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ENERGY LIMITED

27 February 2023

Jesse-2 Helium Well on Schedule to Spud in Current Quarter

- Jesse-2 on schedule to spud mid-March
 - Jesse-2 will exclusively target the gas zone(s) discovered in Jesse-1A, incorporating managed pressure drilling which will allow testing while drilling the target reservoir zone
 - Jesse-2 located 1.5 miles south-east of the Jesse-1A discovery well and within the same structure which intersected a >200ft gas column and returned 1% helium to surface
 - Jesse-2 well immediately adjacent to existing pipeline connected to offtake partner allowing potential near immediate monetisation of a commercial well
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Grand Gulf Energy Ltd (ASX:GGE, OTCQB:GRGUF) (“Grand Gulf” or the “Company”) is pleased to provide an update on the potentially company-making second pure-play helium well, Jesse-2, in the Red Helium project.

Jesse-2 Operational Update

Jesse-2 is on schedule to spud in mid-March, with all long lead items purchased, a drilling rig contract secured and site construction over 50% complete with work phased in line with rig and crew availability, following the approval of the Drill Permit in early January¹.

Aztec Well Servicing, Co. (Aztec) has been contracted to drill the Jesse-2 well at the Red Helium project². Aztec is based approximately 125 miles southeast of the Red Helium project area, in Aztec, New Mexico.

Aztec is the preferred contractor of GGE’s Drilling Superintendent, Todd Gentles³. Mr Gentles has previously worked with Aztec, including this exact rig and crew with underbalance drilling and testing procedures, whilst drilling wells at the neighbouring Doe Canyon field.

¹ ASX Announcement 5 January 2022 – Drill Permit Received for Jesse-2 Helium Well

² ASX Announcement 24 January 2022 – Jesse-2 Drill Contract Signed

³ ASX Announcement 20 January 2022 – Top Drilling Manager Appointed





Jesse Discovery

The forthcoming drilling of the Jesse-2 well follows the highly encouraging Jesse discovery (Jesse-1A well) which included a >200 foot logged gross gas column (with 101 feet of independently audited net pay) and exceptional helium concentrations of up to 1% returned to surface, exceeding pre-drill expectation⁴.

The Jesse-1A well also encountered a productive and strongly pressured reservoir at 2,465 psi.

Jesse-2 Location

Jesse-2 is located 1.5 miles east-south-east of the Jesse-1A discovery well and was selected as the best of three mature prioritised locations on the Jesse structure. The locations were derived from an extensive review of data from six historic wells and Jesse-1A including calibrated 2D seismic to target a structural high location on the Jesse feature to maximise the thickness of the gas pay zone.

Based on analogue performance, the Jesse discovery has the potential to support in excess of 20 wells within the areal extent of the closure, given the >200-foot column intersected at Jesse-1A.

