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RESOURCES

# Potential for large scale copper lead zinc deposits at the new Bangemall Base Metal Project

- New 100% owned project west of the Abra Lead Silver Deposit which covers interpreted western extension of the large regional scale structure that controls mineralisation at Abra
- Prospectivity highlighted by airborne EM (GEOTEM) anomalies with overlapping anomalous surface geochemistry, and / or zones of copper and zinc in historic drill holes
- Strengthens the Company's exploration portfolio which includes the Kurnalpi Nickel Project, Billy Hills Zinc Project, and the Limestone Well Vanadium Joint Venture

Mithril Resources Ltd (**MTH.AX**) is pleased to advise that multiple targets have been prioritised for follow-up on its new 100% - owned **Bangemall Base Metal Project** ("Bangemall"). Bangemall is located west of Galena Mining Limited's Abra Deposit within a similar geological setting approximately 250 kms north west of Meekatharra, WA - *Figure 1*.

The Project (EL's 09/2315 and 52/3644 - 710km<sup>2</sup>) covers the interpreted western extension of the Lyons River Fault Zone, a large regional scale structure that controls mineralisation at Abra 100 kms to the east, within an area of similar Proterozoic sediments that host the Abra deposit (*Figure 2*).

A 2012 JORC Code Compliant Indicated and Inferred Resource of 36.6Mt @ 7.3% lead, 18g/t silver has been recently estimated for the Abra Deposit (*see ASX Announcement by Galena Mining Limited dated 14 March 2018*).

At Bangemall, Mithril is targeting large scale copper, lead and zinc deposits and has now identified multiple targets that are typically characterised by airborne EM (GEOTEM) anomalies with overlapping or adjacent anomalous surface geochemistry, and / or zones of copper and zinc mineralisation within historic drill holes.

Of note is the Belang Bore target on EL52/3644 where a large (~5 kms x 5 kms) barium, manganese, cobalt and lead stream sediment anomaly overlies several late time GEOTEM anomalies. Belang Bore lies within an area of shallow cover and these targets have not been previously drill tested (*Figures 3 to 4*).

The geochemical association seen at Belang Bore is consistent with that typically seen above large scale sedimentary exhalative ("SEDEX") base metal deposits globally.

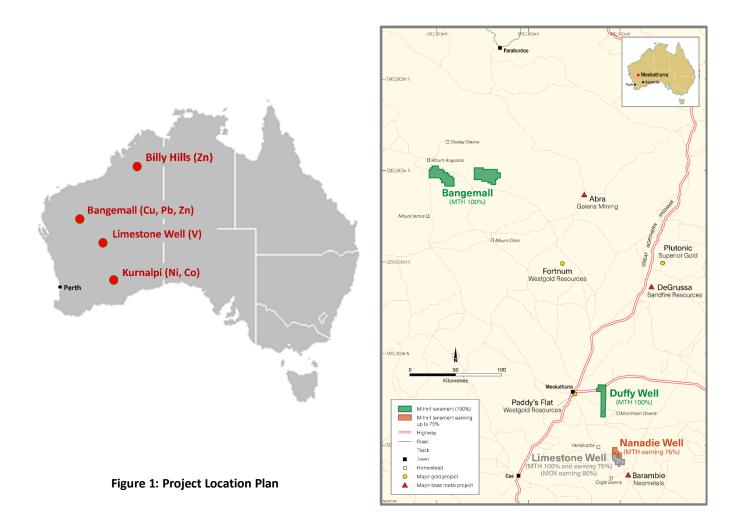
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F: (61 8) 8132 8899
E: admin@mithrilresources.com.au

The potential of the Project to host a large base metal deposit is reinforced by historic surface rock chip sampling and wide spaced drilling undertaken on EL09/2315, some of which has returned strong indications of copper and zinc mineralisation, see Tables 2 - 3, and Figure 5;

- Rock chip samples with individual assay values up to 17.5% copper, 2.4% lead, 3.70% zinc, and 120ppm silver
- Drilling 48m @ 0.27% zinc from 54 metres in ISBD1, 5m @ 0.59% zinc from 130 metres in ISBD2, 21m @ 0.35% zinc from 315 metres in ISBD3 and 10m @ 0.68% zinc from 34m in RC99MC06.

Bangemall considerably strengthens Mithril's exploration portfolio which comprises the Kurnalpi Nickel Project (confirmed nickel sulphides and a new copper-cobalt target), the Billy Hills Zinc Project (priority targets identified adjacent the historic Pillara Zinc Mine), and the Limestone Well Vanadium Joint Venture (where Monax Mining Ltd can earn up to 80% by spending \$2.5M over 5 years).

