Jimperding Deal Completes – Geophysical Targeting Commenced

Date: 22 April 2020

ASX Code: MAN

Capital Structure
Ordinary Shares: 266,341,510
Unlisted Options:
206,675,077 (3c exercise)
Current Share Price: 2.0c
Market Capitalisation: $5.3M
Cash: $3.6M (Dec 31 2019)
Debt: Nil

Directors

Patrick Burke
Non-Executive Chairman

James Allchurch
Managing Director

Ben Phillips
Non-Executive Director

Lloyd Flint
Company Secretary

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Highlights

- **Due diligence on the highly prospective 140km² exploration licence application (ELA) in the Jimperding Metamorphic Belt 70km NE of Perth has been completed to the satisfaction of Mandrake.**
- **All Conditions Precedent for the transaction have now been satisfied, paving the way for targeting work to commence immediately.**
- **Geophysical targeting of ultramafic layered intrusives for potential Ni-Cu-PGE mineralisation has commenced with initial assessments due in coming weeks.**
- **Historic prospects and several other prominent magnetic anomalies on the ELA are now being re-assessed in the context of Chalice's currently-unfolding Julimar PGE-Ni discovery.**
- **Mandrake to expedite ELA, fast-tracking grant of EL.**
- **Follow-up rock chip sampling at the Company's Northern Territory Berinka Pine Creek Gold Project identifies gold grades up to 3.8g/t Au and 37.5g/t Ag.**

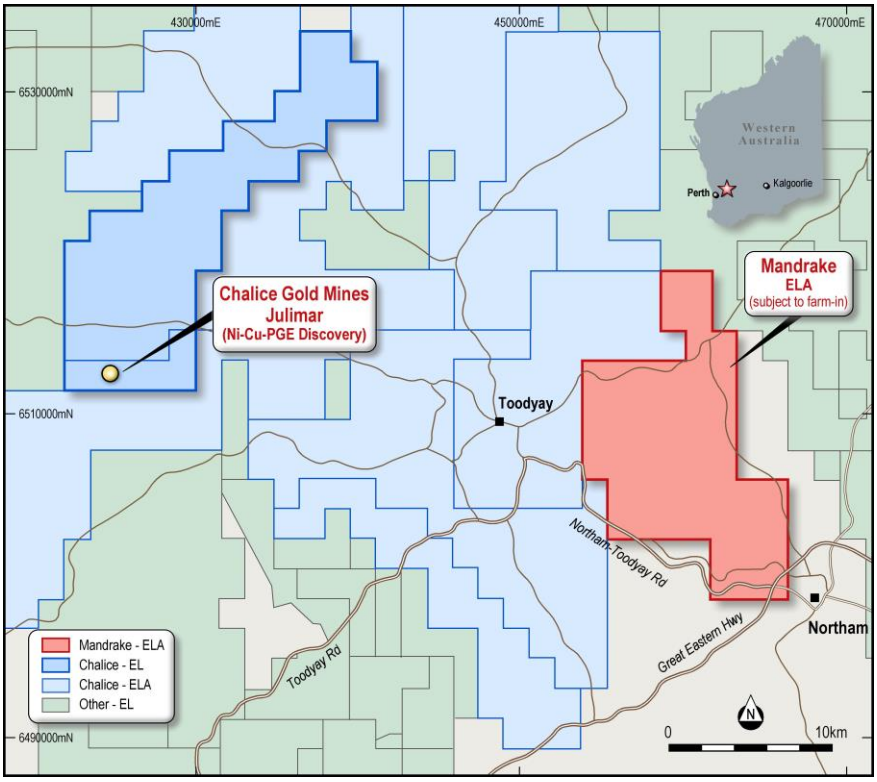


Figure 1 - Location of Mandrake Farm-in ELA – Jimperding Project

Jimperding Project

Mandrake Resources Limited (**ASX: MAN**) (**Mandrake** or the **Company**) is pleased to advise that it has completed due diligence relating to the conditional binding Heads of Agreement with Andean Energy Resources Pty Ltd (**AER**) to farm-in to exploration licence application (**ELA**) 70/5345 (**Jimperding Project**), in the Jimperding Metamorphic Belt located 70km north east of Perth, Western Australia.

