15 April 2024

Potential Deeper Stacked Helium Reservoirs Add Scale to the Red Helium Project

- Three significant deeper reservoir targets prospective for helium have been identified at the Red Helium Project, in addition to the primary Leadville and McCracken sandstone targets.
- Multiple nearby analogue helium fields have proven helium pay and production from these deeper reservoir targets.
- Additional potential helium reservoirs provide significant additional upside both in scale and the potential for higher helium concentration upside - no sub-Leadville gas sample has been analyzed at the Red Helium project.
- Four historic wells within the Red Helium Project area drilled below the Leadville, with proven gas across a maximum interpreted gross zone spanning 900 feet.
- Case and perforate well design in forthcoming operations will log and test all deeper reservoir targets - providing significant upside.

Grand Gulf Energy Ltd (**ASX:GGE**) (**"Grand Gulf" or the "Company"**) is pleased to announce that, following a seismic, petrophysical, completion and production review of analogue helium fields in the region, the Company has identified three highly prospective deeper stacked potential helium reservoir targets that will be tested in future well operations.

The updated well design and engineering (casing and perforating the entire basinal stratigraphic section), will add significant helium upside to the already identified Mississippian Leadville dolomite (10.9 bcf) and Devonian McCracken sandstone (2.7 bcf) targets. In a success case, deeper helium reservoirs will be perforated and tested for modest additional cost.

Managing Director Dane Lance commented:

"We're thrilled to announce the addition of three under-explored, highly prospective additional deeper targets on top of the primary Leadville and McCracken targets. These targets provide the potential for both extra resource build and gas flowrate upside.

The improved case and perforate well design provides zonal isolation, with the identified zones to be logged as a part of the original well plan, and potentially tested for a modest additional cost.

The addition of the three independent deeper targets, takes the total zones to be tested in future Red Helium project well operations to five, providing exciting upside to the already geologically de-risked primary Leadville and McCracken targets which alone target a 12.7 bcf[1] helium resource."

[1] *Gross P50 prospective resource as announced on ASX on 8 December 2021 and 22 June 2023.* 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. See cautionary statement for Prospective Resources.

Red Helium Project Area Deeper Proven Pay (sub-Leadville)

Four historic wells (Texas Coal-1, Gulf Unit-2, Redd-1, Crittenden Phillips-1) in the Red Helium project have drilled below the Leadville. All are interpreted as gas filled to base below the Leadville, including the additional deeper helium targets.

The horst region of the Red Helium project has proven gas in the Leadville and McCracken, with the maximum intersection interpreted as gas bearing over a 900 foot gross zone, incorporating all deeper targets. Earp-1 (permitted) is planned as an up-dip twin of Gulf Unit-2 which identified a proven gas reservoir.

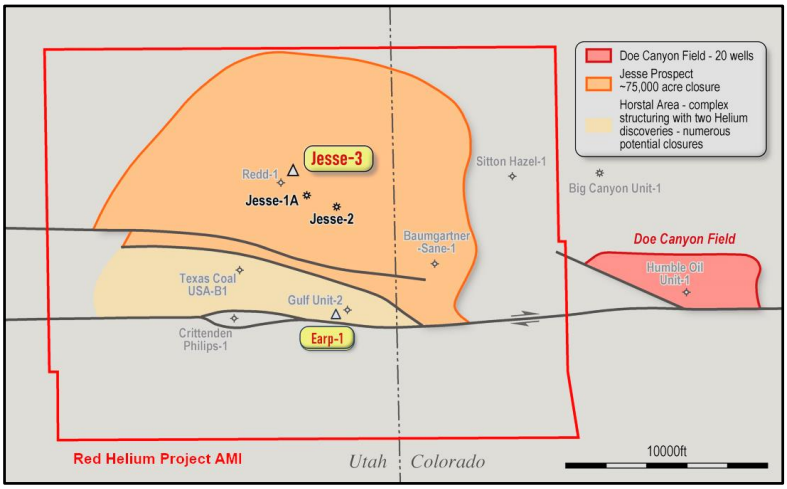

Figure 1: Red Helium project area showing structural closure, six historic wells, Jesse-1A and Jesse-2 locations, and the proposed Jesse-3 (up-dip twin to Redd-1) and Earp-1 (up-dip twin to Gulf Unit-2) locations.

