

## Drilling and geophysics to test Kurnalpi nickel targets

- **Two nickel targets prioritised for drill testing and EM geophysics**
- **Targets comprise an undrilled strong downhole EM conductor adjacent to existing nickel sulphides and a further 7 kilometres of prospective ultramafic highlighted by elevated nickel and cobalt in historic RAB / aircore drilling**
- **Work scheduled to commence late June 2018**

Mithril Resources Ltd (the “Company”) (ASX: MTH) has prioritised two nickel targets on its 100%-owned Kurnalpi Project (*located 70 kms north east of Kalgoorlie, WA - Figure 1*) for drill testing and ground EM geophysical surveying.

The work program will be funded from the proceeds of the Company’s current Share Purchase Plan (Closing Date of Monday 18<sup>th</sup> June 2018 - *see ASX Announcement dated 18 May 2018*) and is scheduled to commence in late June 2018.

### Management Comment

Mithril’s Managing Director Mr David Hutton said the Company was looking forward to testing the targets.

“At Kurnalpi we are exploring for Kambalda – style massive nickel sulphide mineralisation, and the recognition of nickel sulphides in our last round of drilling was a critical positive development in the project’s journey to discovery”.

“The undrilled strong late-time EM conductor adjacent to existing nickel sulphide mineralisation within prospective ultramafic rocks is a compelling target that will be drilled as soon as possible”.

“Additionally, the nickel prospectivity of the area is strengthened by having a further 7 kilometres of ultramafic with indications of nickel, cobalt and copper. Given a lack of previous geophysical surveying over the prospective rocks, we will carry out EM geophysics as part of the proposed program which we expect will generate further targets for drill testing”.

“We look forward to the EM geophysics and drilling to commence as soon as the Share Purchase Plan is completed in late June”.

### High-priority drill target

Drilling undertaken by Mithril at the northern end of the project (in March 2018) confirmed the presence of nickel sulphide mineralisation with a 4-metre zone of gossanous weathered ultramafic and several other narrow intervals

of disseminated nickel sulphide mineralisation intersected beneath a flat-lying zone of near-surface nickel - cobalt mineralisation.

Subsequent downhole EM geophysical surveying identified a strong off hole conductor lying adjacent to the sulphide mineralisation at approximately 150 metres depth (See ASX Announcement dated 20 April 2018).

The south-plunging conductor (85m wide x 500m long / CT of 3,400S / visible at late times: Ch.36 – 200msec) has not been drill tested and lies within an interpreted shear zone that marks the eastern edge of the ultramafic unit that hosts the nickel sulphide mineralisation (Figures 2, 3, 4 and 5).

The strength of the conductor is consistent with what could be expected from semi to massive sulphides and given its proximity to existing nickel sulphide mineralisation, is considered to be a high priority drill target.

Up to three Reverse Circulation holes (750 metres in total) will be drilled as an initial test of the EM conductor and the gossan / disseminated sulphide intercepts. Statutory approvals to conduct the drilling have been received.

### High-priority geophysical target

As shown on Figure 2, the prospective ultramafic also continues south along strike from the nickel sulphides and EM conductor for over 7 kilometres within Mithril's tenements.

While the southern area is relatively poorly explored, several wide-spaced shallow RAB / aircore drilling undertaken in the mid 1990's has intersected strongly anomalous levels of nickel +/- cobalt and copper with no follow-up, 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,
- 15m @ 0.90% nickel, 0.08% cobalt from 9 metres in KURA69 including 7m @ 0.99% nickel, 0.13% cobalt from 10 metres,
- 2m @ 0.15% nickel, 0.09% cobalt from 24 metres in KURA451 (hole ended in mineralisation),
- 8m @ 0.07% nickel, 0.02% cobalt, 0.15% copper from 18 metres in KURA99, and
- 20m @ 0.21% nickel, 0.03% cobalt from 24 metres in KURA297.

The elevated nickel and cobalt in the drill holes is characteristic of weathered ultramafic rock types while the presence of elevated copper is potentially an indication of magmatic nickel sulphide mineralisation at depth.

Collectively the results highlight the nickel prospectivity of the southern extensions of the ultramafic and make it a priority target for follow-up.

Moving Loop ground EM geophysics will be undertaken over the area to define specific targets for drill testing.

