

## Drill targets defined at Stark copper nickel prospect

- Three bedrock EM conductors identified at, and along strike from Stark prospect where recent auger sampling returned up to 0.94% copper, 0.28% nickel, and 1,240ppb PGE's
- 1,500 metre RC drilling and downhole EM surveying planned as initial test
- Drilling expected to commence next month following completion of Heritage Clearance Surveys

Mithril Resources Ltd (ASX: MTH) is pleased to advise that geophysical modelling of three new bedrock EM conductors at, and immediately along strike from the **Stark copper - nickel prospect** located 80 kilometres south east of Meekatharra, WA (Figure 1) has defined specific targets for drill testing.

Stark is a recently identified 800 metre long zone of sub cropping, copper - nickel - PGE mineralisation (where recent auger bedrock sampling returned up to **0.94% copper, 0.28% nickel, and 1,240ppb platinum + palladium** - "PGE's") within weathered mafic rocks which has not been previously tested by drilling or geophysics.

Electromagnetic (EM) geophysical surveying undertaken by the Company last month identified the new conductors (termed the "**northern**", "**central**", and "**southern**" conductors- Figure 2).

The 250 metre long **northern conductor**, which lies 350 metres northwest of Stark and coincides with a strong undrilled induced polarisation (IP) geophysical anomaly (Figure 3), is modelled to be steeply dipping to the west from a depth of 60 metres.

The **central conductor** lies beneath gossanous outcrops within the central portion of the 800 metre long surface mineralised zone (Figures 4 and 5). The conductor is modelled to be a series of steeply east dipping plates over 500 metres strike length that plunges to the south from a depth of 100 metres.

The **southern conductor** lies 2 kilometres south of the central conductor within an area of sand cover. An historic drill hole 100 metres to the east intersected disseminated and stringer sulphides (pyrite – chalcopyrite) suggesting a sulphide source for the conductor. The 220 metre long conductor is modelled to be steeply dipping to the east from a depth of 70 metres.

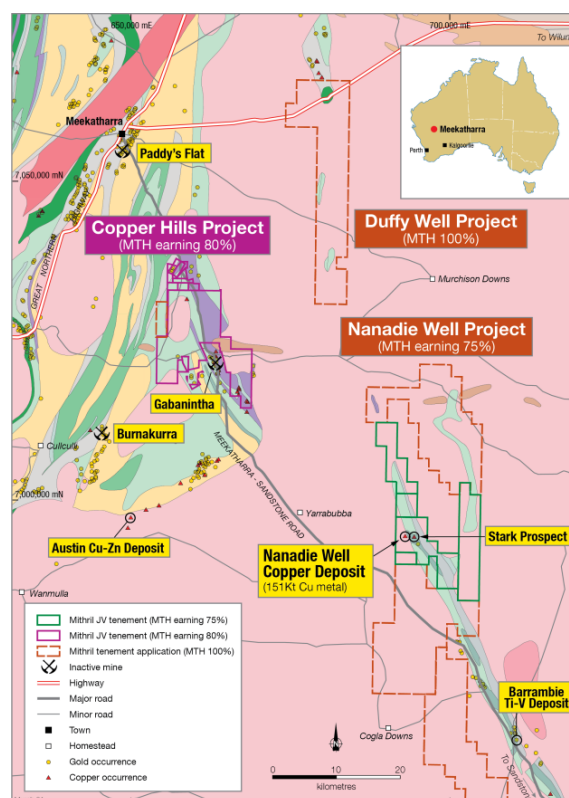
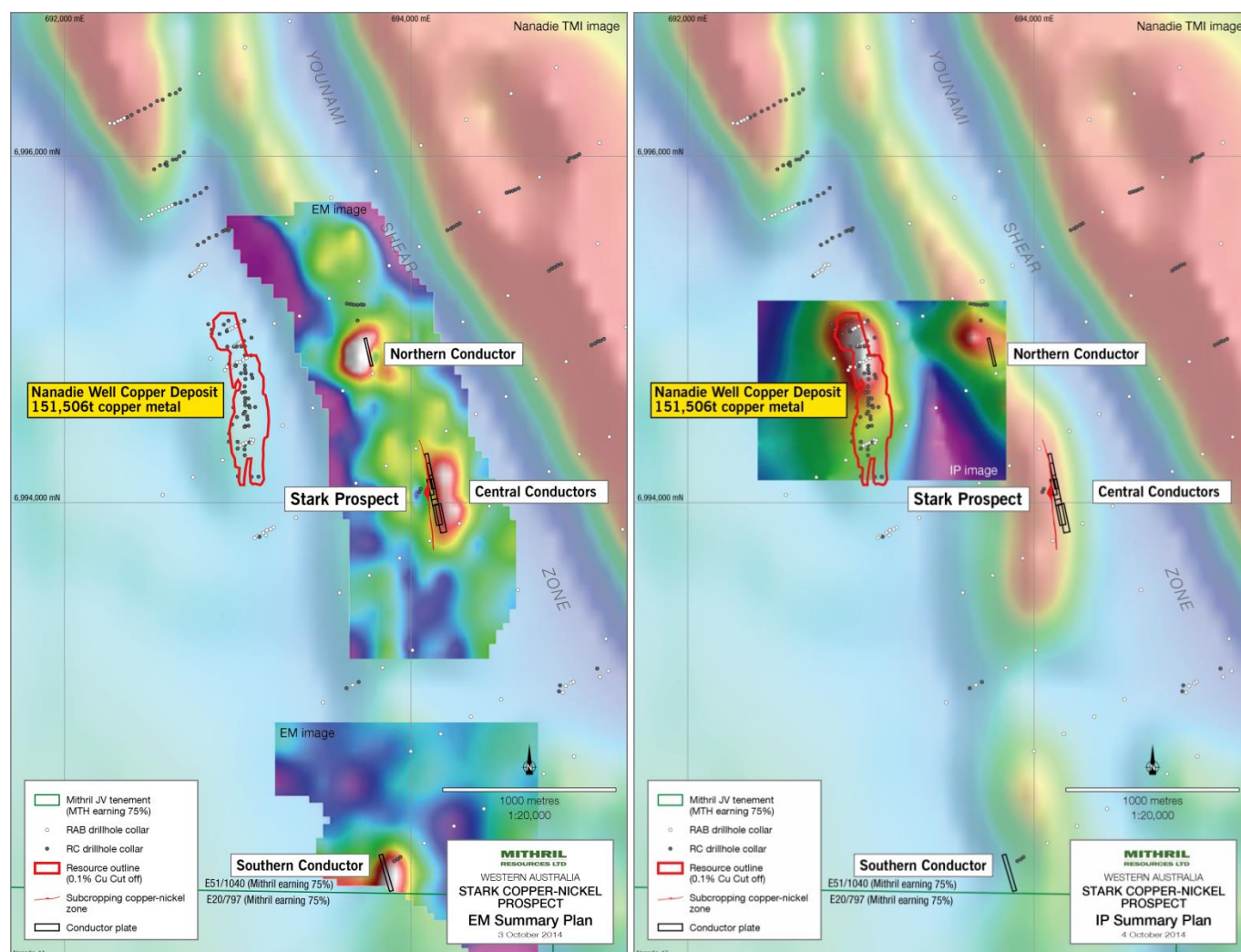


