

## Kurnalpi Nickel Project Update

- **Drilling strengthens Company's understanding of project's nickel prospectivity with main nickel sulphide horizon requiring further drill testing**
- **1.46% copper, 1.12% cobalt returned from grab sample of historic drill spoils on a newly acquired tenement at southern end of project**
- **Ground EM, diamond drilling planned as next step**

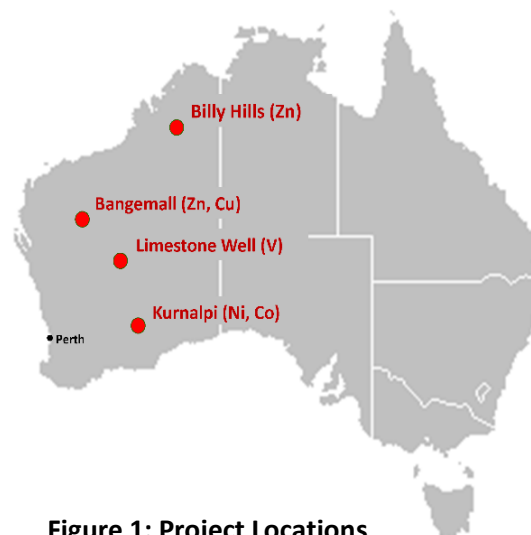
Mithril Resources Ltd (the "Company" - **MTH.AX**) is pleased to advise that the recently completed work program at its 100% owned Kurnalpi Nickel Project (*located 70 kms north east of Kalgoorlie, WA - Figures 1*) has identified strongly elevated copper-cobalt within a new target position and strengthened the Company's understanding of the project's nickel sulphide prospectivity.

Three Reverse Circulation holes (18GDSRC005 to 18GDSRC007 - 540 metres) were drilled as an initial test of a downhole EM conductor, plus gossan and disseminated sulphide intercepts previously obtained by Mithril at the northern end of the project (*Mithril's ASX Announcement dated 30 May 2018*).

Two holes drilled into the EM conductor intersected a four - metre wide zone of barren stringer sulphides (pyrrhotite / pyrite) at the modelled conductor depth (thus explaining the conductor), and a third hole (18GDSRC007) drilled beneath the gossan intersected a four - metre wide zone of weakly disseminated nickel sulphides (*Figure 2*). No significant assays (i.e. > 0.25% nickel) were returned from either intercept.

Significantly the **main nickel sulphide horizon was not tested** with 18GDSRC007 unable to reach target depth due to unfavourable ground conditions (*Figure 2*).

Drill testing of the main nickel sulphide horizon remains a priority and Mithril will need to utilise diamond drilling to confidently do this.



**Figure 1: Project Locations**

As shown on *Figure 3*, the ultramafic rocks which host the nickel sulphide horizon continues for over 7 kilometres to the south of the drilling within Mithril's 100% - owned tenure.

Strongly anomalous levels of nickel +/- cobalt and copper in a number of wide-spaced shallow RAB / aircore drilling undertaken in the mid 1990's highlights the potential of the project's southern area, i.e.;

- 20m @ 0.69% nickel, 0.07% cobalt from 32 metres in KURA50 including 8m @ 0.96% nickel, 0.09% cobalt from 36 metres, and
- 8m @ 0.07% nickel, 0.02% cobalt, 0.15% copper from 28 metres in KURA99 (intercept at end of hole).

A grab sample of remnant drill spoils for the KURA99 intercept returned **1.46% copper and 1.12% cobalt** (Sample No. KUROCK03). The mineralisation is hosted by weakly weathered sheared carbonaceous metasediments and doesn't appear to be related to ultramafic rock types. This suggests the Kurnalpi Project has potential for other mineralisation styles areas well as nickel sulphides.

The copper – cobalt target is a **newly recognised exploration opportunity** given that the KURA99 drill hole lies on a tenement (EL28/2760) that was only recently applied for (*Figure 3*).

### Management Comment

Mithril's Managing Director, Mr David Hutton said that the results continue to demonstrate the project's prospectivity and why Kurnalpi is a priority project for the Mithril.

