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22 June 2023

Bonus McCracken Formation Adds 1.8BCF to Gross Prospective Helium Resource

- An assessment of the McCracken formation has generated a gross P50 helium Prospective Resource of 1.8 billion cubic feet (BCF) (1.3 BCF net to incorporated JV company – Valence Resources) – See Table 3
- The total McCracken Prospective Resource across the entire Jesse structure (best estimate – P50) is 4.9 BCF, with a high estimate (P10) of 13.5 BCF
- The McCracken, a proven helium producing formation in the region, is de-risked by the historic Redd-1 well drilled on the Jesse structure with logged gas filled sands
- The McCracken formation represents a significant independent target to be evaluated in the forthcoming Jesse-3 helium well and future well operations such as the Jesse-1A re-completion
- McCracken Prospective Resource independent to the 10.9 BCF gross P50 Prospective Resource in the primary Leadville dolomite target – bringing the gross P50 total for the Red Helium project to 12.7 BCF¹ - see Table 1

Grand Gulf Energy Ltd (ASX:GGE) (“Grand Gulf” or the “Company”) is pleased to advise that Sproule International (“Sproule”) has performed independent due diligence on the methodology used to generate Prospective Resource estimates by Grand Gulf Energy for the Devonian McCracken sandstone at the Red Helium Project located in the Paradox Basin, Utah USA.

Table 1 - Valence Combined Leadville / McCracken Prospective Resources

Recoverable Helium ¹	1U (P90) (BCF)	2U (P50) (BCF)	3U (P10) (BCF)
Gross to Valence - (28,046 gross acres)	8.1	12.7	17.6
Net to Valence - (18,959 net acres)	5.6	8.7	11.7
Net to GGE - (earning 85% of net Valence)	4.7	7.4	9.9
Red Project Total (Jesse McCracken)	9.3	25.7	71.1

¹ Prospective resource estimates summed arithmetically, see Table 2 for Leadville (Sproule), see Table 3 for McCracken, Table 1 and Table 3 notes, and Schedule A for Listing Rule 5 disclosures and methodology





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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.

Sproule is an independent resources and reserves certification specialist with extensive experience in helium and the Paradox Basin.

Sproule has confirmed that Grand Gulf's methodology meets industry (PRMS) best practices and the parameters that the Company has used for its range of values in its probabilistic volumetric evaluations meet all industry best practices and each of the parameters for area, thickness, porosity, saturation, formation volume factor, helium concentration, and recovery factor can be documented from data in the immediate area or adjacent analogues.

Managing Director Dane Lance Commented:

"The Devonian McCracken sandstone is a proven producing helium formation in the region, and the P50 prospective resource booking of almost 2 BCF at a gross level and 5 BCF at a field level represents a highly prospective bonus formation with significant upside that Grand Gulf will target at the Red Helium Project.

Jesse-3 is located optimally to evaluate the McCracken Sandstone formation at a modest additional cost, whilst targeting a seismically defined structural high near to well control with good reservoir development further de-risking the primary Leadville target which has a 10.9 BCF gross P50 prospective resource.

Similarly, Jesse-1A is within the gas column in the McCracken as defined by the Redd-1 well logs with the proposed future re-completion including an evaluation and test of the McCracken potential.

In both cases, the McCracken represents a cost effective non-binary secondary target with exciting upside for the greater Red Helium project, which has the potential to near immediately monetise a commercial well with minimal time and capex."



Devonian McCracken Sandstone Formation

The Devonian McCracken sandstone is a proven producing helium formation in the region. Twenty miles to the north, the Lisbon field has produces from the McCracken with an average of 1% helium concentration. Also in the Four Corners region, in the San Juan basin, New Mexico, the Tocito Dome field produces at 7 to 8% helium and is under active development².

Helium concentration is dependent on regional source, migration pathways, trap timing and integrity. The 1% helium concentration measured at Jesse-1A³ in the Leadville formation was used as the P50 input to the resource estimation, with proximity of the reservoir to the helium source providing potential further upside in helium concentration.

