

Date: 15 May 2023

ASX Code: MAN

Capital Structure

Ordinary Shares: 598,759,920 Current Share Price: 4.3c Market Capitalisation: \$25.7M Cash: \$18.3M (Mar 2023)

EV: \$7.4M Debt: Nil

Directors

Lloyd Flint Non-Executive Chairman Company Secretary

James Allchurch Managing Director

Roger Fitzhardinge Non-Executive Director

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Mandrake identifies multiple Lithium re-entry candidate wells at flagship Utah Lithium Project

Highlights

- Mandrake has completed a detailed due diligence field inspection to confirm potential candidate lithium re-entry wells at its 100%-owned Utah Lithium Project
- A minimum of six wells were identified as lithium re-entry candidate wells with high geological potential to host lithiumrich brines coupled with ease of accessibility
- Mandrake estimates that re-entering an existing well is up to 10 times cheaper than drilling a well
- Mandrake controls a total of 88,096 acres (~356km²) of prime lithium ground establishing the Utah Lithium Project as a potential world-class lithium asset
- Mandrake fully funded \$18.3M as at 31 March 2023



Figure 1 - Shut-in well at the Utah Lithium Project



Mandrake Resources Limited (ASX: MAN) (Mandrake or the Company) is pleased to announce that it has completed a detailed field inspection as part of due diligence aimed at identifying and assessing existing oil and gas wells that represent attractive candidates for potential re-entry to enable the sampling of brines to determine lithium concentrations.

In the initial phases, the identification of candidate wells incorporated a detailed review of local geology, stratigraphy and the analysis of petrophysical logs from dozens of local oil and gas wells (many of which have been digitised and processed to approximate porosity values in various zones). Further consideration was given to final well completion status including specifics related to age of well, casing dimensions, presence of plugs etc.

The field inspection component was undertaken to assess field-specific variables such as well pad condition, well accessibility, road access, environmental status and presence and condition of any above-ground infrastructure.

A minimum of six wells were identified as high priority candidates for lithium sampling re-entry.



Figure 2 – Access road through the middle of the Utah Lithium Project. Note power availability

The Utah Lithium Project is located in the northern Paradox Basin where numerous oil and gas companies have operated for over a hundred years, resulting in an abundance of historical wells which can be re-entered to collect brine for assaying and mineral processing test work. Mandrake estimates that re-entering an existing well is up to 10 times cheaper than drilling a well, making the re-entry approach a highly attractive exploration option.

Mandrake will now largely shift its focus to the completion of well access agreements and the preparation for field activities to facilitate sampling of historical oil and gas wells.

The Paradox Basin in the south-eastern Utah 'lithium four corners' area hosts hypersaline brines historically documented to contain significant concentrations of lithium, potassium salts (potash), bromine, boron and other elements. The Paradox Basin hosts the Cane Creek potash mine operated by Intrepid Potash (NYSE: IPI) (the United States' biggest potash



producer) and the operations of mid-tier ASX-listed lithium developer Anson Resources (ASX: ASN) who has an existing JORC Mineral Resource of 1.04Mt of Lithium Carbonate Equivalent (LCE) and 5.27Mt of Bromine¹.

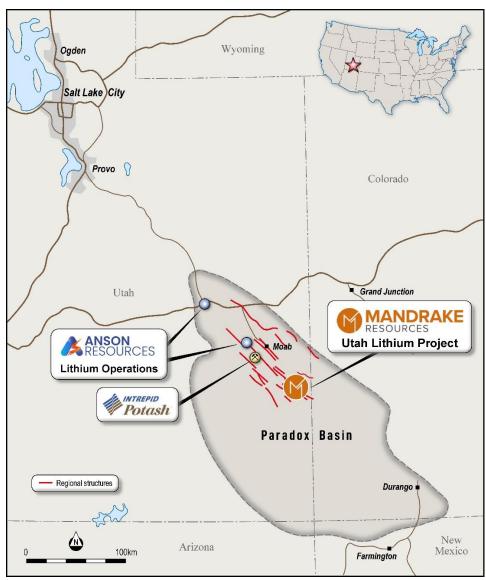


Figure 3: Location of the Utah Lithium Project

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.

 $^{^{1}}$ ASN ASX release dated 2 November 2022