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AIM & ASX Listings:
Shares: **THR**

Directors:
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Mark Potter
Mark McGeough

Key Projects:

- **Gold**
Ragged Range WA
- **Copper**
Kapunda SA
Alford West SA
Alford East SA
- **Tungsten**
Molyhil NT
Pilot Mountain USA
- **Uranium / Vanadium**
Colorado / Utah USA

Company Announcements Office

**ASX Securities Limited,
20, Bridge Street,
Sydney, N.S.W. 2000**

**NEW COPPER-GOLD PROJECT
Alford East, South Australia**

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR) are pleased to advise that Thor has executed a binding term sheet for Thor to acquire an interest in the oxide mineral rights from Spencer Metals Pty Ltd ("Spencer") over the Alford East copper-gold project, located on the Yorke Peninsula, South Australia (Figure 1).

Highlights:

- Thor to acquire up to 80% interest directly in the Alford East Project, covering portions of EL6255 and EL6529 (Figure 1);
- The Alford East Project comprises numerous oxide copper-gold prospects including Alford East, Netherleigh Park and Netherleigh North, each with extensive previous drilling. Copper-oxide intercepts include;
 - 122m @ 0.63% Cu from 95m (ALDDH09) *including* 14m @ 2.26% Cu from 111m
 - 76m @ 0.95% Cu from 138m (ALDDH01) *including* 14m @ 2.18% Cu from 146m
 - 14m @ 1.5% Cu from 162m, and 34m @ 0.5% Cu from 190m (MPBD3);
- The Alford East Project covers the northern extension of Alford Copper Belt, where to the south west EnviroCopper Ltd has reported an Inferred Mineral Resource of 66.1Mt @ 0.17% Cu for three deposits Wombat, Bruce and Larwood (THR:ASX Announcement 15 August 2019);
- The Alford Copper Belt is a coherent zone of potentially *In Situ Recovery* (ISR) amenable copper-gold oxide mineralization, within a structurally controlled north-south trending trough of deeply kaolinized and oxidized metamorphic units on the edge of the Tickera Granite;
- Multiple substantial 'walk up' drill ready targets.

Mick Billing, Executive Chairman of Thor Mining, commented:

"The directors of Thor have taken the view that global copper demand and pricing, with the potential for post COVID19 economic recovery, should improve substantially in both the short and medium term, and have moved to increase the Company's exposure to potential low cost copper production projects."

"The Alford East project, the directors believe, represents a continuation of the favourable geology which hosts the Alford West resources, which Thor has exposure to via our interest in EnviroCopper Ltd (Thor 30% equity)."

"Several prospects at Alford East have substantial drilling history, providing evidence of both extensive mineralisation, and geology of a type, which subject to further work, appears potentially amenable to Insitu Recovery (ISR) techniques."