The Jesse structure (Redd-1) has proven gas in the Leadville, with gas on logs to the base of the McCracken. The well is interpreted as gas bearing over a 700 foot gross zone, with potential for a deeper gas column up to 1,100 feet to the granitic basement. Jesse-3 (subject to permitting) is planned as an up-dip twin to Redd-1.

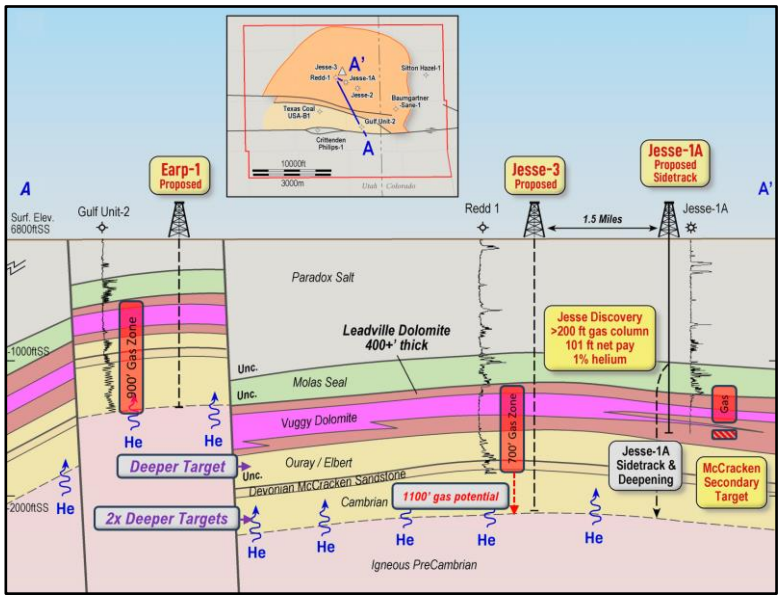

Figure 2: Stylised cross-section showing the Jesse-1A discovery well, and the proposed Jesse-3 (up-dip twin to Redd-1) and Earp-1 (up-dip twin to Gulf Unit-2) locations, and the Jesse-1A discovery well and proposed sidetrack.

Proximal Analogue Seismic, Petrophysical Analysis and Production Performance Review

The Company has reviewed the Red Helium area project wells in conjunction with detailed field studies on the Lisbon oil, gas, and helium field (25 miles to the north) and the Doe Canyon helium field (15 miles east).

Furthermore, the Company is in the process of reviewing seismic, petrophysical, completion and production information on several proximal analogues, both producing and under development, including the Tocito Dome helium field (90 miles south), and three proximal helium discoveries currently under development: Three Mile Unit (25 miles north-west), Hatch point (30 miles north-west) and Tricentrol (25 miles south-west).

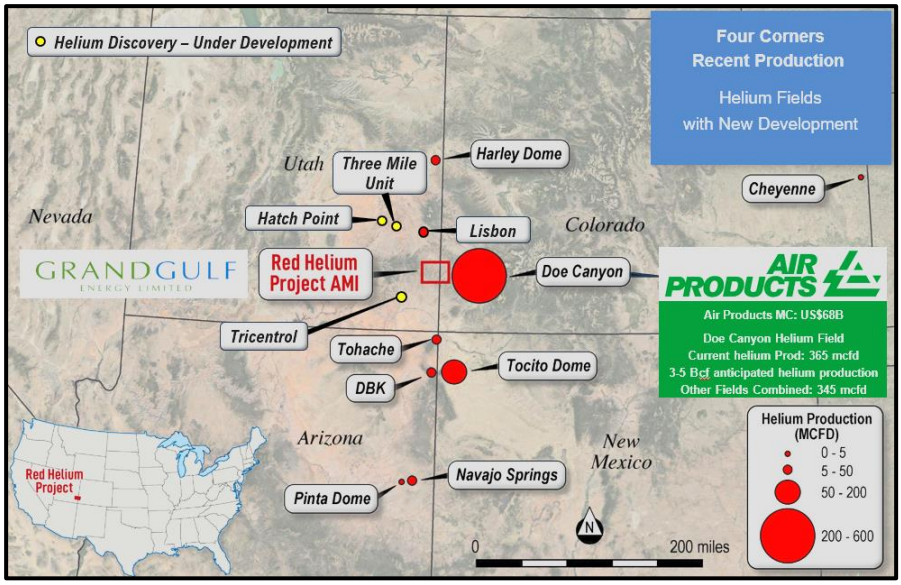

Figure 3: Four Corners new helium production and recent helium discoveries under development

Lisbon helium field is a mature field, having produced from both the Leadville and McCracken, with the identified deeper targets often completed and co-mingled with McCracken production.

