

## Strong Targets at the Kurnalpi Nickel-Cobalt Prospect

- **Geophysical surveys identify multiple conductors adjacent to, and along strike from zone of historic strong nickel-cobalt intercepts**
- **Drilling to determine significance of the EM conductors and nickel-cobalt intercepts to commence next week**
- **Data review identifies new zone of nickel-cobalt mineralisation in historic drill hole south of the main prospect area;**
  - 20m @ 0.69% nickel, 0.07% cobalt from 32 metres *including 8m @ 0.96% nickel, 0.09% cobalt from 36 metres.*

Mithril Resources Ltd (**ASX: MTH**) is pleased to advise that an electromagnetic (EM) geophysical survey at its 100%-owned Kurnalpi Nickel-Cobalt Prospect (located on EL28/2567 approximately 70 kms east of Kalgoorlie, WA - *Figure 1*) has identified multiple bedrock conductors.

The west-dipping conductors are situated adjacent to, and along strike from a zone of high nickel-cobalt intercepts identified from historic drilling (*Figures 2 and 3*). The historic intercepts include;

- 42m @ 1.25% nickel, 0.07% cobalt from 24 metres in KURC22 *including 6m @ 1.78% nickel, 0.20% cobalt from 28 metres, and*
- 19m @ 1.08% nickel, 0.07% cobalt from 33 metres in KURA42 *including 6m @ 1.17% nickel, 0.11% cobalt from 35 metres.*

Maximum values from any one single sample are 2.04% nickel (2 metre composite sample in KURC22), 0.33% cobalt (4 metre composite sample in KURA400) and 0.28% copper (2 metre composite sample in KURC42). The presence of elevated copper is potentially indicative of nickel sulphide mineralisation within the prospect area.

Reverse Circulation drilling to determine the significance of the EM conductors and the nickel-cobalt drill intercepts will commence next week.

### **A new nickel – cobalt target.**

A review of historic aeromagnetic and drilling data for the area to the south of the main prospect, has identified another zone of nickel-cobalt mineralisation within an historic aircore drill hole which appears not to have been followed up (*Figures 2 and 3*). This mineralisation includes;

- 20m @ 0.69% nickel, 0.07% cobalt from 32 metres in KURA50 *including 8m @ 0.96% nickel, 0.09% cobalt from 36 metres.*

Significantly magnetic data shows that KURA50 (drilled in mid-1990's) lies adjacent to a discrete magnetic anomaly that may represent favourable ultramafic rocks (shown as "hot colours" on the magnetic imagery in *Figures 2 and 3*). The interpreted ultramafic rocks continue for several kilometres with only wide-spaced (drill holes nominally every 80 – 160 metres on traverses 320 metres apart) shallow aircore drilling previously undertaken over the area.

The KURA50 intercept and southern ultramafic extensions represent a priority target for field follow-up which Mithril will undertake at the same time as next week's drilling.

Mithril looks forward to updating the market once drilling has commenced and as further results come to hand.

