

# EM surveys underway at Meekatharra

- Electromagnetic ("EM") surveys underway to confirm priority drill targets including;
  - Stark Prospect where most recent auger sampling returned up to 0.94% Cu, 0.28% Ni, and 1,240ppb Pt+Pd ("PGE's")
  - Copper Hills Prospect with historic drill intercepts of 101m @ 0.46% Cu from 63 metres including 16.1m @ 0.99% Cu, and 17.8m @ 0.86% Cu, and 12.5m @ 1.45% Cu from 39.9 metres
  - Nanadie Well Copper Deposit (151,506 tonnes copper metal)\* and extensions
- Results expected by end of September 2014 Quarter

Mithril Resources Ltd **(ASX: MTH)** is pleased to advise that ground EM geophysical surveying at the Meekatharra Project Area in Western Australia has commenced (*Figure 1*). Moving Loop EM will be used to confirm priority drill targets including:

- Stark Prospect a 800 metre long zone of copper nickel PGE mineralisation (latest auger sampling results up to 0.94% copper, 0.28% nickel, and 1,240ppb PGE's) which remains open along strike and has not been previously tested by drilling or geophysics,
- Copper Hills Prospect where shear-hosted copper mineralisation has been intersected in historic drilling (e.g. CD6 101m @ 0.46% copper from 63 metres *including 16.1m @ 0.99% copper, and 17.8m @ 0.86% copper,* and CD7 13.7m @ 0.95% copper from 9.1 metres, and 12.5m @ 1.45% copper from 39.9 metres),
- Nanadie Well Copper Deposit (151,506 tonnes copper metal)\* and northern strike extensions,
- Lannister Prospect where Mithril's rock chip sampling has returned up to 0.22% copper and 0.14% nickel from outcropping ironstone within the central part of a 1,500m x 1,000m north-east trending copper and nickel soil anomaly, less than 2 kilometres west of the historic Gabanintha gold mining centre. The prospect has not been previously drilled.

The results of the surveying are expected by the end of the September 2014 Quarter and the Company will provide the market with a further update at that time.

<sup>\*</sup> A 2004 JORC Code Compliant Inferred Resource of 36.07Mt @ 0.42% copper (151,506 tonnes copper / 74,233 ounces gold) was estimated for the Nanadie Well Copper Deposit by Intermin in September 2013. Refer to Intermin Resources' ASX Announcement "Initial Resource Estimate for the Nanadie Well Cu-Au Project" dated 19 September 2013. The information pertaining to the Nanadie Well Copper Deposit Inferred Resource was prepared and first disclosed by Intermin Resources under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The Stark Prospect and Nanadie Well Deposit are 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).

The Copper Hills and Lannister Prospects are located on tenements subject to a Farm-in and Joint Venture Agreement with Doray Minerals Limited ("Doray" - ASX: DRM), whereby Mithril can earn an 80% interest in the project tenements by completing expenditure of \$1M over four years (ASX Announcement dated 20 December 2013).

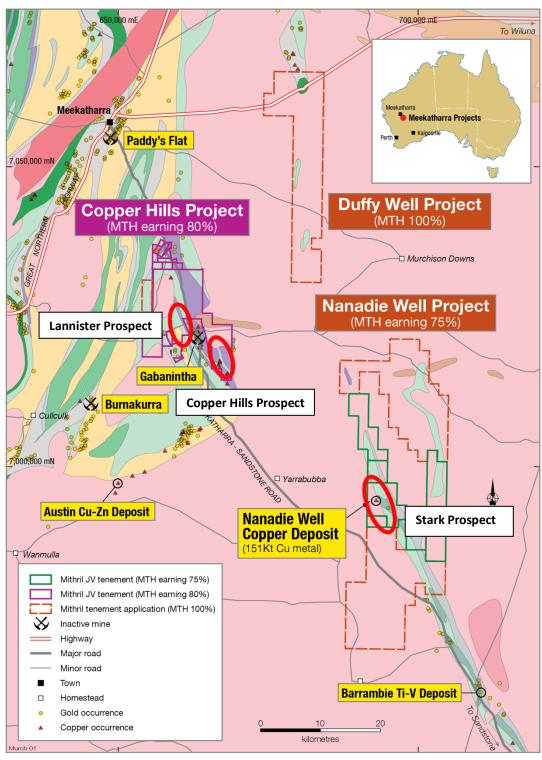


Figure 1: Meekatharra Project Area - location plan showing key prospects

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## **About the Nanadie Well Copper Deposit**

