



OTCQB

GRAND GULF
ENERGY LIMITED

7 November 2022

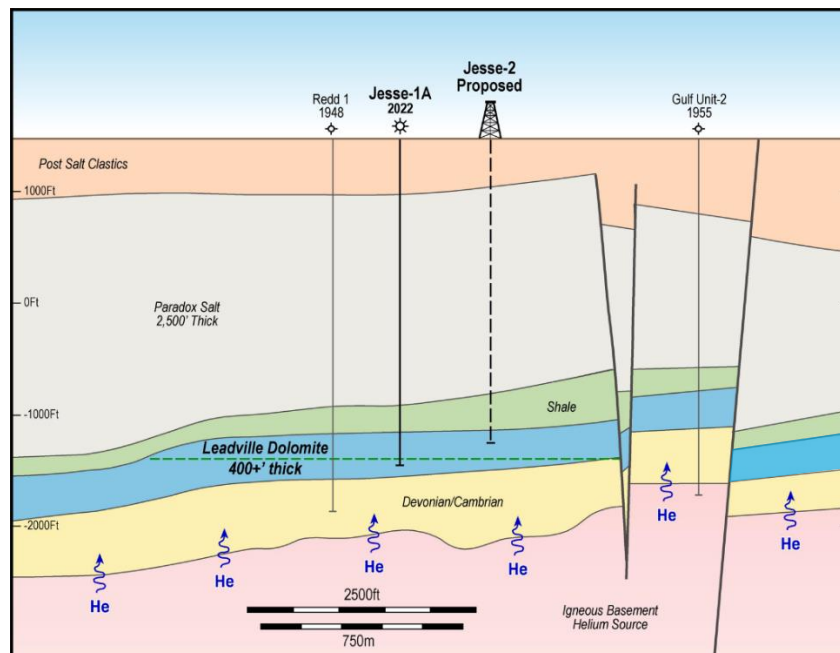
Drilling of Jesse#2 Planned for Q4 2022

- Jesse#2 well site location finalised - drilling planned for Q4 2022
- Jesse#2 exclusively targets gas zone – priority to complete well above the gas/water contact to manage the risk of water ingress
- Third Red Helium Project well planned for early 2023, with three priority locations identified - permits in progress

Grand Gulf Energy Ltd (ASX:GGE, OTCQB:GRGUF) (“Grand Gulf” or the “Company”) is pleased to provide an update on the Red Helium project.

Jesse Discovery

The forthcoming drilling of the Jesse#2 well follows the highly encouraging Jesse discovery which included a >200 foot gross gas column (with 101 feet of independently audited¹ net pay) and exceptional helium concentrations of up to 1% returned to surface, realising the pre-drill upside case for helium grade in the Jesse structure¹. The Jesse#1A well also encountered a productive and strongly pressured reservoir at 2,465 psi.



**Figure 1: Stylised schematic showing >200 foot gas column, and gas / water contact (green dashed).
Jesse#2 exclusively targets the overlying gas pay zone**

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



OTCQB

GRANDGULF
ENERGY LIMITED

Jesse#2 Well Design

The Jesse#1 discovery well encountered water ingress as a function of drilling through the gas/water contact identified in Figure 1.

Jesse#2 is designed to minimize the risk of drilling into the water bearing zone, with the planned total well depth terminating at least 50 feet above the identified gas/water contact Jesse#1A.

The well location also uses calibration of 2D seismic data with Jesse#1A and historic well results to target a structural high location on the Jesse feature to maximise the thickness of the gas pay zone.

Jesse#2 Location

Jesse#2 is located 1.5 miles south-east of the Jesse#1A well and was selected as the best of three mature prioritised locations on the Jesse structure derived from an extensive review of data derived from six historic wells and Jesse#1A with calibrated 2D seismic.

