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GRANDGULF
ENERGY LIMITED

5 January 2023

Drill Permit Received for Jesse-2 Helium Well

- Permit to Drill received for Jesse-2 helium well with spud date on schedule for Q1 2023
- 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

Grand Gulf Energy Ltd (ASX:GGE, OTCQB:GRGUF) (“Grand Gulf” or the “Company”) is pleased to announce it has received approval of the Permit to Drill from the Utah Division of Oil, Gas and Mining (UDOGM) for the potentially company-making second pure-play helium well, Jesse-2, at the Red Helium project.

The Company is now in a position to conduct drilling in early Q1 2023 with advanced negotiations with multiple rig operators indicating availability over Q1 2023.

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 expectation¹.

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

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



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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.

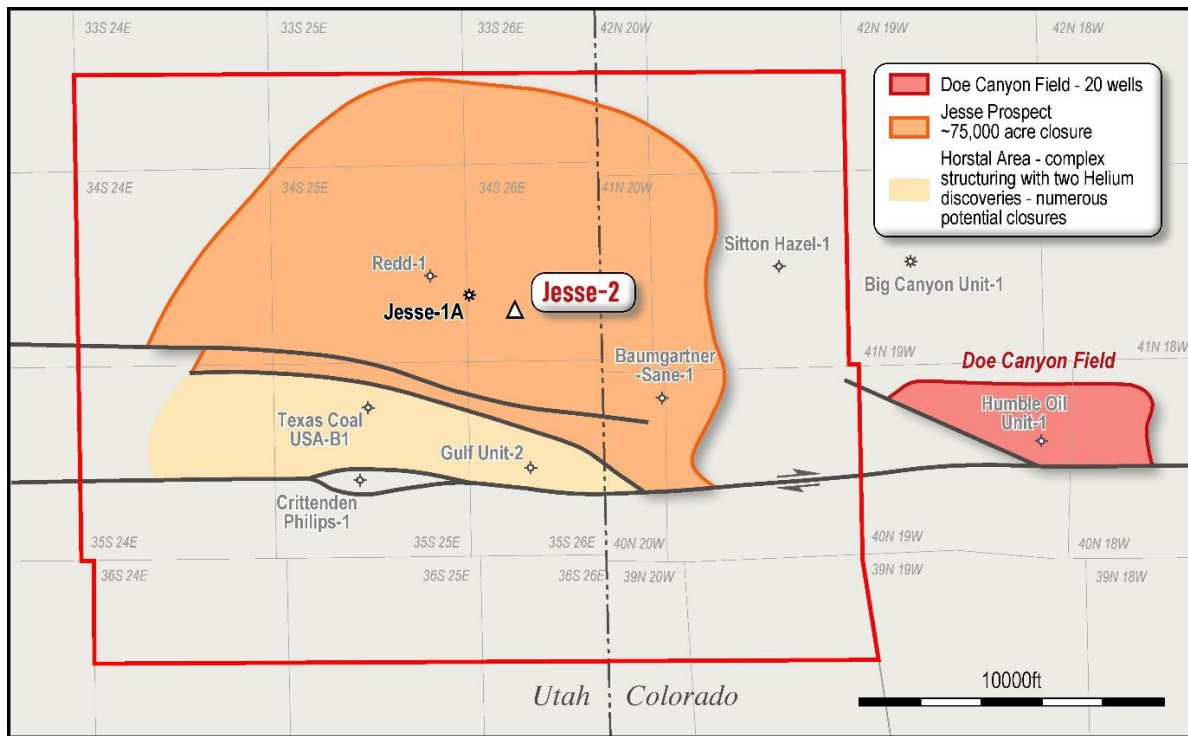


Figure 1: Jesse-2 location showing Jesse structural closure (orange) and major faulting (black).

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.