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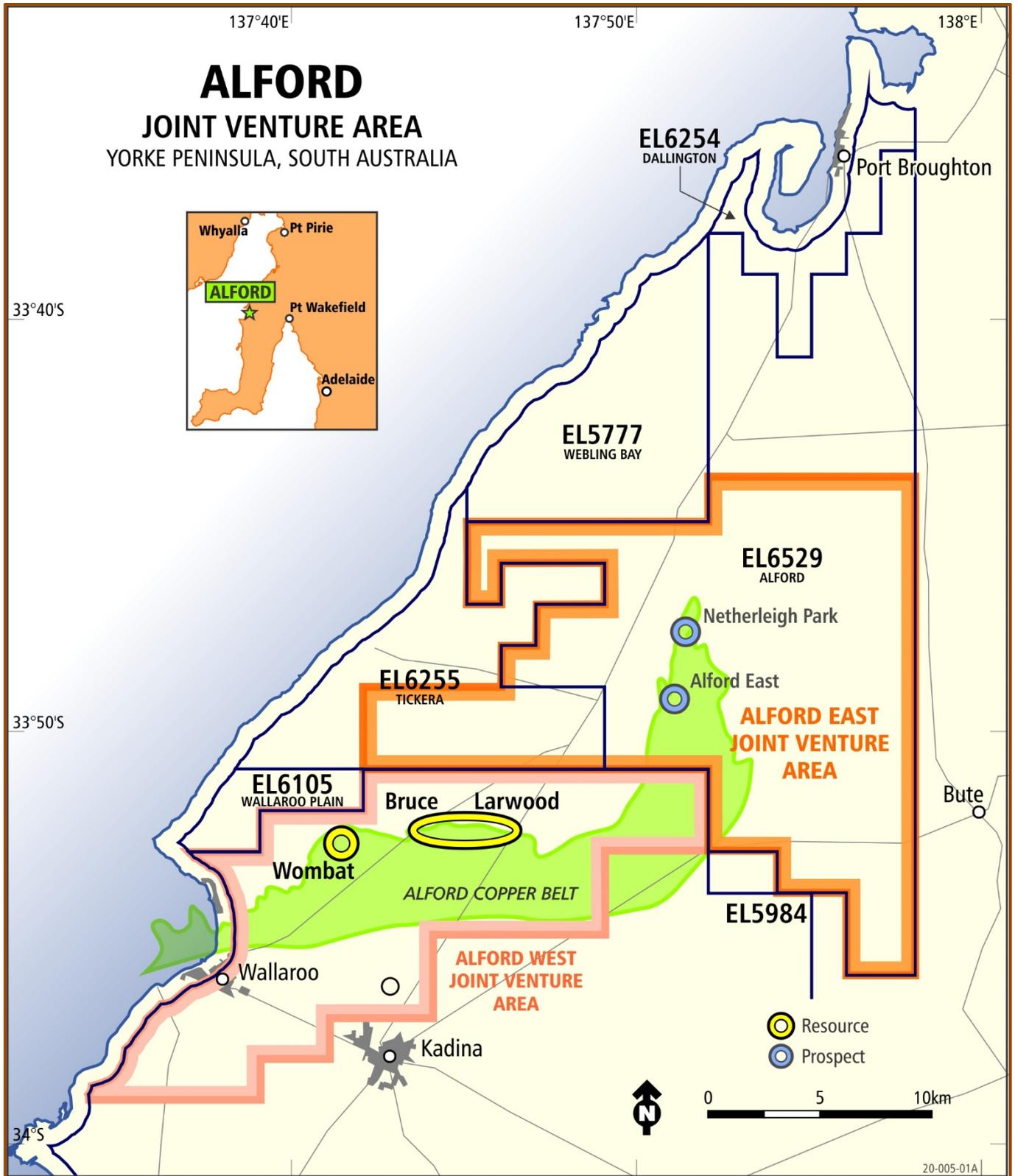


Figure 1: Tenement & Prospect Location Plan
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Agreement Structure and Commercial Terms

Under the terms of the Agreement, Thor has been granted the right to explore for minerals on the agreed portions of the exploration licences (EL6255 and EL6529), and to conduct feasibility and development activities in respect thereto, and via funding expenditure on these activities, earn an interest of up to 80% over two stages directly in the project;

- Upfront cash consideration of A\$30,000 upon execution of the binding term sheet, which has been paid;
- **Stage 1:** Thor can earn a 51% interest by funding A\$500,000 expenditure over 2 years to 11 November 2022, and for additional consideration of A\$250,000 in fully paid Thor shares, issued at the 5 day ASX VWAP (volume weighted average price) on the date immediately prior to allotment, together with two free attaching options per share issued, exercisable at \$0.03 within 5 years from the date of issue (Stage 1 expenditure);
- **Stage 2:** earn a further 29% interest (80% in total) by funding an additional A\$750,000 of expenditure over a subsequent 2 years to 11 November 2024 and for additional consideration of A\$250,000 in fully paid Thor shares, issued at the 5 day ASX VWAP on the date immediately prior to allotment and two free attaching options per share issued, exercisable at a\$0.03 within 5 years from the date of issue (Stage 2 expenditure). If Thor does not proceed with the Stage 2 earn-in, then its interest in the project is relinquished;
- Upon Thor completing the acquisition of an 80% interest in the project, Spencer will hold a free carried 20% interest in the project, until decision to mine;
- The parties have agreed to use reasonable commercial endeavours to negotiate and execute a formal Joint Venture Agreement for the development and operation of a mine and associated facilities within 60 days from the end of Stage 2.