"Nickel sulphide exploration is difficult and takes patience but importantly our work to date has demonstrated that nickel sulphides are present at Kurnalpi within favourable ultramafic rocks. The identification of a new copper cobalt target is highly encouraging and reinforces the project's potential".

"We are confident that ongoing exploration will be ultimately successful and we look forward to carrying out further ground EM geophysics and drilling as soon as possible".

**Table 1: Drill hole specifications**

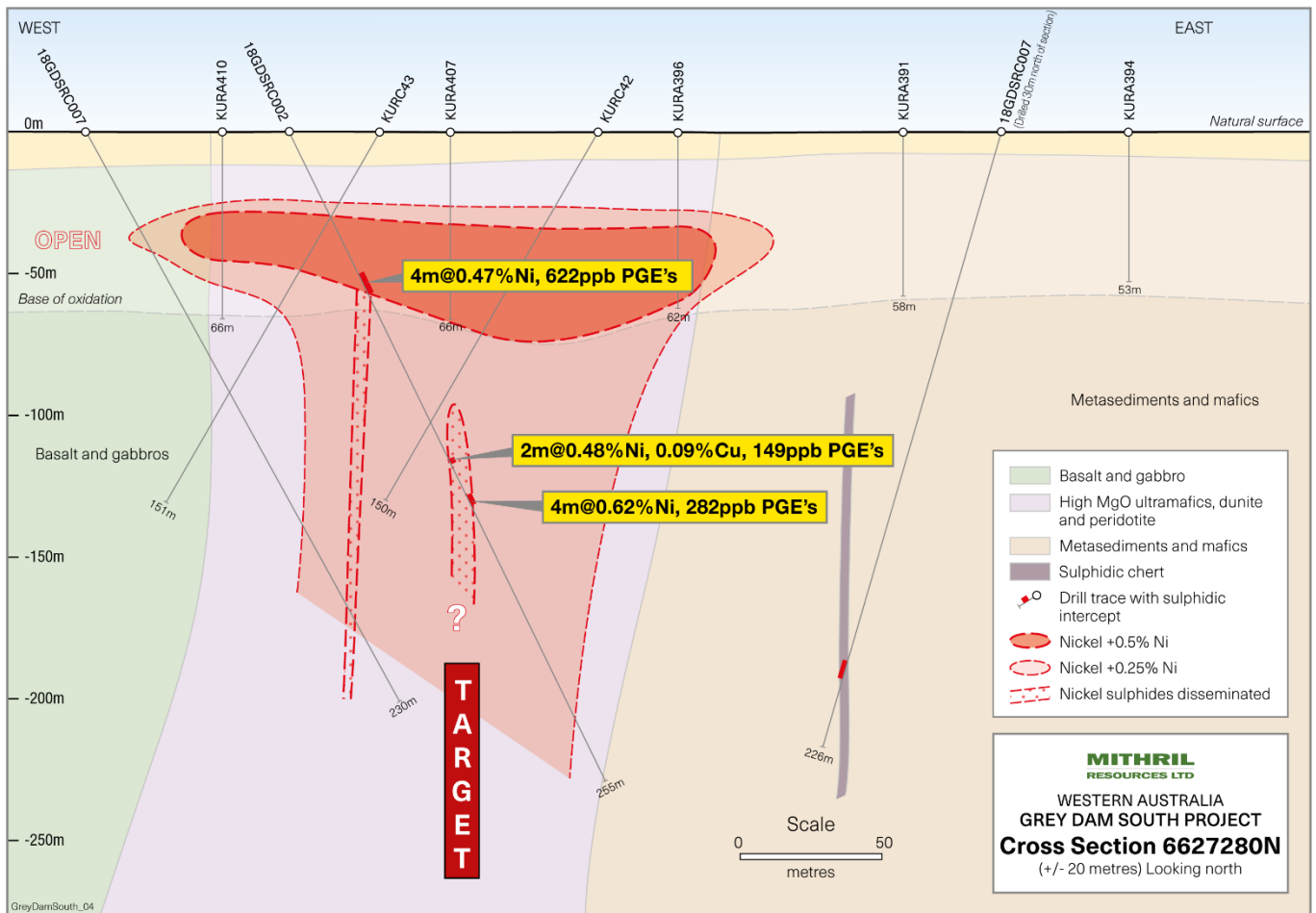
Hole ID	Easting GDA	Northing GDA	Dip	Azi	Total Depth	Drill type
18GDSRC005	418,085	6,627,250	-70	358	84	RC
18GDSRC006	418,124	6,627,324	-77	270	226	RC
18GDSRC007	417,768	6,627,300	-60	90	230	RC