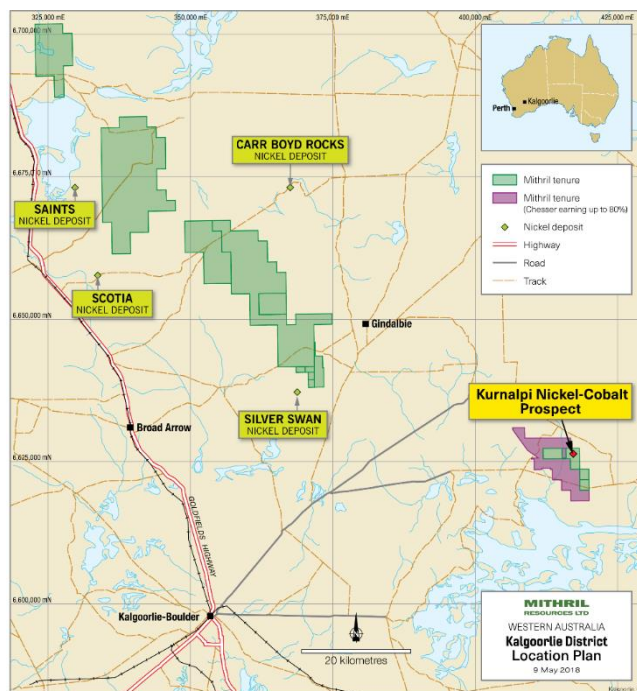
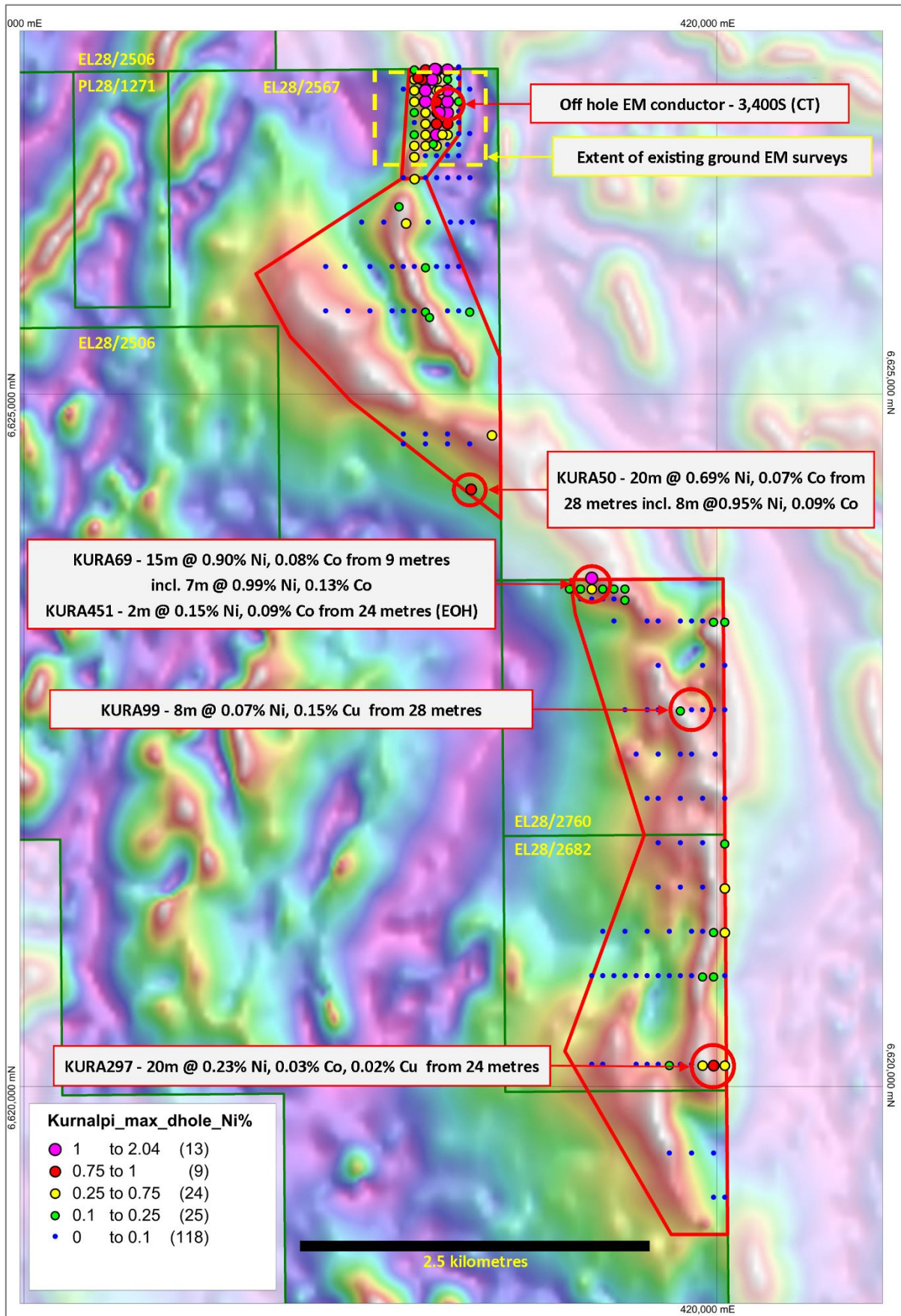