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

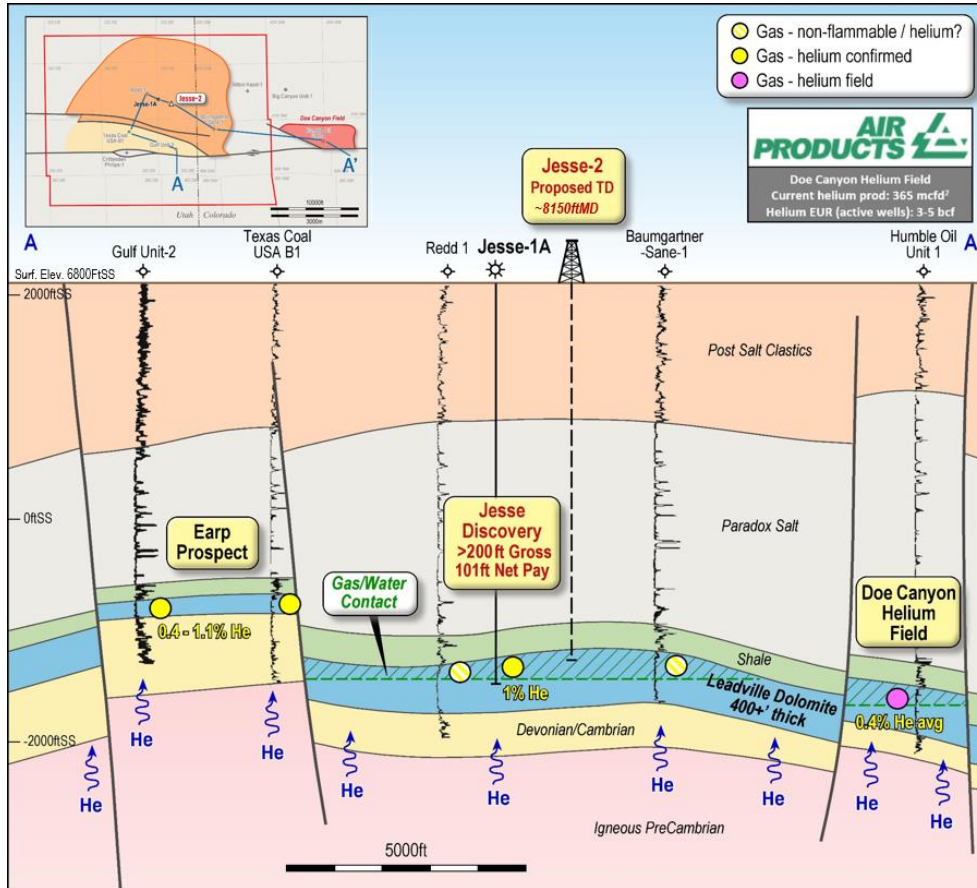


Figure 2: Stylised schematic showing Jesse-2 location exclusively targeting the gas pay zone

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 in Q1 2023 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.”



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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

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Helium Market – Brief Update

Recent sharp rise in helium prices on the back of US supply disruptions, Russian sanctions and increased demand. Ongoing supply-side issues including the outage at the US government's BLM Cliffside facility (up to 10% global supply) and the Amur facility incident (10 - 20% global supply) have put extreme pressure on the global market, and in particular the US spot market, with the company advised of US spot prices in excess of US\$2,000/mcf for research grade helium (160mcf tube trailer). The BLM facility was re-started in June 2022, however significant supply shortages are forecast through 2023. Spot prices increases representing a more than 300% rise over the last year and many suppliers in the US are still in Force Majeure, meaning they are rationing helium and cannot meet their supply contracts.

About the Red Helium Project:

The Red Helium Project provides exposure to the burgeoning helium industry in a prolific proven helium-producing region, the Four Corners Area, that comprises:

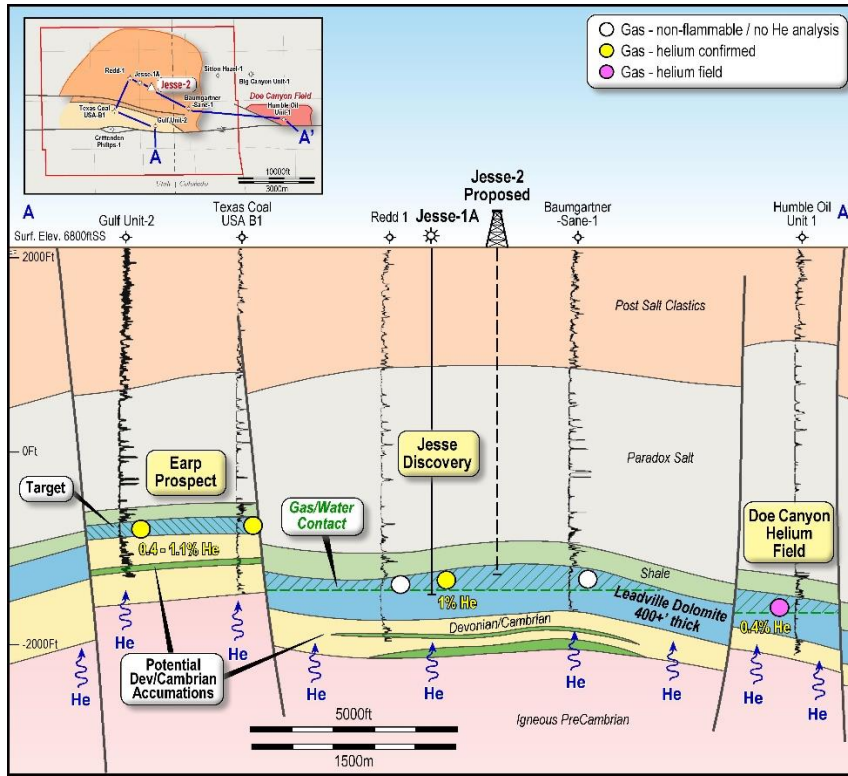
- 250,713 acre area of mutual interest (AMI) with over 29,000 acres (private leases/Utah state leases) leased in drill-friendly Utah in the heart of the most prolific helium-producing region in the world;
- Geologically analogous to Doe Canyon Field. Doe Canyon is situated 15 miles due east of the Red Helium project, and is currently producing approximately 10,700,000 cubic feet of helium per month, the bulk of which comes from only 7 wells. Air Products (market cap US\$68b) is processing the helium, and it is anticipated that Doe Canyon will ultimately produce 3-5 billion cubic feet of helium. With additional drilling, this resource figure could increase;
- 315 kms of well-placed 2D seismic has been acquired and reprocessed identifying multiple drill targets – and confirming a structural trap 4-5 times larger than the Doe Canyon Field;
- Six historic wells exclusively targeting hydrocarbons were drilled within the project AMI, proving trap, seal, reservoir presence and gas charge and a working helium system, to differing degrees within each prospect. Several wells tested non-flammable gas, the only two analysed for helium confirmed helium presence; and
- 20 miles south of and connected by pipeline to the operational Lisbon Helium Plant (99.9995% purity).

Since acquisition in September 2021 the company has continued to mature the project, including the following milestones:

- Maiden prospective gross project unrisks P50 helium resource of 10.9 billion cubic feet of helium;
- Jesse discovery (Jesse-1A), generally exceeding pre-drill expectation and highlights including:
 - Helium grade of up to 1%. An analogous Doe Canyon well at 1% helium and a raw gas rate of 20 million cubic feet per day would produce 200 thousand cubic feet of helium per day;
 - Productive and well pressured reservoir at 2465 psi on trend with virgin pressure at the neighbouring Doe Canyon.
 - Independent Auditor confirms Jesse helium discovery and maturation from Prospective to Contingent Resource category
 - over 200 feet of gross gas column; and
 - 101 feet of net pay;
- Helium Offtake Agreement with Paradox Resources LLC, a helium refiner and seller owner with extensive helium market experience and connections, and operator of the advanced Lisbon Valley helium plant;
- Strategic Alliance to expand on the Offtake terms and exploit the corporate synergies with Paradox;
- Matured three new drill locations on the Jesse structure and multiple prospects independent to Jesse, including the drill-ready Earp prospect, with plans to drill a second helium well in early Q1 2023; and
- Increased Working Interest in the Red Helium Project to 70% with a right to earn 85%.



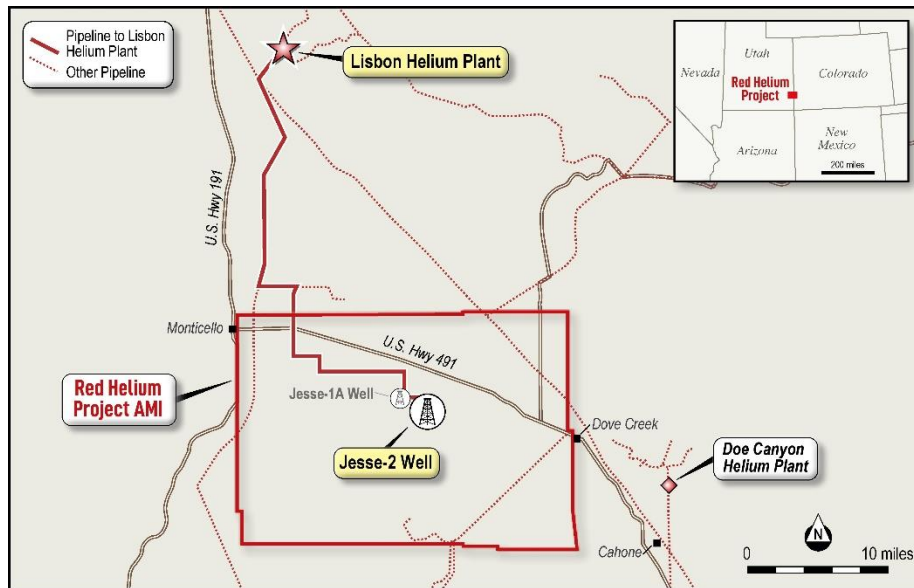
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Stylised cross section with Jesse Discovery, Earp prospect, Doe Canyon helium field, and historic wells