Tocito Dome helium field (90 miles south) originally targeted the Leadville, however initial exploration indicated a relatively tighter reservoir as a function of limited dolomitization/and resulting secondary porosity.

Tocito Dome now primarily targets sub-Leadville geology, with an average porosity of 7%, routinely completing zones below 5% porosity. Red helium project deeper intersections show porosities exceeding 10% in all deeper reservoir targets.

Based on analogue field data, the deeper targets can present both as a continuous gas column and separate gas accumulations with inter-formation seals.

Proximity of the deeper formations to the helium source, inter-formation seal/baffle potential, and the helium trapping potential of lower porosity reservoirs, relative to the prolific Leadville, all provide helium concentration upside for the Red Helium deeper formations.

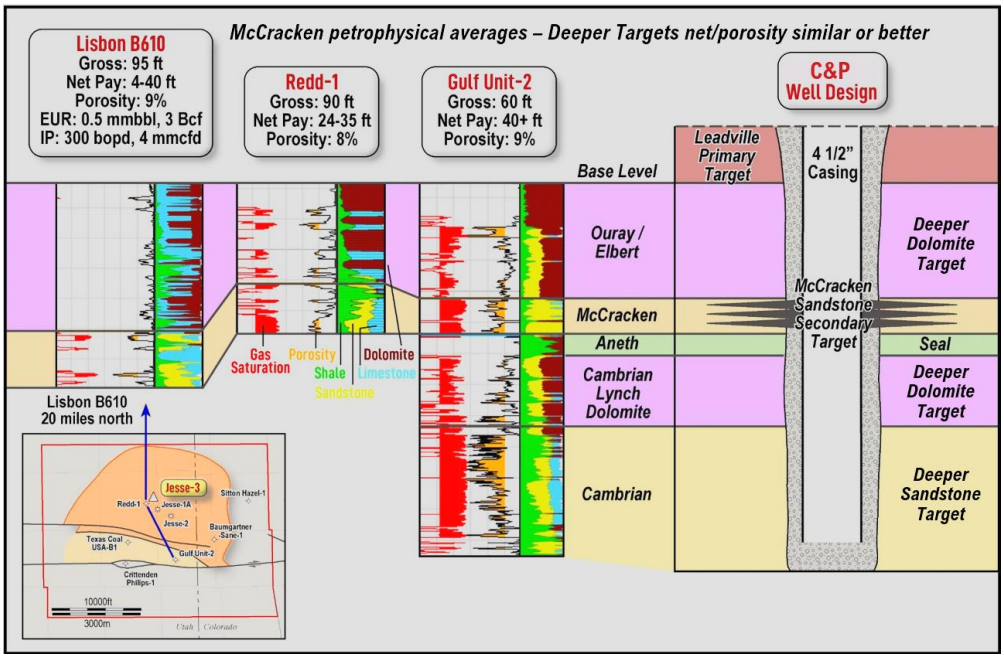

Figure 3: Log section of selected deeper well penetrations in the proximal Red Helium project area, showing exceptional porosity development in the Redd-1 and Gulf Unit-2 McCracken and deeper targets with proven gas.

The average produced helium concentration at Tocito Dome is 7%. The high helium concentrations observed are interpreted to be due to a combination of the above factors, the local helium (pre-Cambrian granitic basement) source, and other geologic gas sources and migration pathways.

Three Mile Unit, Hatch Point and Tricentrol all had exceptional helium-charged Leadville reservoirs with commercial gas flow rates and are currently under development. Three Mile Unit and Tricentrol have proven deeper pay below the Leadville. These fields will be the subject of a future update once field studies are finalised.