Copper-Gold Prospectivity

The Alford East Earn-in/Joint Venture covers portions of EL6529 and EL6255 (Figure 1) and is interpreted as the northern extension of the Alford Copper Belt, comprising Alford East, Netherleigh Park and Netherleigh Park North prospects. The Alford Copper Belt is a coherent zone of copper-gold oxide mineralization; malachite, azurite, native copper and chalcocite within a structurally controlled north-south trending trough of deeply kaolinized and oxidized metamorphic units on the edge of the Tickera Granite. Kaolin and alunite overprints metasediment, granite and calc-silicate altered metasomatites. The timing of the argillic alteration is contentious and may be either a primary hydrothermal alteration assemblage or a product of deep weathering during the Tertiary.

In 1995, M.I.M Exploration discovered the Alford East Prospect when drilling diamond hole MPBD3 that reported significant copper oxide mineralization in four broad zones to the end of hole, including (Open File Report – ENV08660: Annual Technical Report M.I.M. Exploration 1996):

- 20m @ 0.2% Cu from 64m,
- 42m @ 0.3% Cu from 116m,
- 14m @ 1.5% Cu from 162m, and
- 34m @ 0.5% Cu from 190m.

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Further drilling by joint venture partners of Argonaut Resources, Hillgrove Resources and Sandfire Resources from 2001 to 2015, intersected copper oxide mineralization at Alford East and a nearby prospect Netherleigh Park and reported intersections are shown on Table A.

Historic exploration over the Alford Copper Belt has focused on the IOCG sulphide mineralization beneath the interpreted oxide zone, however recent metallurgical testwork by EnviroCopper Ltd over their Alford West project (Figure 1), approximately 10km to the south west has highlighted the amenability of this copper-gold oxide mineralization to *In situ Recovery* (ISR) processes. Alford West has an ISR amenable Inferred Mineral Resource (MRE) of 66.1Mt @ 0.17% Cu, containing 114,000 tonnes of contained copper, at a cut-off grade of 0.05% Cu, covering Wombat, Bruce and Larwood deposits, Figure 1 (THR:ASX Announcement 15 August 2019). The amenability of this oxide mineralization within the deep weathered trough presents exciting opportunities for Thor to add further mineralization extensions over the Alford East Project.

Table A: Alford East Drill -Results from Argonaut Resources (ARE: ASX Announcement 9 Nov 2012)

HOLE	Interval (m)*	Cu %	From (m)
ALDDH01	76	0.95	138
<i>including</i>	14	2.18	146
ALDDH04	20	0.75	131
ALDDH09	122	0.63	95
<i>including</i>	14	2.26	111
ALDDH10	98	0.64	88
<i>including</i>	54	0.86	88
ALAC158	26	0.54	77
ALAC160	18	0.5	75
ALAC164	31	0.58	68
ALAC197	67	0.72	8
<i>Including</i>	21	1.01	10
<i>and</i>	18	1.04	57

**Downhole Interval*

Authorised by Mick Billing, Chairman and Chief Executive officer For further information, please contact:
THOR MINING PLC

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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](https://twitter.com/ThorMining).

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Competent Persons Report

The information in this report that relates to exploration results is based on information compiled by Nicole Galloway Warland, who holds a BSc Applied geology (HONS) and who is a Member of The Australian Institute of Geoscientists. Ms Galloway Warland is an employee of Thor Mining PLC. She has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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’. Nicole Galloway Warland consents to the inclusion in the report of the matters based on her 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 2018¹ 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 Bonya copper deposit, and the White Violet and Samarkand tungsten deposits².

