

Date: 15 November 2022

ASX Code: MAN

Capital Structure

Ordinary Shares: 534,499,920
Unlisted Options: 18,000,000 (3c exercise)
Current Share Price: 4.7c
Market Capitalisation: \$25.1M
Cash: \$17.1M (Sep. 2022)
EV: \$8.0M
Debt: Nil

Directors

Lloyd Flint
Non-Executive Chairman
Company Secretary

James Allchurch
Managing Director

Roger Fitzhardinge
Non-Executive Director

Contact Details

First Floor
10 Outram Street
West Perth WA 6005
Australia

Tel: +61 9200 3743

mandrakeresources.com.au

Further high-grade drill results up to 7.3g/t Au at Berinka

Highlights

Gold-copper results

- **Individual metre results received from recent RC and diamond drilling. Hole FBRC013 returned:**
 - **6m @ 2.3g/t Au and 0.34% Cu from 5m including;**
 - **3m @ 3.8 g/t Au and 0.35% Cu from 7m**
 - **1m @ 7.3g/t from 164m**
- **High-grade Au/Cu mineralization identified along 2km strike**
- **Au/Cu mineralisation and previously released Ni-PGE potential of the Sandy Creek mafic demands follow-up drilling**

Opportunities

- **Mandrake evaluating new project opportunities and undertaking project generative work focusing on battery metals. The market will be updated with any material developments**

Mandrake Resources Limited (ASX: MAN) (Mandrake or the Company) has now received final results from reverse circulation (RC) and diamond drilling at the 100%-owned Berinka Pine Creek Gold-Copper Project in the Northern Territory.

Mandrake drilled a total of 11 holes for 1,131m which comprised 1,047m of RC drilling plus an 84m diamond tail of NQ2 core at FBRD014 (Figure 1). RC sampling primarily comprised 4m composites, the results of which were released 19 October 2022.

Results have now been received for diamond core (FBRD014) and individual metre samples over mineralised intervals identified by the 4m composites results.

Gold-Copper Results

FBRC013 was drilled at Terry's Gap to test along strike from mineralisation intersected during the 2020 RC drilling campaign. Strong oxide gold-copper mineralisation associated with weathered quartz veining and silica alteration was intersected near the top of the hole from 4m, returning 6m @ 2.3 g/t Au and 0.34% Cu which included 3m @ 3.8 g/t Au and 0.35% Cu from 7m.

Several zones of strong alteration and veining were mostly related to rafts of sheared gabbro and quartz/pyrite veining within the Ti-tree Granophyre host rock. The interval 164-165m assayed 7.3 g/t Au.

About Mandrake Resources

Mandrake is a junior exploration company established with the purpose of exploring and developing gold, nickel, copper and PGE opportunities. The Company recently entered into an agreement to earn-in to exploration tenure prospective for Ni/Cu/PGEs 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: Summary of RC drill collars – Berinka Pine Creek Gold Project

HOLE_ID	Prospect	East*	North*	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Comment
FBRC008	The Cross	666845	8439612	266	-60	67	105	
FBRC009	The Cross	666791	8439611	266	-60	66	72	
FBRC010	The Cross	666876	8439715	265	-60	68	72	
FBRC011	William's Corner	665772	8438888	296	-60	60	86	
FBRC012	William's Corner	665831	8438872	296	-60	60	108	
FBRC013	Terry's Gap	666169	8439131	356	-60	60	174	
FBRD014	Vegetation Anomaly	665258	8439688	336	-60	60	155.83	84m diamond tail
FBRC015	Vegetation Anomaly	665350	8439734	335	-60	61	124	
FBRC016	Vegetation Anomaly	665158	8439666	335	-60	60	150	
FBRC017	Sandy Creek	665258	8440783	41	-60	61	12	Hole abandoned- collapsed collar
FBRC018	Sandy Creek	665264	8440796	70	-60	60	72	

* - Coordinates are in GDA94 MGA Zone 52. Azimuths are referenced to Magnetic North.

Table 2: Summary of significant RC drill intercepts – Berinka Pine Creek Project

HOLE_ID	From (m)	Interval (m)	Sample Type	Au g/t	Pd ppb	Pt ppb	Cu ppm	Description
FBRC009	9	2	RC 1m splits	0.49	2	<1	153	Quartz veined weathered granophyre
FBRC011	0	3	RC 1m splits	0.43	1	<1	67	Weathered gabbro
FBRC013	5	6	RC 1m splits	2.29	4	<1	3409	Weathered granophyre
includes								
FBRC013	7	3	RC 1m splits	3.78	4	<1	3485	Weathered granophyre
FBRC013	153	2	RC 1m splits	0.41	2	<1	84	Quartz-pyrite veining in gabbro/altered gabbro
FBRC013	157	2	RC 1m splits	1.03	1	<1	420	Altered gabbro
FBRC013	164	1	RC 1m split	7.28	1	<1	604	Quartz-pyrite veining in granophyre
FBRD014	10	4	RC 1m splits	0.83	22	13	275	Weathered gabbro
FBRD014	95	3	½ CORE NQ2	0.27	<1	<1	534	Hydrothermal breccia

Note: An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of the mineralisation are unconfirmed at this time