The Jimperding Project lies approximately 30km east of Chalice Gold Mines Limited's (**Chalice**) Julimar Ni-Cu-PGE discovery announced on 23 March 2020. The 140km^2 ELA comprising the Jimperding Project was applied for on 4 March 2020, prior to the Julimar discovery hole announcement and prior to Chalice pegging over 2,000km^2 of ELAs contiguous to the Jimperding Project.

Conditions precedent under the Heads of Agreement for the transaction have now been satisfied, paving the way for targeting work to commence.

Geophysical consultants have been engaged to commence targeting work with initial detailed assessments due in the coming weeks. Mandrake is targeting ultramafic layered intrusives for potential Ni-Cu-PGE mineralisation such as the Newleyine prospect in the south of the ELA.

Historic surface sampling of the 1.5km-long Newleyine prospect ultramafic intrusive by way of 90 rock chip samples returned assay values up to 0.52% Ni and 805 ppm Cu (see Mandrake ASX release 14 April 2020).

Follow-up drilling at Newleyine confirmed the presence of widespread Ni-Cu-Fe sulphide mineralisation of 0.24% Ni and 172 ppm Cu over drill widths of up to 240m. (see Mandrake ASX release 14 April 2020). Crucially, samples were not assayed for PGEs.

Historic data from Newleyine and several other prospects are currently being compiled, digitized and assessed. These historic prospects, as well as several other prominent magnetic anomalies within the Jimperding Project, are now being re-assessed in the context of Chalice's currently-unfolding Julimar PGE-Ni discovery.

Mandrake has also implemented a process to expedite the granting of ELA 70/5345.

Exploration Activities - Berinka Pine Creek Project

Through the review of historic detailed geological exploration data, Mandrake identified several compelling high priority prospects within the Berinka Pine Creek Project.

In March 2020 Mandrake successfully located all high priority prospects as well as identifying several previously undocumented prospects warranting further investigation.

A total of 9 rock chip samples were collected across the Silver Strike prospect and RGC Creek anomaly with the a further 3 rock chip samples collected from the Specky Creek and Bubbles East prospects.

