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9 September 2022

Bow River Gravity Inversion Results

Highlights:

- **Historical Falcon™ gravity data re-processed and modelled by Southern Geoscience (SGC) indicates a large gravity anomaly at depth**
- **Gravity anomaly may correlate to a high-density Peridotite rock type, host to Panoramic's 13Mt @ 1.56% Ni Savannah Mine[1]**
- **Drilling being planned to target centre of gravity anomaly between 600 – 800m depth, to investigate potential of significant nickel-copper mineral system of the Bow River intrusive**
- **A high-powered ground-based SQUID EM survey covering approximately 8.4km² of the prospective Bow River intrusion is scheduled to commence mid-September**
- **EM survey will assist in identifying drill targets beneath the depth of historical investigation**

Lycaon Resources Ltd (ASX:LYN) (**Lycaon** or the **Company**) is pleased to announce the results from re-processed gravity Falcon™ data (**Falcon**) by Southern Geoscience Consultants (**SGC**) over ~8.4km² of the Bow River intrusion, host to the Bow River nickel copper prospect (**Bow River**) in the East Kimberley region of Western Australia. During 2011, an airborne gravity gradiometer multi-client survey was flown by Fugro Airborne Pty Ltd over the project area. This data was re-processed by SGC resulting in a 3D gravity inversion highlighting a large 6km gravity anomaly.

Mr Thomas Langley, Technical Director commented, "The Bow River intrusion shares many similarities to Panoramic's Savannah mine located 60km to the south yet has not been explored past ~150m vertical depth. The recent discovery of Savannah north in 2014, which was 4x bigger than the original Savannah mine demonstrates the significant exploration potential that remains in the Kimberley for nickel and copper mineralisation, with the Bow River prospect one of the highest potential prospects outside of Savannah for discovery of an economic nickel-copper deposit."

"I look forward to updating the market upon commencement of the EM survey in mid-September and results as they become available and drilling as soon as possible thereafter."

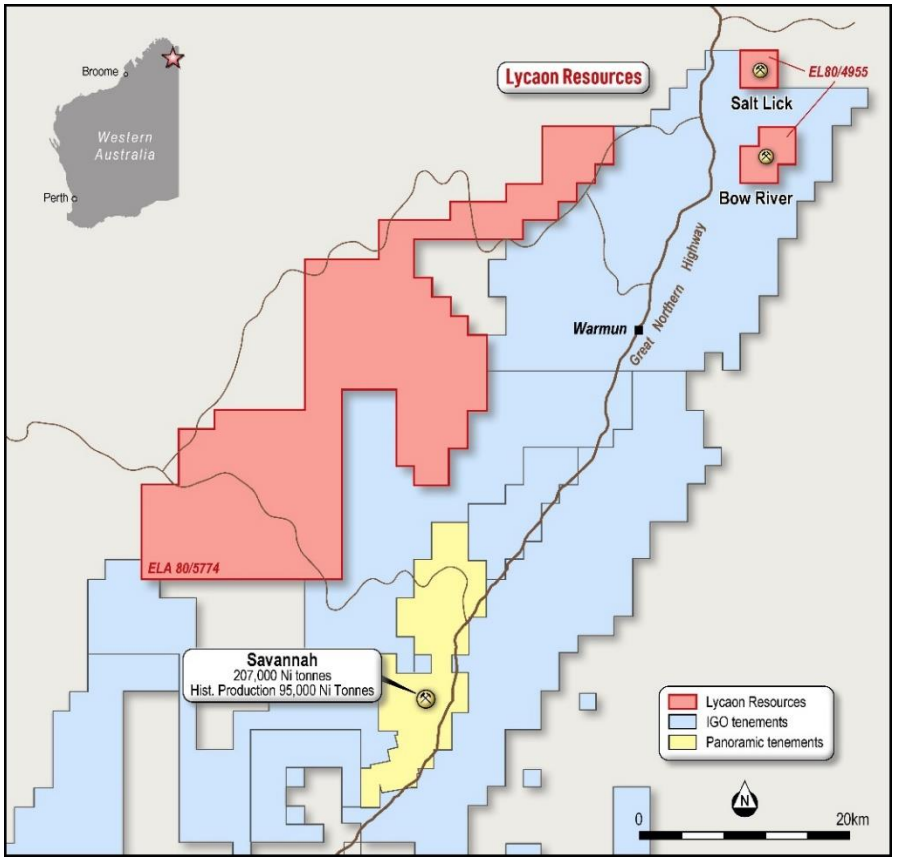

Figure 1. Location of Bow River and Salt Lick nickel copper sulphide projects and new tenement application ELA80/5774

