

24<sup>th</sup> August 2023

# NEW LITHIUM TARGETS IDENTIFIED AT YARMANY

## **HIGHLIGHTS:**

- Historical data review identifies new lithium targets along the Ida Fault
- Pegmatites recorded in diamond drilling from the 1970s
- Thick pegmatites logged up to 49.7m downhole thickness, not assayed
- Pegmatite sampling, mapping and geochemical surveys in progress

Metal Hawk Limited (**ASX: MHK**, "Metal Hawk", "the Company") is pleased to provide an update on exploration activities and results from an ongoing review of historical data for the Yarmany lithium and nickel project, located 40km north-west of Coolgardie in Western Australia.

In July 2023 Metal Hawk signed an option to acquire the Yarmany Project, which covers 282km<sup>2</sup> along the Ida Fault, a major regional structure and crustal boundary between the Kalgoorlie and Youanmi Terranes, from gold development company Horizon Minerals Limited (ASX: HRZ).

The Reptile Dam prospect is situated at the northern end of the Yarmany Project and presents as a priority target area for RC drilling where Metal Hawk will test for both lithium and nickel sulphide mineralisation. Diamond drilling was carried out at Reptile Dam in 1973-74, with four diamond holes drilled for a total of 2,110 feet (643 metres). The drilling was designed to test beneath surface gossanous material interpreted to represent highly weathered and potentially mineralised ultramafic rocks. Historical open file data from this diamond drilling has been compiled and digitised by Metal Hawk geologists. Numerous thick pegmatite units were logged within and adjacent to the targeted ultramafic rocks. The pegmatite intervals have not been assayed.

**Metal Hawk's Managing Director Will Belbin said**: *"We have identified new walk-up lithium targets from historical diamond drilling which we'll be testing with our first campaign of RC drilling at Yarmany. We are in the process of systematically mapping, sampling and prioritising drill targets for lithium and nickel sulphide mineralisation. The favourable lithologies present at Reptile Dam are very encouraging and warrant more drilling."* 

Limited nickel sulphide exploration has been carried out on the project since the 1970s and the tenements have received only mostly superficial exploration for pegmatite-hosted lithium-caesium-tantalum (LCT) mineralisation. The Company is currently conducting mapping, pegmatite sampling and extensive regional geochemical surveys in order to identify anomalous levels of Li and other pathfinder elements indicative of LCT mineralisation.



#### HISTORICAL DATA REVIEW

Diamond drilling was conducted at Reptile Dam in 1973 by Amax Exploration (Australia) Incorporated, and in 1974 by Barrier Exploration N.L. The drilling was targeting a north-south trending serpentinised lensoid ultramafic unit, represented at surface as intermittently outcropping gossanous material up to 30m wide and along 1,300m of interpreted basal contact. A total of four diamond holes were drilled for 643m at the prospect. Metal Hawk has collected several gossan samples from the prospect and submitted them for analysis.

The deepest and northern-most hole, **RD-DD1**, was drilled to a total depth of 807.5 ft (246m). RD-DD1 intersected high MgO ultramafic rocks and also encountered various pegmatitic units including an interval of 47.7m of coarse-grained pegmatite from 122.6m to 172.4m. None of this material was assayed for lithium and the current location of the drill core is unknown. The logging noted trace disseminated sulphides, but assays did not confirm any significant nickel mineralisation.

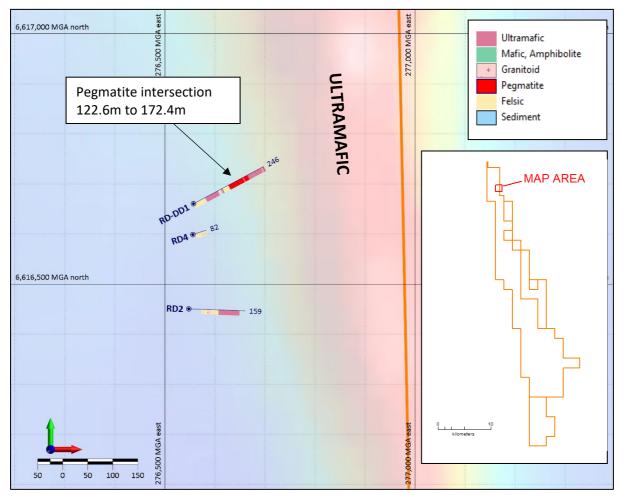


Figure 1. Reptile Dam nickel prospect showing historical diamond drilling over magnetics (TMI)