- **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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Holes were drilled to variable depth dependent on geological observation of the rig geologist. • RC samples were collected from a rig mounted cyclone. A 3kg sub sample was split into a calico bag from the main sample through a riffle splitter mounted under the cyclone; the remainder of the sample was collected in a bucket and placed on the ground in rows of 20. Composite samples (3kg) were collected over 4 metre intervals by spear sampling the four sample piles corresponding to the sample interval. <p>All samples were dry.</p> <p>Appropriate standards were inserted into the sample sequence at regular intervals.</p> <p>Composite samples and selected individual 1 metre splits were pulverized to produce a 50 g charge for fire assay and a sub-sample for 4-Acid digest 33-element determination by MS. Samples were analysed by North Australian Assay Laboratories, Pine Creek.</p>
Drilling techniques	<ul style="list-style-type: none"> • 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). 	<p>The holes were drilled using reverse circulation drilling, with a 5 1/2" face sampling hammer. Hole FBRD014 was RC pre-collared to 72m and then diamond cored using standard NQ2 bits. The core was fully oriented using Reflex ACTII.</p>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Recoveries were noted in the drill logs for each individual metre interval. Recoveries were visually estimated from the quantity of drill chips collected in standard plastic sample bags for each metre drilled. Core recoveries were measured; core recovery was near 100%. Samples were collected through a cyclone to maximise recovery of fines. A well-fitting stuffing box was used around the collar to minimise material to the outside return. Holes were terminated by the geologist when the samples could no longer be kept dry. Rods, cyclone and splitter were regularly cleaned. Moisture content was semi qualitatively estimated. There is no observable relationship between recovery and grade in the RC drilling at this stage.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The lithology, colour, weathering, texture, mineralogy, alteration and vein percentage were recorded for each metre interval. Data was captured using Excel spreadsheets on a field logging computer. Basic geotechnical logging of the diamond core was carried out. Logging is both qualitative and quantitative. Core trays were photographed before and after wetting them down. All holes were logged in full.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> RC samples were split at a ratio of 87.5%-12.5% through a riffle splitter. RC composite samples were collected by spear sampling of the riffle split bulk samples. The samples were sent to an accredited laboratory for sample preparation and analysis. All samples were

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>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.</p> <ul style="list-style-type: none"> Quality control procedures included the insertion of certified standards every 40 samples, and collection of duplicate samples every 50 samples. North Australian Assay Laboratories internal QAQC procedures included insertion of certified standards, blanks, check replicates and testing for grind fineness.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The analytical technique used a 50g charge fire assay and is considered appropriate to detect gold, and PGE group mineralization. Fire assaying is considered a total assay. The 4-acid digest analytical technique is considered a total assay for Ag, As, Bi, Ca, Cd, Ce, Co, Cs, Cu, K, La, Mg, Mn, Mo, Na, Ni, Pb, S, Se, Sr, Te, Zn. It is considered near total for Al, Cr, Fe, Nb, Sb, Sn, Ta, Th, Ti, U, V, W. It is a partial technique for Zr.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The company used industry standard techniques for sampling and used independent laboratories. Primary geological and sampling data were recorded digitally.
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"> The grid system used is MGA GDA94 Zone 52. A handheld GPS (Garmin 66i) was used to locate the drillhole collars to an estimated accuracy of +_3m. Topographic control was not established; all holes are located in an area of subdued topography and

Criteria	JORC Code explanation	Commentary
		topographic effects are not considered material at this stage of the drilling program.
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 classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Hole spacing is variable. The reported drilling is reconnaissance in nature at this stage. Samples were collected continuously at regular downhole intervals.
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"> Samples were collected continuously at regular downhole intervals. The drilling is reconnaissance in nature. There is limited orientation data for key mineralized structures. There is no indication of bias based on the currently known orientation of geological structures.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were placed in tied calico bags with unique sample numbers. Calico bags were bagged in zip tied poly-weave sacks. Once delivered from the field the samples were housed in secure premises prior to laboratory submission by Mandrake personnel. 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	<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/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	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties 	<ul style="list-style-type: none"> The RC holes were drilled on EL31710 EL31710 is held by Focus Resources Ltd, a wholly owned

Criteria	JORC Code explanation	Commentary
land tenure status	<p>such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> 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. 	<p>subsidiary of Mandrake Resources</p> <ul style="list-style-type: none"> There are no material interests or issues associated with the tenement.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Costeaning, rock-chip sampling and ground magnetics work carried out by Carpentaria Exploration Company in the mide-1980's showed indications of gold mineralisation in the area of drilling.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Sulfide-quartz lodes associated with Proterozoic granitoid intrusions and the regional Halls Creek/Giants Reef Fault zone.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Table 2 for significant results from the RC/DD drilling. Drill hole locations are described in Table 1 and on related figures.
Data aggregation methods	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> No length weighting or cut-off grades have been applied. No metal equivalent values have been reported.

Criteria	JORC Code explanation	Commentary
	<p>the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> At this stage the main primary mineralised structural orientations are still being ascertained and are inconclusive. Downhole lengths are reported; true widths are unknown.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in announcement.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> All significant results (>0.2ppm Au) are reported in Table 2.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All meaningful information provided.
Further work	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Extensions of intercepts are likely to be further tested in the next field season by further RC drilling

Criteria	JORC Code explanation	Commentary
	<i>and future drilling areas, provided this information is not commercially sensitive.</i>	