



Athena
Resources

ACN 113 758 900

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The Company Announcements Office
Australian Stock Exchange Limited
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SYDNEY NSW
2000

BYRO IRON ORE PROJECT

TABAROA SOUTH ORE BODY DSO ASSAY GRADES

- Hematite Assay Results Define Potential DSO Hematite Body
- Assay Grades Average **56.1% Fe**
- Highest Grade **58.56% Fe**
- Lowest Grade **54.22% Fe**
- Total Length of Outcrop is Over 1 Kilometer Long

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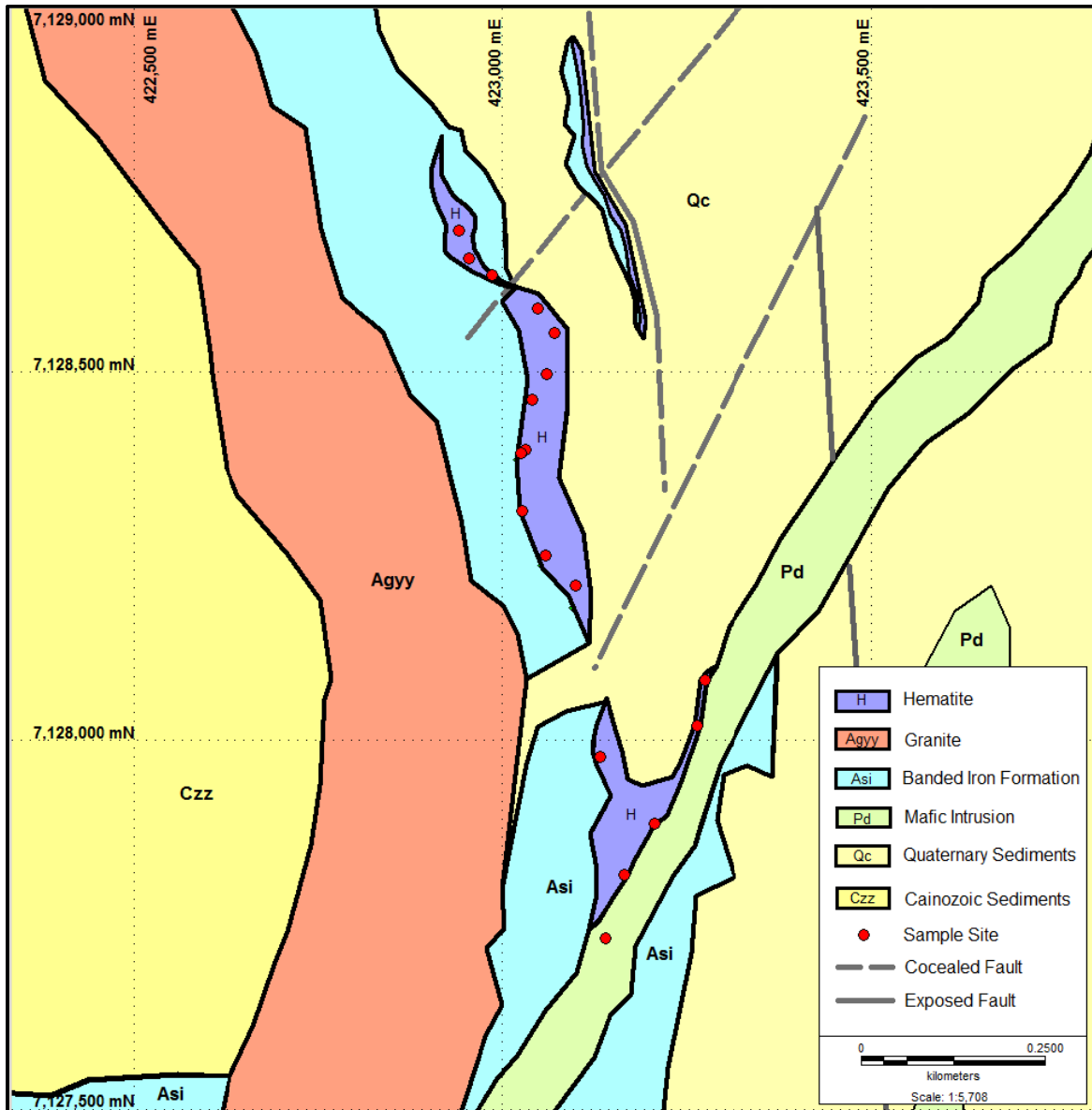
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The Directors of Athena Resources Limited (ASX: AHN) are pleased to advise that the Company received assay results for a sampling program designed to test for a Direct Shipping Ore, (DSO), at the Company's Tabaroa South Ore Body.