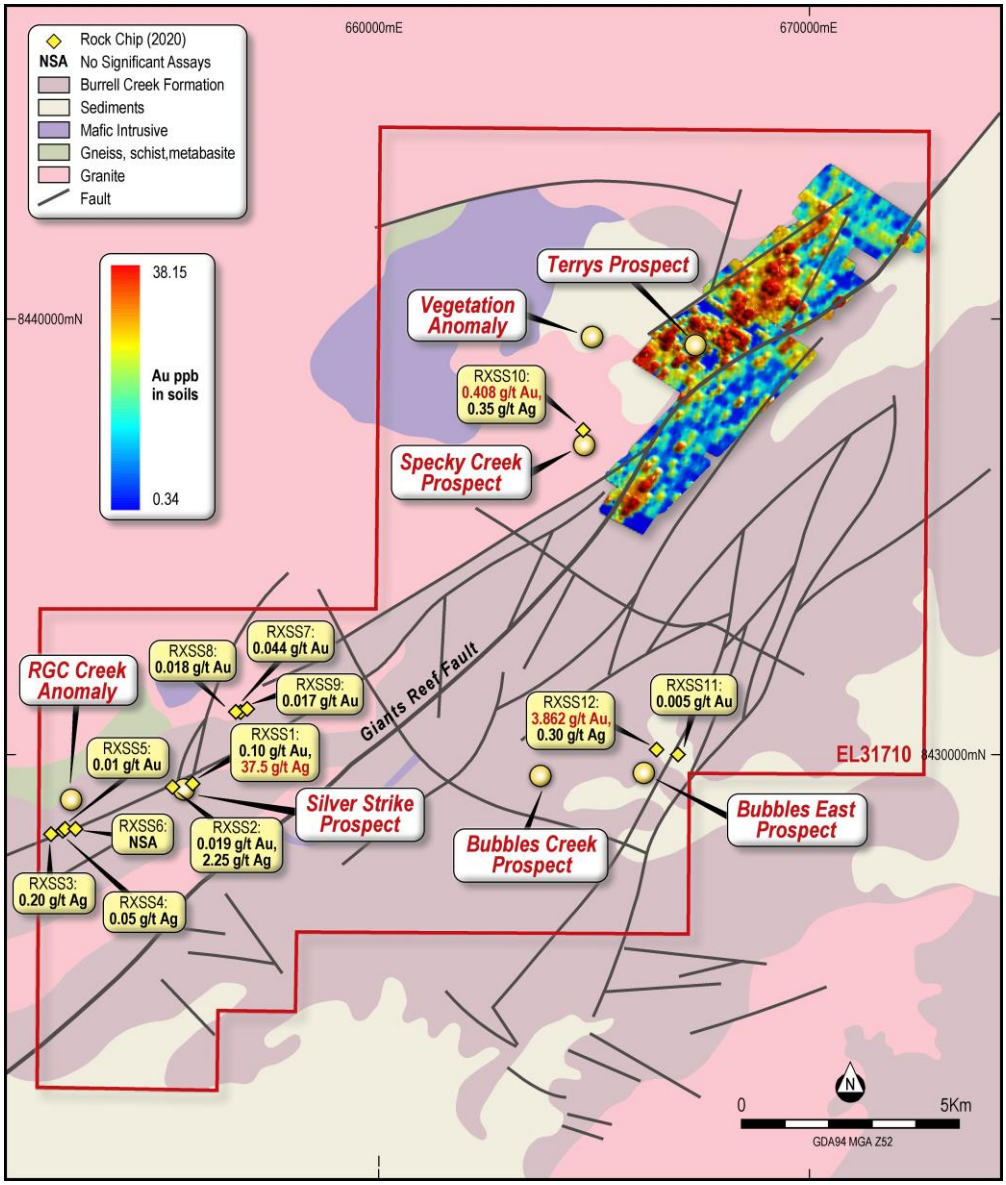


Figure 2 - Berinka Pine Creek – Reconnaissance Rock Chip Results

Rock chip results for all samples collected are shown in Table 1.

Silver Strike is situated on a SW-NE trending structural corridor sub-parallel with the regionally important Giants Reef Fault. The structural corridor is associated with a series of flexure faults and splays and was previously explored for base and precious metals.

Two samples (RXSS1 and RXSS2) were collected from veins associated with the Silver Strike prospect, with RXSS1 returning 37.5g/t Ag.

The RGC Creek prospect is located approximately 2km along strike to the west of Silver Strike and is characterized by a highly anomalous gold zone approximately 3,000m x 700m in area as demonstrated by historic high density stream geochemistry data. Rock chip sampling within this catchment failed to identify the source of historic stream sediment anomalism.

RXSS12 – Quartz vein in ferruginous siltstone grading 3.8g/t Au

Specky Creek was discovered by Carpentaria Exploration Company (CEC) in the mid-1980s. Carpentaria located anomalous float to 180g/t Au and 142g/t Ag in Specky Creek and followed this up with costeaning, which revealed minor gold bearing veining[1].

A float sample was taken from the costean spoil of a weathered narrow silica-sulphide-tourmaline lode. The nature of the float suggests a lode less than 10cm wide. Intercepts on adjacent costeans suggest a NE striking structure of at least 50m strike. Float sample RXSS010 returned 0.41g/t.