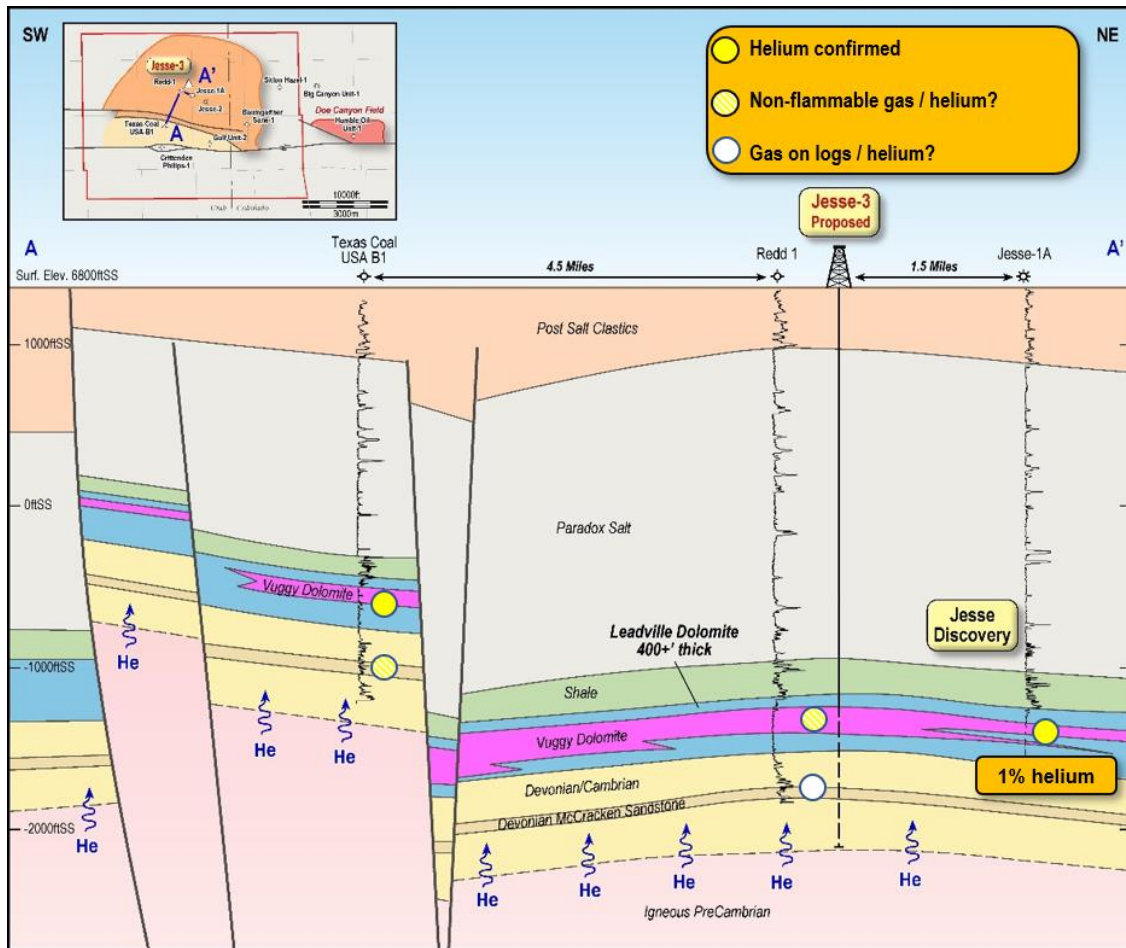


Figure 1: Jesse-3 well location targets a structural high proximal to the historic Redd-1 well which had significant gas shows on logs in the Devonian McCracken sandstone formation

² <https://navajotimes.com/biz/company-navajo-could-be-saudi-arabia-of-helium/>

³ ASX Announcement 19 October 2022 - Jesse-1A Downhole Sample Increases Helium Grade





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The McCracken play is independent of the Leadville formation and overall trap, seal, reservoir source and migration risk is low as the Redd-1 well has already been drilled on the Jesse structure with logged gas sands and indications of non-hydrocarbon gas that historically from other wells in the area will contain >1% helium by volume.

Three historic wells within the project area in the horstal region to the south have intersected gas on petrophysical logs in the McCracken and tested non-flammable gas (helium?) and gas cut mud (Texas Coal-1, Crittenden Phillips-1 and Gulf Unit-2).

Jesse-3: Structural High on Existing Seismic, Reservoir Definition through Well Control

The selected Jesse-3 location is proximal (1,300 feet) to the historic Redd-1 well positioned on a seismic high with the potential to be 70 feet high to Jesse-1A⁴. Jesse-3 is optimally located structurally to evaluate both the primary Leadville target and the McCracken as a secondary target. Targeting a structural high provides 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.