Mithril will continue with target generation activities on the Project ahead of tenement grant which is expected early next year.

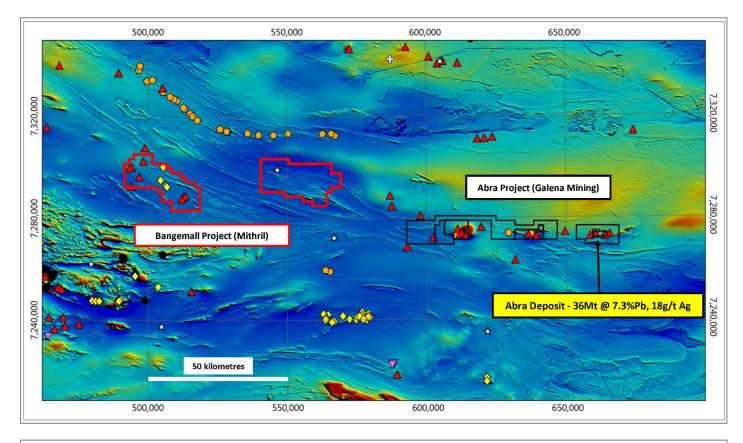


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E: admin@mithrilresources.com.au

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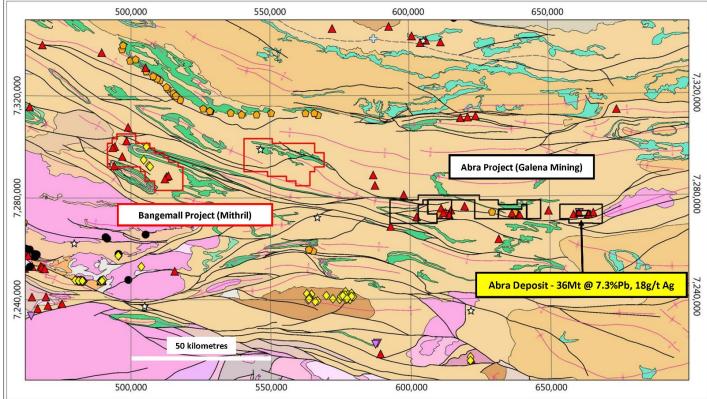


Figure 2: Regional setting of the Bangemall Project in relation to the Abra Lead Silver Deposit. <u>Upper image</u> shows regional magnetics and the <u>lower image</u> shows regional geology and mineral occurrences (referenced from the WA MINDEX database) at the same scale. Yellow diamond symbols are gold occurrences and red triangles are base metal occurrences.

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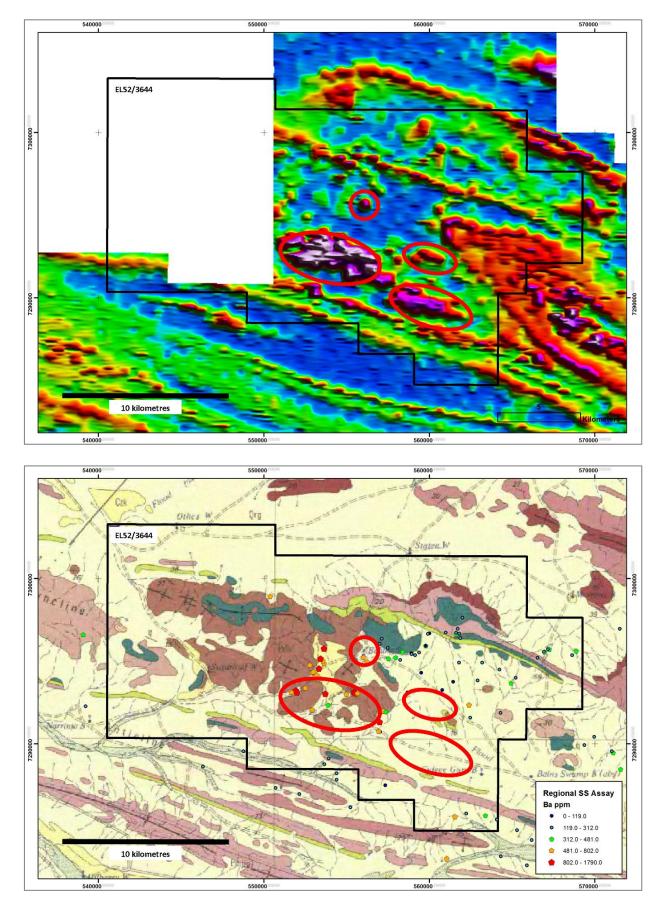


Figure 3: EL52/3644 showing GeoTEM Ch.20 (Z component image) image and Belang Bore targets (red polygons) – <u>Upper image</u>, and outcrop geology + Barium stream sediment sampling results - <u>Lower image</u>.

