ASX Code: "THR"

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THOR MINING PLC

Registered Numbers:
United Kingdom 05276 414
Australia 121 117 673

Registered Office:
58 Galway Avenue
MARLESTON, SA, 5035
Australia

Ph: +61 8 7324 1935
Fx: +61 8 8351 5169

Email:
corporate@thormining.com

Website:
www.thormining.com

Twitter
@ThorMining

Enquiries:
Mick Billing
Executive Chairman
Thor Mining PLC
+61 8 7324 1935

Nominated Advisor
Samantha Harrison
Grant Thornton
+44 (0) 20 7383 5100

AIM & ASX Listings:
Shares: THR

Directors:
Michael Billing
Richard Bradey
Mark Potter

Key Projects:
- **Tungsten**
  Molyhil NT
  Pilot Mountain USA
- **Copper**
  Kapunda SA
  Moonta SA

Company Announcements Office
ASX Securities Limited,
20, Bridge Street,
Sydney, N.S.W. 2000

POSITIVE TEST RESULTS - KAPUNDA COPPER ISR PROJECT

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR) are pleased to advise additional positive results from the initial hydrogeological drilling program at the Kapunda ISR (Insitu Recovery) copper project carried out by EnviroCopper Limited.

EnviroCopper Limited, via subsidiary Environmental Copper Recovery Pty Ltd, holds an agreement to earn, in two stages, up to 75% of the rights over metals which may be recovered via in-situ recovery ("ISR") contained in the Kapunda deposit, from Australian listed company, Terramin Australia Limited ("Terramin" ASX: "TZN"). Thor hold a 25% interest in EnviroCopper Limited with rights to increase that interest to 30%.

HIGHLIGHTS:

- The hydrogeological testing program was successful, with the tracer test showing fluid movement from well to well in a relatively short time period, providing potential for cost saving through reducing the number of wells for optimum production.
- Laboratory assays confirm previously reported portable XRF results along with some elevated gold levels.
- Groundwater is acidic (pH 3.8 – 4.0) with naturally elevated copper levels, indicating potentially lower expected pre-conditioning operating costs, and demonstrating that the copper is highly soluble.
- Laboratory testing to date shows several lixiviant systems suit the natural low pH environment, minimising likely impact on environment & microorganisms.
- Initial laboratory scale metal recovery tests - Ion Exchange, Electro Winning and Cementation all produce copper.

Mick Billing, Executive Chairman of Thor Mining, commented:
"Very solid progress being made by EnviroCopper at the Kapunda copper ISR project, continuing to confirm the potential for production of copper using ISR, against a background of rising copper prices".

"There is a very busy schedule of activities during the second half of calendar 2020 with potential to add significant investor value via gold focussed drilling, and more field test activities to further demonstrate the potential for economic ISR production at Kapunda."

"Some zones within the Kapunda deposit have previously been reported to host highly promising gold values, including 95metres @ 3.06g/t, (www.asx.com.au/asxpdf/20190403/pdf/4440hfmqpsl83y.pdf) and we look forward to the drill program to confirm and extend these."

Hydrogeologic testing

Three holes were drilled south of the Kapunda mine site. Their purpose was to establish an array of wells for

- Pump testing to determine aquifer properties,
- Tracer testing to determine fracture connectivity between wells.

The drilling comprised one pilot hole (KPFRT01) to determine the geology, ore distribution, depth to water table and permeable water yielding zones and then two additional bores were drilled and cased as test production bores (KPFRT02 and 03) located approximately 10m apart. Hole KPFRT01 was geophysically logged to provide additional downhole information on fracture density and orientations.

Drill chip samples from these holes were analysed using portable XRF on site, (www.thormining.com/sites/thormining/media/pdf/asx-announcements/20191127-preliminary-drilling-results-at-kapunda-project.pdf) then sent to NATA accredited laboratories for chemical assays to confirm copper concentrations with table B containing a summary of the results. Copper values were higher than expected for the area, as it is off the existing mine site and gold assays confirmed the presence of gold in the system.

Pump Test (KPFRT02 and KPFRT 03)

Pumping was undertaken using a 24-volt diaphragm pump. Groundwater was discharged to a 1m³ bulk container and the water level rise in the container was used to monitor flow rate.
Pumping continued for 480 minutes with the flow rate holding constant for most of the test.
Drawdown was measured manually and by data-logger in the pumped well (KPFRT03) and in the observation well (KPFRT02) located 15 metres away.