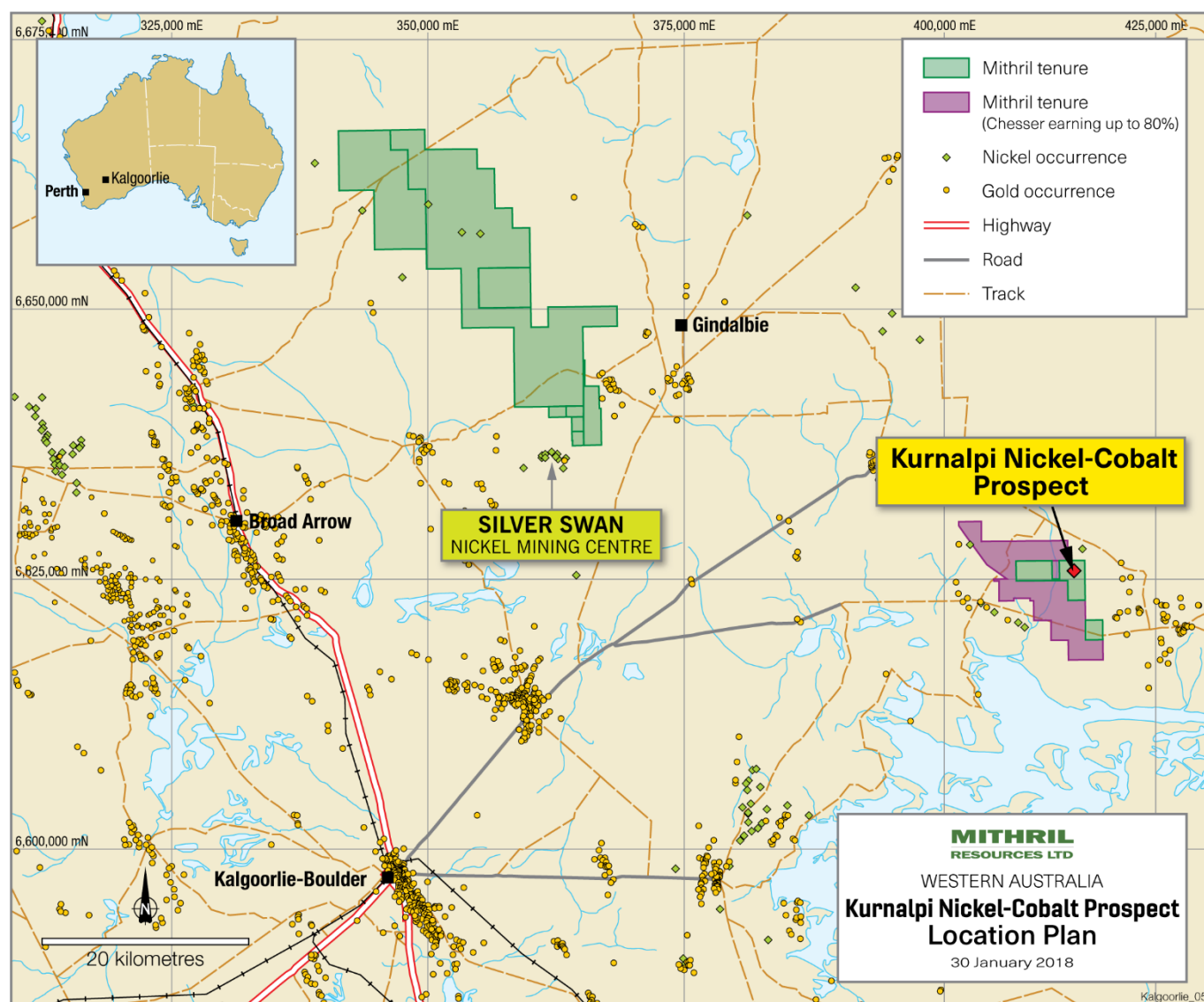
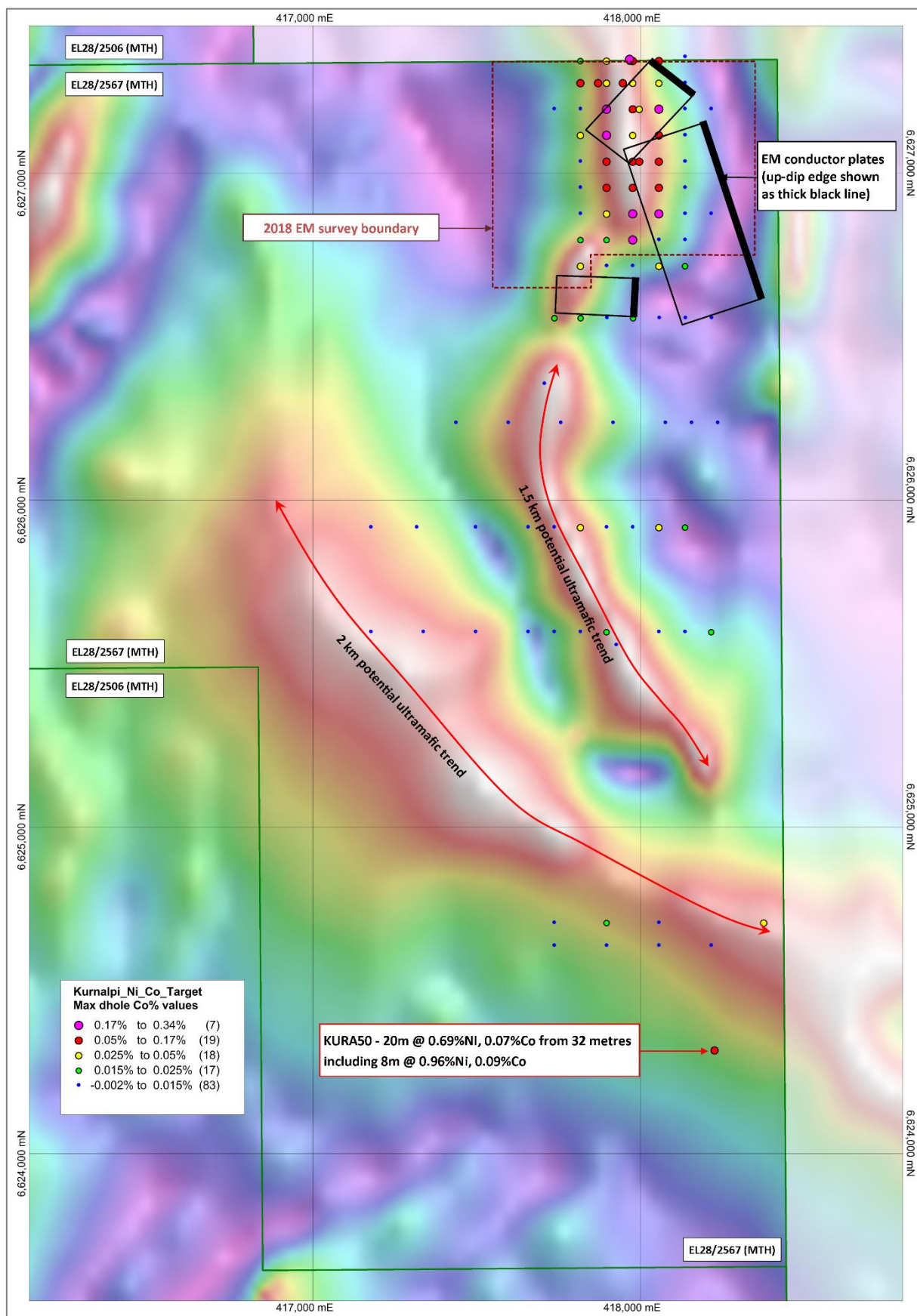