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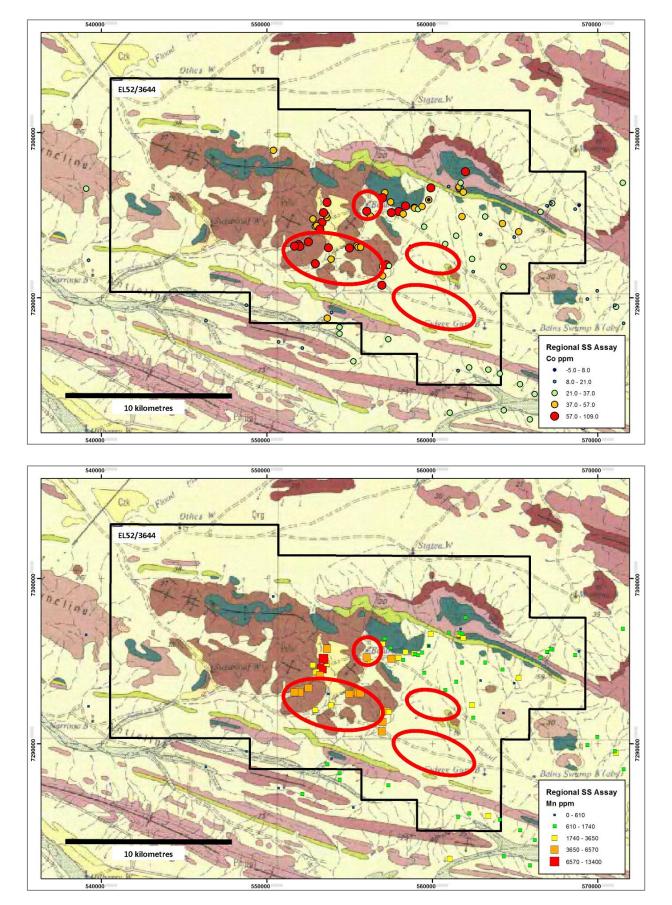


Figure 4: EL52/3644 showing outcrop geology, Belang Bore targets + Cobalt stream sediment sampling results - <u>Upper image</u>, and Manganese stream sediment sampling results – <u>Lower image</u>.

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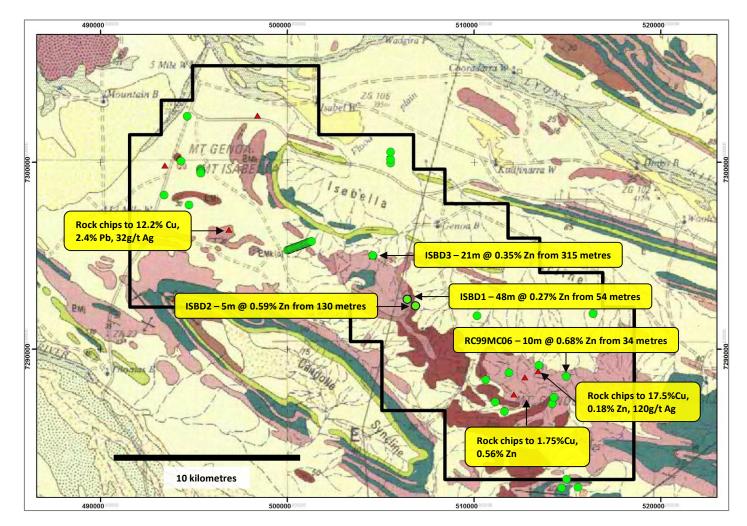


Figure 5: Surface geology map of EL09/2315 showing outcrop areas, drainage, historic drill hole positions (green dots) and positions of rock chip samples (red triangles) compiled to date from historic data sources.

Table 1: EL09/2315 – significant historic drill interce	pts (0.25% zinc lower cut-off & GDA_Z50 coordinates)
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Hole ID	Туре	Easting	Northing	dip	Azi	TD (m)	Width	From	Zn %
ISBD1	RC / Diamond	506 <i>,</i> 876	7,292,292	-60	080	165	48	54	0.27
ISBD2	Diamond	506,427	7,292,590	-60	080	291	5	130	0.59
ISBD3	Diamond	504,577	7,295,004	-80	080	450	21	315	0.35
RC99MC06	RC	514,959	7,288,524	-60	205	200	10	34	0.68