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Hole commenced 5.5.73 completed 22.5.73 Logged by Double commenced D.D.H. No. RD-DD1 (AMAX)						G
	INTER	IVAL		OBSERVATIONS	SUMMARY	
From	To	Core	Drilled		Legend Notes	Field or Sam
ft	ft		ft			
	402.3		70.8	schist. Well bedded and exhibits textures similar to meta acid tuffs an Project 73/5. Bedding at very low angle to core axis, parallel to core in places. Last 20' has increasing bedding angle to 90° to core axis in one place. 396.0 - 402.3 contains up to 5% sulphide, pegmatite veins and fold structures		
402.3	565.6	163.3	163.3	Pegmatite Charse quartz-felspar-muscovite-garnet 402.3 contact at about 45° to core axis. Becomes biotite rich down hole. Lower contact at 40° to core axis		
565.6	577.2	11.6	11.6		5 1 5	
577.2	621.2	44.0	44.0		8	
621.2	666.1	44.9	44.9		19	

Figure 2. Extract from geological logging from RD-DD1 drilled at the Reptile Dam prospect

Hole ID	Date drilled	East GDA94	North GDA94	Depth (ft)	Depth (m)	Dip	Azimuth local	Azimuth MGA
RD-DD1	May-73	276557.1	6616660.5	807.5	246.13	-50	80	62
RD2	Sep-74	276547.6	6616450.6	520.3	158.6	-45	110	92
RD3	Oct-74	276909.8	6615391.6	514.6	156.85	-45	285	267
RD4	Dec-74	276555.9	6616599	267.8	81.62	-70	90	72

Table 1. Reptile Dam historical drillhole collars

\*Notes to table 1

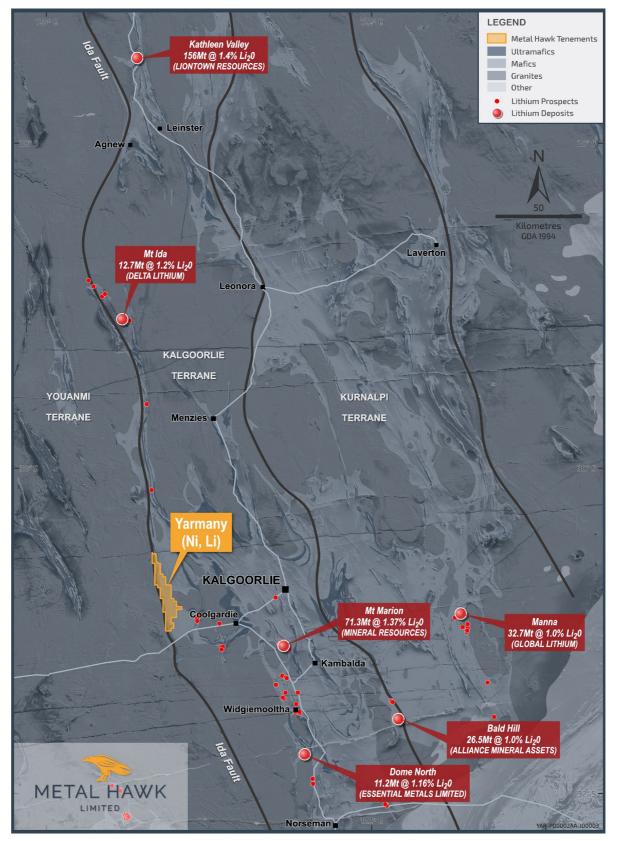
- Grid coordinates converted from local grid

- All holes nominal RL at 500m

Wide-spaced auger sampling carried out by Horizon identified numerous zones of lithium anomalism (>50ppm Li) with elevated levels of pathfinder elements including Cs, Rb, Ta. All of these anomalies are located on single line traverses (auger hole spacings at 100m) and require tighter spaced infill geochemical sampling before drill-testing can be considered. Metal Hawk is continuing to build and improve the Yarmany geochemical dataset with more extensive and tighter-spaced follow-up geochemical sampling programs.



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Figure 3. Yarmany Project



#### FORWARD PLAN

Metal Hawk has commenced regional soil geochemical surveys across the Yarmany tenements. A large proportion of the survey will aim to confirm, follow-up and extend lithium anomalism identified by Horizon's initial 2022 auger program, with the aim to define buried lithium-bearing pegmatite targets for drill-testing.

Mapping and pegmatite sampling is in progress. Newly identified pegmatite outcrops have been sampled and submitted to the laboratory for assay.

Lithium expert and former exploration manager of Core Lithium (ASX: CXO), Dr David Rawlings, has been engaged to assist the Company with its systematic lithium exploration program.

In parallel to the regional lithium exploration at Yarmany, the Company has also commenced regional nickel sulphide exploration activities on the project. High-powered airborne electromagnetic surveys are due to commence shortly and will cover the majority of the 282km<sup>2</sup> tenement package.

The maiden drilling program at Yarmany is scheduled for Q4 2023.