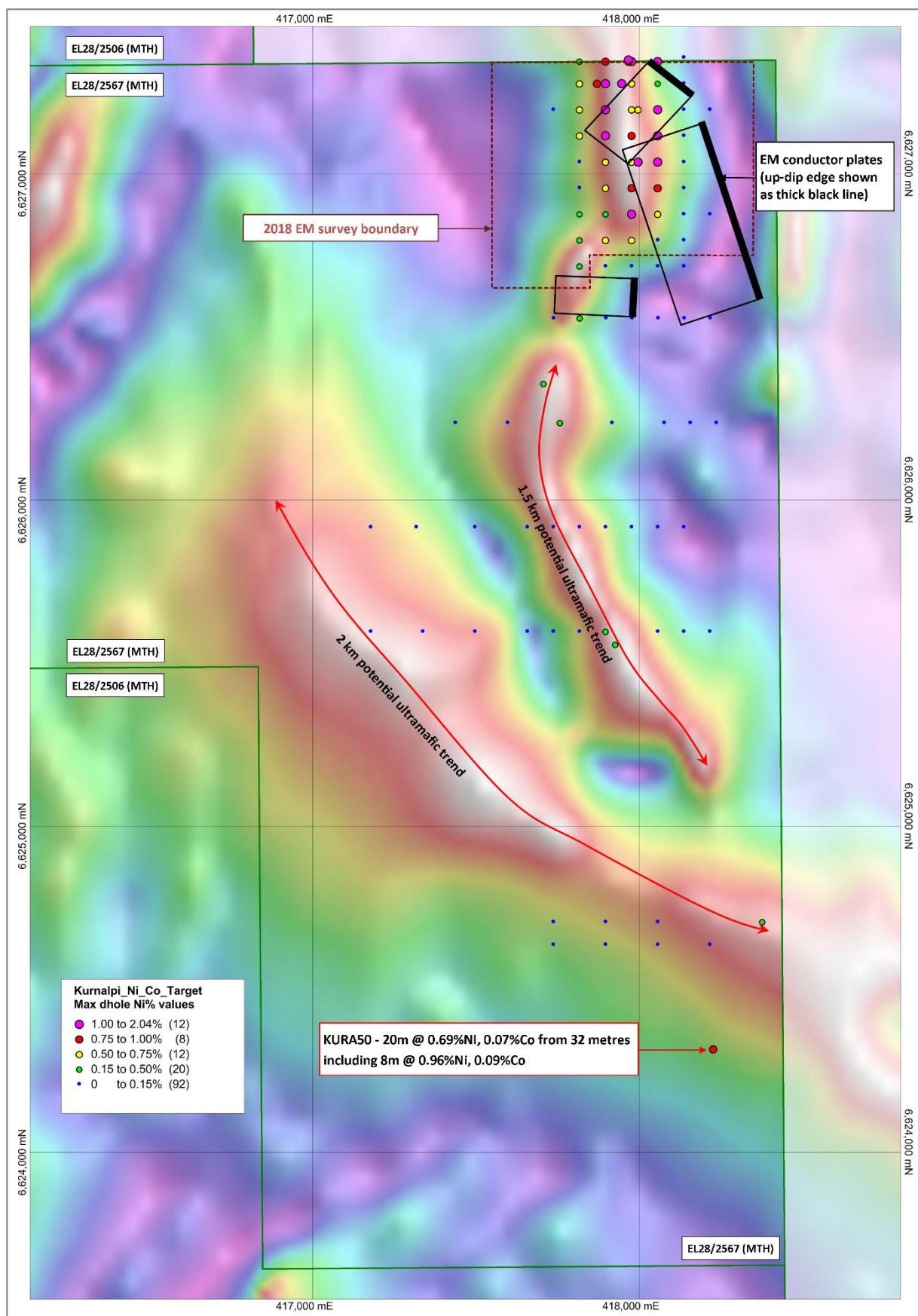


