8 June 2023

Optimised Jesse-3 Location Targets Structural High and Potential Quality Reservoir as determined from Local Well Control

- The proposed location of the Company's third helium well, Jesse-3, targets a seismic high proximal to the historic Redd-1 well that has strong evidence of secondary vugular dolomitic porosity development on logs
- Jesse-3 has the potential to be up to 70 feet structurally high to Jesse-1A
- Proximal well control de-risks reservoir, structure and potential for water ingress
- Jesse-3 has the potential to evaluate a deeper secondary target, the McCracken Sandstone, a proven helium producing formation in the region, in addition to the primary Leadville Dolomite target.
- Jesse-3 planned for Q3/Q4 spud

Grand Gulf Energy Ltd (**ASX:GGE**) (**"Grand Gulf" or the "Company"**) is pleased to advise that it continues to progress a series of opportunities at the Red Helium project including:

- Selection of 'high-graded' Jesse-3 well location with drilling preparations well advanced
- Continued evaluation of a workover programme at the Jesse-1A well to enable production tie-in
- Selection of future Jesse drill locations based on revised mapping
- Evaluation of stimulation/remediation and full flow testing options for Jesse-2

Forthcoming Jesse-3 Helium Well

The Company has performed a full re-calibration and mapping of 2D seismic data and petrophysical logs integrating the new data obtained from the Jesse-2 with Jesse-1A and historic well results. Based on the results, an optimised location was selected from four mature drillable candidate locations.

The selected Jesse-3 location is proximal (1,300 feet) to the historic Redd-1 well and positioned on a seismic high.

Preparations for Jesse-3 are advanced and currently subject to permitting. The Utah Division of Oil Gas and Mining (UDGOM) are currently advising of permit approval times of 60 to 70 days, consistent with a potential Jesse-3 Q3/Q4 2023 spud date.

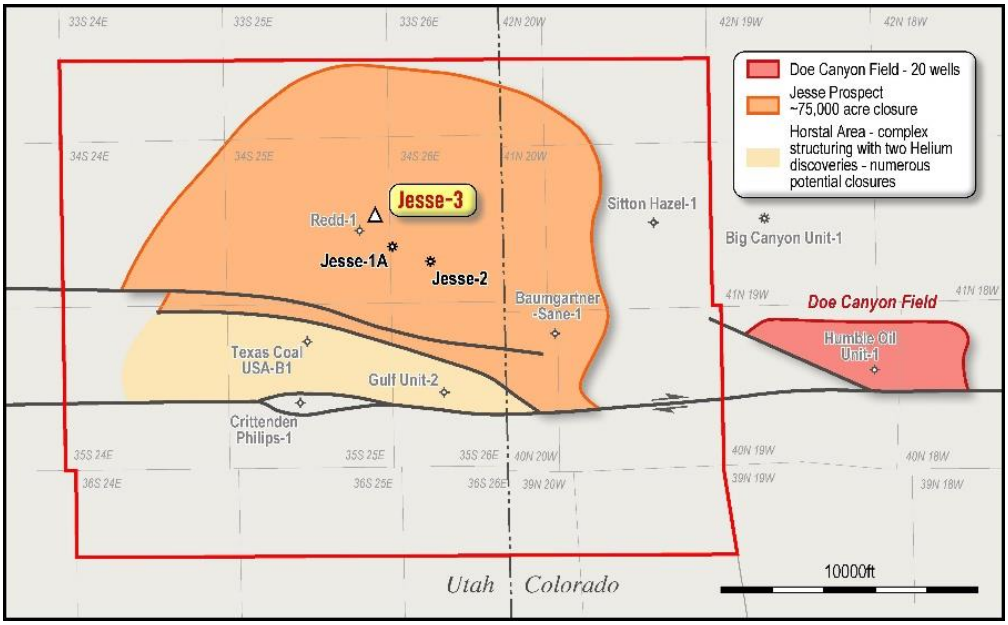

Figure 1: Proposed Jesse-3 well location proximal to the historic Redd-1 well which is structurally high to the Jesse-1A well, with both wells having evidence of vugular dolomitic secondary porosity

Jesse-3 Optimised Location – Rationale

Structural High on Existing Seismic

Drilled in 1952, Redd-1 is interpreted as approximately 20 feet structurally high to the Jesse-1A well. Based on the 2D seismic, there is a significant consistent structural high in the seismic in both time and depth proximal to Redd-1. The proposed Jesse-3 location has the potential to be up to 50 feet higher than Redd-1 and up to 70 feet higher than Jesse-1A based on a seismic line close to Redd-1.

As per standard upstream exploration and production practice, targeting a structural high gives the potential for greater stand-off to the gas/water contact, reducing risk of water ingress, and potential for greater net reservoir in the gas column. Uncertainty in seismic interpretation and time-depth conversion at the Jesse-3 location are reduced due to the proximity of Redd-1 well control.