Figure 4. Lithium consultant Dr David Rawlings and Newexco's Adrian Black on site at Yarmany



This announcement has been authorised for release by Mr Will Belbin, Managing Director, on behalf of the Board of Metal Hawk Limited.

# For further information regarding Metal Hawk Limited please visit our website at <u>www.metalhawk.com.au</u> or contact:

Will Belbin Managing Director Metal Hawk Limited +618 9226 0110

admin@metalhawk.com.au

Media & Investor Relations Luke Forrestal GRA Partners +61 411 479 133

luke.forrestal@grapartners.com.au

#### **Competent Person statement**

The information in this announcement that relates to Exploration Targets and Exploration Results is based on information compiled and reviewed by Mr William Belbin, a "Competent Person" who is a Member of the Australian Institute Geoscientists (AIG) and is Managing Director at Metal Hawk Limited. Mr Belbin is a full-time employee of the Company and hold shares and options in the Company. Mr Belbin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Belbin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Metal Hawk Limited's planned exploration program(s) and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward looking statements.



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#### **About Metal Hawk Limited**

Metal Hawk Limited is a Western Australian mineral exploration company focused on early-stage discovery of critical metals. Metal Hawk owns a number of quality projects in the Eastern Goldfields and the Albany Fraser regions.

Metal Hawk discovered high grade nickel sulphide at the Berehaven Nickel Project, located 20km southeast of Kalgoorlie, in September 2021. The Company has consolidated over 90km<sup>2</sup> of underexplored tenure at Berehaven, which is situated north of the Blair Nickel sulphide deposit.

In June 2023 Metal Hawk discovered high-grade clay-hosted REEs at the Fraser South Project, located 150km northeast of Esperance.

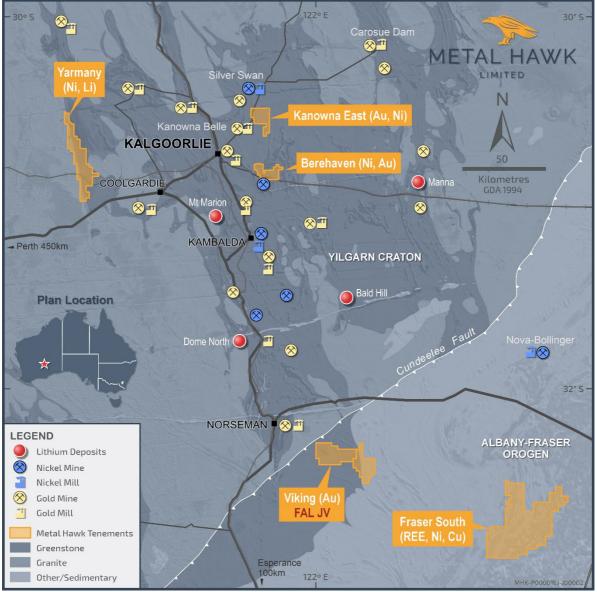


Figure 5. Metal Hawk's goldfields and Albany-Fraser project locations



# 2012 JORC Table 1

### SECTION 1: SAMPLING TECHNIQUES AND DATA

#### (HISTORICAL 1973-1974)

#### OPEN FILE REPORTS A 3164, A 5371, A 6223

	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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used 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.	<ul> <li>Diamond drilling reported undertaken from 1973- 1974 by AMAX Exploration (Australia) Incorporated, Barrier Exploration N.L. and Jimberlana Minerals N.L.</li> <li>No assaying was undertaken for lithium mineralisation.</li> <li>Sampling procedures followed are believed to be in line with industry standards at the time.</li> <li>Select core was assayed for Ni, Cu, Co, Cr, Mn, Pb, Zn.</li> <li>Drilling methods were diamond core.</li> <li>Based on available data, there is no information about measures taken to ensure sample representivity. However there is nothing to indicate that drilling and sample practices did not follow prevailing normal industry practices.</li> <li>Hole depths ranged from 81.6m to 246.1m.</li> </ul>
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).	<ul> <li>Drilling was diamond core.</li> <li>No assays were undertaken for lithium.</li> <li>Although no documentation is available to describe the drilling techniques used at the time, it is understood that the various drilling types used conventional drilling methods consistent with industry standards of the time.</li> <li>None of the historical diamond drill core was oriented.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples.	There are no available records for sample recovery for drilling completed.
	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.	No sample bias has been identified to date.