Assays have revealed high grades of up to 58.56% Fe in hematite, Table 1. Samples were taken from out crop which was mapped with a significant total length 1048m, Figure 1. Applications are currently being made to drill test this body.



The rock type mapped within the purple domain in Figure 1 is dominantly massive hematite with little evidence of banding or visible discrete silica as grains. The northern section is strongly strained by faulting, the southern section is truncated by faulting. The larger mid section is mostly competent and less fractured.

Table 1. Tabaroa South Assay Results

Sample ID	East	North	Fe	SiO2	Al2O3	CaO	P XRF	S XRF	LOI
MBCR531	422940	7128692	55.87	10.90	1.87	0.03	0.017	0.122	6.22
MBCR532	422954	7128654	57.04	7.10	0.85	0.08	0.028	0.134	9.18
MBCR533	422986	7128631	57.11	5.88	0.81	0.04	0.014	0.085	10.73
MBCR534	423048	7128587	56.97	6.43	1.25	0.03	0.027	0.078	9.46
MBCR535	423070	7128553	56.10	9.31	1.04	0.03	0.022	0.135	8.02
MBCR536	423060	7128498	54.73	7.23	2.15	0.12	0.039	0.252	10.41
MBCR537	423041	7128463	57.87	5.65	1.81	0.09	0.019	0.154	8.53
MBCR539	423031	7128395	57.91	5.34	1.45	0.04	0.013	0.143	9.04
MBCR540	423027	7128312	55.58	7.64	0.90	0.16	0.019	0.172	10.62
MBCR541	423059	7128251	57.40	5.89	0.59	0.13	0.017	0.105	10.26
MBCR542	423099	7128211	54.22	11.50	0.43	0.25	0.014	0.181	9.02
MBCR543	423133	7127978	58.56	6.98	1.10	0.20	0.025	0.158	6.86
MBCR544	423268	7128083	56.74	4.88	2.68	0.06	0.156	0.103	8.77
MBCR545	423264	7128020	55.98	7.05	3.03	0.11	0.086	0.148	8.10
MBCR546	423203	7127888	49.81	12.06	7.42	0.08	0.027	0.171	7.63
MBCR547	423165	7127819	53.99	8.03	3.02	0.03	0.022	0.127	10.58
MBCR548	423139	7127731	56.41	8.83	3.27	0.13	0.020	0.175	5.91

Note: Fe: Iron; SiO₂: Silicon Dioxide; Al₂O₃ : Aluminium Oxide; P: Phosphorus; LOI: Loss On Ignition. All assays are XRF.

This is the first substantial body in Athena tenements to date that has returned assays equivalent to direct shipping ore grade. The body is marked by a 30m rise in the local topography and is bounded by shallow preferentially eroded valleys in a region of complex geology.