[1] CEC Final Report (1990) Exploration Licence 4650 – Open File NT Mines Dept CR 1991/024

A major, multi drainage area anomalous for Au, As and Bi was identified at the Bubbles Creek East prospect.

During the traverse down an adjacent creek within the broader catchment a strongly ferruginous quartz vein hosted by ferruginous siltstone was located, 15cm wide with trace remnant pyrite, exposed over 5m of strike. Sample RXSS12 collected from this vein assayed 3.8g/t Au.

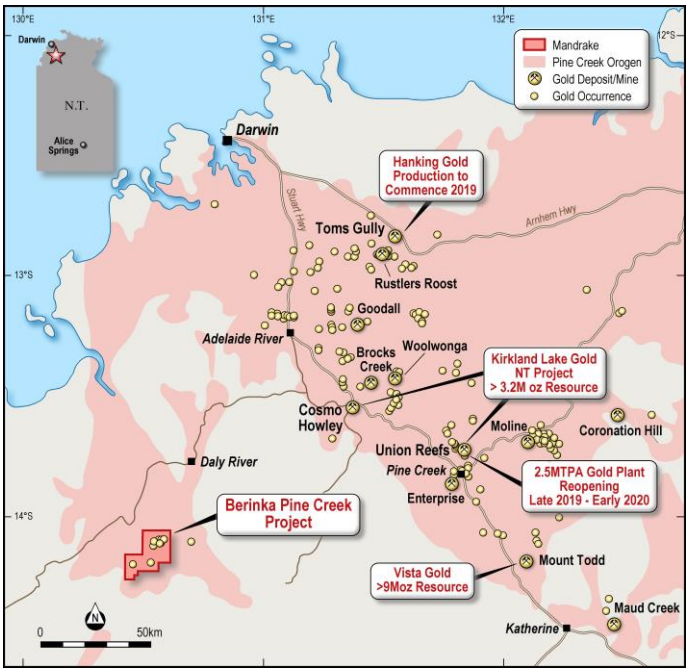
Current travel restrictions enforced by the Northern Territory and Western Australian state governments pursuant to the Covid-19 pandemic have prevented any further work at Berinka. Further, the Northern Land Council has suspended non-essential travel to the Aboriginal communities in the Berinka area and is monitoring the activities of exploration companies closely.

An application to undertake drilling at the Berinka Pine Creek Project, known as a Mining Management Plan (MMP), was submitted to the Northern Territory Department of Primary Industry and Resources (DPIR) in August 2019. The Company is in the process of modifying the MMP application. Dependent on Covid-19 restrictions, a drilling programme testing several targets is scheduled for mid-2020, immediately following the wet season.

This announcement has been authorized by the board of directors of Mandrake.

Berinka Pine Creek Project - Background

Gold mineralisation at the project is associated with >10km strike of poorly tested structurally controlled igneous units of the Proterozoic Pine Creek Orogen. Previous reverse circulation (RC) drilling has intersected gold mineralisation associated with sulphide rich veins and is open at depth and along strike at the Terrys prospect with a best intersection of 4m @ 6.56g/t from 32m (TRP-018). A complete list of all historic drill intercepts is contained in the Mandrake Resources prospectus lodged with the ASX on 24 May 2019.



Location of Berinka Pine Creek Project

About Mandrake Resources

Mandrake is a junior exploration company established with the purpose of exploring and developing gold, nickel, copper and PGM opportunities. The Company recently entered into an agreement to earn-in to exploration tenure prospective for Ni/Cu/PGMs in the exciting Jimperding Metamorphic Belt, 70km NE of Perth.

Mandrake also owns a mineral exploration project located in the prolific Pine Creek Orogen of the Northern Territory prospective for gold, silver and base metals.