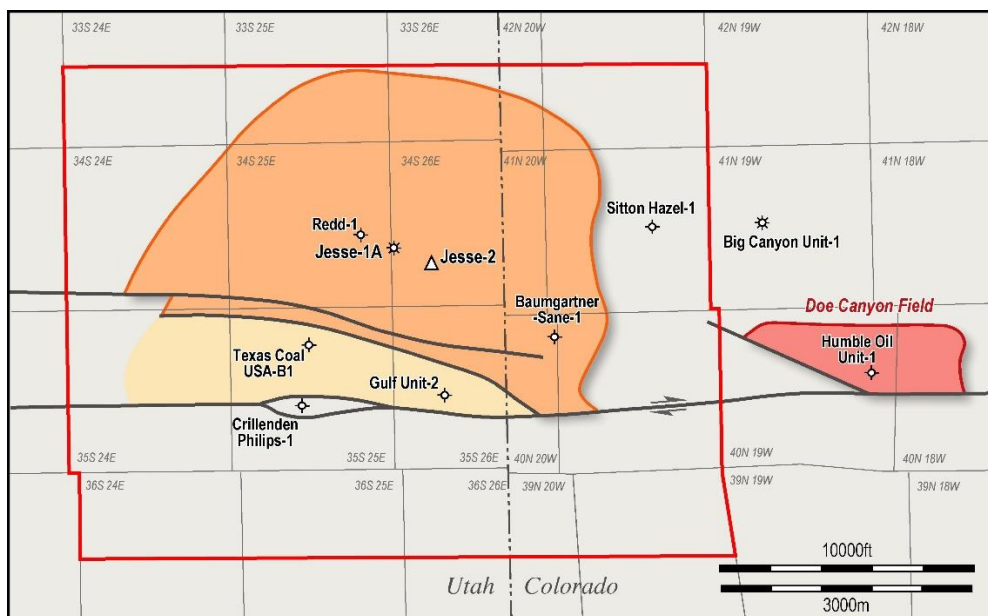


Figure 2: Jesse#2 location showing Jesse structural closure (orange) and major faulting (black).

Jesse#2 Well Engineering and Development

The engineering for the Jesse#2 well incorporates further learnings on the heterogeneous Paradox Basin carbonate rocks from the drilling of the Jesse#1A well.

The Jesse#2 well design includes a managed pressure drilling program through the primary Leadville formation, which will reduce formation damage.

Furthermore, the ability to drill underbalance will allow real-time monitoring of reservoir inflow, in excess of normal mud-gas returns, with real-time monitoring of gas compositions using mass spectrometry.



On identification of significant helium inflow a bottoms-up flow test will be conducted to characterise the reservoir and in the event of commercial flow rates the well will be completed for production high in the formation.

The results of Jesse#1A stimulation treatment have been used to calibrate stimulation treatment at Jesse#2 and will be implemented post initial reservoir flow characterisation.

The Jesse#2 well is within close proximity of the pipeline connected with Grand Gulf's helium offtake partners, Paradox Resources LLC ("Paradox"), Lisbon Valley Helium Plant.