The Redd-1 well intersected over 26 feet of net pay over a 90 foot gross gas zone in the McCracken sandstone as indicated by petrophysical logs. Redd-1 logs in the primary Leadville target 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. Proximal well control de-risks reservoir development in both zones.

Jesse-1A Re-completion

The Redd-1 well lowest known gas (LKG) was used in the resource estimate to constrain the P90 case. Jesse-1A is located within the lowest known gas contour observed at the Redd-1. A future case and perforate re-completion at Jesse-1A is planned to include an evaluation of the potential of the McCracken sandstone.

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

⁴ ASX Announcement 8 June 2022 - Optimised Jesse-3 Location Targets Structure and Reservoir

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**Table 1 - Valence Combined Leadville / McCracken Prospective Resources**

Recoverable Helium ¹	1U (P90) (BCF)	2U (P50) (BCF)	3U (P10) (BCF)
Gross to Valence - (28,046 gross acres)	8.1	12.7	17.6
Net to Valence - (18,959 net acres)	5.6	8.7	11.7
Net to GGE - (earning 85% of net Valence)	4.7	7.4	9.9
Red Project Total (Jesse McCracken)	9.3	25.7	71.1

Table 2 - Valence Mississippian Leadville 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

Table 3 - Valence Devonian McCracken Prospective Resources

Recoverable Helium	1U (P90) (BCF)	2U (P50) (BCF)	Mean (BCF)	3U (P10) (BCF)
Gross to Valence - (19,508 gross acres)	0.5	1.8	2.3	4.7
Net to Valence - (13,336 net acres)	0.4	1.3	1.6	3.2
Net to GGE – (earning 85% of net Valence)	0.3	1.1	1.3	2.7
Red Project Total (Jesse McCracken)	1.4	4.9	6.3	13.5

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%

Notes on Table 1

Note 1: The Prospective Resource evaluations of the Leadville (from Sproule) and the McCracken (from GGE) are both done under the SPE-PRMS Guidance and the GGE McCracken methodology has been reviewed by Sproule. The resource numbers that are disclosed are from two separate reports and have been combined to generate Table 1 in this press release.

Note 2: Table 1 is generated by arithmetic summing of Table 2 and Table 3

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.



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Notes on Table 3

Note 1: The resource estimates have been prepared using the probabilistic method and are presented on an unrisks basis. In a probabilistic resource distribution, 1U (P90), 2U (P50), 3U (P10) estimates represent the 90% probability, 50% probability and 10% probability respectively that the quantity recovered will equal or exceed the estimate assuming a success case in the prospect. The mean is the average of the generated probability distribution.

Note 2: The resource estimates provided have an effective date of 10th June 2023.

Note 3: GGE has the right to earn 85% of the incorporated joint venture company Valence Resources LLC (Valence) by drilling a third well at the Red Helium Project

Note 4: The Red Project comprises private and Utah State leases as described in Schedule A.

Note 5: Resources have been calculated as those helium volumes that the entity is allowed to lift and sell on behalf of the royalty owner

Note 6: The totals shown are the for the Jesse McCracken closure as described in the Methodology section of Schedule A.

Note 7: Red Project Total incorporates the entire Red Helium Jesse closure for the McCracken





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Sproule

June 20, 2023

Mr. Dane Lance
Valence Resources LLC
835 E. 2nd Ave Ste 440
Durango, CO 81301

Re: Due Diligence Evaluation of the McCracken Prospect, San Juan County, Utah.

Dear Mr. Lance:

At the request of Valence Resources LLC (hereinafter referred to as "Valence" or "the Company"), Sproule Incorporated ("Sproule"), an independent sub-surface consultancy based in Calgary, Canada, has conducted an independent Due Diligence Evaluation of the McCracken Prospect that underlays the Jesse Helium Discovery that has been made in the Leadville Limestone in San Juan County, Utah, USA. This evaluation is a geologic and engineering evaluation, based on the analysis methodology described herein using technical and economic data supplied by Valence, which is currently 77.5% owned by Grand Gulf Energy (CGE), with a right to own 85%, and has an effective date of June 10th, 2023. This evaluation does not include estimates of recoverable helium volumes from Contingent and/or Prospective Resources. Sproule has previously estimated the volumes of Prospective Helium Resources, those volumes of gases that are undiscovered, but the likelihood of their existence can be estimated. Prospective Resources thus carry significant exploration risk. Sproule has further given a statement, based on the results on the Jesse -1A well that the Company has demonstrated contingent resources on the Jesse Prospect. Contingent Resources are those volumes that have been discovered but either are not yet defined sufficiently to be classified as reserves or are not currently planned for development.