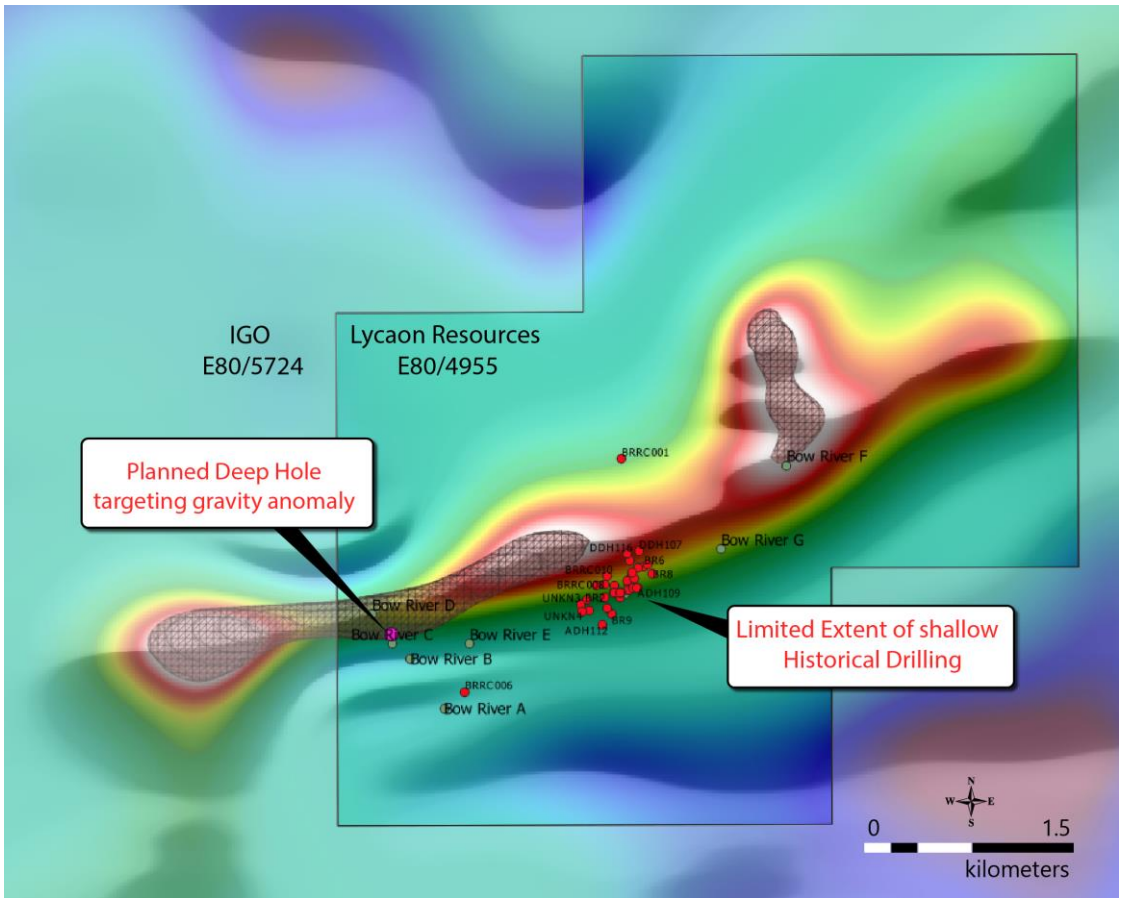

Figure 2. Location of historical drilling at Bow River nickel copper sulphide project, in relation to the large underlying Gravity anomaly inferred to be the Bow River Intrusive

Bow River Prospect *(Ni/Cu/Co±PGE)*

The Bow River Project is located within the Halls Creek Mobile Zone in the East Kimberley region of Western Australia (Figure 1). The Bow River prospect contains the Bow River intrusion, which is inferred to be over 10km². Outcropping gossans and anomalous soil geochemistry has been mapped at surface over an area of 900m x 300m. The surface expression of the intrusion has received most of the focus of historical exploration however, the broader intrusive undercover and at depth has received little attention. In addition, exploration using more powerful modern day geophysical techniques to detect conductors deeper below surface has not been completed.