Sample ID	Description	Easting	Northing	Cu %	Pb %	Zn %	Ag ppm
294632	Quartz, hematite, malachite, cuprite vein	512,711	7,288,514	17.50	0.03	0.18	120
294657	Vein, quartz, kaolin, chrysocolla, limonite	513,473	7,288,864	1.50	0.00	0.92	<2
294658	Malachite veined carbonate	513,473	7,288,864	0.28	0.00	0.03	<2
294659	Vein: limonite quartz, chrysocolla	513,473	7,288,864	1.80	0.00	3.70	<2
294660	Ferruginous dolomite	513,473	7,288,864	0.12	0.01	0.14	3
294630	Quartz vein with malachite rosettes	496,865	7,296,440	6.40	2.40	0.02	<2
294631	Quartz vein with malachite and hematite	496,865	7,296,440	12.20	2.00	0.04	32

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## JORC Code, 2012 Edition - TABLE 1 (Section 1: Sampling Techniques and Data)

Criteria	JORC Code explanation	Commentary
	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under	ISBD1 was drilled as a RC pre-collared diamond drill holes whereas ISBD2 – ISBD3 were drilled as diamond drill holes. A three were undertaken by Western Mining Corporation (WMC during the period 1992 – 1994.
	investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should	RC99MC06 was drilled as a RC hole by Rio Tinto Exploration in 1999.
Courseling	not be taken as limiting the broad meaning of sampling.	Rock chip samples were collected by International Nickel (INCO in 1978
Sampling techniques	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Each drill hole location (easting and northing) was collected by handheld GPS. Mithril Resources understands that drill hole specifications and details of lithologies and sampling were completed for every metre, or as necessary, for each drill hole.
	Aspects of the determination of mineralisation that are Material to the Public Report.	While exact details of the analytical methods for both rock chip sampling and drilling are unknown, rock chip samples were analysed for gold and base metals by AAS. Chip samples and diamond drill core was analysed for gold and base metals by mixture of AA and MS techniques.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	Details of the drill rig are unknown. RC drilling method produces chip samples (i.e. non-core) and the diamond drilling method produces core.
	Method of recording and assessing core and chip sample recoveries and results assessed.	The results reported in this Report are historical and as such these details are unknown.
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The results reported in this Report are historical and as suc these details are unknown.
	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.	No relationship has been identified.
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.	While drill chip samples have been geologically logged, they hav not been geologically and geotechnically logged to a level or 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	Logging of drill samples is of a qualitative nature.
	The total length and percentage of the relevant intersections logged.	The results reported in this Report are historical and as suc these details are unknown.
	If core, whether cut or sawn and whether quarter, half or all core taken.	The results reported in this Report are historical and as suc these details are unknown.
Sub-	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	The results reported in this Report are historical and as suc these details are unknown.
sup- sampling techniques and sample preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The results reported in this Report are historical and as suc these details are unknown.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The results reported in this Report are historical and as suc these details are unknown.
	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.	The results reported in this Report are historical and as suc these details are unknown.

Norwood, South Australia, 5067 www.mithrilresources.com.au

F: (61 8) 8132 8899

E: admin@mithrilresources.com.au

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled	The results reported in this Report are historical and as such these details are unknown.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Depending on the method of digestion (unknown) the AAS, AA and MS analytical methods are appropriate for the type of exploration undertaken. Given the age of the work, the techniques are considered partial.
Quality of assay data and laboratory tests	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.	The drill results reported in this Report are historical and as such these details are unknown.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The results reported in this Report are historical and as such these details are unknown.
	The verification of significant intersections by either independent or alternative company personnel.	The significant intersections as reported in historic reports have been reviewed verified by the Company's Geology Manager and Managing Director.
Verification	The use of twinned holes.	No twin holes were drilled.
of sampling and assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All historic information used in the preparation of this Report has been sourced from publicly available Annual Technical Reports available from the WA Mines Department; specifically, A8716, A41630, A60490, and A110110.
	Discuss any adjustment to assay data	There was no adjustment to assay data
Location of	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.	All information used in the preparation of this Report has been sourced from publicly available Annual Technical Reports available from the WA Mines Department. Mithril has yet to carry out a field inspection of the project.
data points	Specification of the grid system used.	Data points have been quoted in this Report using the MGA Zone 50 (GDA94) coordinate system.
	Quality and adequacy of topographic control.	The results reported in this Report are historical and as such these details are unknown.
	Data spacing for reporting of Exploration Results.	The drill results reported in this Report are historical and as such these details are unknown.
Data spacing and distribution	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.	The data spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s).
	Whether sample compositing has been applied.	The results reported in this Report are historical and as such these details are unknown.
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.	The results reported in this Report are historical and as such these details are unknown.
	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.
Sample security	The measures taken to ensure sample security.	The results reported in this Report are historical and as such these details are unknown.