The Due Diligence Evaluation contained in this report is prepared in accordance with the Society of Petroleum Engineers (SPE) Petroleum Resources Management (PRMS) guidance and provides a review under a set of assumptions deemed most appropriate by a practitioner. These estimates are also in accordance with both the Australian Stock Exchange (ASX) rules (specifically Listing Rule 05 for Oil and Gas Companies). Sproule's evaluation is based upon data supplied by Valence, supplemented where necessary by Sproule's corporate awareness of current American industry costs and best practices.

RESOURCE ESTIMATES

Sproule reviewed the technical workflows and assumptions of the Company in its exploration assessment of the McCracken Prospect underneath the Jesse Helium Discovery. The McCracken Sandstone is a known helium producer, with multiple helium wells with historic helium production from the Exxon Lisbon Field north of the Jesse structure and the Redd-1 well, within the Jesse structural closure, penetrated the McCracken Sandstone where there is a petrophysical analysis with a gas pay zone along with a test of non-flammable gas.





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Valence Resources LLC
Sproule Incorporated

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June 14, 2023

Thus, from a helium systems analysis, the play risk has been eliminated as there are known commercial helium fields with the same source, reservoir, and seals. The overall reservoir and seal risk is low as the Redd-1 well has already been drilled on structure with logged gas sands and indications of non-hydrocarbon gas that historically from other wells in the area will contain 1 to 2+ percentage of helium by volume. The parameters that the Company has used for its range of values in its probabilistic volumetric evaluations meet all industry best practices and each of the parameters for area, thickness, porosity, saturation, formation volume factor, helium concentration, and recovery factor can be documented from data in the immediate area or adjacent analogs.

STATEMENT OF RISK

The accuracy of reserves, resources, and economic evaluations is always subject to uncertainty. The magnitude of this uncertainty is generally proportional to the quantity and quality of data available for analysis. As a prospect, project, or well matures and new information becomes available revisions may be required which may either increase or decrease the previous estimates. Sometimes these revisions may result not only in a significant change to the reserves, resources and value assigned to a property, but also may impact the total company reserves, resources and economic status. The independent reserves, resources and economic forecasts contained in this report were based upon a technical analysis of the available data using accepted geoscience and engineering principles. However, they must be accepted with the understanding that further information and future reservoir performance subsequent to the date of the estimate may justify their revision. It is Sproule's opinion that the independent estimated reserves, resources, economics, and other information as specified in this report are reasonable and have been prepared in accordance with generally accepted geoscience and petroleum engineering and evaluation principles. Notwithstanding the aforementioned opinion, Sproule makes no warranties concerning the data and interpretations of such data. Neither Sproule, nor any of its employees have any interest in the subject properties and neither the employment to do this work, nor the compensation, is contingent on Sproule's estimates of the resources or economic evaluations for the properties in this report. This report was prepared for the exclusive use of Valence and will not be released by Sproule to any other parties without the Company's written permission (other than the stated purpose set out above). The data and work papers used in this preparation of this report are available for examination by authorized parties in Sproule's offices. Sproule gives its permission for the release of this report, for public use, by the Company.

Thank you for this opportunity to be of service to Valence. If you have any questions or wish to discuss any aspect of the report further, please feel free to contact either of us.

Sincerely,


Jun 14 2023

Jeffrey B. Aldrich, L.P.G.
Senior Geoscientist





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SCHEDULE A - LISTING RULE 5 DISCLOSURES

In accordance with ASX Listing Rules 5.25, 5.26, 5.28 and 5.31, the Company confirms the following in respect of its Prospective Resources:

Method of Preparation

The resource estimates have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2018, approved by the Society of Petroleum Engineers (SPE-PRMS) and reported in the most specific resource class in which the prospective resource can be classified under 2018 SPE-PRMS. The estimates of Prospect Resources are reported as at 10th June 2023.

Resource Classification

The Prospective Resources have been sub-classified as a “Prospect” as the accumulation is well defined and represents a viable drilling target. This project maturity status sub-classification is further confirmed by the commercial Lisbon Helium Field immediately to the north.

The Prospect Resources are reported on the basis that helium would be produced from vertical wells with the opportunity for offtake with two helium plants in the immediate vicinity. The Lisbon Helium Processing Plant is ~20 miles to the northeast with an available access pipeline on the AMI. The Company has a binding offtake agreement with Paradox Resources LLC (Paradox). The Doe Canyon Helium Plant is ~15 miles to the east in Colorado.