Tracer Test (KPFRT02 and KPFRT 03)

A tracer test was undertaken with the aim of determining the connectivity of fractures between the two test production bores. The test comprised injection of a sodium bromide tracer into one well KPFRT03 and simultaneous extraction of groundwater from KPFRT02. Samples were taken every 15 minutes and a selection of samples were analysed for bromide concentration. Breakthrough of the bromide tracer occurs at approximately 150 minutes. There was incomplete tracer recovery in the 8-hour period the test was run. This tracer testing showed that the longer screened intervals and increased distances apart may yield more satisfactory results than small scale, focused extraction by small diameter well patterns. This could contribute to potentially lower capital costs with a smaller number of wells required.

Table A: Drill hole coordinates

Hole ID	Easting	Northing	Azimuth	Dip	Final Depth
KPFRT01	308641	6196659	0	-90	66
KPFRT03	308638	6196659	0	-90	29
KPFRT02	308639	6196669	0	-90	29

Table B: Summary of Kapunda Assay results

Hole ID	Prospect	Preliminary XRF Intercept summary	Assay Intercept summary
KPFRT01	Kapunda	66m @ 0.27% Cu including 5m @ 0.72% Cu from 3m and 11m @ 0.54% Cu from 19m	66m @ 0.20% Cu from surface, inc 11m @ 0.47% Cu from 0m, inc 3m @ 0.027ppm Au from surface, & 1m @ 0.03ppm Au from 8 m 18m @ 0.24% Cu from 19m 8m @0.17% Cu from 39m

Figure 1: Image showing location of the hydrogeological test bores

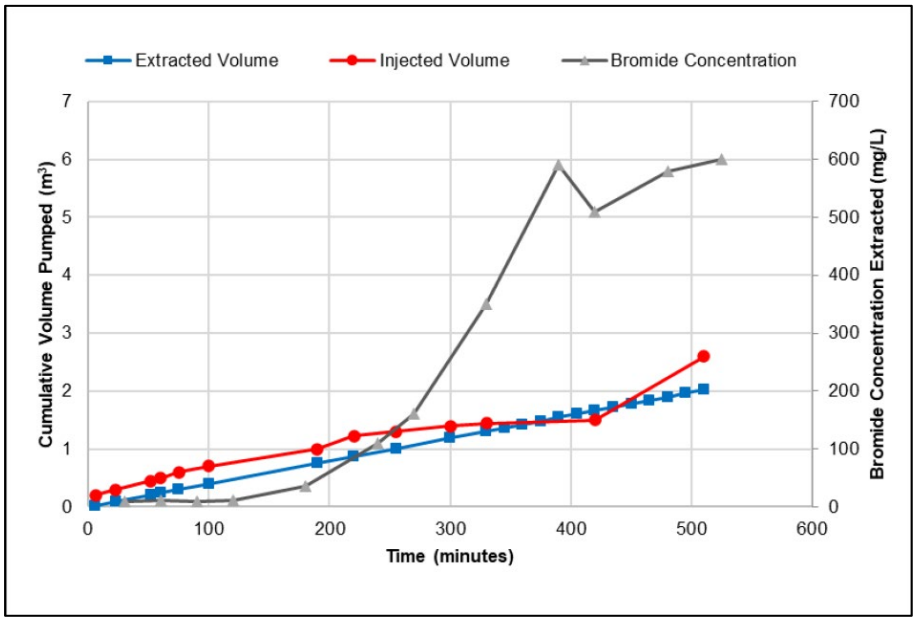

Figure 2: Chart showing Tracer test results

The groundwater measured at the site is naturally acidic (pH 3.8 - 4.0) and copper concentration is naturally elevated (40-300 mg/L Cu), with copper having naturally leached into the local groundwater. This suggests that preconditioning of the groundwater and rock to lower the pH should be less onerous and may have a positive impact, lowering expected operating cost.

Initial Metal Recovery Testing

As part of the next stage of the project, some initial scoping studies were carried out to see if any significant issues (chemical or physical) may exclude a particular method of copper production. Currently three methods are being investigated, with each demonstrating successful copper recovery: -

- Ion Exchange
- Cementation
- Electrowinning

Ion Exchange

Three resins were used in the sorption / elution tests: two imino diacetic (IDA) resins from two manufacturers and a strong acid cation (SAC) resin. IDA resins are copper selective resins, the SAC resin is a generic cationic resins with no specific selectivity towards any metals.

The isotherm sorption and elution (desorption) tests were conducted using bottle roll tests with different resin to solution ratios varying from 1:5 to 1:1000. The groundwater copper concentration was adjusted to that expected within the mine area and the bottles were rotated on the roller for 24 hours. The dynamic sorption tests were conducted by passing the solutions through a burette filled with fresh resin. The dynamic elution tests were similar and conducted by passing the eluent (10% sulphuric acid) through the burette with loaded resin. The eluate samples were collected and analysed for copper and other metals. Comparison of different ion exchange resins in isotherm tests showed that the IDA type resins obtain higher copper selectivity than the SAC resin.