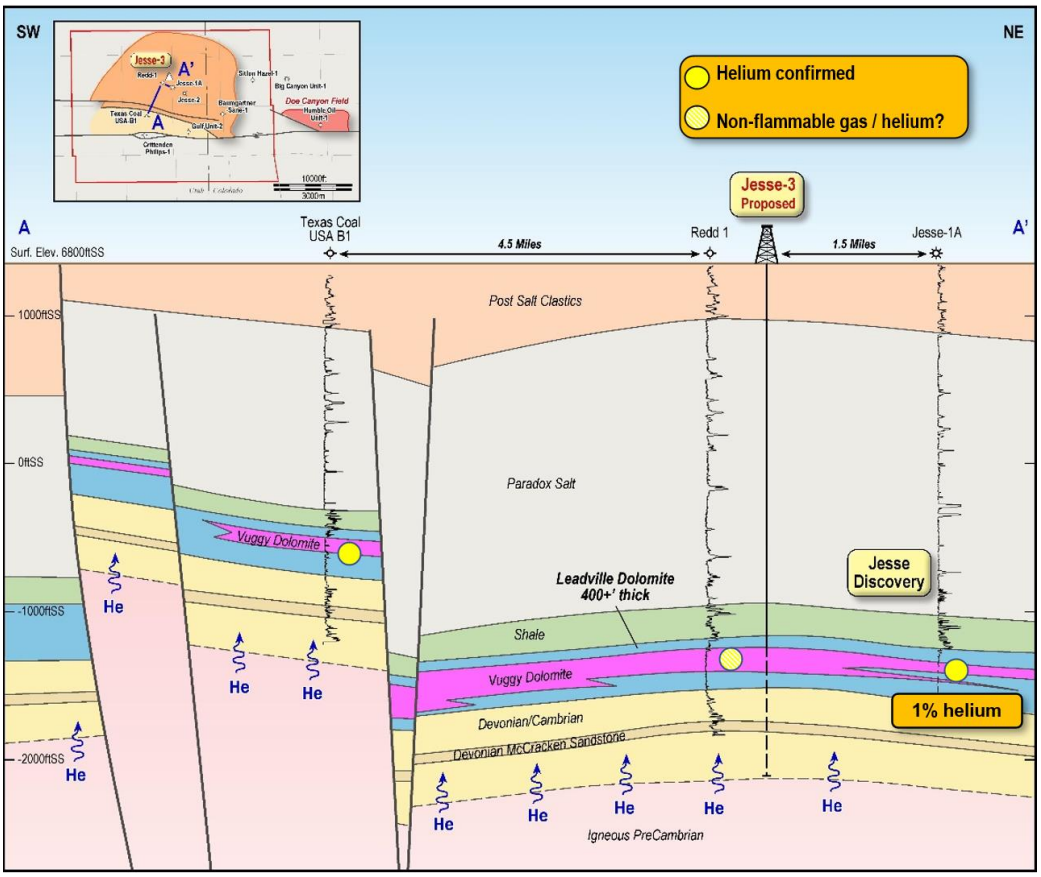

Figure 2: Jesse-3 well location targets a structural high proximal to the historic Redd-1 well which had an at least 140 gross feet section of porous dolomitic reservoir including 50 feet with evidence of strong hydrothermal dolomitization

Reservoir definition through well control

An understanding of the heterogeneity of carbonate reservoirs increases dramatically with data, with the Company selecting a high-graded location for the Jesse-3 well focusing on de-risked reservoir development and deliverability with proximal well control.

The petrophysical and mud logs at Redd-1 indicate several gas filled zones across at least 140 gross feet of porous dolomitic reservoir including a 50 foot zone with evidence of strong hydrothermal dolomitization and secondary vugular porosity. The 1952 vintage of Redd-1 wireline logs, in particular the neutron log, provide porosity control and potential upside on modern logs. Redd-1 tested non-flammable gas (possibly helium?) in multiple zones within the Mississippian Leadville.

Redd-1 did not test the deeper Devonian McCracken Sandstone formation but has similar log character to gas charged helium producing McCracken sands to the north at the Lisbon field, providing a highly prospective secondary target.

The Jesse-1A well discovered a 200 foot gross gas column with 101 feet of net pay (independently audited) and returned a 1% helium concentration to surface, greatly exceeding pre-drill expectations[1]. The electric image log at Jesse-1A showed strong evidence of secondary vugular porosity. The drill stem tests indicate a strongly pressured reservoir with a potentially commercially productive reservoir. Recent analysis and modelling by Blade Energy Partners (Blade) indicate the potential for the upper Leadville in Jesse-1A to flow 5 million cubic feet per day (MMscfd) of raw gas or greater[2].

Managing Director Dane Lance Commented:

"Jesse-3 is focussed on delivering a de-risked potential production well by focussing on a seismic high proximal to well control.

The Jesse-3 location targets a potential fairway of reservoir development based on logs and observations from Jesse-1A and Redd-1 with strong evidence of secondary vugular dolomitic porosity and gas charge with Jesse-1A returning 1% helium.