Figure 1: Kalgoorlie District – Project Location Plan



**Figure 2: Kurnalpi Project magnetic image showing all target areas for ground EM (red polygons), drill hole collar locations (colour coded by maximum downhole % nickel), and key drill intercepts.**

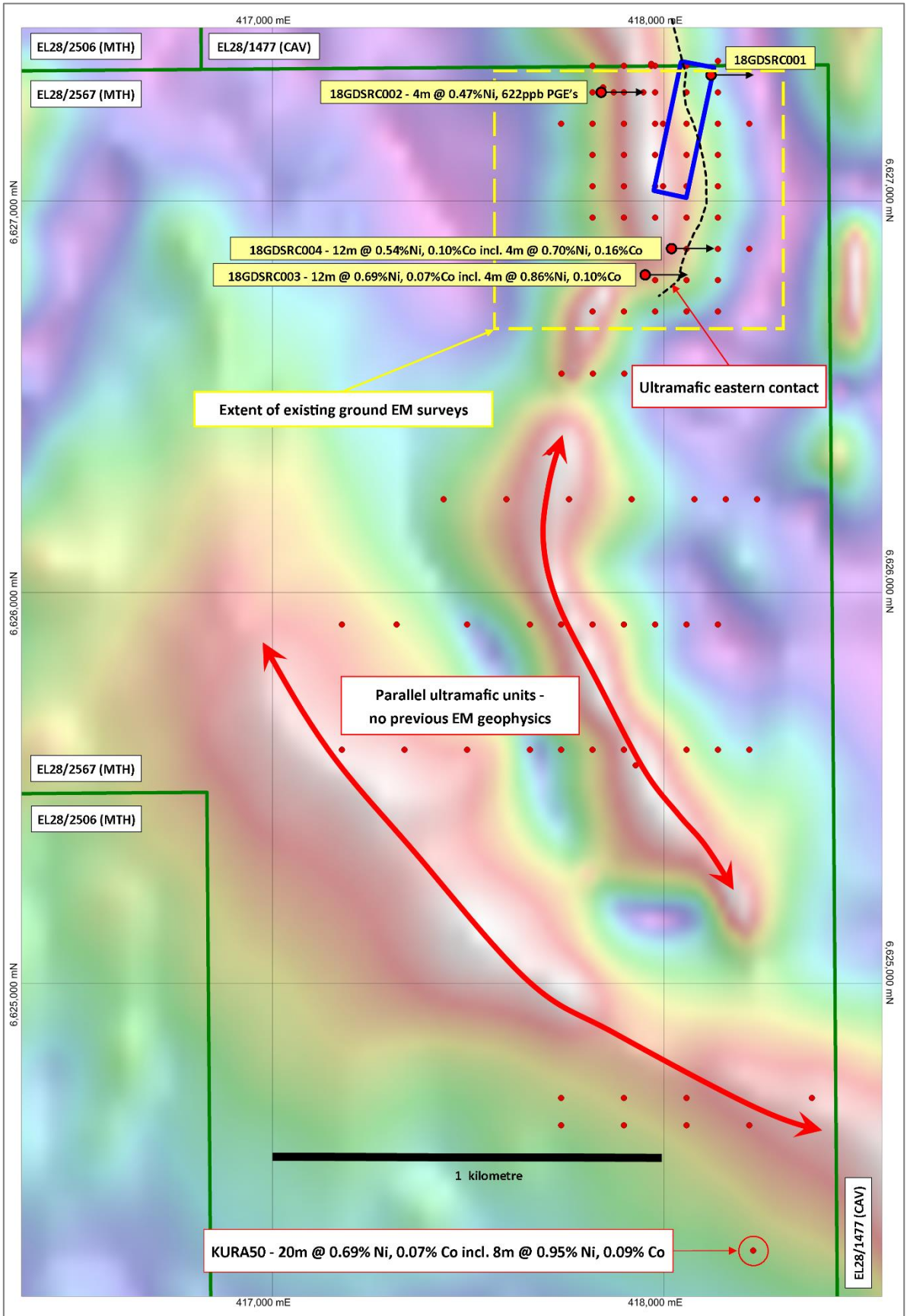


Figure 3: Kurnalpi Project northern target area showing priority down hole EM conductor plate (blue outline), extent