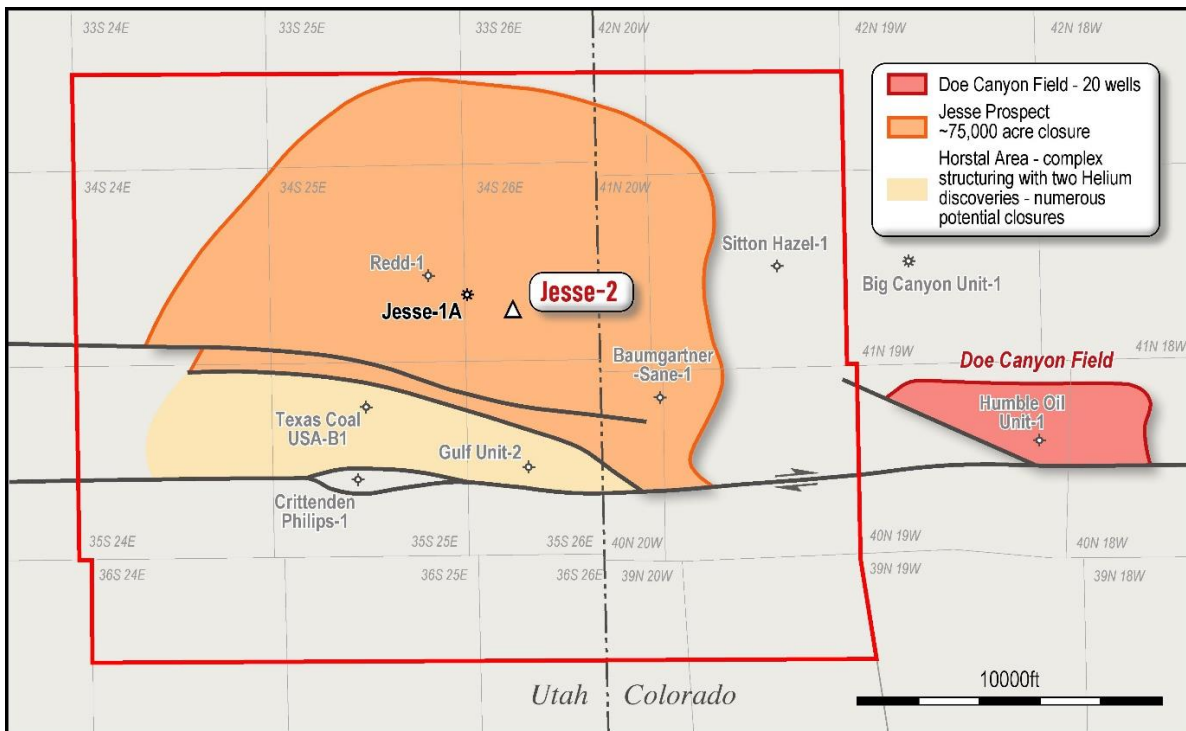


Figure 1: Jesse-2 location showing Jesse structural closure (orange) and major faulting (black).

⁴ ASX Announcement 19 October 2022 – Jesse-1A Downhole Sample Increase Helium Grade





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Jesse-2 Drilling Program

Jesse-2 will exclusively target the gas pay zone(s) to minimize the risk of water production, with the planned total well depth terminating at least 50 feet above the identified gas/water contact at Jesse-1A.

The drilling program incorporates managed pressure drilling through the primary Leadville formation minimising formation damage. The program allows enhanced mud-gas returns and real-time monitoring of reservoir gas flow and gas compositions using mass spectrometry.

On identification of significant helium inflow, a bottoms-up flow test will be conducted to characterise the reservoir.