Targeting a structural high on seismic proximal to well control increases structural offset from the observed gas/water contact at Jesse-1A potentially allowing for more permeable net reservoir in the Mississippian Leadville gas column.

Jesse-3 is also located optimally to evaluate the highly prospective Devonian McCracken Sandstone formation at a modest cost. The McCracken is a proven producing helium formation in the region, providing a potential secondary target and exciting upside for Jesse-3 and the greater Red Helium project."

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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[1] ASX Announcement 19 October 2022 – Jesse-1A Downhole Sample Increases Helium Grade

[2] ASX Announcement 2 June 2023 – Independent Review Confirms Helium Potential

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).

Key milestones in the Red Helium Project:

- Maiden prospective gross project un-risked P50 helium resource of 10.9 billion cubic feet of helium;
- Jesse discovery (Jesse-1A), generally exceeding pre-drill expectation and highlights including:
    - over 200 feet of gross gas column, and 101 feet of net pay (Independently Audited);
    - 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; and
    - Productive, well pressured reservoir at 2465 psi on trend with neighbouring Doe Canyon virgin pressure.
- 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;
- Increased Working Interest in the Red Helium Project to 77.5% with a right to earn 85%.

Helium Offtake Agreement ("Offtake"):

Offtake 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 Capex[3]. The Red Helium project is 20 miles south of and connected by pipeline to the operational Lisbon Helium Plant.

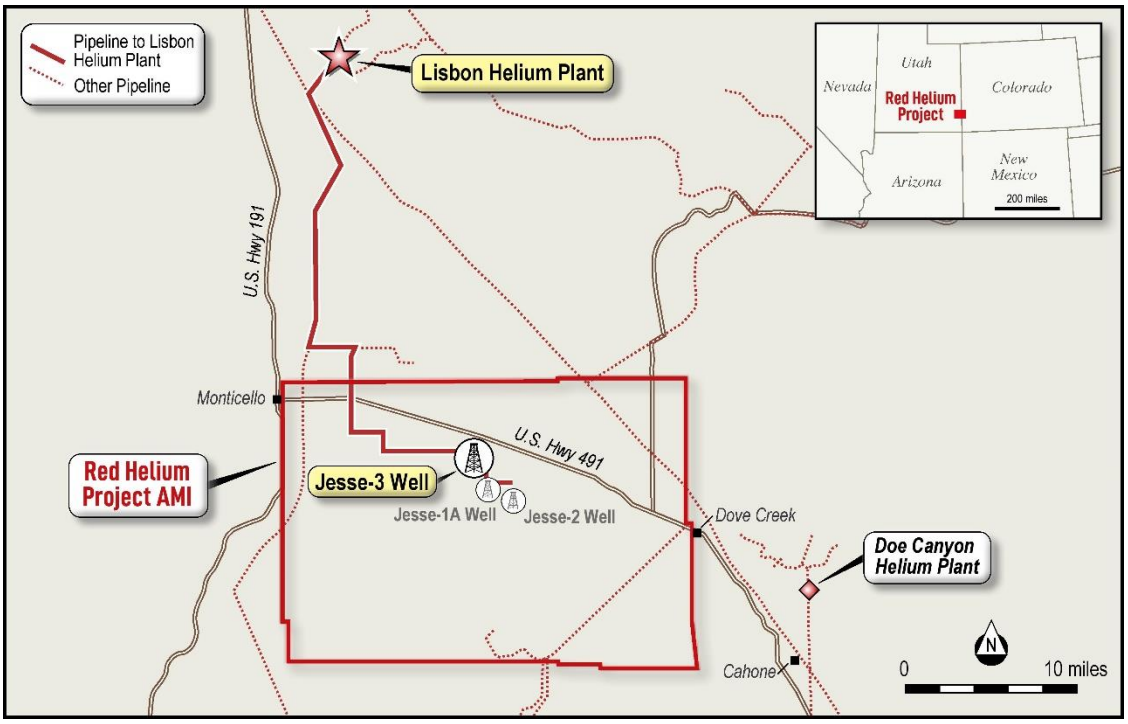

Figure 3: Jesse-1A and Jesse-2 locations in the Red Helium project AMI with local pipelines / gas transport route to the Lisbon Helium Plant.

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 market[4]. 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 future wells
- Progress identified CO_2 disposal options with revenue generating potential:
    - Expansion of existing carbon sequestration activities at Paradox's Lisbon Plant to include CO_2 from the Red Helium Project - potentially revenue-generating under Section 45Q of the US Tax Code; and
    - Joint investigation into utilization of Red Helium Project CO_2 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

[3] ASX Announcement 9 January 2023 – Helium Offtake Agreement Secured for Jesse-2

[4] ASX Announcement 11 April 2022 – Strategic Alliance with Helium Offtake Partner

Figure 4: Paradox "5.5 Nines" Resources 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 Resources[5]

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

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 77.5% interest in Valence with a right to secure a further 7.5% interest (total of 85%) on the following terms:

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

[5] *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.

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

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.