Figure 2. Tabaroa South

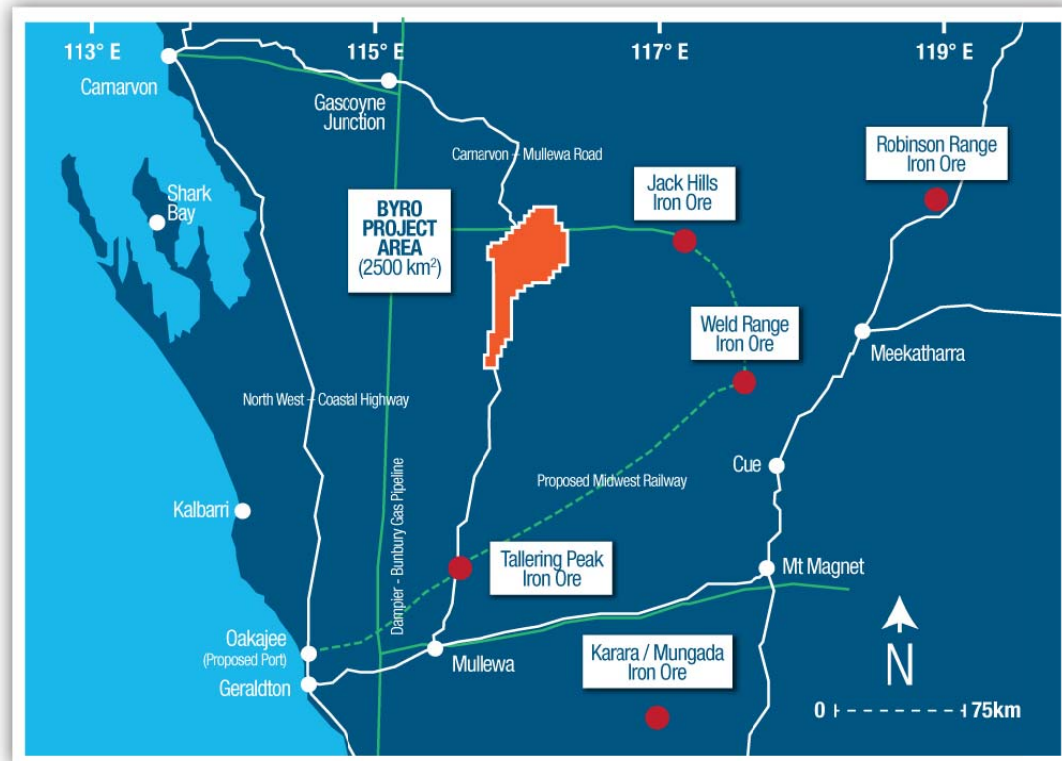


Figure 2 shows the prominent hillside topography of the Hematite outcrop in the background. The body has substantial width up to 60m in places and dips below surface at variable angles from 30 to 70 degrees. Accurate average widths cannot be calculated until drilling is completed and dip is determined.

Figure 3. Sample MBCR542, typical rock type of massive hematite



Figure 4. Byro Location Map



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 – see also ASX announcement 25 March 2014) is strategically located in the Midwest Iron province which includes a substantial mining sector. The project's southern boundary is 210km north of the Mullewa Rail Siding by road and 310km from the Port of Geraldton. Development of the Byro Iron project is expanding the overall resource in the Midwest region along with neighbours at the Gindalbie and Ansteel's Karara Iron Project, Sinosteel's Weld Range Project, the proposed Jack Hills Expansion Project, Padbury's Robinson Range Project, and Mt Gibson's Tallering Peak Mine, amongst others. Access and improved infrastructure to the maturing iron ore province is growing with development of the CSIRO SKA Project and increased capacity and further development at the Port of Geraldton. The region is also awaiting the inevitable development of a deep water bulk shipping port north of Geraldton to cater for the export of the many billions of tonnes of iron ore currently in JORC compliant resources in the region.

E W Edwards
Managing Director
2 April 2014

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock chips were broken from insitu outcrop. Placed in unused new numbered calico bags and closed. Chips ranged in size From 100mm cross section by +/- 50mm
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> Sample locations were measured with hand held Garmin GPS. Magnetic susceptibility measurements were taken using a hand held meter as per manufacturers recommendations
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock chips were assayed using X-Ray Fluorence. Samples were pulverized in lab conditions to obtain a pulp then into a glass disc using a Lithium Borate flux. For ore grade materials, flux composition and sample to flux ratios were varied to ensure the sample dissolves completely and that re-crystallisation does not occur as the melt is cooled. Oxidising agents may be added to ensure retention of Sulphur or conversion of certain elements to highest state.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Rock Chip sample collected with a geo-hamer/pick
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample 	<ul style="list-style-type: none"> chips from outcrop were placed in sample bags .All chips were used in sample preparation to pulp for analysis. Overall recoveries were

Criteria	JORC Code explanation	Commentary
	<p><i>recovery and ensure representative nature of the samples.</i></p> <ul style="list-style-type: none"> • <i>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.</i> 	<p>good and there were no significant problems</p> <ul style="list-style-type: none"> • Samples were chosen as representative of the outcrop • Sample was a whole rock analysis. There is insufficient samples collected to evaluate sample bias at this stage QAQC protocols were followed to reduce any sample bias.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Rock chips were geologically identified and described in terms standard rock classification techniques. • Sample sites were photographed at the location the sample was taken from. • No intersections are reported but outcrop dimensions are measured using GPS coordinates and odometers where practical
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> 	<ul style="list-style-type: none"> • No core sample taken
	<ul style="list-style-type: none"> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> 	<ul style="list-style-type: none"> • Samples are collected dry hewn from outcrop
	<ul style="list-style-type: none"> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> 	<ul style="list-style-type: none"> • Best practice XRF analysis as per Bureau Veritas Laboratories
	<ul style="list-style-type: none"> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	<ul style="list-style-type: none"> • Lab results are reviewed and checked for deviation using lab certified references and in house analysis
	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Where possible at least two samples are taken at each site.
	<ul style="list-style-type: none"> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Sample sizes taken are large enough to be representative of the whole rock constituents.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations</i> 	<ul style="list-style-type: none"> • XRF fusion techniques are suitable for the analysis of most mineralogical ores, metallurgical products and complex matrices. • No ground geochemical measurements were taken • Lab QAQC involved internal lab