Lycaon Resources is completing a HT SQUID electromagnetic survey over 8.4km² of the Bow River intrusion in September 2022, which hopes to delineate conductors below the historical depth of investigation. The HT SQUID survey utilises optimal parameters, low base frequency and high power/current levels which can provide >500m depth of investigation where the target is a high conductance body and of significant size.

Even with high-powered modern-day EM surveys, the target depth of the gravity anomaly which is the highest priority to host nickel and copper sulphides may not by detected. This can relate to the geometry and orientation of the sulphides not being as readily detected in relation to the configuration of the EM survey. Therefore, a stratigraphic hole proposed to 800m hole depth has been designed to intersect the highest amplitude of the gravity anomaly. This drillhole will provide critical stratigraphic, geological and geochemical information that can help determine whether the gravity anomaly could be related to a fertile Ni-Cu magmatic sulphide system. The drillhole will also provide a platform to complete high-powered DHEM surveying to detect deep seated strong conductors.

The proposed drill program at Bow River will be critical in demonstrating the potential for a major Ni-Cu-Co resource in the Kimberley analogous to Panoramic's Savannah nickel mine 60km south. The recent discovery of the Savannah North orebody in 2014 which highlights the exploration potential that remains in the Kimberley, Figure 3.

Drilling is planned to target beneath the current extent of historical drilling, targeting the deeper more primitive part of the intrusion. The historical gravity Falcon data was modelled by Southern Geoscience Consultants (SGC) as a 3D inversion to better quantify the magnitude of the gravity anomaly, location at depth and size. The rationale being that the highest density of the anomaly of >0.5g/cc density contrast will have the highest likelihood of hosting economic nickel and copper mineralisation.

SGC modelled a large gravity anomaly which appears to be quite deep potentially >500m vertical depth for >0.5g/cc density contrast. A density contrast of 0.5-1g/cc is within the desired target range to be consistent with peridotite and ultramafic rock types depending on what the surrounding rock types are and their densities. The Savannah orebodies are hosted in Peridotite and this rock type is thought to lead to the highest likelihood to discover further mineralisation within the Bow River intrusion.