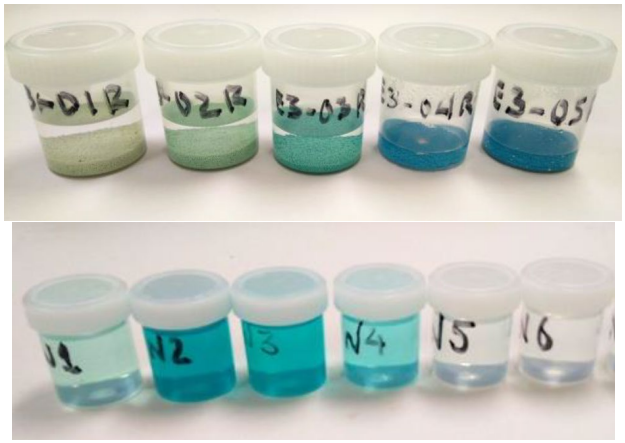

Figure 4: Loaded IDA resin samples after isotherm sorption and resulting eluate fractions

Cementation

The cementation test was carried out in a Stirred Mill with steel media at Bureau Veritas Laboratories in Adelaide. Groundwater copper concentration was adjusted to the levels expected to be reached during the ISR recovery process and then loaded into a container with a rotating agitator and the steel media. The test was run for approximately 5 minutes and showed that the copper can be removed from liquor via the agitated cementation concept. This method is likely to be relatively cheap and produce a product that has a ready market in Australia for fertiliser and fungicide applications in agriculture and horticulture.

Figure 5: Images showing laboratory stirred mill setup and steel media after the test

Electro Winning

Groundwater from the site was placed into a test cell at the laboratory resources of Enviromineralls Limited in Adelaide. Enviromineralls patented low energy electro winning technology was then applied using steel sheet as the recovery media. Copper cathode was formed on the plate, additional testing is likely to be carried out in the future with a small field scale pilot plant.

Figure 6: Image showing result of electrowinning test

Anticipated work schedule for next 6 months

The work program for the next six months includes preparation for a Site Environmental Lixiviant Test (SELT), and gold and geotechnical focussed drilling, both aimed at commencement around October 2020. The SELT work will involve circulating chosen lixiviants through a trial pattern of injectors and producers to assess in ground recovery. The exact timing of these activities is dependent on a number of factors including the coordination of approvals between various government and local government agencies

- Additional bores for further hydrogeological testing on current site south of mine - August
- Tracer test and accompanying geophysical studies - August
- Push/pull test current site - September
- Large particle saturated column leach test work (CSIRO) - July to December
- Value Metal recovery testing (CSIRO) - September to December
- Geotech drilling to SELT site - October
- Geotech/gold drilling - October/November*

- Drill/Install bores for SELT - October
- Pump test/ Tracer test at SELT site (in conjunction with geophysics) - October
- Monitor bore placement - October/November
- Push/pull test and Circulation test - October to December
  *(council dependent)

Authorised by Mick Billing, Chairman and Chief Executive Officer

For further information, please contact:

THOR MINING PLC

Mick Billing, Executive Chairman
+61 8 7324 1935
Updates on the Company's activities are regularly posted on Thor's website www.thormining.com, which includes a facility to register to receive these updates by email, and on the Company's twitter page @ThorMining.

Competent Persons Report

The information in this report that relates to exploration results and Mineral Resources is based on information compiled by Leon Faulkner, who holds a BSc in geology and who is a Member of The Australasian Institute of Geoscientists. Mr Faulkner is an employee of Environmental Copper Recovery Pty Ltd. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Leon Faulkner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Thor Mining PLC

Thor Mining PLC (AIM, ASX: THR) is a resources company quoted on the AIM Market of the London Stock Exchange and on ASX in Australia.

Thor holds 100% of the advanced Molyhil tungsten project in the Northern Territory of Australia, for which an updated feasibility study in August 2018[1] suggested attractive returns.

Adjacent Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including Inferred Resource estimates for the White Violet and Samarkand tungsten deposits and the Bonya copper deposit[2].

Thor also holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate[3] on 2 of the 4 known deposits. The US Department of the Interior has confirmed that tungsten, the primary resource mineral at Pilot Mountain, has been included in the final list of Critical Minerals 2018.