**Table 2: Rock chip / Grab sampling specifications**

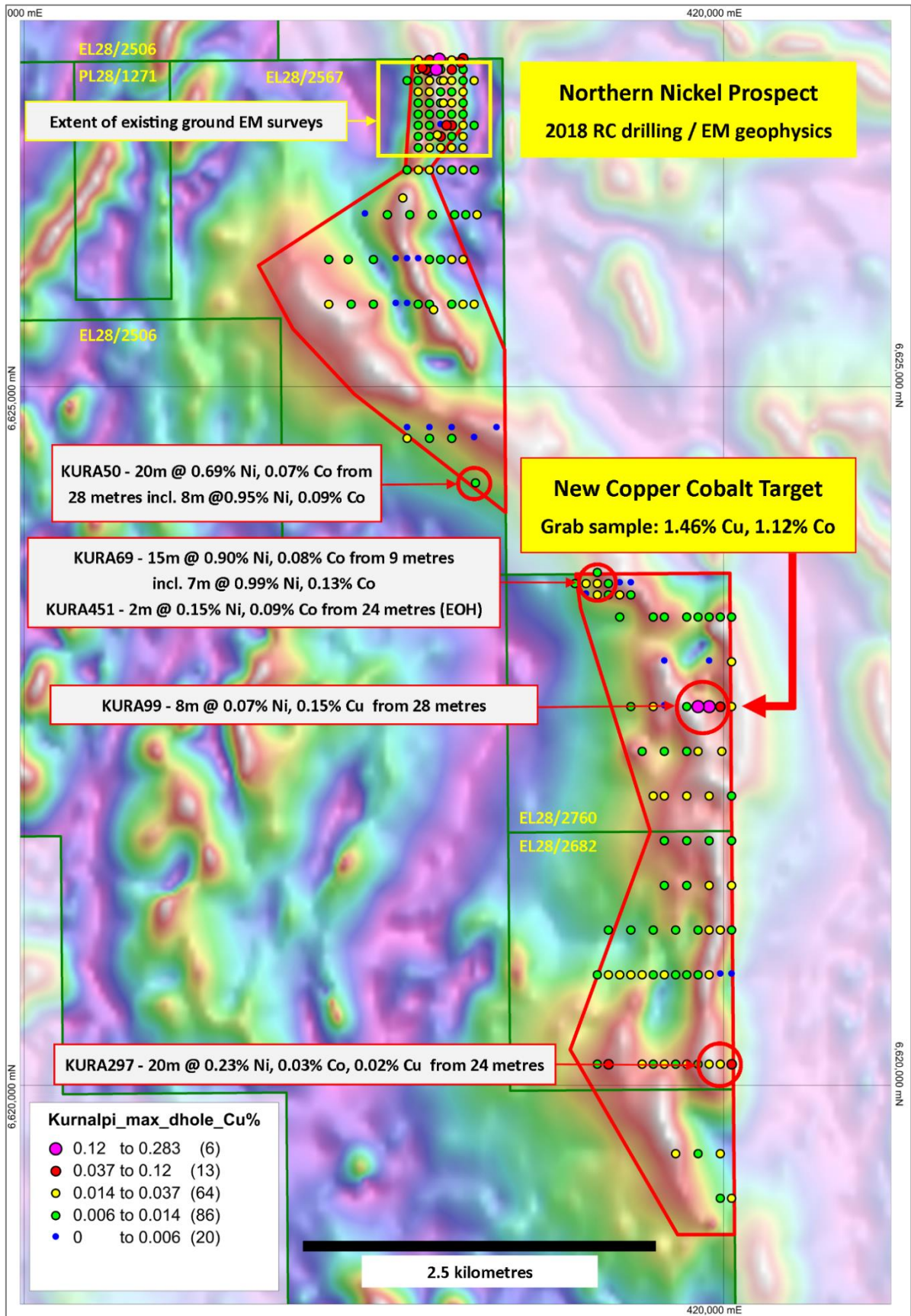
Sample ID	Easting GDA	Northing GDA	Comments	Copper_%	Cobalt_%	Nickel_%	Zinc_%
KUROCK001	419,802	6,622,701	Gossanous?	0.04	0.00	0.02	0.10
KUROCK002	419,803	6,622,701	Gossanous, goethite dominant?	0.06	0.00	0.02	0.10
KUROCK003	419,803	6,622,722	black drill chips rich? >1%Cu on pXRF	1.46	1.12	0.23	0.41
KUROCK004	419,887	6,622,724	Drill chips with ironstone (gossanous?)	0.17	0.04	0.07	0.36
KUROCK005	419,889	6,622,738	Gossanous?	0.02	0.01	0.02	0.05