Criteria	JORC Code explanation	Commentary
	<p><i>factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> • <i>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.</i> 	<p>standards, certified reference material blanks and duplicates.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Summary inspection by contract Geologist • No drilling conducted • Primary data was collected in combined forms in the field on paper note book and laptop field computers. This was later transferred and stored to hard drive. Electronic data captured in the field was also downloaded to hard drive. • No adjustments have been made to assay data in this report
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Sample locations were measured with Garmin hand held GPS. Accuracy is within +/-5m • MGA_GDA94 Zone 50 • Topographic surface recorded with handheld Garmin GPS +/- 10m
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Spacing is randomly biased by outcrop location. • Mineralisation domains have not demonstrated continuity in either grade or geology. Therefore cannot support the definition of a Mineral Resource or Reserve, and the classifications under the 2012 JORC Code. • No sample compositing was applied to individual outcrop samples reported. Composites from individual sample over a large outcrops were composited for metallurgical average
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> 	<ul style="list-style-type: none"> • Rock chip samples provide a local sample only
	<ul style="list-style-type: none"> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to</i> 	<ul style="list-style-type: none"> • No orientation based sampling bias has been identified in this data at

Criteria	JORC Code explanation	Commentary
	<i>have introduced a sampling bias, this should be assessed and reported if material.</i>	this point
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Chain of custody was maintained from sample site to lab
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No reviews of data management systems has been carried out

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Tenements referred to in this report E09/1552, E09/1507, E09/1637 and E09/1781 are 100% Athena owned and operated within native title claim WAD 6033/98, made on behalf of the Wajarri Yamatji People.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The tenements are in good standing and no known impediments exist. See tenement listing attached.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historic exploration within the 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

Criteria	JORC Code explanation	Commentary
		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	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Upper amphibolite to granulite metamorphic facies with mafic to ultramafic intrusive. Granite and migmatite are common
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> 	<ul style="list-style-type: none"> • No drilling was undertaken in the quarter and no result are reported in this report
	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • No information has been excluded
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • No weighting, min max, ave, truncation or cut off techniques were used in this report
	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • No aggregation has been used
	<ul style="list-style-type: none"> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • No metal equivalent are referred to in this report

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	
	<ul style="list-style-type: none"> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported</i> <i>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').</i> 	<ul style="list-style-type: none"> No drilling was undertaken in the quarter and no result are reported in this report No drilling was undertaken in the quarter and no result are reported in this report
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Refer to figures 1,2,3 in the body of the report
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All exploration results are reported for this quarter in this report
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> This report contains substantive information from mineralogical and petrological work completed by external independent consultant Roger Townend and Associates. This report details all substantive information related to the project from the Roger Townend report.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> Drilling programs have been planned and approvals have been granted. The registration ID of the granted PoW's is E09/1781 ID 36923 E09/1637 ID 36920 E09/1552 ID 36924 E09/1507 ID 36922
	<ul style="list-style-type: none"> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> The planned drilling information is commercially sensitive and is not included in this report.

INTEREST IN MINING TENEMENTS

Athena Resources Limited 100%

Byro

E09/1507

E – Exploration License

E09/1508

LA – Miscellaneous Water Search Licence
Application

E09/1552

E09/1637

E09/1638

E09/1656

E09/1657

E09/1781

E09/1938

LA09/30

LA09/37

LA09/38

Cautionary Notes

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. The 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 Statement

The information included in the announcement 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 2012 Edition)”. Mr Kelly consents to the inclusion of the information in the announcement in the context and format in which it appears and that the historical information was compliant with the relevant JORC Code, 2004 Edition, and new information announced in this report is compliant with the JORC Code 2012 Edition.

Competent Persons Disclosure

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