Figure 1: Location of Stark Prospect

A program of approximately 10 RC drillholes (1,500 metres) and downhole EM (DHEM) surveying is planned as an initial test of the EM conductors.

WA Government Programme of Work (POW) approval for the drilling has been obtained and Mithril is currently organising Heritage Clearance Surveys which are expected to be completed by mid-next month. Drilling will commence immediately thereafter.

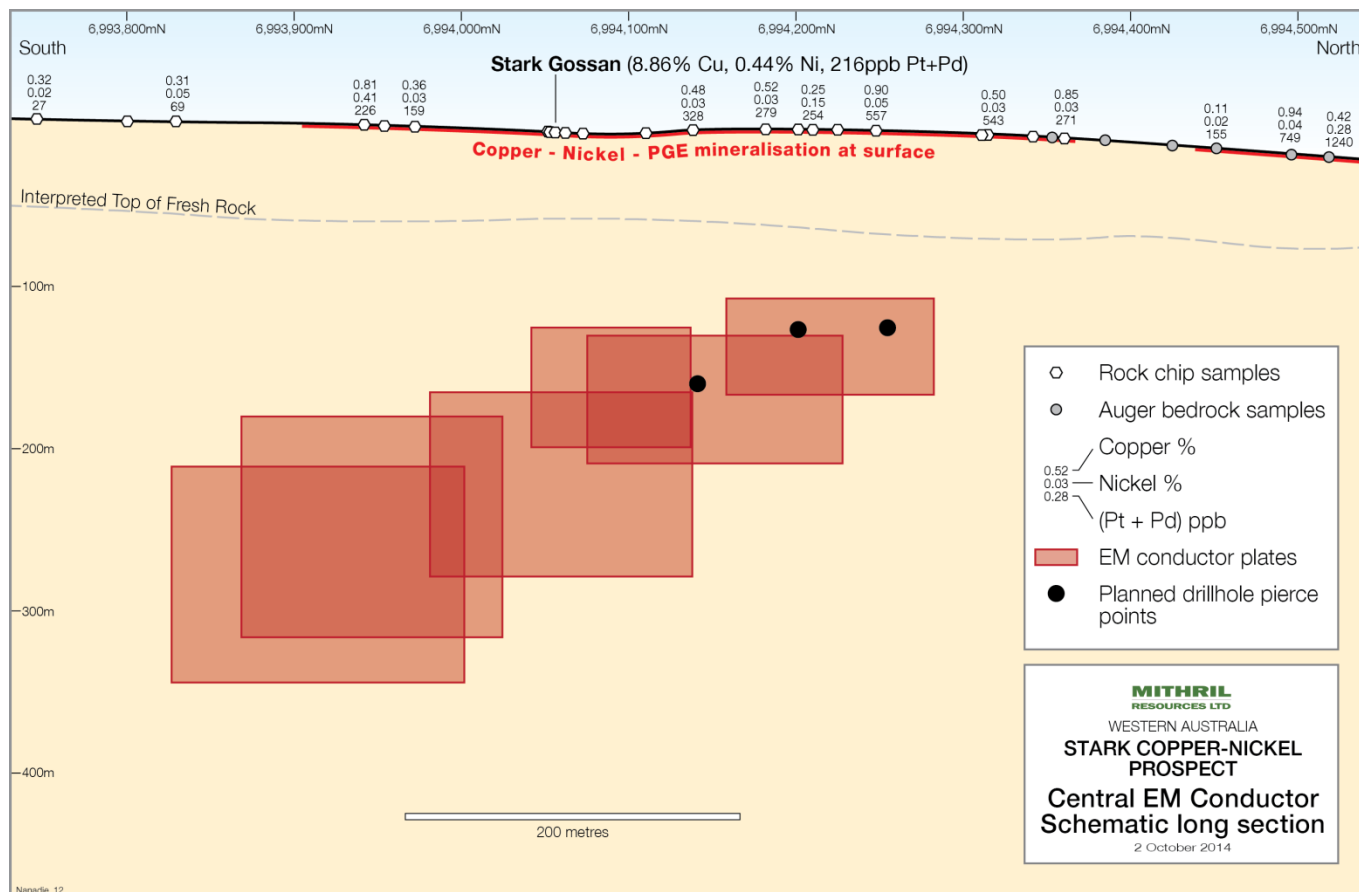
Stark is located on tenements subject to a Farmin and Joint Venture Agreement with Intermin Resources Limited (**ASX: IRC**) whereby Mithril can earn up to a 75% interest in the project tenements by completing expenditure of \$4M over 6 years with a minimum expenditure of \$250,000 required by 14 April 2015 and before any withdrawal (*ASX Announcement dated 6 December 2014*).



**Figure 2 (left):** Stark prospect area showing Stark mineralised zone, ch18 EM image (Z-axis) with bedrock EM conductors labelled, and drill holes. Background image is TMI magnetics.

**Figure 3 (right):** Stark prospect area showing Stark mineralised zone, IP chargeability image with bedrock EM conductors labelled, and drill holes. Background image is TMI magnetics.





**Figure 4: Schematic Long Section of Stark Central EM Conductor showing surface mineralisation and geochemical sampling results, Stark gossan (see Figure 5), modelled conductor plates and proposed drill hole pierce points**



**Figure 5: Photo of Stark copper - nickel - PGE gossan which lies adjacent to the central EM conductor**

## JORC Code, 2012 Edition – Comments

The rock chip and auger geochemical sampling undertaken by Mithril Resources at the Stark Prospect and referred to in this Report was previously reported in the following ASX Announcements: “Nickel gossan identified at Nanadie Well Project WA” (dated 22 April 2014), “Further results reinforce Nanadie Well copper – nickel prospectivity” (dated 28 July 2014), and “Highly anomalous copper – nickel – PGE results at Nanadie Well” (dated 21 August 2014). 2012 JORC Code information for the rock chip and auger geochemical sampling was included in those reports and has not been repeated here.

The historic drilling referred to in this Report was previously reported in the following ASX Announcement: “Further results reinforce Nanadie Well copper – nickel prospectivity” (dated 28 July 2014). 2012 JORC Code information for the historic drilling was included in that report and has not been repeated here.

The Company confirms that it is not aware of any new information or data that materially affects the rock chip and auger geochemical sampling, and historic drilling information included within the Company’s previous announcements.