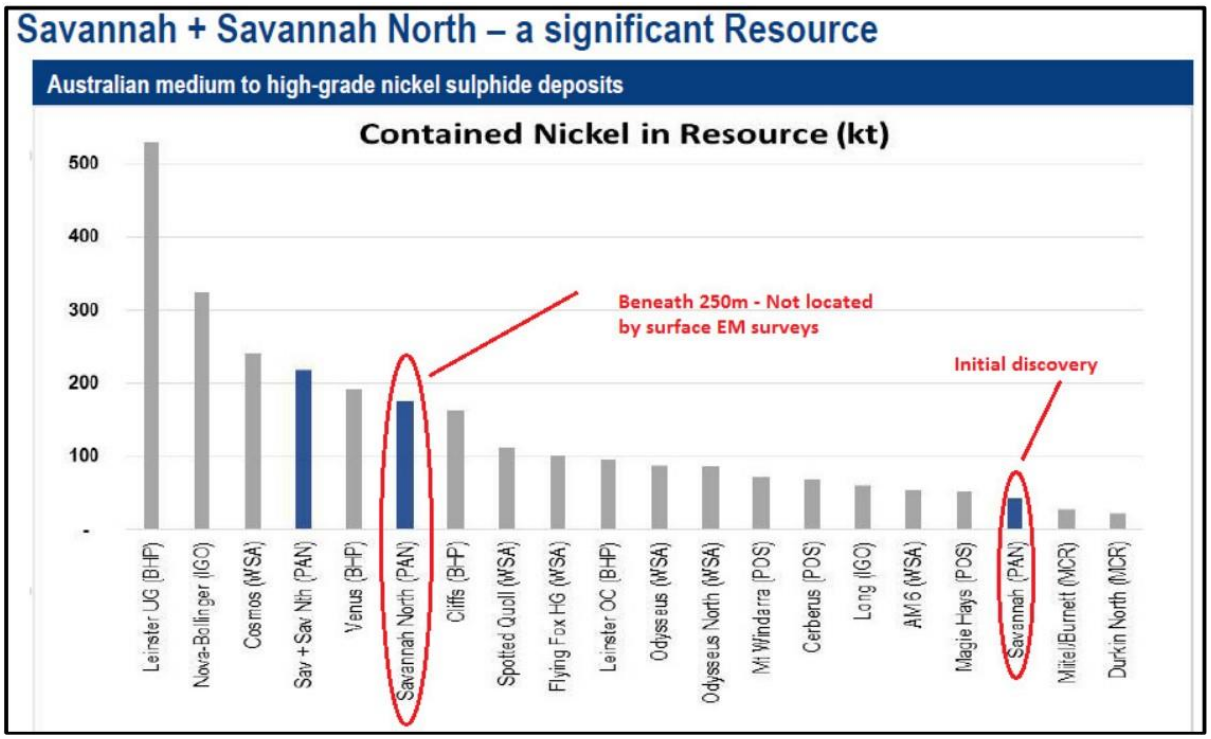

Figure 3. Graph highlighting significant addition of contained nickel resource due to the discovery of Savannah North, a much larger deposit than Savannah.

- ENDS -

This announcement has been authorised for release by the Directors of the Company.

Thomas Langley - *Technical Director*

For additional information please visit our website at www.lycaonresources.com

The information referred to in this announcement relates to the following sources:
[1] Mineral Resource and Ore Reserve - Panoramic Resources

Competent Person's Statement

The information in this release that relates to Geophysical Results and Interpretations is based on information compiled by Russell Mortimer, Consultant Geophysicist at Southern Geoscience Consultants. Russell Mortimer is a Member of the Australasian Institute of Geoscientists (AIG) and 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'. Russell Mortimer consents to the inclusion in the release of the matters based on this information in the form and context in which it appears.

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Thomas Langley who is a member of the Australian Institute of Geoscientists (MAIG) and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr. Thomas Langley is a full-time employee of Lycaon Resources Limited, and is a shareholder, however Mr. Thomas Langley believes this shareholding does not create a

conflict of interest, and Mr. Langley 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". Mr. Langley consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Appendix 1. Historical Drilling Results from the Bow River Project

Hole ID	Hole Type	Easting	Northing	Dip / Azi	From	Length	Intersection
BRRC001	RC	429200	8135700	-60 / 180			
BRRC002	RC	429200	8134850	-60 / 000	84	12	0.45% Cu+0.12% Ni
					84	4	0.77% Cu, 0.12% Ni
BRRC003	RC	429200	8134800	-60 / 000	116	8	0.26% Cu+0.37% Ni
BRRC004	RC	429100	8134750	-60 / 180	73	2	1.43% Cu
BRRC005	RC	429100	8134800	-60 / 180			
BRRC006	RC	428000	8134050	-60 / 180			
BRRC007	RC	429200	8134750	-60 / 000	157	1	1.21% Ni+ 0.11% Co
BRRC008	RC	429000	8134800	-60 / 180			
BRRC009	RC	429200	8134900	-60 / 180			
BRRC010	RC	429150	8135020	-60 / 180			
BRRC011	RC	429340	8134940	-60 / 000	108	2	1.4% Cu
					123	5	1.3% Cu
BRRC012	RC	429370	8135080	-60 / 180	81	1	3.8% Cu
					88	1	1.2% Ni
DDH101	DD	429350	8134500	-90 / 000		2.6	1% Ni
DDH102	DD	429360	8134940	-45 / 000		3	1.3% Ni + 0.97%Cu
						3	1.4% Ni + 0.4%Cu
DDH107	DD	429375	8135200	-90 / 000		10	1.1% Cu + 0.5%Ni

Appendix 2. 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*	Re-reporting of historical drilling data. Cored and percussion drilling completed. Methodology detailed in WAMEX reports; A9748 Australian Anglo American Prospecting Pty Ltd; A65634 Southdale Holdings Pty Ltd; A87523 Jindalee Resources Pty Ltd; A97478 Thundelarra Exploration Ltd; A128314 East Kimberley resources Pty Ltd. Gravity Falcon™ Survey