A 2004 JORC Code Compliant Inferred Resource of 36.07Mt @ 0.42% copper (151,506 tonnes copper / 74,233 ounces gold) was estimated for the Nanadie Well Copper Deposit by Intermin in September 2013. As such, the surrounding project area is highly prospective for the discovery of new copper and gold mineralisation and contains a number of drill ready targets that offer excellent exploration upside.

Nanadie Well Inferred Resource					
2004 JORC Code Classification	Tonnes (Mt)	Copper %	Gold ppm	Contained Copper (t)	Contained gold (ounces)
Inferred	36.07	0.42	0.064	151,506	74,233

Refer to Intermin's ASX Announcement "Initial Resource Estimate for the Nanadie Well Cu-Au Project" dated 19 September 2013.

The information pertaining to the Nanadie Well Copper Deposit Inferred Resource was prepared and first disclosed by Intermin under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Table 1: Copper Hills historic drilling details and results

Hole ID	Туре	Easting	Northing	Dip°	AziMag°	Hole Depth	From	Width	% Copper
CD6	Diamond drill hole	668,257	7,015,444	-40	242	307.8	63	101.0	0.46
	Including							16.1	0.99
	and						145.7	17.8	0.86
CD7	Diamond drill hole	668,207	7,015,424	-90	0	63.1	9.1	13.7	0.95
u	и	u	u	"	u	u	39.9	12.5	1.45

### **JORC Code, 2012 Edition – Comments**

The auger geochemical sampling undertaken by Mithril Resources at the Stark Prospect and referred to in this Report was first reported in an ASX Announcement entitled "Highly anomalous copper - nickel - PGE results at Nanadie Well" (dated 21 August 2014). 2012 JORC Code information for the auger geochemical sampling was included in that report and has not been repeated here.

The soil geochemical results and rock chip sampling undertaken by Mithril Resources at the Lannister Prospect and referred to in this Report was first reported in an ASX Announcement entitled "Meekatharra Exploration Update" (dated 1 July 2014). 2012 JORC Code information for the soil geochemical results and rock chip sampling was included in that report and has not been repeated here.

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

Criteria	JORC Code explanation	Commentary		
Sampling techniques	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.	Diamond drillholes at the Copper Hills Prospect were drilled by Union Oil in 1969.  Composite samples for geochemical analysis were collected at 5 foot (1.524 metres) intervals over the total length of every drill hole. Sample weight, collection method and geochemical analysis techniques used are unknown as these details were not recorded in the historical reports.		
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Measures taken to ensure sample representivity and appropriate calibration of measurement tools used are unknown as these details were not recorded in the historical reports.		
	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. In other cases more explanation may be required,	Sample collection methods or laboratory analytical techniques are unknown as these details were not recorded in the historical reports.		

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Criteria	JORC Code explanation	Commentary		
	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.			
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.).	Drill type was core drilling. It is unknown whether the holes were pre-collared and if the core was orientated.		
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not known as these details were not recorded in the historical reports.		
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not known as these details were not recorded in the historical reports.		
	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.	A relationship between sample recovery and grade has not been identified. Information regarding sample bias is unknown as these details were not recorded in the historical reports.		
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.	The core samples were originally geologically logged on 5 foot intervals with the level of detail not suitable for mineral resource estimation, mining or metallurgical studies.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography	Logging was simplistic (i.e. only weathering, colour, and lithology was recorded) and only qualitative in nature.		
	The total length and percentage of the relevant intersections logged.	Every anomalous intersection quoted in this Report has been geologically logged as per above.		
Sub- sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	It is unknown whether the core was cut or sawn and if so whether quarter, half or all core was originally taken.		
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Precise sample collection methods and whether sample wet or dry are unknown as these details were not recorded in the historical reports.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation technique is unknown as these details were not recorded in the historical reports.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Quality control procedures are unknown as these details were not recorded in the historical reports.		
	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.	Measures taken are unknown as these details were not recorded in the historical reports.		
	Whether sample sizes are appropriate to the grain size of the material being sampled	Information unknown as this detail was not recorded in the historical reports.		
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Information unknown as these details were not recorded in the historical reports.		
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.	No geophysical tools, spectrometers, handheld XRF instruments, etc. were used		
	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.	Information unknown as this detail was not recorded in the historical reports.		
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	None undertaken		