22B Beulah Road Norwood, South Australia, 5067 www.mithrilresources.com.au T: (61 8) 8132 8800

F: (61 8) 8132 8899 E: admin@mithrilresources.com.au

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Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All results were reviewed by Company personnel including the Geology Manager and Managing Director. No negative issues were identified from these reviews.

## JORC Code, 2012 Edition - TABLE 1 (Section 2: Reporting of Exploration Results)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure	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.	EL09/2315 and EL52/3644 have been applied for by Minex (West) Pty Ltd, a wholly owned subsidiary of Mithril Resources Ltd.
status	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.	EL09/2315 and EL52/3644 are tenement applications. At the time of writing there were no known impediments to obtaining a granted tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration (surface geochemistry, geophysics and drilling) has been undertaken throughout the area by the following parties:</li> <li>Westfield Exploration: 1966 – 1967</li> <li>International Nickel (INCO): 1978</li> <li>Alcoa: 1982 – 1983</li> <li>Western Mining Corporation (WMC): 1992 – 1994</li> <li>BHP / Aberfoyle JV: 1995 – 1998</li> <li>RioTinto: 1998 – 2000</li> <li>Sandfire Resources: 2004 – 2005</li> <li>Cosmopolitan Minerals: 2015 – 2017</li> <li>While exploration conducted to date has highlighted and confirmed the area's base metal prospectivity, Mithril believes that significant potential to find a SEDEX – hosted base metal deposit remains, especially considering that recent positive developments at the Abra Deposit are yet to be applied to the Bangemall Base Metal Project.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The base metal mineralisation at Bangemall and surrounding district occurs within Proterozoic sediments of the Bangemall Basin. Mineralisation is interpreted to be largely SEDEX in origin.
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. If the exclusion of this information is justified on the basis	A summary of all material information referred to in this Announcement is presented in Tables 1- 2, and Figures 2 - 5 of this Report.
	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	While no weighting averaging techniques, or cutting of high grades have been used, a lower cut-off grade of 0.25% zinc has been used.

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Criteria	JORC Code explanation	Commentary
	(e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	
	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.	Not Applicable as no weighting averaging techniques have been applied.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents reported
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	The relationship between mineralisation widths and intercept lengths is unknown. Widths of mineralisation have not been postulated. All mineralised intervals quoted in this announcement are quoted as downhole widths only.
mineralisation widths and intercept	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The geometry of the mineralisation with respect to the drill hole angle is not known.
lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The drilling Exploration Results in this Announcement are reported as down hole widths only as true widths are not known.
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.	See Figures 2 - 5 of this Report.
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.	All significant (+0.25% zinc) exploration results have been reported and all drill hole collar positions are shown in Table 1 and Figures 2 – 5 of this Report.
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.	All relevant data has been included within this Report.
	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step- out drilling).	Further work will comprise ground truthing and field checking historic exploration results.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Figure 1 shows the location of the tenements and prospects.

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#### For Further Information Contact:

Mithril Resources Ltd David Hutton, Managing Director admin@mithrilresources.com.au

22B Beulah Road Norwood, South Australia 5067 ABN: 30 099 883 922 T: (61 8) 8132 8800 F: (61 8) 8132 8899 www.mithrilresources.com.au

#### **Competent Persons Statement:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr David Hutton, who is a Competent Person, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Hutton is Managing Director and a full-time employee of Mithril Resources Ltd.

Mr Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Hutton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### About Mithril Resources Ltd:

Mithril Resources Ltd (MTH:AX) is an Australian resources company whose objective is the creation of shareholder wealth through the discovery of mineral deposits.

The Company and its exploration partners are actively exploring throughout the Kalgoorlie, West Kimberley and Murchison Districts of Western Australia for economic nickel, copper, zinc, and vanadium deposits.

In the Kalgoorlie District, Mithril is exploring for nickel on the Kurnalpi, Lignum Dam and North Scotia Projects which lie along strike from, or adjacent to previously mined highgrade nickel at the Silver Swan and Scotia Nickel Deposits.

In the West Kimberley, Mithril is exploring for zinc on the Billy Hills Project which lies adjacent to the previously mined Pillara Zinc Deposit.

In the Murchison, Mithril is exploring for copper, nickel and zinc mineralisation on the Nanadie Well Project and for copper, lead and zinc on the Bangemall Base Metal Project. Mithril's exploration partner – Monax Mining Ltd is also exploring for vanadium on the Limestone Well tenements.

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