The estimated quantities of petroleum (or commercial gases) that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons, and or commercial gases.

Methodology

Valence compiled a database of well logs, well information, grids, land information and production data to evaluate the Red Helium Project McCracken potential at Jesse. Sproule evaluators reviewed the Valence interpretations. Sproule performed due diligence on the geologic, geophysical, petrophysical, and reservoir engineering analysis of Valence.

Only the Devonian McCracken sandstone formation was considered in the report based on the analogue Lisbon field 20 miles to the North. The Leadville prospective resource was previously evaluated by Sproule.

Prospective Resources were considered in the Jesse closure, a subset of the broader Red Helium Project. The structural closing contour was taken as the maximum area and the closing height was divided into thirds to define the Most Likely using the Lowest Known Gas as a Minimum.

Valence evaluated the Gross Thickness, Net-to-Gross (NTG) and porosity as defined by petrophysical analysis. The NTG method advantage is that there are often more datapoints spread across a much greater area.

In the Red Helium Project and the Lisbon field there were multiple wells with sufficient log data for reasonable porosity evaluation.

Porosity and gas saturation ranges were taken from petrophysical analysis and checked against publications of existing analogue fields. The porosity range is from 5% to 15% with a most likely





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9% porosity. Gas saturations can be as high as 80% (with some log calculated values higher however, as with the porosity, there are zones of higher water saturation thus a low case of 60% was used. A mean value of 70% gas saturation was used in the realization.

The gas formation volume factor (B_g) was calculated from industry standard correlations and reported gas compositions.

The recovery factor (RF) was assumed to range from a maximum of 80% to a minimum of 50% with a most likely value of 65%. The maximum recovery factor represents a permeable reservoir with minimal faults, joints, and permeability barriers. The most likely recovery factor of 65% is typical of a volumetric dry gas reservoir with some flow restrictions. Assuming a reservoir depth of 8,500 feet, initial reservoir pressure is 2,600 psia.

A range of expected helium concentrations were used based on recoveries from wells in the Red Prospect and the nearby Lisbon field.

Calculation of Gross and Net Prospective Helium Resources

The shapefiles of the Maximum, Most Likely and Minimum areas for each of the Jesse McCracken prospect were used to determine the gross and net acreage that Valence currently has leased within each of those shapefiles.

* A 20% royalty on all commercial production from the AMI is payable to the landowners (State and private as per below) and is inclusive of an overriding royalty interest payable to the Valence partners and project vendors.

MINERAL LEASE SUMMARY INFORMATION

In Utah, the mineral estate (including helium) may be owned by private citizens or corporations, the State of Colorado or the United States of America (federal). A mineral owner may permit a third party to develop and produce the mineral estate (including helium) by entering into a mineral lease between itself as lessor and the third party as lessee. Valence's rights to develop, produce and sell any helium that may be derived from the Red Helium Project has been granted by private mineral owners and the State of Utah pursuant to mineral leases issued by each of those mineral owners. There are currently no federal leases held by Valence.

The net mineral acres associated with the Jesse McCracken prospective resource at the Red Helium Project comprise 19,508 gross acres with a net 13,336 acres based on the Jesse McCracken closure.

State Leases

The State of Utah's School and Institutional Trust Lands Administration (SITLA) (State Leases) has, under an exclusive Other Business Arrangement (OBA), leased approximately 14,672 acres to Valence. The initial term of the leases is two years (commencing 1 July 2021) with an annual rental of US\$2.00/acre. As Jesse-1A was drilled on State land on or before July 1, 2023, Valence has a right to extend any or all of the State leases for a period of 3 years for \$11/acre. If the Company successfully produces helium or other products from the lease area, a 15% royalty will be payable to the State of Utah and the lease term will be extended indefinitely until production ceases. The leases do not include any minimum work commitments. Valence is the only working interest owner in each of these leases.

Private Leases

The leases issued by the private mineral owners (Private Leases) have an initial term of two years with, in most cases, an option to renew for a further three years for a fee of \$100/acre. If the Company successfully produces helium or other products from the lease area, a 15%-16.67%





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royalty will be payable to the lessor and the lease term will be extended indefinitely until production ceases. The leases do not include any minimum work commitments. Valence is the only working interest owner in each of these leases.