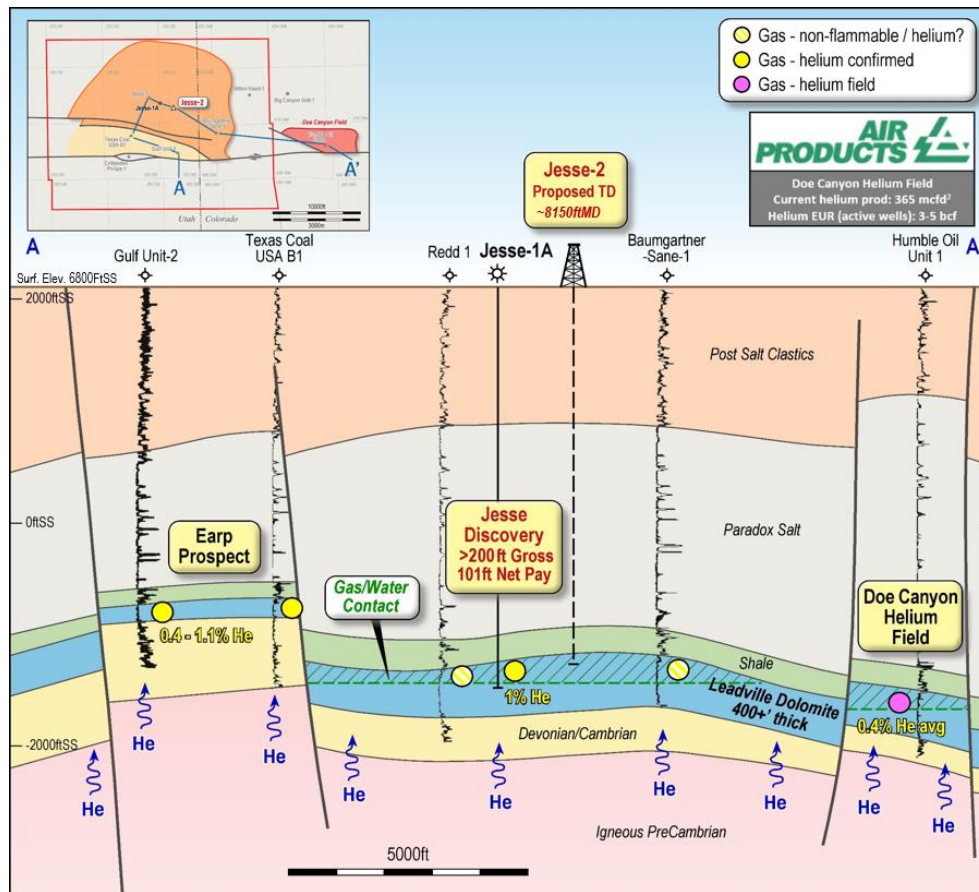


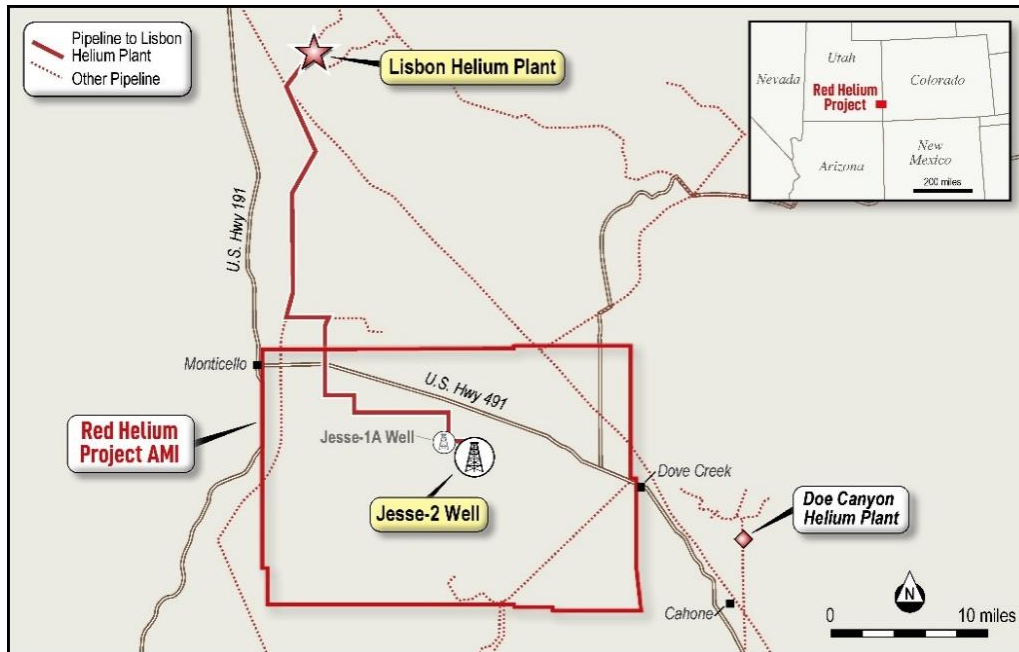
Figure 2: Stylised schematic showing Jesse-2 location exclusively targeting the gas pay zone





Jesse-2 Offtake Agreement

Helium Offtake partner Paradox Resources LLC (Paradox) is owner of the advanced Lisbon helium processing plant (Lisbon) located 20 miles north of the Red Helium Project. Jesse-2 is immediately adjacent to unutilised pipeline connected to the Lisbon helium plant. The Company has a Gas Sales & Processing Agreement (GSPA, Offtake)⁵ with Paradox which includes the Jesse-2 well⁶.



Jesse-2 location in the Red Helium project AMI with local pipelines / gas transport route to the Lisbon Helium Plant.

In the event of a successful well, the GSPA provides a path to monetization of the Company's second pure-play helium well, Jesse-2. The GSPA expansion continues a relationship with a proven helium refiner and seller with deep helium processing and marketing experience. The key terms include an 80/20 industry standard revenue split in favour of the producer (GGE) as well as standard tariffs for gathering, compression and processing.

The GSPA expansion represents recognition from Paradox of the significant potential of the Red Helium Project and the technical merits of the potentially company-making Jesse-2 well. Both Grand Gulf and Paradox are participating in ongoing discussions to identify further strategic business opportunities framed by a Strategic Alliance⁷, which includes GSPA expansion and further corporate synergies.

⁵ ASX Announcement 16 March 2022 - Helium Offtake Agreement Secured

⁶ ASX Announcement 9 January 2023 - Helium Offtake Agreement Secured for Jesse-2

⁷ ASX Announcement 11 April 2022 - Strategic Alliance with Helium Offtake Partner



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Paradox owns over 100,000 net acres and operates over 150 wells in the Paradox Basin in the Four Corners Region of Utah, Colorado, New Mexico and Arizona. Paradox is operator of 570 miles of operated gas gathering lines (220 miles of which is wholly owned) with four compression stations that feed directly to the Lisbon Valley Gas Plant.

The advanced Lisbon Valley Gas Plant is comprised of a 60 million cubic feet per day (mmcf) treating plant with a 45 mmcf cryogenic plant capable of liquefaction of 0.5 mmcf of high purity 99.9995% (5 ½ Nines) helium, that attracts premium pricing for advanced applications such as semiconductor, medical, research, space and defense industries. The plant has capacity for another 0.6 mmcf of purified ~99.989% gaseous helium currently sold to multiple suppliers and direct to downstream retail consumers via Paradox's logistics arm comprising precisely engineered specialist tube trailers.