Thor also holds a 30% interest in Australian copper development company EnviroCopper Limited, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource on the portion of the historic Kapunda copper mine in South Australia recoverable by way of in situ recovery⁴. EnviroCopper also holds rights to earn a 75% interest in portion of the Alford West copper project also in South Australia, and is also considered amenable to recovery by way of in situ recovery⁵.

Thor holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate³ on 2 of the 4 known deposits.

At the 100% owned Ragged Range Project in the Pilbara region of Western Australia, Thor has exciting early stage results for which gold and nickel drilling is planned.”

“Thor holds mineral claims in the US states of Colorado and Utah with historical high grade uranium and vanadium drilling and production results.”

Notes

¹ Refer ASX and AIM announcement of 23 August 2018

² Refer ASX and AIM announcement 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 2016 and ASX announcement of 12 February 2018

⁵ Refer ASX and AIM announcement of 15 August 2019

JORC CODE, 2012 EDITION – TABLE 1

1.1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> • <i>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 hand held XRF instruments, etc) These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> ▪ Historic drilling by Joodex and Uranez used RAB drilling (436 RAB holes for 13,545.7m), North Broken Hill used auger drilling (191 holes). Follow-up drilling by Jododex drilled 3 angled and one vertical diamond hole, 890.23m. Follow up included diamond hole by Uranez in 1986 was completed to 392.5m. ▪ Historic Drilling – MIM (1993 -1997) – Diamond, reverse circulation and aircore drilling (was used to obtain samples which were pulverised to produce sub samples for lab assay (Analabs SA). ▪ Historic Drilling - Sandfire, Hillgrove & Argonaut (2002-2014): ▪ AC drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for Au fire assay AA21 and 48 element suite ME-MS61. Samples submitted to ALS, SA. ▪ Diamond drilling was half cored for Au fire assay AA21 and 48 element suite ME-MS61. Samples submitted to ALS, SA. Standard blank and duplicate inserted every 30 samples ▪ There are no records indicating if any measures were taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. ▪ Mineralization is determined by descriptive logs for each AC, RC and diamond hole as well as the incorporation of assay results. ▪ Historic Collar elevations were calculated using the TEISA DTM Grid in 2001.
<p><i>Drilling Techniques</i></p>	<ul style="list-style-type: none"> • <i>Drill type (air 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</i> 	<ul style="list-style-type: none"> ▪ Drill methods included; auger, RAB, diamond coring, reverse circulation and aircore. Some precollars for diamond holes were drilled using rotary mud methods.Hole diameters

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	<p><i>type, whether core is orientated and if so, by what method, etc).</i></p>	<p>varied for different drilling methods.</p> <ul style="list-style-type: none"> ▪ Some diamond core was triple tubed. ▪ Face sampling hammers were used for RC holes. ▪ Other details unknown
<p><i>Drill Sample Recovery</i></p>	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the sample.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of coarse/fine material.</i> 	<ul style="list-style-type: none"> ▪ Sample recoveries for historic drillholes unknown. ▪ No relationship is known to exist between sample recovery and grade.
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and mode, reading times, calibration factors applied and their derivation, etc.</i> • <i>Nature and 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.</i> 	<ul style="list-style-type: none"> ▪ MIM Drilling - Assayed for Au, As, Pb, Zn, Co Ni, Mo (GA101) <ul style="list-style-type: none"> ▪ And U, F, La, Ce (GX401) ▪ Sandfire, Argonaut & Hillgrove Drilling - fire assay for gold with four acid digest for 46 element package. ▪ Duplicate, Blank and standard samples inserted every 20 samples, were introduced into Sandfire, Argonaut and Hillgrove drilling, while the laboratory completed double assays on many samples. QAQC measures undertaken by other companies (MIM) is not generally known. ▪ Argonaut, Sandfire and Hillgrove and external ALS laboratory introduced QAQC samples, which indicate acceptable analytical accuracy. No QAQC is none for MIM drillholes.
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical or electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> ▪ All significant intersections have been verified by an alternative company geologist. ▪ There are no records of twinned drillholes ▪ No adjustments have been made to the laboratory assay data.