Figure 1: Kurnalpi Project Location Plan



**Figure 2: Kurnalpi Nickel Cobalt Prospect showing new west-dipping EM conductors (projected to surface), all drilling with collars coloured-coded by downhole maximum cobalt (%) values, potential ultramafic trends and the KURA50 drill intercept.**



**Figure 3: Kurnalpi Nickel Cobalt Prospect showing new west-dipping EM conductors (projected to surface), all drilling with collars coloured-coded by downhole maximum nickel (%) values, potential ultramafic trends and the KURA50 drill intercept.**

## Kurnalpi Nickel Cobalt Prospect - EM Survey Specifications

The 2018 ground TEM surveying at Kurnalpi was carried out by GEM Geophysics between the 18th and 24th January 2018. The data were acquired using a GEM GT-HO high-powered transmitter, SMARTem24 receiver, and Jessy Deeps HT-SQUID sensor. MLTEM data were acquired with a single turn 200 x 200m loop with nominal 50m station spacing on 100m-spaced lines.

### Contractor Details

Operator : GEM Geophysics  
Survey Date : 18th – 24th January 2018

### Survey Design

Configurations : In loop  
MLTEM Stn Spacing : 50m  
MLTEM Line Spacing : 100m  
Datum/Projection : GDA94/MGA51

### Receiver

Receiver : SMARTem-24  
Sensor : Jessy Deeps LT-SQUID  
Component Directions : Z +ve up, X +ve East, Y +ve North

### Transmitter

Transmitter : GEM GT-HO (100A)  
MLTEM Frequency : 1.0 Hz  
MLTEM Time Base : 200 msec  
MLTEM Loop Size : 200 x 200m  
MLTEM Current : 73–75A

The survey coverage is shown in Figures 2 and 3 with survey locations summarised below. A total of 126 stations were recorded over 7.5 lines for a total of 5.9 line-km.

**Kurnalpi 2018 ground TEM station locations**

Line	Config	Current (A)	Freq (Hz)	Stn Spacing	Line Start	Line End	No Stns	Line Km
6627340N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6627250N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6627150N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6627050N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6626950N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6626850N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6996750N	In loop	73	1.0	50m	417550E	418350E	17	0.80
6996650N	In loop	73	1.0	50m	417550E	417850E	7	0.30
							<b>126</b>	<b>5.9</b>