The Lisbon Plant is also currently sequestering carbon dioxide and is well advanced in the permitting process to qualify for carbon capture tax credits under Section 45Q (Revenue) of the US tax code. The recent Inflation Reduction Act increased the value of carbon dioxide sequestered to \$85 per metric tonne, making it a potential material revenue stream for the Red Helium Project.

Helium Market - Semiconductor Fabrication

Semiconductor fabrication is a key growth segment of the helium market. In August 2022 President Biden signed the US\$52B CHIPS Act, designed to increase US domestic semiconductor fabrication capability leading to a raft of investment⁸. Texas Instruments (TXN market cap: US\$158B⁹) recently announced a US\$11B fabrication plant in Lehi, Utah, 250 miles north west of the Red Helium Project, the largest economic investment in Utah history¹⁰.

This follows similar investments proximal to the Red Helium Project in Pheonix, Arizona, of US\$40B¹¹ by Taiwanese Semiconductor Manufacturing Corporation (TSM market cap: US\$456B¹²), and US\$20B by Intel (INTC market cap: US\$104B¹³), bringing Intel's total investment in the area to US\$50B¹⁴. Micron (MU market cap: US\$64B¹⁵) also recently announced an initial

⁸ <https://www.reuters.com/markets/us/biden-sign-order-52-billion-chips-law-implementation-2022-08-25/>

⁹ <https://finance.yahoo.com/quote/TXN>

¹⁰ <https://news.ti.com/texas-instruments-selects-lehi-utah-for-its-next-300-millimeter-semiconductor-wafer-fab>

¹¹ <https://ktar.com/story/5382019/with-tsmc-intel-investing-billions-chips-could-be-arizonas-sixth-c/>

¹² <https://finance.yahoo.com/quote/TSM/>

¹³ <https://finance.yahoo.com/quote/INTC/>

¹⁴ <https://www.intel.com/content/www/us/en/newsroom/news/intel-breaks-ground-two-new-leading-edge-chip-factories-arizona.html#gs.r5foq2>

¹⁵ <https://finance.yahoo.com/quote/MU/>





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US\$20B¹⁶ investment for a fabrication plant in New York, with the total investment over the life of the project potentially reaching US\$100B.

Managing Director Dane Lance Commented:

“With the highly encouraging results from Jesse-1A, including a helium grade of 1% greatly exceeding pre-drill expectation, the Company is excited to be back in the field for Jesse-2.

The Jesse-2 well engineering has incorporated the lessons learned from the evaluation program on the maiden helium exploration well to minimise risk of water production by staying high in the column. Coupled with the managed pressure drilling program to maximise well deliverability, which also allows preliminary flow evaluation whilst drilling, the drilling of Jesse-2 will be an exciting period for the Company.

The compelling fundamental commercial pillars of the Red Helium Project remain unchanged with the ability to quickly monetise a commercial well to generate near term free cash flow with minimal time and cost.”

This ASX announcement has been authorised for release by the Board of Grand Gulf Energy Ltd.

For more information about Grand Gulf Energy and its projects, contact:

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About Grand Gulf Energy:

Grand Gulf Energy Ltd (ASX:GGE) is an independent exploration and production company, headquartered in Australia, with operations and exploration in North America. The Red Helium project is a pure-play helium exploration project, located in the Paradox Basin, Utah, in the prolific Four Corners region. For further information please visit the Company’s website at www.grandgulfenergy.com

¹⁶ <https://investors.micron.com/news-releases/news-release-details/micron-announces-historic-investment-100-billion-build-megafab>





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Competent Person's Statement:

The information in this report is based on information compiled or reviewed by Mr Keith Martens, Technical Director of Grand Gulf. Mr Martens is a qualified oil and gas geologist/geophysicist with over 45 years of Australian, North American, and other international executive oil and gas experience in both onshore and offshore environments. He has extensive experience of oil and gas exploration, appraisal, strategy development and reserve/resource estimation. Mr Martens has a BSc. (Dual Major) in geology and geophysics from The University of British Columbia, Vancouver, Canada.

Forward Looking Statements:

This release may contain forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "anticipate", "believe", "intend", "estimate", "expect", "may", "plan", "project", "will", "should", "seek" and similar words or expressions containing same. These forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this release and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. These include, but are not limited to, risks or uncertainties associated with the discovery and development of oil, natural gas and helium reserves, cash flows and liquidity, business and financial strategy, budget, projections and operating results, oil and natural gas prices, amount, nature and timing of capital expenditures, including future development costs, availability and terms of capital and general economic and business conditions. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to GGE, or any of its affiliates or persons acting on its behalf. Although every effort has been made to ensure this release sets forth a fair and accurate view, we do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