**Table 1. Electromagnetic (EM) geophysical surveying details**

Item	Details
Operator	GEM Geophysics
Sensor	EMIT Smart Flux B-field Magnetometer
Receiver	EMIT SmartEM-24
Transmitter	Zonge ZT-30
Configuration	In-loop
Loop Size	200x200m
Number of Turns	2
Tx Effective Current	50A
Base Frequency	1.56 to 3.33 Hz
Station Spacing	50 - 100m
Line Spacing	100 - 200m
Quality Control Measures	Repeat readings at each station

**JORC Code, 2012 Edition - TABLE 1  
Section 1: Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. 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.</i>	Moving Loop Electromagnetic (MLEM) geophysical surveying was undertaken over the Stark Prospect. Technical specifications of the Moving Loop Electromagnetic (MLEM) geophysical surveying is also given in Table 1 of this Report.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	The MLEM surveys were designed to cover an area consisting of the immediate targets and surrounding rocks to ensure geophysical surveying was representative of the prospect area.
	<i>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 (e.g. ‘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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	MLEM geophysical surveying was undertaken to test for conductive responses potentially indicative of buried sulphide mineralisation.
Drilling techniques	<i>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</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.

Criteria	JORC Code explanation	Commentary
	<i>oriented and if so, by what method, etc.).</i>	
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<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>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
Logging	<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>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
	<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>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled</i>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Not applicable as no physical samples and subsequent assaying are collected during MLEM geophysical surveying.
	<i>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.</i>	Details of geophysical tools used during the EM geophysical surveying are given in Table 2.
	<i>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.</i>	Geophysical field data was checked on a daily basis by the Company's geophysicist. In addition, anomalous responses generated by the survey were subject to infill and repeat readings.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The geophysical anomalies were identified by the Company's geophysicist and verified by the Company's Geology Manager.
	<i>The use of twinned holes.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Raw data for the geophysical surveying was captured electronically in the field and transferred by the contractor to the Company's geophysicist in Perth for processing and interpretation.
	<i>Discuss any adjustment to assay data</i>	None undertaken
Location of data points	<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>	EM stations were recorded using a handheld GPS with an expected accuracy of +/- 5m. For the nature of the program completed, this level of accuracy is considered to be suitable. No down-hole surveys were completed.
	<i>Specification of the grid system used.</i>	Data points have been quoted in this Report using the GDA1994 MGA, Zone 50 coordinate system.
	<i>Quality and adequacy of topographic control.</i>	An RL value using the handheld GPS was recorded at each rock



Criteria	JORC Code explanation	Commentary
		chip sample location
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Details of the EM surveying data spacing are given in Table 2 of this Report.
	<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>	No mineral resource or ore reserve estimation has been undertaken. Geophysical results are not suitable for incorporation into mineral resource or ore reserve estimations.
	<i>Whether sample compositing has been applied.</i>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
Orientation of data in relation to geological structure	<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>	Given that the geophysical data was collected over a large area from regularly-spaced stations and not designed to test any specific orientation, it may be considered to be unbiased.
	<i>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.</i>	Not applicable as no drilling techniques are utilised during MLEM geophysical surveying.
Sample security	<i>The measures taken to ensure sample security.</i>	Not applicable as no physical samples are collected during MLEM geophysical surveying.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	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 status	<i>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.</i>	The work described in this Report was undertaken on Exploration Licence 51/1040 which is owned by Intermin Resources and in which, Mithril has the right to earn up to a 75% interest by completing \$4M expenditure over 6 years (See ASX Announcement dated 6 December 2013).
	<i>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.</i>	There are no existing impediments to the tenements.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Intermin estimated a 2004 JORC Code Compliant Inferred Resource for the Nanadie Well Copper Deposit of 36.07Mt @ 0.42% Cu in September 2013. This work followed the completion of various previous RAB, RC and geophysical surveys throughout the area by Intermin and previous exploration companies.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	The Stark Prospect is interpreted to contain Archaean – age, magmatic copper-nickel mineralisation within a package of structurally deformed mafic lithologies.
Drill hole Information	<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:     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.</i>	A summary of the geophysical surveying and results referred to in this Report is presented in Table 1 of the Report. Also see Figures 2 and 3 in this Report.
	<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>	No information has been excluded
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	No weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades have been applied when reporting Exploration Results.

Criteria	JORC Code explanation	Commentary
	<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>	Not applicable see previous response.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents reported
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Widths of mineralisation have not been postulated
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The geometry of the mineralisation is not known but assumed to be sub-vertical.
	<i>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').</i>	No drilling results have been given in this Report.
<i>Diagrams</i>	<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>	See Figure 2 of this Report.
<i>Balanced reporting</i>	<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>	All results are reported.
<i>Other substantive exploration data</i>	<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>	All relevant data has been included within this Report
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Drilling is planned as a further test of the Stark copper – nickel mineralised zone outlined in this Report
	<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>	Figure 2 displays areas of interest at Stark.

## ENDS

### For Further Information Contact:

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### Competent Persons Statement:

The information in this report that relates to Exploration Targets and Exploration Results 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 is an Australian exploration company focused on the discovery and development of base metal deposits primarily copper. Mithril is a frontier explorer with a small but highly experienced team based in Adelaide. Combining advanced technology with a proven field-based approach ensures the bulk of the company's expenses go directly into the ground.