**Table 1: Kurnalpi nickel-cobalt target – significant drill intercepts (using +0.5% nickel cut-off)**

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

**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>	Aircore and Reverse Circulation (RC) drilling was undertaken on EL28/2567 by Mt Kersey Mining NL in the period 1996 to 1997. Samples were collected as composite samples (up to 4 metres) from the drill spoils laid out on the ground. Sample sizes were approximately 2-3kg in weight. MLTEM (EM) geophysical surveying was undertaken by Mithril Resources in February 2018.
	<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 location (easting and northing) was collected by a 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.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	1 - 2kg samples were collected and submitted to ALS Laboratories in Kalgoorlie, WA for geochemical analysis. In the laboratory, samples were crushed (~10mm) and pulverised to produce a representative 40g sub-sample for gold, nickel cobalt and copper analysis by aqua regia acid digest (with selected Fire Assay repeats) and AAS finish. Laboratory codes are unknown.
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>	Details of the aircore and RC drill rig are unknown. 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>	The results reported in this Report are historical and as such these details are unknown.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	The results reported in this Report are historical and as such these details are unknown.
	<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.
	<i>The total length and percentage of the relevant intersections logged.</i>	The results reported in this Report are historical and as such these details are unknown.
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>	The results reported in this Report are historical and as such these details are unknown.
	<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>	The results reported in this Report are historical and as such these details are unknown. Resampling of all significant intercepts will be undertaken in the future.

Criteria	JORC Code explanation	Commentary
	<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>	The results reported in this Report are historical and as such these details are unknown.
	<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>	Aqua regia digest is considered as a total digest and is 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>	The drill results reported in this Report are historical and as such these details are unknown. The details of geophysical tools used are detailed in the portion of this Report entitled "Kurnalpi Nickel Cobalt Prospect - EM Survey Specifications".
	<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 results reported in this Report are historical and as such these details are unknown. The geophysical results reported in this announcement were reviewed by the Company's geophysicist and Geology Manager.
	<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.
Verification of sampling and assaying	<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>	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.
	<i>Discuss any adjustment to assay data</i>	There was no adjustment to assay data
	<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>	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 located a number of the historic holes in the field and is satisfied as to the accuracy of the drill holes reported locations. EM survey stations were located in the field using a handheld GPS.
Location of data points	<i>Specification of the grid system used.</i>	Data points have been quoted in this Report using the MGA Zone 51 (GDA94) coordinate system.
	<i>Quality and adequacy of topographic control.</i>	Level of topographic control offered by the handheld GPS was considered sufficient for the work undertaken.
	<i>Data spacing for reporting of Exploration Results.</i>	The drill results reported in this Report are historical and as such these details are unknown. The details of geophysical survey are detailed in the portion of this Report entitled "Kurnalpi Nickel Cobalt Prospect - EM Survey Specifications".
Data spacing and distribution	<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 (typically up to 4 metre intervals) depending on the geology and depth of hole.
Orientation of data in relation to	<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>	Aircore and RC samples are unable to be orientated and do not provide structural information.

Criteria	JORC Code explanation	Commentary
<i>geological structure</i>	<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.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	The results reported in this Report are historical and as such these details are unknown.
<i>Audits or reviews</i>	<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
<i>Mineral tenement and land tenure status</i>	<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>	EL28/2567 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>	There are no existing impediments to the tenements.
<i>Exploration done by other parties</i>	<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.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The nickel – cobalt mineralisation referred to in this Report occurs within weathered ultramafic and mafic rocks of Archean - age.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:      <i>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></i>	A summary of all material information referred to in this Announcement is presented in Table 1, and Figures 2 - 3 of this Report.  The details of geophysical survey are detailed in the portion of this Report entitled “Kurnalpi Nickel Cobalt Prospect - EM Survey Specifications “.
	<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.
<i>Data aggregation methods</i>	<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 0.5% nickel has been used.
	<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.

Criteria	JORC Code explanation	Commentary
	<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>	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 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.
<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 Figures 2 - 3 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 significant (+0.5% nickel) exploration results have been reported and all drill hole collar positions (colour coded by maximum downhole nickel and cobalt) are shown in Table 1 and Figures 2 – 3 of this Report.
<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>	Further work will comprise RC drilling of the new EM conductors.
	<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 1 shows the location of the tenements and prospects.

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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 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 is an Australian resources company whose objective is the creation of shareholder wealth through the discovery and development of mineral deposits.

Mithril are exploring for a range of high-value commodities (principally nickel, cobalt, copper and zinc) throughout the Meekatharra, West Kimberley and Kalgoorlie Districts of Western Australia.

The Company is also exploring South Australia's far western Coompana Province for magmatic nickel – copper deposits with OZ Minerals Limited.