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Criteria	JORC Code explanation	Commentary
and assaying	The use of twinned holes.	None undertaken
ussayg	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Handwritten data entry. Procedures or verification for data entry is unknown.
	Discuss any adjustment to assay data	None undertaken
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.	Original (1969) geological plans showing the location of the Union Oil drill hole collar positions were scanned and geo-referenced via MapInfo GIS to determine MGA coordinates for each drill hole collar.  Hole locations have been confirmed on the ground by Mithril geologists using a handheld GPS with an expected accuracy of +/-5m.
	Specification of the grid system used.	Drill hole collar coordinates have been quoted in this Report using the GDA1994 MGA, Zone 50 coordinate system.
	Quality and adequacy of topographic control.	The drilling was of a reconnaissance nature only and other than the RL recorded by the GPS at the time of field verification; no detailed topographic control has been used.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	It is understood that the original drill holes were of a reconnaissance nature only and as such they were randomly located based on prospective outcrop geology.
	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.	No mineral resource or ore reserve estimation has been undertaken.
	Whether sample compositing has been applied.	The Union Oil drill holes were originally sampled using 5 foot composite samples.
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 drilling was of a reconnaissance nature only and as such information regarding whether possible structures exist, and whether sampling achieves unbiased sampling of possible structures is unknown at this stage.
	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.	Unsure of the measures taken to ensure sample security as these details were not recorded in the historical reports.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Apart from a desktop review of the drill data, no audits have been undertaken by Mithril Resources.

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

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 Union Oil drillholes at the Copper Hills Prospect described in this Report occur on Exploration Licence 51/960 which is owned by Doray Minerals and in which, Mithril has the right to earn up to an 80% interest by completing \$1M expenditure over 4 years (See ASX Announcement dated 20 December 2013).
	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.	There are no existing impediments to the tenements.

ASX Code: Issued Shares:

MTH 316,657,750 Market Capitalisation: \$3.17 million

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Copper Hills Prospect has been explored by numerous companies since mid-1960's with the most recent being the Silver Swan Group (2008 – 2012). Previous drilling, geochemical and geophysical surveys at Copper Hills has demonstrated widespread copper mineralisation but further EM geophysics is required to test for continuous high-grade zones of mineralisation
Geology	Deposit type, geological setting and style of mineralisation.	Copper Hills lies within the Murchison Domain of the Youanmi Terrane, Yilgarn Craton. The targeted style of mineralisation is shear-hosted copper gold.
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.	Historic drill hole results material to the understanding of the exploration results referred to in this Report are presented in Table 1.
	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 material to the understanding of the exploration results has been excluded.
Data aggregation methods	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.	Union Oil drill data was originally recorded in imperial measurements (i.e. feet). Mithril has converted all imperial measurements to metric measurements using the following conversion factor; 1 foot equals 0.3048 metres.  For reporting of significant drilling results, a lower cut-off grade of 0.3% copper has been applied.  Where composite samples of unequal length have been used to calculate results, a length weighting technique has been applied.
	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.	Length weighted intercepts are calculated as follows: Reported grade for a downhole interval = (the sum of all individual sample grades x individual sample length) / (total interval length).
	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.	Widths of mineralisation have not been postulated
mineralisation widths and	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 is not known.
intercept 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').	Not applicable as only rock chip and historic soil sampling results have been included in this Report.
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.	No significant discovery is being reported and prospect locations are shown in Figure 1 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.	No new Exploration Results are being reported.
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

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Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout drilling).	EM geophysical surveying is planned as a further test of the copper target.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See Figure 1.

### **ENDS**

#### For Further Information Contact:

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

The information in this report that relates to Mineral Resources is based on information compiled by Mr David O'Farrell who is a full-time employee of Intermin Resources Limited and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr O'Farrell has more than five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

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

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 fieldbased approach ensures the bulk of the company's expenses go directly into the ground.

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ASX Code: