Significant lithium brine discovery at Utah Lithium Project

Exceptional lithium concentrations up to 147mg/L

Date: 22 January 2024

ASX Code: MAN

Capital Structure
Ordinary Shares: 615,759,920
Current Share Price: 4.5c
Market Capitalisation: $27.7M
Cash: $15.5M (Sept 2023)
EV: $12.2M
Debt: Nil

Directors

Lloyd Flint
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Highlights

- **Maiden downhole sampling of oil and gas wells at Mandrake's 100%-owned Utah Lithium Project has returned exceptional lithium concentrations up to 147mg/L**
- **The discovery of multiple lithium-rich brines validates the project as a significant large-scale US high-grade lithium brine play**
- **Outstanding bromine and potassium (potash) values up to 3,480mg/L and 33,600mg/L respectively representing potentially valuable by-products**
- **Results from DLE testing of lithium-rich brines due shortly**
- **JORC-compliant Exploration Target well advanced**
- **Uranium mapping and sampling work due to commence[1]**
- **Mandrake well funded - $15.5M**

Mandrake Resources Limited (ASX: MAN) (Mandrake or the Company) is pleased to advise that a preliminary lithium brine sampling programme at its flagship 93,755-acre (~379km^2) Utah Lithium Project has returned exceptional lithium concentrations of up to 147mg/L.

Managing Director James Allchurch commented:

'The discovery of outstanding lithium concentrations of up to 147mg/L at the Utah Lithium Project far exceeded expectations and, together with Mandrake's expansive 379km^2 land position, solidifies the Utah Lithium project as a major US lithium brine asset.

Our 100%-owned Project is located in a historic mining (copper/uranium) and oil and gas province in a pro-mining conservative state with quality infrastructure and a highly supportive local County administration. These elements position Mandrake's Utah Lithium as one of the most significant critical minerals projects in North America.

Mandrake will now contract a swabbing unit to extract higher volumes of brine from additional oil and gas wells, targeting additional lithium-rich brines. Mandrake is now working to shortly deliver a maiden lithium Exploration Target along with preliminary Direct Lithium Extraction (DLE) results.

In an exciting development, concurrent with the lithium work, Mandrake is set to commence uranium mapping and sampling activities across the project area - one of the most significant uranium mining districts in Utah.'

[1] See ASX Announcement 12 October 2023

Wireline Sampling Results

Mandrake completed wireline brine sampling at five oil and gas wells owned by local oil field owner Paradox Resources Inc (Paradox). Mandrake signed a Well Access Agreement with Paradox in May 2023[2] allowing Mandrake to sample Paradox-owned oil and gas wells. Paradox operates over 150 wells on approximately 98,000 net acres in the Paradox Basin.

A wireline unit from The Wireline Group (TWG) collected samples using a ball-valve bailer configuration. Mandrake regards wireline bailer sampling as conservative insofar for the potential to return relatively diluted lithium concentrations when compared to brines collected through swabbing.

Each sample was sent to an accredited laboratory for comprehensive analytical testing, with larger bulk samples sent to two Direct Lithium Extraction (DLE) providers, the US-based Bill Gates Breakthrough Energy Fellows-funded Electroflow Technologies Inc and an advanced Australian-based DLE firm. Analytical results for the brines are provided in Table 1.

Table 1: Concentrations of Li, Br and K in brine samples collected from wireline bailer sampling

Well	Long/Lat	Target Formation	Sample Depth (ft)	Li (mg/L)	Br (mg/L)	K (mg/L)	Comments
Big Indian #1	38.239428/ 109.275236	Paradox (Upper)	6,150	147	2,920	33,600	
Big Indian #1	38.239428/ 109.275236	Paradox (Lower)	7,560	140	3,480	18,600	
Lisbon B-912	38.186416/ 109.240868	Leadville	8,480	65.6	278	1,790	
Lisbon D-89	38.189514/ 109.288069	Paradox	7,680	38.4	916	9,250	Likely contaminated/diluted by kill fluids/injected water in documented 2022 O&G operations. Results disregarded. Swabbing planned to attain representative sample
Lisbon D-84	38.204969/ 109.286034	Leadville	8,560	59	<DL	1,680	
Hook n Ladder Fed 15-25	38.245936/ 109.336416	Paradox	6,800	18.5	774	9,980	Likely contaminated/diluted by kill fluids/injected water in documented 2019 O&G operations to remove stuck swab cup. Results disregarded. Swabbing planned to attain representative sample

<DL – below detection limit of 50 mg/L

Brines collected by Mandrake returned lithium concentrations of up to 147mg/L, far exceeding expectations and, given Mandrake's large 379km^2 land position, bodes well for the publication of a significant Lithium Carbonate Equivalent (LCE) Exploration Target.

Furthermore, significant bromine concentrations up to 3,480mg/L and outstanding potassium (potash) concentrations up to 33,600mg/L were recorded, indicating the potential for valuable by-products.

[2] See ASX Announcement 22 May 2023

See Table 2 below for lithium concentrations of various non-salar oil field brine companies.

Table 2: Lithium concentrations of North American non-salar lithium brine companies

Company	Location	Li (mg/L)	Status
Anson Resources (ASX: ASN)	Utah, USA	112[1]	Construction of demonstration plant
E3 Lithium (TSX-V: ETL)	Alberta, Canada	74.5[2]	Pilot plant DLE field testing
Arizona Lithium (ASX: AZL)	Saskatchewan, Canada	106[3]	Pilot plant DLE field testing

[1] – Anson ASX release 16 October 2023
[2] - https://www.e3lithium.ca/our-assets/resources/
[3] - https://www.arizonalithium.com/projects/prairie-lithium/

Brines collected from the Big Indian #1 well were derived from the Paradox Formation where four different sets of perforations are open over an interval of 2,600ft, with all perforations likely contributing brines from independent discrete clastic brine reservoirs. Table 1 shows sample collection depths.

One or more of the open-perforations in the Paradox clastic brine reservoirs at the Big Indian #1 well likely has significantly higher lithium concentrations than the 147mg/L sample; given that the 147mg/L sample is a mixture of all the currently open-perforations. The identification and isolation of this independent clastic unit(s) would likely produce lithium at a significantly higher concentration.

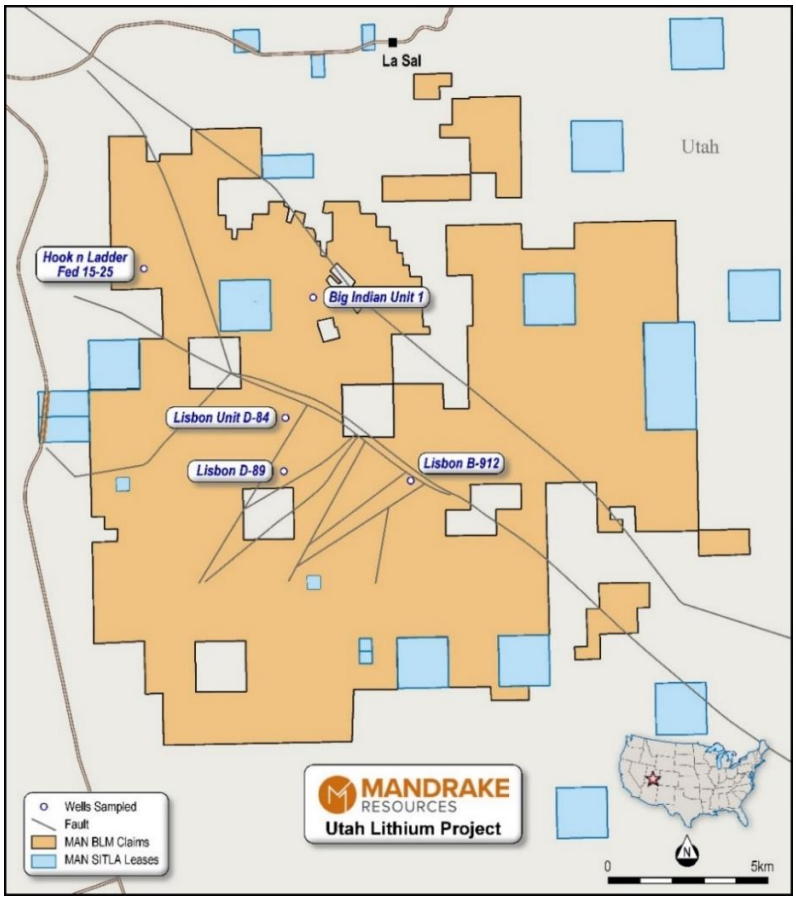

Figure 1: Wireline Sampling Locations – Utah Lithium Project

Concentrations of lithium in the high-volume, high-porosity Leadville formation are relatively high and consistent, with concentrations up to 65.6mg/L.

Importantly, the concentrations of lithium in the Mississippian Leadville Formation, and older Formations have not been determined in the central fault-bound NW-SE trending block where the Big Indian #1 is located - now known to contain significant lithium concentrations in the Paradox Formation. The sampling of the Leadville Formation within this fault block is crucial in determining if the high Paradox lithium concentrations are present in the 650 foot thick, high permeability, high-porosity Leadville Formation.

Bromine

Bromine is a US$3.6 billion per annum market with applications in flame retardants, water treatment, biocides and cutting-edge hydrogen–bromine batteries[3]. Bromine represented approximately 19% of Albermarle Corporation's revenue in 2022 who have stand-alone bromine operations in the Smackover Basin, Arkansas with concentrations between 5,000 and 6,000mg/L.[4]

Outstanding bromine results at Mandrake's Utah Lithium Project of up to 3,480mg/L represent a significant potential high-value by-product for Mandrake.

Potassium (potash)

The global potash market size was estimated at US$57.74 billion in 2022 and is expected to grow at a compound annual growth rate (CAGR) of 4.9% from 2023 to 2032[5]. Potash is essential for providing the necessary nutrients that crops need to thrive. It enhances root development, nutrient absorption, and overall plant growth.

Potassium results from Mandrake's Utah Lithium Project have returned exceptionally high values of 40,656mg/L and 33,600mg/L for K_2O and K respectively. The occurrence of potassium in such high concentrations is an exciting development for the company and may represent a significant commodity as exploration develops.

Examples of global potash-bearing brine deposits is provided in Table 3.

Table 3: Global potash-bearing brine deposits in continental closed basins

Deposit	Country	Elements present	Status	K_2O (mg/L)	K (mg/L)
Salar de Atacama	Chile	Li, K	Producer	22,200	18,347
Qarhan Salt Plain	China	HAL, K, Li, B, Mg	Producer	14,400 – 20,900	11,901 – 17,273
Dead Sea	Israel/Jordan	K, Mg	Producer	7,200 – 9,000	5,950 – 7,438
Searles Lake	USA	NACO, Li, K	Past production	17,900 – 31,000	14,793 – 25,620

Source: Orris (2011), USGS. Deposit Model for Closed-Basin Potash-Bearing Brines
Li – lithium, K – potassium (potash), B – boron, HAL – halite, Mg – magnesium, NACO – sodium carbonate (trona)
K_2O : K conversion = 1.21

[3] https://www.marketsandmarkets.com/Market-Reports/bromine-market-42782196.html
[4] Albemarle Corporation 2022 Form 10-K Annual Report". U.S. Securities and Exchange Commission. Feb, 2023
[5] https://www.grandviewresearch.com/industry-analysis/potash-market-report

Lithium Field Operations - Next Steps

A swabbing unit will be mobilised to site end Q1 2024, enabling:

1. larger volumes of brine to be removed from the well allowing for the ingress of brines more representative of surrounding formations, and for comprehensive DLE testing;
2. the potential isolation of clastic unit(s) in the Paradox Formation (Big Indian #1 well) containing higher lithium brine concentrations;
3. sampling of the Leadville Formation in the Big Indian #1 well;
4. sampling of additional wells; and
5. sampling of additional formations.

All items above have the potential to significantly enhance any lithium Exploration Target/Inferred Resource Estimation.

Forthcoming Newsflow

During Q1/Q2 2024, Mandrake will be reporting on the following items:

- Swabbing and further sampling of lithium brines
- Publication of JORC-compliant Lithium Exploration Target
- Results of DLE processing work on Utah Lithium Project brine
- Permitting update for Bureau of Land Management (BLM) re-entry wells
- Permitting update for new well (under the auspices of Utah State)
- Commencement of uranium field mapping and sampling as soon as practicable (see 11 October 2023 MAN ASX release) – weather dependent

This announcement has been authorised for release by the Board of Mandrake Resources.