Criteria	JORC Code explanation	Commentary
	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.*	Fugro Airborne Surveys Pty Ltd 2 FALCON™ Airborne Gravity Gradiometer, Magnetic Survey – Kimberley, Western Australia, Job 2078 - Multiclient Survey Data The survey was based out of Halls Creek, Western Australia. The survey aircraft was operated from the Halls Creek Airport. The GPS base system was comprised of a GPS receiver, a logging computer, an antenna and a power supply. Data was logged and displayed in real time on the logging computer screen. The logged base data was processed with the airborne GPS data to calculate the differentially post-processed position of the aircraft. Total kilometres (km): 11,679 (AGG); 11,801 (Mag) Terrain Clearance: (m) 80 Clearance Method: Drape Traverse Line Direction (deg.): 115 / 295 Traverse Line Spacing (m): 500 Tie Line Direction (deg.): 025 / 205 Tie Line Spacing (m): 5000
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).*	Cored and reverse circulation drilling.
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.*	Re-reporting of historical drilling data. No comments on recovery in reports.
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.*	Re-reporting of historical drilling data. Geological logging of RC drilling has been completed to an acceptable standard.
Sub-sampling techniques	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube*	Re-reporting of historical drilling data. No details of sub sampling techniques or sample preparation for cored drilling.

Criteria	JORC Code explanation	Commentary
and sample preparation	*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.*	For BRRC001 – 008 both four metre composite samples and one metre riffle split samples were collected. For BRRC009 – 012 single metre rotary split samples were collected but only selected samples were submitted for analysis.
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.*	Re-reporting of historical drilling data. No details of analytical techniques or QA/QC procedures for cored drilling. For BRRC001 – 008 both four metre composite samples were sent to Amdel, Perth for base metal analysis by IC2E.and one metre riffle split samples were sent to ALS Perth and analysed for Ni, Cu, Co by AA62 and Au, Pt, Pd by PGM-MS24. For BRRC009 – 012 single metre rotary split samples were collected but only selected samples were submitted for analysis. Gravity Falcon™ Survey The following parameters were recorded during the course of the survey: • FALCONTM AGG data: recorded at different intervals; • Airborne total magnetic field: recorded with a 0.1s sampling rate; • Aircraft altitude: measured by the barometric altimeter at intervals of 0.1s; • Terrain clearance: provided by the radar altimeter at intervals of 0.1; • Airborne GPS positional data (latitude, longitude, height, time and raw range from each satellite being tracked): recorded at intervals of 1s; • Time markers: in digital data; • Ground total magnetic field: recorded with a 1s sampling rate; • Ground based GPS positional data (latitude, longitude, height, time and raw range from each satellite being tracked): recorded at intervals of 1s; • Aircraft distance to ground in different angular position: measured by the laser scanner system at intervals of 0.05s;

Criteria	JORC Code explanation	Commentary
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.*	Re-reporting of historical drilling data Gravity Falcon™ Survey During the survey, problems were encountered with the AGG instrument as a result of a partial system malfunction. As a result, several lines were rejected as being in excess of noise specifications and operational procedures were changed to ensure data collected were of the required standard. For some lines, only B complement data were used in processing as A complement data were deemed to be in error. Studies of one line flown twice (once with both complements working nominally, once with B complement only) were used to provide confidence in this procedure. Analysis of this repeat line has been provided separately. The mean turbulence was low to moderate across the survey area. Although the system was unusually sensitive to turbulence, the levels evident in final accepted data have been shown to have minimal effect on the measured gravity components. This was further evidenced when the profiles were examined line by line.
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.*	• Re-reporting of historical drilling data • GDA94 MGA Z52.
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.*	Re-reporting of historical drilling data Gravity Falcon™ Survey Traverse Line Direction (deg.): 115 / 295 Traverse Line Spacing (m): 500 Tie Line Direction (deg.): 025 / 205 Tie Line Spacing (m): 5000
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.*	Re-reporting of historical drilling data Gravity Falcon™ Survey Traverse Line Direction (deg.): 115 / 295 Traverse Line Spacing (m): 500 Tie Line Direction (deg.): 025 / 205 Tie Line Spacing (m): 5000 The gravity lines were orientated 025 / 205 in order to cross known regional structural trends that range from north easterly to north-north easterly. Interpretation of the gravity data appears to confirm known regional structural directions.
Sample	*The measures taken to ensure sample*	Re-reporting of historical drilling data