of ground EM surveys and ultramafic units. Location of 18GDSCR002 section shown. Magnetic image background.

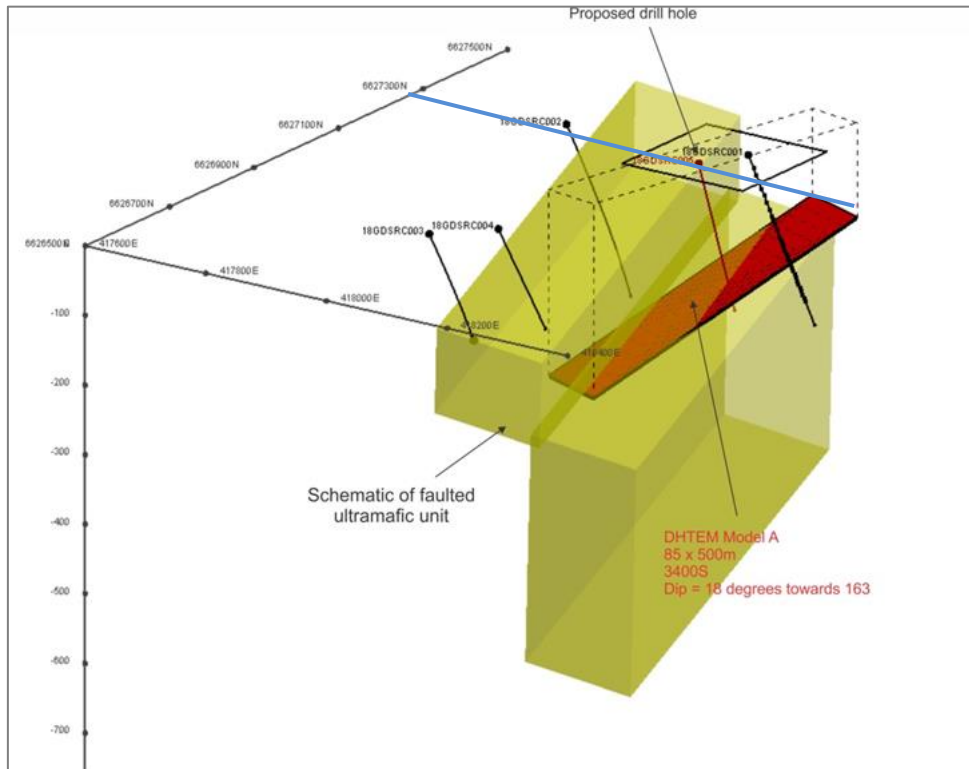


Figure 4: Schematic representation showing the position of the off-hole EM conductor (red) against the magnetic model of the ultramafic unit (green). The model assumes a flat lying fault. The position of the 6,627,280N (18GDSRC002) section is shown as a blue line.

