size and characteristic.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned drilling information is not complete. • Future drilling is commercially sensitive and is not included in this report.