Thor holds a 25% interest Australian copper development company EnviroCopper Limited (with rights to increase its interest to 30%). EnviroCopper Limited holds:

- *rights to earn up to a 75% interest in the mineral rights and claims over the resource[4] on the portion of the historic Kapunda copper mine in South Australia considered recoverable by way of in situ recovery; and*

- *rights to earn up to 75% of the Moonta copper project, also in South Australia comprising the northern portion of exploration licence EL5984 and includes a resource estimate[5] for several deposits considered recoverable by way of in situ recovery.*

Notes

[1] Refer ASX and AIM announcement of 23 August 2018
[2] Refer ASX and AIM announcements of 26 November 2018 and 29 January 2020
[3] Refer AIM announcement of 13 December 2018 and ASX announcement of 14 December 2018
[4] Refer AIM announcement of 10 February 2018 and ASX announcement of 12 February 2018
[5] Refer ASX and AIM announcement of 15 August 2019

1 JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Hole KPFRT01 was rotary air blade drilled then geophysically logged. holes KPFRT02 and 03 were blade drilled at 241mm, fitted with 177mm PVC casing and screened with slotted PVC. • Cuttings were collected every 1m into a large plastic container, these were transferred into plastic bags, subsamples of 2-3 Kg were taken for geochemical assay, chip tray samples were collected, logged and photographed. • All sample intervals from KPFRT01, 02 and 03 were analysed by handheld XRF on site. Samples from KPFRT01 were sent to a NATA accredited laboratory and assayed • Industry standard QAQC protocol was adopted with reference material inserted every fifth sample.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Watson Drilling was contracted to provide the drilling services • All holes were drilled with rotary air blade
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.* • *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.*	• Qualitative assessment of sample recovery and moisture content was recorded. • No relationship is known to exist between sample recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All holes were geologically logged on site by geologist • Water flow rates were measured at the completion of each drill rod • Water samples were taken at the completion of each rod • KPFRT01 was geophysically logged by Borehole wireline.
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.*	• Chips were collected with a plastic scoop with several samples from different sections of the bag placed into a calico sample bag for assay • Sample sizes are considered appropriate for the mineralisation style and the material gathered. • Laboratory standards were included in the assay process for QAQC, these indicate acceptable analytical accuracy • Laboratory analytical charge sizes and standard sizes are considered adequate for the material being assayed.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Industry standard sample preparation undertaken • Samples were digested and refluxed with a mixture of acids • Base metal assays determined by Inductively Coupled Plasma (ICP) Mass Spectrometry. • Au assays have been determined by Atomic Absorbtion Spectrometry. • The laboratory techniques and assaying are considered appropriate • Boreholes were geophysically logged with a range of methods from natural gamma, spectral gamma, induction-conductivity, magnetic susceptibility, formation density, north seeking gyro through to optical imaging. Where applicable, all probes, natural gamma, spectral gamma and formation density, have been calibrated in Adelaide at the DEWR calibration models. Other probes were calibrated with fixed

Criteria	JORC Code explanation	Commentary
		apparatus in Borehole Wireline's Adelaide workshop. Calibration, data processing and optical image processing were supervised and checked by Duncan Cogswell, BSc, MSc, MAusIMM from Borehole Wireline.
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.*	• KPFRT01 was twinned with KPFRT03, both holes were analysed on site using handheld XRF with similar results • All data are stored in an electronic database, collar locations are entered into a spreadsheet then transferred to the database. • Assay data from the laboratory is electronically loaded into the database • No adjustments were made to the assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collar locations were recorded from a Garmin handheld GPS • No downhole surveys were undertaken • Topographic control is taken from DTM derived from aerial survey and is considered adequate
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.*	• Hole spacing is ~10m and is considered adequate for the hydrogeological investigations undertaken. • No sample compositing was applied.
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.*	• Holes are vertically drilled to intersect regional aquifer
Sample security	• *The measures taken to ensure sample security.*	• Samples were stored on private property and then transferred to fenced yard.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits/reviews undertaken

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The holes are drilled on Exploration License number 6198 held 100% by Terramin Exploration Pty Ltd.. • The tenement is currently in good standing with no known impediments to exploration.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The tenement has been actively explored since the early 1900's. Companies include Utah corporation, Minefields Exploration, Northland Minerals, Copper Range and Terramin Exploration Pty Ltd
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The copper in the Kapunda area sits within the Tapley Hill formation and consists of steeply dipping, structurally controlled, high grade lodes of oxide and secondary copper mineralisation. The Kapunda mine site was the subject of mining until the late 1800's and has sporadically been looked at over the years. Recent advances in InSitu recovery have prompted the area the area to be reviewed and its prospectivity for this style of mining to be evaluated.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• Collar location details are appended to the release
		•

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	• Intersections are calculated by averaging the 1m assays • No metal equivalents are reported
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 (eg 'down hole length, true width not known').*	• Intervals reported are downhole lengths
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.*	• Relevant Maps are included in this report
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All chemically assayed intercepts FOR KPFRT01are reported
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• These holes were primarily drilled for hydrogeologic testing not as mineral exploration holes.
Further work	• *The nature and scale of planned further work (eg 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.*	• Further work will be focused on additional hydrogeological evaluation of the Kapunda area potential for InSitu recovery of copper.