For further information visit www.mandrakeresources.com.au

Competent Persons Statement

The technical information in this announcement complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Harry Mees, consulting geologist to Mandrake Resources. Mr Mees is a Member of the Australian Institute of Geoscientists. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Mees consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Table 1: Rock Chip Results

Sample ID	Easting*	Northing*	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Description
RXSS1	655750	8429290	0.1	**37.5**	681	**712**	22	Bucky quartz + silicified carbonate vein, mesothermal, to 50cm wide, brecciated margins, intermittent outcrop and boulder float over approximately 50m strike. Subvertical to steep south dipping. Hosted by sandy greywacke. Random rockchip.
RXSS2	655539	8429213	0.019	2.25	**2080**	65	5.5	Bucky quartz + silicified carbonate vein, mesothermal, traces malachite. 50cm wide vein with brecciated margins, intermittent outcrop over 40m strike. Dip 85 to 170 degrees. Hosted by sandy greywacke. Random rockchip.
RXSS3	652472	8428166	-	0.2	18.6	6	1.5	Greater than 3-4m wide zone of intense silicification + brecciation in greywacke, zone strikes greater than 2km. South dip. Major splay of Giants Reef system. Forms WSW trending ridgetop. Random rockchip.
RXSS4	652711	8428250	-	0.05	9.6	2.4	1	As for RXSS03, 4-6m wide zone, random rockchip.
RXSS5	652726	8428292	0.01	-	3.6	3.4	6.5	As for RXSS03, 3-4m wide zone, slightly more ferruginised, some boxwork textures after carbonate blades. Random rockchip.
RXSS6	653032	8428387	-	-	3.6	2.2	2	As for RXSS03, 4-5m wide zone, slightly more ferruginised, some boxwork textures after carbonate blades. Random rockchip.
RXSS7	656832	8430972	0.044	-	6	3.2	3	Quartz veining 5-20cm wide, greater than 30m strike, vuggy, ferruginous after sulphide. Dipping 80 towards 262 degrees, hosted by brown oxidised mafic. Random rockchip.
RXSS8	656809	8430985	0.018	-	4.8	2	2.5	Irregular quartz veining, 2-3m wide zone of approximately 15% quartz veining, north trending, hosted by ferruginous siltstone.
RXSS9	656981	8431012	0.017	-	4	3.6	7.5	Quartz veining in ferruginous metaseds, outcrop in bank of creek, veins to 10cm wide, breccia textured. Various orientations, including dipping 60 to 280 degrees. Random rockchip sample.
RXSS10	664755	8437402	**0.408**	0.35	83.4	**533**	61	Silica-sulphide-tourmaline lode in granite, float from spoil of old costean. Lode perhaps 10cm wide. Float sample.
RXSS11	666913	8429933	0.005	-	6	4.6	2.5	Sheeted quartz veins in silicified and brecciated sandstone, veins 2-3cm wide, overall zone aproximately 6m wide. Veins dipping 75 to 300 and 80 towards 282 degrees. Random rockchip.
RXSS12	666439	8430044	**3.862**	0.3	32.2	3.2	3.5	Quartz vein in ferruginous silstone, 15cm wide, quartz-hematite, traces of pyrite. Exposed over 5m of strike, striking to 350 degrees. Random rockchip.

* Coordinates are in GDA94, MGA Z52
- Less than detect ion limit (0.005g/t)

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.*	• Rock chips collected during field inspection of various stream sediment and historic rock chip anomalies. • Rock chips collected from outcrops with a geological hammer. • Outcrops represent resistant and exposed portions of local geology. Sampling targeted structural features and potential alteration. • Historical chip sampling; no details of the sampling methods were reported in the source (CEC Final Report (1990) Exploration Licence 4650 – Open File NT Mines Dept CR 1991/024).
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).*	• Not applicable – surface rock chip samples
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure*	• Not applicable – surface rock chip samples