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Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic diamond drill hole collars were located from original grids and the collars pegged using GPS with an accuracy of +/- 0.5 meters, Downhole surveys were completed on all RC and diamond holes using a compass based instrument post 1996. Only 5 holes diamond holes prior to this date, have downhole survey information. GDA94 (Zone 53)
Data spacing and distribution	<ul style="list-style-type: none"> 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 classification applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> The data spacing is considered sufficient to allow confident interpretation of exploration results. No sample compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Drill lines are predominately oriented East-West. The main mineralized structure strikes roughly north south and dips steeply to the East.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Measures for historic drillholes unknown.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data 	<ul style="list-style-type: none"> No audits completed.

1.1 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section may apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements of material issues with third parties such as joint ventures, overriding royalties, native titles 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 license to operate in the area. 	<ul style="list-style-type: none"> The JV area covers portions EL6255 and EL6529 which are 100% owned by Spencer Resources Ltd. PML 268 for aggregate & sand lies within EL 6529 There are no non govt royalties, historical sites or environmental issues. Underlying land title is Freehold land which extinguishes native title. All tenure in good standing.

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<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> • <i>Acknowledgement and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> ▪ The general area of this report has been explored in the past by various companies including Jododex, Uranez, North Broken Hill, MIM, Hillgrove Resources, Argonaut Resources and Sandfire Resources. Activities include AC, RC, & Diamond drilling, and significant geophysical surveying. The Company has reviewed past exploration data generated by these companies.
<p><i>Geology</i></p>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> ▪ Deposits in the general region are considered to be of Iron Oxide Copper Gold (IOCG) affinity, related to the 1590Ma Hiltaba/GRV event. Cu-Au-Mo-Pb mineralisation is structurally controlled and associated with significant metasomatic alteration and deep weathering or kaolinisation of host rocks.
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> • <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> <ul style="list-style-type: none"> ○ <i>Easting and northing of the drill collar</i> ○ <i>Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill collar.</i> ○ <i>Dip and azimuth of the hole.</i> ○ <i>Down hole length and interception depth.</i> ○ <i>Hole length.</i> • <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> 	<ul style="list-style-type: none"> ▪ No tabulation of drillhole information is presented as the results are historical and the omission of such detail does detract from an investor’s understanding of the report. Links and references to Open File reports are included in document.
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> • <i>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.</i> • <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 some detail.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> ▪ Intersections are calculated by simple averaging of 1m assays. ▪ No metal equivalents are reported.

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<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this</i> <ul style="list-style-type: none"> • <i>effect (eg ‘down hole length, true width not known’).</i> 	<ul style="list-style-type: none"> ▪ All companies noted the association of copper oxide mineralization with intense clay alteration. The alteration is interpreted to be similar to that found in the adjacent Alford West area. ▪ The drilling intersections quoted are downhole intercept lengths with an unknown orientation to dip and plunge of the target mineralization.
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> • <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</i> <ul style="list-style-type: none"> • <i>views.</i> 	<ul style="list-style-type: none"> ▪ Appropriate plans and sections with scales appear as Figures 1 &2 in the report.
<p><i>Balanced Reporting</i></p>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> ▪ The report summarizes publicly available open file results, not new results
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> • <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, ground water, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> ▪ There is no other meaningful or material exploration data that has been omitted from the report.
<p><i>Further work</i></p>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests of lateral extensions or depth extensions or large scale step-out drilling).</i> • <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> 	<ul style="list-style-type: none"> ▪ Further work may involve further drilling, mineral resource estimation, followed by technical studies including lixiviant optimisation, permeability studies, etc