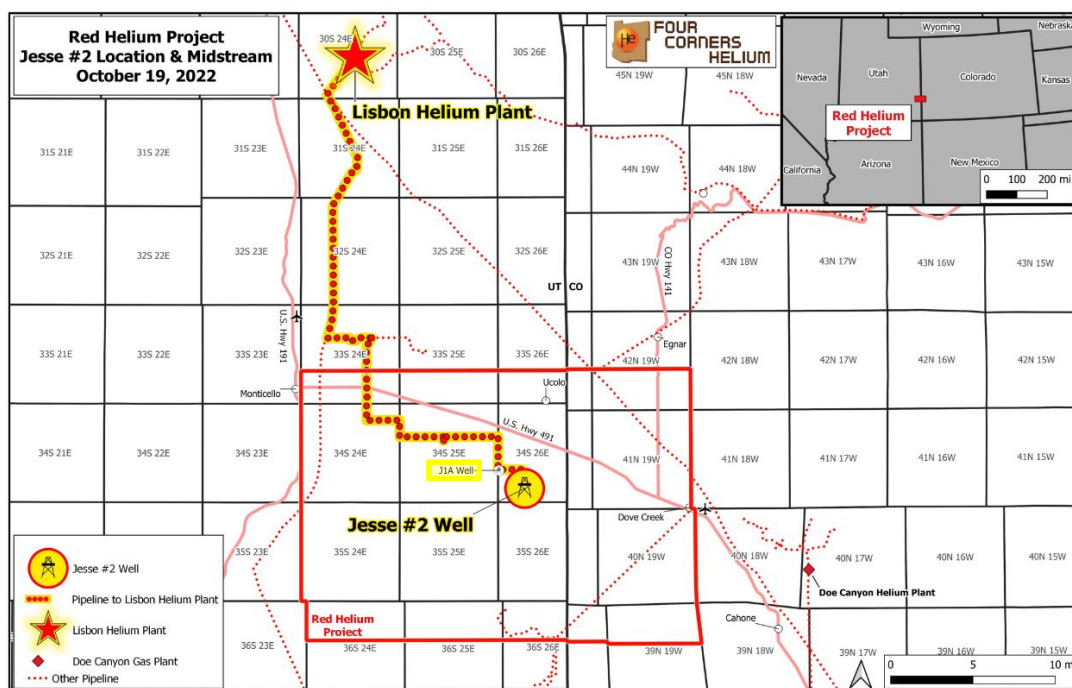


Figure 2: Jesse#2 location in the Red Helium project AMI with local pipelines / gas transport route to the Lisbon Helium Plant.

Third Red Helium Well Planned

Planning is on schedule for a third Red Helium project well following Jesse#2, with the Company currently optimising the preferred drill location, prioritising a further two mature locations on Jesse with total of three permits in progress. The Company has multiple other locations on Jesse within leased acreage proximal to the pipeline that could be quickly matured to drill-ready.

The Company has also identified and matured an optimal location on the drill-ready Earp prospect, one of three highly prospective locations independent of Jesse, testing a structurally high horst block.



OTCQB

GRANDGULF
ENERGY LIMITED

Managing Director Dane Lance Commented:

"We were thrilled to announce the helium grade of 1% returned to surface at Jesse#1A which has significantly de-risked the Red Helium Project and greatly exceeded the pre-drill expectation.

The independently audited 200 foot gross gas column and 101 feet of net pay at Jesse#1A, along with demonstration of productive and strongly pressured reservoir further de-risks the Red Helium Project. Furthermore, we are just 15 miles west of the Doe Canyon analogue helium field which has demonstrated the exceptional flow potential of the Leadville formation in the area with average raw gas rates of 20 million cubic feet per day.

These results from our maiden helium exploration well are highly encouraging and represent a significant discovery given the scale of the resource in one of the most prolific proven producing helium locations on the globe.

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 essentially allows preliminary flow evaluation whilst drilling, Jesse#2 and Q4 2022 in general are shaping up to be an exciting period for the Company and our shareholders.

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. In fact, the economics are enhanced by the realisation of an upside helium grade, and we look forward to being back in the field imminently for Jesse#2."

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:

Dane Lance

Managing Director

E: info@grandgulfenergy.com

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





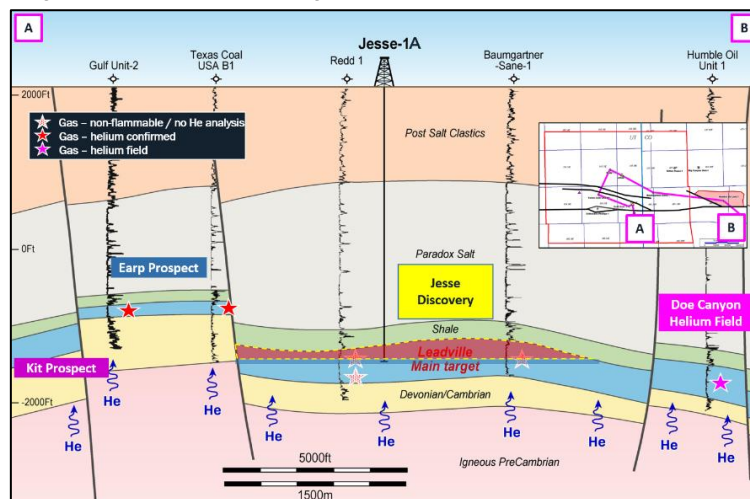
About the Red Helium Project:

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\$52b) 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 unrisked 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 three prospects independent to Jesse, including the drill-ready Earp prospect, with plans to drill a second helium well in Q4 2022; and
- Increase in Working Interest to 70% with a right to earn 85%.



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

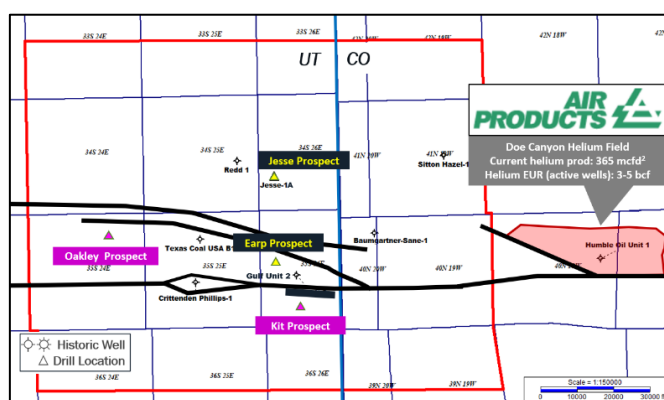


Helium Market – Brief Update

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 cannot meet their supply contracts.

Multiple Independent Prospects

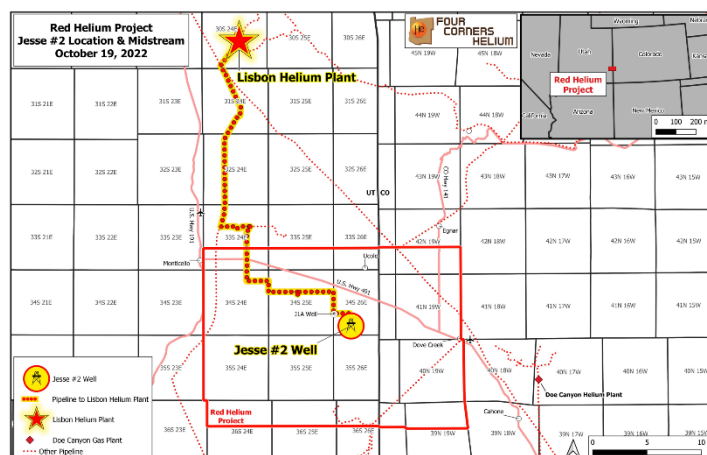
Three highly prospective drill locations independent to the Jesse prospect have been matured, significantly de-risking the Red Helium Project², including the drill-ready Earp prospect in a horst block structurally high to the Jesse discovery. With most key geologic elements already de-risked by the vintage wells on the AMI, these locations are further de-risked by the highly encouraging Jesse#1A results.



Jesse#1A location and additional independent prospect drill locations in the Red Helium project AMI with Doe Canyon Analog helium field (Air Products market cap US\$52B)

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 Jesse#1A to monetized with minimal time and Capex³. 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 4 April 2022 – Additional Drill Locations Identified

³ ASX Announcement 16 March 2022 – Helium Offtake Agreement Secured



OTCQB

GRAND GULF
ENERGY LIMITED

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 market⁴. 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 - 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 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 Pre-Drill Prospective Resources⁵

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

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

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.



OTCQB

GRAND GULF
ENERGY LIMITED

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 (cost overruns to be split 77.5/22.5)	77.5%
Drilling third well	US\$1.5M (cost overruns to be split 85/15)	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.