**Table 3: Historic RAB / Aircore drill hole specifications**

Hole ID	Easting	Northing	dip	Azi	TD (m)	Width	From	Ni%	Co%	Cu%
KURA99	419817	6622718	-90	0	36	8	28	0.07	0.02	0.15
KURA50	418,228	6,624,319	-90	0	55	20	32	0.69	0.07	-
<i>Including</i>						8	36	0.96	0.09	-



**Figure 2: Kurnalpi Northern Nickel Prospect (18GDSRC007 Section) showing geology and nickel sulphide horizons. Note that 18GDSRC007 failed to reach the main nickel sulphide horizon due to unfavourable ground conditions.**



**Figure 3: Kurnalpi regional magnetics and historic RAB / Aircore drill collars. Location of Northern Nickel Prospect and the new Copper Cobalt target also shown. Drill hole collar positions shown colour coded by maximum downhole copper (%).**

JORC details for historic (“KURA” series) RAB / Aircore drilling at Kurnalpi Project has been previously detailed in Mithril’s ASX Announcement entitled “Strong Targets at the Kurnalpi Nickel-Cobalt Prospect” - dated 7 February 2018.

**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>	Reverse Circulation (RC) drilling was completed at the Kurnalpi Nickel Project on EL28/2567 which is 100%-owned by Mithril Resources through its wholly owned subsidiary, Minex (West) Pty Ltd.  RC samples were collected as 4 metre composite samples from the drill spoils laid out on the ground directly from the cyclone splitter. Sample sizes were approximately 2-3kg in weight.  1 – 3kg grab samples of historic drill spoils and surface outcrop was collected at various locations based on prospective geology.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Each drill hole and grab sample location (easting and northing) was collected by a handheld GPS. Drill hole specifications and details of lithologies and sampling were completed for every metre, or as necessary, for each drill hole. All logging and sampling protocols remained constant throughout the program.
	<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>	2 – 3kg composite RC samples and separate grab samples were collected for geochemical analysis by ALS Laboratories in Perth, WA.  In the laboratory, samples were crushed (~10mm) and pulverised to produce a representative 25g sub-sample for analysis using fire assay with ICP-MS finish for Au, Pt, and Pd (PGM-ICP23 – Lab Code) and four acid digest with ICP-AES finish for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W, and Zn (ME-ICP61 – Lab Code).
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 oriented and if so, by what method, etc.).</i>	A truck mounted T660 Schramm drill rig and separate truck mounted auxiliary / booster (total air – 2,050cfm / 1,000psi) owned and operated by Profile Drilling Services Pty Ltd was used to carry out the Kurnalpi drilling.  The drilling method produces chip samples (i.e. non-core).
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No recordings of recoveries were undertaken.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No measures taken to maximise sample recovery.
	<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>	No relationship has been identified.
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>	While drill chip samples have been geologically logged, they have not been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography</i>	Logging of drill samples is of a qualitative nature.  RC chip samples are always logged for lithology, colour, texture, weathering, minerals, alteration, and sulphide percentage and type, with comments included as necessary.
	<i>The total length and percentage of the relevant intersections logged.</i>	Every hole was geologically for its entire length.