Logging	Whether core and chip samples have been	There is no available documentation describing
	geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant	<ul> <li>There is no available documentation describing the logging procedures for the drilling reported.</li> <li>However, the historical graphical hardcopy logs are of high quality and contain significant detail with logging intervals down to as narrow as 0.03m.</li> <li>Logging of drill core was recorded on paper forms. Metal Hawk has digitized available data and manually entered data on to excel tables.</li> <li>Logging was qualitative in nature.</li> <li>All intervals logged for diamond drilling.</li> </ul>
	intersections logged.	
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Intervals of no nickel mineralisation or interest were not sampled. None of the mentioned pegmatitic material was sampled or assayed for lithium mineralisation.</li> <li>QA/QC and sampling protocols for the drilling undertaken is unknown.</li> <li>There is insufficient drill data density to inform an updated Mineral Resource Estimate with the current level of data.</li> </ul>
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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.	<ul> <li>The core samples were analysed for Ni, Cu, Co, Cr, Mn, Pb and Zn. The method of analysis is not reported.</li> <li>No lithium assays were undertaken.</li> <li>There is no data available at the time of this announcement pertaining to the assaying and laboratory procedures nor the historical field or laboratory quality assurance and quality control (QAQC).</li> <li>No geophysical tools were noted in the historical drill programs.</li> <li>There are no QAQC records relating to historical exploration. No mention of QAQC issues relating to the historical exploration results were made but cannot be verified based on available data.</li> <li>Hand held assay devices have not been reported.</li> <li>Industry practice is assumed for historical drilling.</li> <li>Given the exploratory stage of the project and the mineral resources the assumption to be sound.</li> </ul>

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Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	<ul> <li>There has been no verification completed.</li> <li>No twin holes have been drilled.</li> <li>The Company has not been able to locate the drill core. Open file reports from the 1980's have also mentioned they were not able to locate the drillcore.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	<ul> <li>All drill collar locations were recorded on a local grid. Historical methods of drill collar survey pickup are not known.</li> <li>Accuracy and precision of historical drillhole coordinates is unknown.</li> <li>Metal Hawk has georeferenced historical grids and maps using known topographical features. The collar positions have been converted to MGA94 Zone 51.</li> <li>No collar positions have been verified in the field.</li> <li>Holes were drilled on variable spacings as per collar details below. All reported coordinates were referenced to a local grid.</li> <li>There is no detailed documentation regarding the accuracy of the topographic control.</li> <li>The topography is flat at the location of the drilling and small differences in elevation between drill holes will have little effect on lithology widths and initial interpretation.</li> <li>No downhole surveys were taken.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	<ul> <li>Holes were variably spaced for exploration purposes.</li> <li>This is consistent with industry standard exploration drilling with the collar details/coordinates supplied in Table 1.</li> <li>No sample compositing has been applied.</li> </ul>
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. 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.	<ul> <li>The majority of drilling was oriented east-west in order to intersect the targeted north-south trending ultramafic units perpendicular to the strike.</li> <li>The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>No assays are being reported in this announcement.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been commissioned.

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### **SECTION 2: REPORTING OF EXPLORATION RESULTS**

#### (HISTORICAL 1973-1974)

#### OPEN FILE REPORTS A 5371, A 6223

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.	<ul> <li>The historical drilling was conducted on the exploration license 15/1655.</li> <li>The project tenements are registered to Black Mountain Gold Limited.</li> <li>Metal Hawk has acquired an option to explore on the tenements.</li> </ul>
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The project tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Recent exploration carried out by Horizon Minerals Limited included limited pegmatite mapping and aircore drilling. No significant results were reported. Prior to Horizons work, no previous lithium exploration has been carried out on the tenements.</li> <li>Exploration reported by AMAX, Barrier Exploration NL and Jimberlana Exploration NL was carried out in 1973-74. The drilling was targeting nickel sulphide mineralisation beneath outcropping gossanous rocks.</li> <li>Earlier work by I.N.S.E.L (International Nickel Southern Exploration Limited) and included geochemical rockchip sampling and shallow percussion drilling. This data is not in digital form.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The geological setting is of Archaean age with common host rocks related to komatiite-hosted nickel sulphide mineralisation as found throughout the Yilgarn Craton of Western Australia.</li> <li>Additional potential has been recently recognized for lithium mineralisation related to pegmatite occurrences.</li> </ul>
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	Refer to drillhole tables and text in the body of the announcement.
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.	No new assays are being reported in this announcement, only geological logging.



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	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. The assumptions used for any reporting of metal equivalent values should be clearly stated.		
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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 no results are being reported in this announcement.	
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.	Refer to Figures in text.	
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.	<ul> <li>Summary of drill hole information Is presented in the body this announcement.</li> <li>No exploration results are being reported in this announcement.</li> </ul>	
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.	Everything meaningful and material is disclosed in the body of the report. Geological and geophysical observations have been factored into the report.	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	<ul> <li>Work is ongoing to compile and review all available data for the project area. Further work including drilling will be planned following geochemical sampling and geophysical surveys.</li> </ul>	