Helium Offtake Agreement (“Oftake”):

Oftake executed with helium refiner and seller Paradox Resources LLC (“Paradox”) with industry standard 80/20 revenue sharing / allowing near immediate monetisation of a success case well to monetized with minimal time and Capex². The Red Helium project is 20 miles south of and connected by pipeline to the operational Lisbon Helium Plant.



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

² ASX Announcement 16 March 2022 - Helium Offtake Agreement Secured



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Strategic Alliance

Grand Gulf entered into a Strategic Alliance (“Alliance”) with helium refiner and seller Paradox designed to fast-track and optimise the significant commercial opportunities that exist in the current buoyant helium market³. The Alliance is structured to explore mutually commercially advantageous revenue sharing arrangement on such key items as:

- Optimize and prioritize near-term exposure to the burgeoning helium market
- Red Helium Project to be a potential priority supplier to re-start the Paradox liquefier capable of producing high purity 99.9995% helium (“5 ½ Nines”) - which attracts premium pricing, currently over US\$2,000/mcf
- Collaborative downstream marketing targeting end users of high-purity helium such as semi-conductor manufacturers and the space industry
- Expansion of the terms of the recently executed Offtake agreement to include discoveries after Jesse#1A
- Progress identified CO₂ disposal options with revenue generating potential:
 - i) Expansion of existing carbon sequestration activities at Paradox’s Lisbon Plant to include CO₂ from the Red Helium Project - potentially revenue-generating under Section 45Q of the US Tax Code; and
 - ii) Joint investigation into utilization of Red Helium Project CO₂ for enhanced oil recovery (flooding) from Paradox’s Lisbon Oil Field
- Potential synergistic commercial benefits in assessing corporate opportunities that involve both Paradox assets and the Red Helium Project



Paradox Resources “5 ½ Nines” Lisbon Valley Gas Processing Plant.

Maiden Prospective Helium Resource

On 8 December 2021 the Company announced that Sproule had completed the maiden Prospective Resource Report for the Red Helium Project located in the Paradox Basin, Utah USA.

Sproule has confirmed a P50 10.9 billion cubic feet (BCF) Prospective Resource over gross leased acreage and P50 of 7.4 BCF on a net acre basis to Valence. The Sproule Prospective Resource calculation is based on the current acres held by incorporated joint venture company at 8 December 2021.

The Company plans a resource update based on the data gained from Jesse-1A and future wells.

Valence Prospective Resources⁴

Recoverable Helium	1U (P90) (BCF)	2U (P50) (BCF)	3U (P10) (BCF)
Gross to Valence - (28,046 gross acres)	7.6	10.9	12.9
Net to Valence - (18,959 net acres)	5.2	7.4	8.5
Net to GGE - (earning 85% of net Valence)	4.4	6.3	7.2
Red Project Total	7.9	20.8	57.6

³ ASX Announcement 11 April 2022 – Strategic Alliance with Helium Offtake Partner

⁴ Sproule as announced on ASX on 8 December 2021. The Company is not aware of any new information or data that materially affects the information included in the referenced ASX announcement and confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.



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The estimated quantities of helium that may potentially be recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal is required to determine the existence of a significant quantity of potentially moveable helium.

GGE now has a 70% interest in Valence with a right to secure a further 15% interest (total of 85%) on the following terms:

Earning 85% of Valence Resources	Max Commitment Spend	Cumulative Interest
Current Working Interest		70%
Drilling second well	US\$1.5M	77.5%
Drilling third well	US\$1.5M	85%

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.



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