Criteria	JORC Code explanation	Commentary
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 the drilling method produces chip samples (i.e. non-core).
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Samples were collected as a 4-metre composite sample from the drill spoils (scoop used) laid out on the ground directly from the cyclone splitter. Majority of samples were dry, with only a few wet samples.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation of the drill samples follows industry best practice, involving oven drying (110°C) where necessary, crushing and pulverising (~90% less than 75µm).
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Along with samples taken at the rig, blanks (comprising coarse washed sand) were inserted (around every 20 samples) and were included in the laboratory analysis process. The laboratory completed repeat analysis on samples returning >10,000 ppm Cu, Ni, and Zn.
	<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>	Sampling was supervised by the field geologist following geological logging to ensure that sampling was representative of the in-situ material collected. Selected repeat sampling will be undertaken at a later date.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled</i>	Sample sizes are considered appropriate for the exploration method and produce results to indicate degree and extent of mineralisation.
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>	Fire Assay and a four-acid digest are considered near total digest and are appropriate for the type of exploration undertaken.
	<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>	Not Applicable as no geophysical tools were used.
	<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>	The laboratory completed repeat analysis on all drill and grab samples returning >10,000 ppm Cu, Ni, and Zn. From results achieved it is determined an acceptable level of accuracy and precision has been established.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The significant intersections were verified by the Geology Manager and Managing Director.
	<i>The use of twinned holes.</i>	No twin holes were drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Collar locations were predetermined in the office and modified in the field as necessary (dependent on access etc.). All data collection (lithology logging, sampling, etc.) was completed at each drill hole location as hole was being drilled. Data initially written on paper log sheets. A complete data set (excel spreadsheet) was created by Mithril on completion of the program, based on all information collected.
	<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>	Each drill hole and grab sample location (easting and northing) was collected by a handheld GPS.
	<i>Specification of the grid system used.</i>	Data points have been quoted in this Report using the MGA Zone 51 (GDA94) coordinate system.

Criteria	JORC Code explanation	Commentary
	<i>Quality and adequacy of topographic control.</i>	Level of topographic control offered by the handheld GPS was considered sufficient for the work undertaken.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	As detailed in Tables 1 and 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>	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).
	<i>Whether sample compositing has been applied.</i>	Sample compositing was employed throughout the drill program.
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>	RC samples are unable to be orientated and do not provide structural information.
	<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>	No orientation-based sampling bias has been identified.
Sample security	<i>The measures taken to ensure sample security.</i>	All drill and grab samples were collected by company personnel and stored in a secure location until completion of the program. Samples were taken to the ALS Laboratory in Perth.
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 Kurnalpi Project comprises EL's28/2567, 2682, 2760, 2056, and PL28/1271 and is 100%-owned by Mithril Resources through its wholly owned subsidiary, Minex (West) Pty Ltd.
	<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>	Apart from EL28/2760 which is a tenement application and yet to be granted, there are no existing impediments to the tenements.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Mt Kersey Mining NL has conducted exploration activities on the tenement during the period 1996 – 1997.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	The nickel – cobalt and nickel sulphide mineralisation referred to in this Report occurs within weathered and fresh ultramafic rocks of Archean - age.
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 all material information referred to in this Announcement is presented in Tables 1 – 3, and Figures 2 - 3 of this Report.

Criteria	JORC Code explanation	Commentary
	<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>	While no weighting averaging techniques, or cutting of high grades have been used, a lower cut-off grade of 0.25% nickel has been used for reporting drill results. No lower cut-off grades have been used to report the grab sample results.
	<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 as no weighting averaging techniques have been applied.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents reported.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	For the drilling 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.
	<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 with respect to the drill hole angle is not well known.
	<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>	The drilling Exploration Results in this Announcement are reported as down hole widths only as true widths are not known.
Diagrams	<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 Figures 2 - 3 of this Report.
Balanced reporting	<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 significant (+0.25% nickel) drill results have been reported and all drill hole collar positions are shown in Table 1 and Figures 2 – 3 of this Report.
Other substantive exploration data	<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.
Further work	<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>	Further work will comprise geophysical surveying, drilling within the project area.
	<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>	Figures 1 and 2 shows the location of the tenements and prospects.



## ENDS

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### For Further Information Contact:

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### 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:ASX) 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 high-grade 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, silver, zinc and lead on the Bangemall Base Metal Project. Mithril's exploration partner – Monax Mining Ltd is also exploring for vanadium on the Limestone Well tenements.