Red Helium Deeper Target Geology

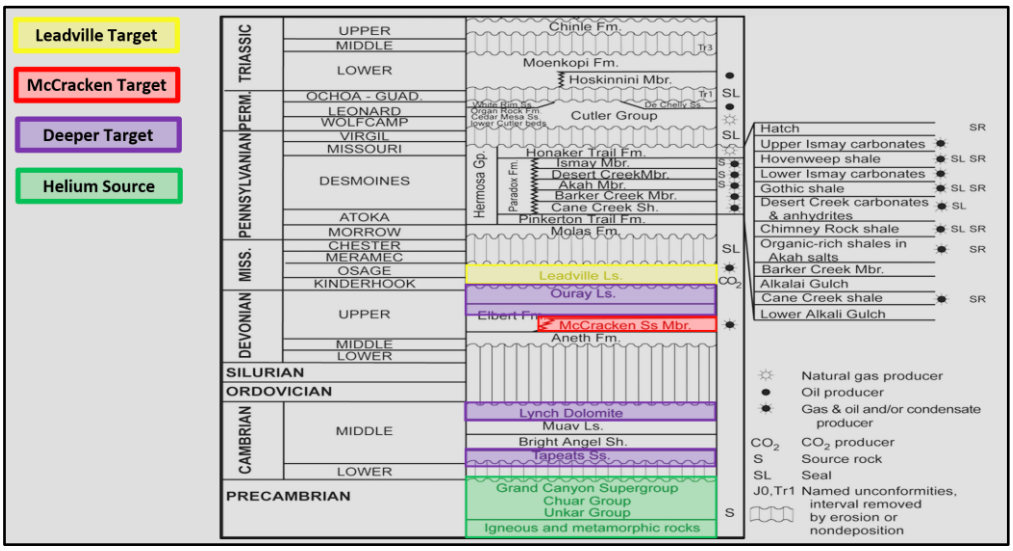

Figure 4: Paradox Basin stratigraphic column showing helium source rock with primary Leadville/McCracken and deeper targets.

Devonian McCracken Sandstone (Secondary Target) ~380 Ma

Regional proven helium producing fluvio-deltaic sandstone formation. Routinely completed in Lisbon and Tocito Dome and co-mingled, with initial production rates in excess of 1 million cubic feet per day (mmcfd) and several examples exceeding 5 mmcfd. Both Redd-1 and Gulf Unit-2 demonstrate excellent net pay exceeding 30 feet, with porosities exceeding 10%. The Company has a 2.7bcf gross P50 prospective resource in the McCracken.

Devonian Ouray/Elbert Dolomite (Deeper Target) ~360 Ma

Carbonate (dolomite) formation, including breccia and limey shales across a 100 foot gross zone. Productive in a several wells in Lisbon, with porosity on logs in most wells, productivity is unknown as zone is produced co-mingled. Routinely completed in Tocito Dome and co-mingled. Redd-1 and Gulf Unit-2 shows porosity development exceeding 10%.

Cambrian Lynch Dolomite and Cambrian Ignacio Sandstone (Two Deeper Targets) ~520 Ma

Carbonate (dolomite) across a 100 foot gross zone separated by a widespread marine shale to the variable clastics (sandstone), potentially a granite wash, across a 150 foot gross zone which sit directly on the pre-Cambrian weathered/igneous basement helium source. Gas test in Lisbon of 0.5mmcfd pre-stimulation techniques, and likely to be greatly improved with modern stimulation. Produced in the Lisbon field co-mingled with limited isolated production history. Highly under explored in the region with limited penetrations. Gulf Unit-2 has exceptional porosity development exceeding 15%, whilst Redd-1 did not penetrate below the McCracken.

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 Paradox Basin, Utah, in the prolific Four Corners region. For further information please visit the Company's website at www.grandgulfenergy.com

Cautionary Statement for Prospective Resource Estimates

With respect to the Prospective Resource estimates contained within this report, it should be noted that the estimated quantities of gas that may potentially be recovered by the future application of a development project relate to undiscovered accumulations. These estimates have an associated risk of discovery and risk of development. Further exploration and appraisal are required to determine the existence of a significant quantity of potentially moveable helium.

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.