Competent Persons Statement

The information related in this announcement has been compiled and assessed under the supervision of Mr James Allchurch, Managing Director of Mandrake Resources. Mr Allchurch is a Member of the Australian Institute of Geoscientists. He has sufficient experience that is relevant to the information 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 Allchurch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

- # 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.	• A ball-valve bailer, capable of storing up to 3.4 L of liquid, attached to a wireline truck was used to retrieve samples from the formations of interest using existing perforations in historical oil and gas wells. • A mixture of brine and minor volumes of hydrocarbon liquids retrieved from the bailer were poured into a clean bucket and then into a 2,000 mL separator funnel to separate hydrocarbons from water. After 5-10 minutes of allowing for hydrocarbon/brine separation, a 200-300 mL aliquot of the brine was captured from the separation funnels to be analysed with an AquaTroll 500 water multimeter. The Aqua Troll was factory calibrated upon shipment and re-calibrated upon arrival for high conductivity brines (~100,000 µs/cm). After 30-40 minutes of allowing for hydrocarbon/brine separation, the brine separated was collected in a HDPE sampling bottle with minimal headspace and transported in a cooler on ice. • Sampling equipment (e.g. bucket, beakers, separation funnels, etc.) was thoroughly cleaned with soap and water and rinsed 3x - 4x with distilled water between sample points. • The sample retrieval method used only samples accumulated fluids in the immediate wellbore and is not always an accurate representation of the native brines in the adjacent targeted geological formations. In this case, it is possible that Mandrake will carry out a future brine sampling campaign that improves sample confidence by using a swabbing rig that allows for bigger

Criteria	JORC Code explanation	Commentary
		volumes of liquid to be obtained from the stratigraphic formations. • Historical wells may not be optimally perforated to target fluids associated with the highest lithium-brine units. In this case, it is possible that Mandrake will carry out a future brine sampling program that isolates stratigraphic zones of interest and establishes new perforations to enhance the pumping of lithium-enriched brine to the surface.
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).	• Mandrake has yet to conduct any drilling at the Utah Lithium Project. • The historical oil and gas company owned wells were drilled using conventional oil and gas drill rigs that drill vertical well bores.
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.	• Sample size is constrained by the capacity of the bailer and reduced by its oil/water saturation. • Measurements of the original liquids recovered from the bailer, oil saturation and final sample collected were recorded. • Actions were taken to extract brine from each sample and separate-out any minor liquid hydrocarbons that were retrieved from the original mixed-liquids in the bailer. • To the best of Mandrake's knowledge, no relationship exists between the oil saturation and the concentrations of other elements in the brines.
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.	• Electric Conductivity, Temperature and pH were recorded in the field using an AquaTroll 500 instrument. • Petrophysical well logs associated with the historical wells include gamma-ray, neutron density, resistivity, sonic, and mud logs.

Criteria	JORC Code explanation	Commentary
	• The total length and percentage of the relevant intersections logged.	• The petrophysical logs provide information such that geologists can make stratigraphic formation picks to define the down-well lithology of each well. These interpreted lithological logs are used to prepare cross-sections to map the reservoir and to target future well locations.
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.	• No sub-sampling techniques were applied. • Sample collection and preparation followed the protocols of the NELAC accredited laboratories used. • A blind synthetic standard was provided every 20-30 samples or at the beginning and end of a set of samples. Blind blanks (distilled water) are provided every 50-60 samples or at the beginning of each set of samples and a check lab was used for every second sample. • The contracted labs reported the following methodologies for sample analysis: o Sample Digestion: EPA 200.2 o Anions: EPA M300.0, EPA 300.0, SM2320B, SM4500S2-D, SM2310BSM, SM D516 o Cations: EPA M200.7 & EPA 200.7 o Volatile Organic Compounds (Hydrocarbons): EPA M8015D, EPA M8260C/D, and EPA M3520C
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)	• Reported analytes typically include, for example, cation and anion data along with a limited number of trace elements. • Assay procedures are considered appropriate. • Quality control procedures included the inclusion of standards and duplicates and the use of external laboratory checks.