Criteria	JORC Code explanation	Commentary
security	*security.*	Gravity Falcon™ Survey Fugro Airborne Surveys Pty Ltd, who collected the gravity data, are very experienced and reputable contractors who specialise in gravity surveys. Fugro are used by many large companies and have a sound reputation of delivering high quality, accurate and properly corrected gravity data. Southern Geoscience Consultants re-processed the Fugro Gravity Falcon™ Survey data are considered expert geophysical consultants based in West Perth, Western Australia.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits have been completed.

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 Bow River and Salt Lick Projects are located on one (1) granted Exploration Licence E80/4955 covering approximately 25.6km²* *Lycaon has entered into a binding sale agreement with East Kimberley Resources Pty to acquire a 100% interest in the tenements.* *The tenements will be owned 100% by Lycaon Resources Limited* *A Royalty Deed exists for 1% payable to East Kimberley Resources Pty and Uramin Pty Ltd in respect of all saleable minerals, concentrates, metals produced.* *The Project is overlain by the Malarngowem (WC1999/044 and WAD43/2019) Native Title Claim* *East Kimberley Resources Pty executed a Heritage Agreement with Kimberley Land Council Aboriginal Corporation in July 2016.* *The Heritage Agreement allows Lycaon access to the project area provided relevant protocols are observed to preserve Aboriginal heritage.* *The tenements are in good standing and no known impediments exist.*
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	*The area comprising the Bow River and Salt Lick Project have been explored for a variety of commodities over a protracted period. Previous exploration activities within the project area commenced in the 1960's with Pickand Mather exploring base metals. Airborne magnetic and electromagnetic surveys were completed in 2002, to assess the effectiveness of previous drilling and to define new drill targets. The airborne EM survey outlined a strongly conductive zone coincident with the soil geochemical anomaly. Follow up of the airborne survey anomalies with a ground-based EM system led to the recognition of six discrete conductors, several of which had not been tested by previous drilling.*

Criteria	JORC Code explanation	Commentary
		Drilling of electromagnetic conductor targets intersected broad zones of low-grade nickel mineralisation in disseminated to massive sulphides up to 20m thick. *The combined results of historical work completed to date provides Lycaon with a compelling prospect to discover primary nickel copper sulphides at depth within the two layered mafic intrusions within E80/4955. Lycaon intends to follow on from this prior work that identified high grade nickel, copper, cobalt (±PGE's) mineralisation with high powered electromagnetic surveys prior to drilling.*
Geology	*Deposit type, geological setting and style of mineralisation.*	*The Bow River and Salt Lick Project area is underlain by early Proterozoic metamorphic and igneous rocks of the Halls Creek Mobile Zone (HCMZ). This composite orogenic belt comprises three tectonostratigraphic terranes (Western, Central and Eastern Zones) bounded by northeast trending strike-slip faults (Griffin and Grey, 1990).* *The Central Zone is dominated by the Tickalara Metamorphics, a regionally metamorphosed assemblage of mafic volcanics and sediments. These are intruded by several generations of felsic and layered mafic to ultramafic intrusions, which are also deformed and metamorphosed to varying degrees.* *The Central Zone hosts the majority of the Ni-Cu-Co deposits known in the east Kimberley, including Bow River.*
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.*	Re-reporting of historical drilling data
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*	Re-reporting of historical drilling data

Criteria	JORC Code explanation	Commentary
	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 (eg 'down hole length, true width not known').*	Re-reporting of historical drilling data
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.*	*Appropriate maps and sections are provided in the 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.*	The accompanying document is a balanced report with a suitable cautionary note.
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.*	*Historical exploration activity over the Bow River and Salt Lick project areas have included airborne electromagnetic and magnetics surveys, surface geochemical sampling, RC and Diamond drilling also completed within the project area. Data is being systematically compiled and reviewed to aid in current exploration programmes.*
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.*	*Additional geophysical surveys and geological mapping may be carried out in the future in order to assist in the delineation of drilling targets.*