Criteria	JORC Code explanation	Commentary
	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.*	
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.*	• Short geological description recorded of each sample collected. • Dip, strike and geometry recorded for any stratigraphic, structural or vein feature associated with the sample location.
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.*	• The samples were sent to an accredited laboratory for sample preparation and analysis. All samples were sorted, dried, crushed and pulverized to -75um to produce a homogeneous 50g subsample for analysis. A grind quality target of 85% passing -75um was established. • Quality control procedures included the collection of field duplicates every 30 samples. • Intertek Genalysis' internal QAQC procedures included insertion of certified standards, blanks, check replicates and testing for grind fineness of 85% passing -75um. • Historical rock chip sampling: sampling methodology is not available. The work was carried out under supervision of a Chartered Professional Geologist, it is assumed normal industry practices were used. • The samples were analysed by an accredited laboratory (Classic Comlabs Limited).
Quality of assay data	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered*	• The analytical technique used a 50g charge fire assay and is considered appropriate to detect gold mineralization. Fire assaying

Criteria	JORC Code explanation	Commentary
and laboratory tests	*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.*	is considered a total assay. • The 4 acid digest 48 element analytical technique is considered a total assay for Ag, As, Bi, Ca, Cd, Ce ,Co, Cs, Cu, Ga, Ge, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, Re, S, Se, Sr, Te, Tl, Zn. It is considered near total for Al, Ba, Be, Cr, Fe, Nb, Sb, Sc, Sn, Ta, Th, Ti, U, V, W, Y. It is a partial technique for Hf and Zr. • Historical rock chip sampling: the samples were analysed for gold by fire assay and base metals by Atomic Absorption Spectroscopy.
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.*	• The company used industry standard techniques for sampling and used an independent laboratory. • Primary geological and sampling data were recorded digitally. • Historic assay results were reported in the Final Report (EL 4650) prepared by CEC as referenced.
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.*	• Rock chip samples were located using hand held GPS with accuracy of +-3m. • The grid system used is MGA GDA94 Zone 52
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.*	• Only reconnaissance sampling completed – spacing is variable and based on outcrop location and degree of exposure • Samples were taken at non-regular intervals according to observations at the time in the field. • No sample compositing has been applied
Orientation of data in	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering*	• Samples were taken according to geological observations at the

Criteria	JORC Code explanation	Commentary
relation to geological structure	*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.*	time in the field.
Sample security	• *The measures taken to ensure sample security.*	• Samples were placed in tied calico bags with unique sample numbers. Once delivered from the field the samples were housed in secure premises prior to laboratory submission by Mandrake personnel. Samples were placed in cable tied polyweave bags for transport to the assay laboratory. • The assay laboratory confirms that all samples have been received and that no damage has occurred during transport. • Results data was emailed to the Mandrake MD.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits/reviews have been undertaken to date.

• 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 rock chip samples collected were located on EL31710 which is held 100% Focus Exploration Pty Ltd, a subsidiary of Mandrake Resources Limited • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Gold mineralization on EL31710 was discovered by Carpentaria Gold, who carried out intensive exploration work culminating in RC drilling of 36 short holes at the Terry's prospects.

Criteria	JORC Code explanation	Commentary
		• China Australia Land Resources (CALR) carried out geochemical surveys defining gold anomalism and drilled 4 diamond holes. These diamond holes were apparently not marked up or geologically logged and only party sampled prior to CALR relinquishing their tenement.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Proterozoic orogenic lode gold and base metal deposits. They are hosted by Berinka Volcanics and Ti-Tree Granophyre proximal to the major regional Giants Reef Fault zone in the Pine Creek Orogen.

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.*
		• Not applicable – surface rock chip samples

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.*	• No length weighting or cut-off grades have been applied • No metal equivalent values have been reported.

Criteria	JORC Code explanation	Commentary
	• *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').*	• Not applicable – surface rock chips.
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 announcement. A plan view of rock chip locations is provided.
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 results reported in Table 1
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.*	• All meaningful information provided
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.*	• Potential work across the Berinka project may include further verification drilling, sampling, assaying and QA/QC. Other further work may also include mapping, surface sampling, ground or airborne geophysics as well as in-fill or exploratory drilling