Criteria	JORC Code explanation	Commentary
	and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
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.	• Lithological intersections not assessed as bailed sampling was performed on formation brines. • Documentation of primary field data detailed above was conducted under standard operating procedures.
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.	• Well locations are identifiable in the field. • The longitude and latitude locations of the oil and gas wells samples are provided in Table 1.
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.	• Data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for a potential future Mineral Resource or Ore Reserve. • No compositing was applied to the brine data.
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.	• The effect of structures in the concentration of different elements in the brines is not fully understood. • Seismic interpretation has been undertaken by Mandrake to evaluate geological structures but further work is still required. • The location of the historical oil and gas wells sampled is presented with reference to the main known structures in the images in the body of the announcement.
Sample security	• The measures taken to ensure sample security.	• Samples were kept and safely stored by Mandrake's personnel while at the field and shipped by registered courier to the laboratories and DLE providers.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits/reviews of the data have been undertaken at this stage.

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 Utah Lithium Project is located approx. 60km SSE of the City of Moab, in the State of Utah in the United States.
		• The total land position is 93,755 acres and includes:
		  o 34,670 acres within an Other Business Agreement (OBA) with the Utah State Government's School and Institutional Trust Lands Administration (SITLA).
		  o The remaining land position of approximately 59,085 acres is comprised of over 2,950 staked Bureau of Land Management (BLM) placer claims.
		• Mandrake has potash rights over SITLA tenure only.
		• All the land tenure / staked BLM claims are 100% owned by Mandrake's US subsidiary (Mandrake Lithium USA Inc.) or held in trust by Mandrake's commissioned landman, in which the deeds are awaiting transfer to Mandrake Lithium USA Inc.

Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical exploration work has been performed by oil and gas companies who have completed hydrocarbon-specific exploration and production activities over the last 80 years across the lease and claim areas. • Individual wells within oilfields continue to produce in the Paradox Basin and within the boundaries of the Utah Lithium Project.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Project is in the north-central portion of the Paradox Basin. • Structurally, Mandrake's Project occurs on the southern margin of the "Paradox fold and fault belt", which consists

Criteria	JORC Code explanation	Commentary
		of a series of roughly parallel, northwest-trending faults, northwest striking diapiric salt-cored anticlines and synclines in the northern part of the Paradox Basin. • Currently, Mandrake's lithium-brine geological target units are defined by the Devonian McCracken sandstone, the Mississippian Leadville-Ouray Limestone Formation (Leadville Limestone) and the Pennsylvanian Paradox Member of the Hermosa Formation. • The Leadville Limestone comprises massive to thinly laminated, gray, buff, and yellow limestone that were deposited in intertidal to subtidal environments. • The Paradox Basin can be defined by the maximum extent of halite and potash salts in the Middle Pennsylvanian Paradox Formation and is composed of halite interbedded with gypsum, shale, sandstone, and dolomite deposited intermittently in a closed marine depositional environment.

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.*
		• Mandrake has yet to conduct drilling at the Utah Lithium Project.
		• Refer to Table 1 for descriptions of the historic wells documented in this announcement.
		• The historical oil and gas wells were drilled vertically.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations*	• No weighting or cut-off grades have been applied. • No metal equivalent values have been reported.

Criteria	JORC Code explanation	Commentary
	(eg cutting of high grades) and cut-off grades are usually Material and should be stated. • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
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').*	• The oil and gas fluids (hydrocarbons and brine) are produced from large, confined aquifer/reservoir deposits; hence, the brine samples – as fluid media – represent samples from a larger pool of fluids. Accordingly, it is accurate to state that brine data do not have common solid mineral deposit sample intervals or intercepts. Hence downhole lengths and true widths are not applicable to this type of deposit.
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.*	• Historical well collar locations and appropriate lithium-brine information are presented within the figures, tables, and text contents of this announcement.
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 are reported in Table 1. The dataset is too sparse to evaluate grade variations.
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.*	• Based on the Mandrake's current knowledge of the project, all meaningful information has been provided.

Criteria	JORC Code explanation	Commentary
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.*	• Planning of a swabbing campaign to allow for the sampling of more representative native and uncompromised brines further away from the historical oil and gas well bores is currently underway. • Permitting is also ongoing to allow Mandrake to make new perforations in the historical oil and gas wells that target the lithological units most prospective to host lithium rich brines • Direct Lithium Extraction (DLE) test work of the samples referred to in this announcement, to verify that lithium can be extracted from deep-seated brine underlying the Utah Lithium Project, is currently being undertaken by a couple of independent DLE providers. • Work has been initiated to review the potential to generate a JORC compliant Exploration Target. • Post exploration work – consider a lithium-brine Mineral Resource in accordance with JORC (2012).