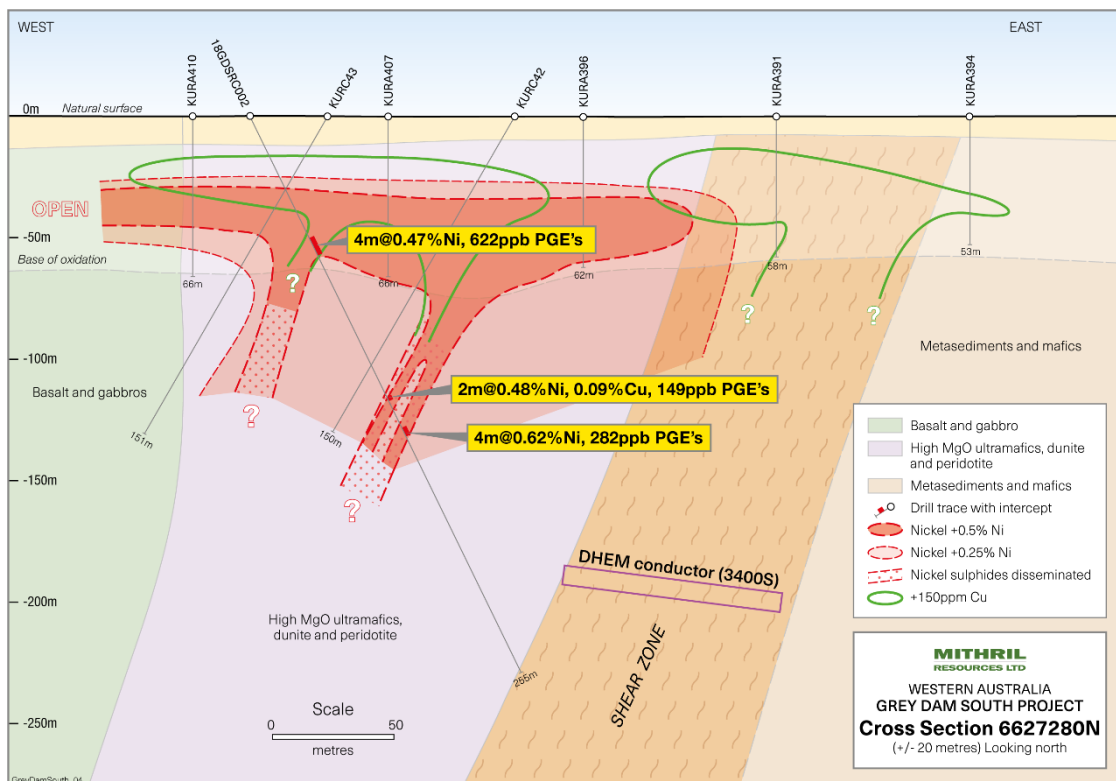


Figure 5: 6,627,280N (18GDSRC002) section showing geology, nickel-copper geochemistry and the off-hole EM conductor.

**Table 1: Kurnalpi Project – significant historic drill intercepts (using +0.25% nickel lower cut-off)**

Hole ID	Easting	Northing	dip	Azi	TD (m)	Width	From	Ni%	Co%	Cu%
KURA50	418,228	6,624,319	-90	0	55	20	32	0.69	0.07	-
<i>Including</i>						8	36	0.96	0.09	-
KURA69	419,097	6,623,678	-90	0	25	15	9	0.90	0.08	-
<i>Including</i>						7	10	0.99	0.13	-
KURA451	419,177	6,623,598	-90	0	26	2	24	0.15	0.09	-
KURA99	419,817	6,622,718	-90	0	36	8	28	0.07	-	0.15
KURA297	420,057	6,620,158	-90	0	47	20	24	0.23	0.03	0.02

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

Note – the JORC information for the downhole EM conductor mentioned in the text has been previously released in Mithril’s March 2018 Quarterly Report – dated 20 April 2018.

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 RAB drilling was undertaken on EL’s 28/2567, 2682, 2760 and EL28/2506 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.
	<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 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.

Criteria	JORC Code explanation	Commentary
	<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.
	<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.
	<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.
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>	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
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>	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.
	<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.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<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.
	<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 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>	Drill 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>	The results reported in this Report are historical and as such these details are unknown.
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>	EL's 28/2567, 2682, and 2760 are 100%-owned by Mithril Resources through its wholly owned subsidiary, Minex (West) Pty Ltd. EL28/2506 is also wholly owned by Minex (West) but is subject to a farm in agreement with Chesser Resources (CHZ:ASX) whereby Chesser can earn up to an 80% interest by completing expenditure of \$250,000 prior to 15 October 2019.
	<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, 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 copper mineralisation referred to in this Report occurs within weathered ultramafic and mafic 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:      <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 - 5 of 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</i>	No information has been excluded.



Criteria	JORC Code explanation	Commentary
	<i>Competent Person should clearly explain why this is the case.</i>	
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.
	<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>	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.
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 - 5 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) exploration results have been reported and all drill hole collar positions (colour coded by maximum downhole nickel) are shown in Table 1 and Figures 2 – 5 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 RC drilling of the new EM conductor and ground EM surveying of the southern 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 show 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 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.

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