QUALIFIED PETROLEUM RESERVES AND RESOURCE EVALUATOR - DETAILS

The reserves and resources information in this document are based on and fairly represent information from a report independently verified by Sproule Associates Limited (“Sproule”) relating to oil and gas fields in the Asset Properties.

The report was prepared effective 10th June 2023 under the supervision of Jeff Aldrich who is qualified in accordance with ASX listing rule 5.41. Jeffrey B. Aldrich is a Senior Geoscientist in Sproule and is a Certified Petroleum Geologist, #6254, by the American Association of Petroleum Geologists (AAPG) and a Licensed Professional Geoscientist, #394; He is an active member of the AAPG and the Society of Petroleum Engineers (SPE). He has over thirty years as a practicing petroleum geologist/geophysicist and over twenty years of experience in oil and gas reserve evaluations. He holds a Bachelor of Science degree in Geology from Vanderbilt University and a Master’s of Science degree in Geology from Texas A&M University. He is an instructor in the PetroSkills Alliance and is the Course Director for “Prospect and Play Analysis”, “Evaluating and Developing Shale Reservoirs”, “Unconventional Resource and Reserve Estimation”, and “Coalbed Methane Reservoirs”. He is qualified in accordance with ASX listing rule 5.41.

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.

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

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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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 Capex⁶. The Red Helium project is 20 miles south of and connected by pipeline to the operational Lisbon Helium Plant.

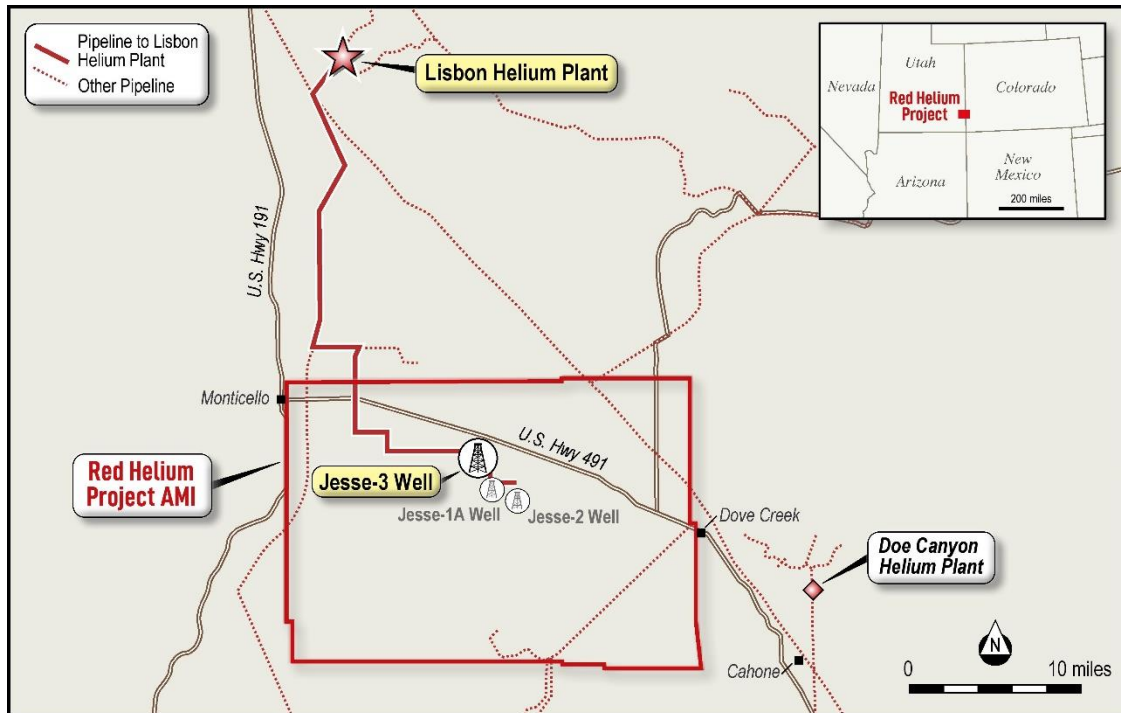


Figure 2: Jesse-1A and Jesse-2 locations in the Red Helium project AMI with local pipelines / gas transport route to the Lisbon Helium Plant.

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 market⁷. 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\$1,000/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 CO₂ disposal options with revenue generating potential:
 - 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
 - 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

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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Figure 3: Paradox "5.5 Nines" Resources Lisbon Valley Gas Processing Plant.

