



17 January 2022

Well Permitting Commenced & Top Drilling Manager Appointed

- Experienced Drilling Engineer, Doug Frederick, has been appointed as Drilling Superintendent for the Red Helium Project:
 - Ex-Shell engineer with 20 years of experience at neighboring Doe Canyon helium/CO₂ field.
 - Mr Frederick's hands-on local knowledge is a major step towards implementing a large-scale drilling programme.
- Optimal well site selected and permitting commenced for the maiden helium well, Jesse #1

Grand Gulf Energy Ltd (ASX:GGE) ("Grand Gulf" or the "Company") and its partner, Four Corners Helium, LLC (FCH), is pleased to advise of the appointment of Doug Frederick to the position of Drilling Superintendent for the forthcoming helium drilling programme at the Red Helium Project. Doug has over 40 years' experience in drilling and completion, including 16 years working for Shell Oil Company.

Incorporated joint venture company Valence Resources LLC ("Valence") (Grand Gulf current interest - 55% with a right to earn up to 85%) is fortunate to secure the services of Mr Frederick. During his 20-year tenure with Kinder Morgan¹ (market cap: US\$40B²), he oversaw 9 drilling and 30 workover rigs annually which culminated in McElmo Dome Field becoming one of the largest CO₂ producing fields in the world (~1 BCF/day); and Doe Canyon Field, the second largest North American helium discovery in over 70 years.

As Drilling Director at Kinder Morgan, Mr Frederick was responsible for drilling and workover operations of source wells and injection/production wells. He was responsible for annual capital budgets up to US\$300M and OPEX budgets up to US\$200M and focused on continuous improvement to increase efficiency and lower cost in delivering a quality wellbore.

¹ Kinder Morgan owns the Doe Canyon Field whilst Air Products operates the helium component of production

² <https://finance.yahoo.com/quote/KMI/>



Mr Frederick has the requisite in-depth knowledge and relevant experience in drilling and completing helium wells in the precise area of the Paradox Basin where the Red Helium Project is located.

Jesse #1 Permitting

After a year of in-depth research, the optimal drill site has been selected for the maiden helium well (Jesse #1), with Valence designated as Operator. Permitting of the well is underway and is expected to be completed in less than 3 months.

Under the farmin agreement, Grand Gulf is to fund the Jesse #1 well up to a value of \$US1.5 million, with any additional costs to be paid 70% Grand Gulf and 30% FCH. On completion of the first well Grand Gulf will have earned a 70% interest in Valence.

Red Helium Project Details and Resource

Table 1 - Valence Prospective Resources*

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

* 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.

The Red Helium Project provides exposure to the burgeoning helium industry in a known helium-producing 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 (refer ASX announcement 8/12/21, pg 4), 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 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
- 20 miles south of and connected by pipeline to the operational Lisbon Helium Plant (99.9995% purity)
- Current helium strip pricing ranges from \$250-\$400/mcf³

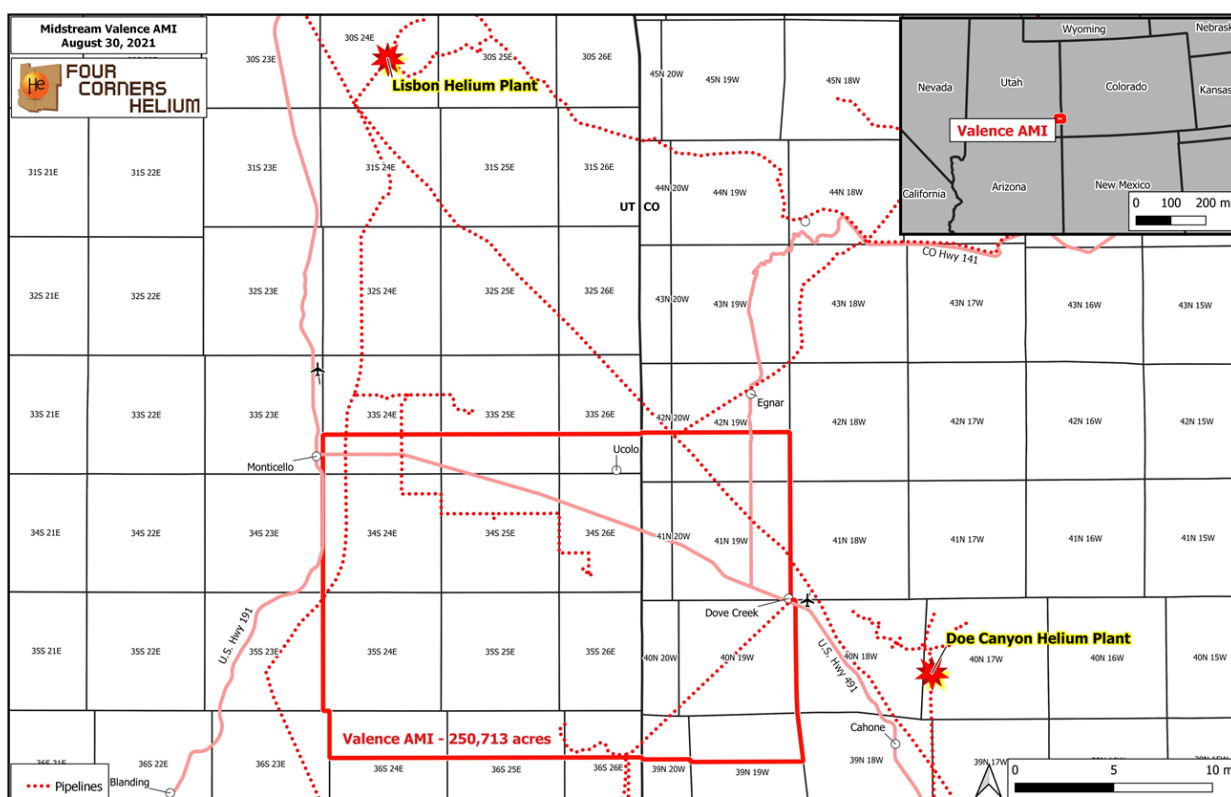


Figure 1 Valence AMI containing the Red Helium Project with local pipelines (dotted red) and the two nearby helium fields/processing plants

³ Edison Research Global Helium Market Update, May 2021

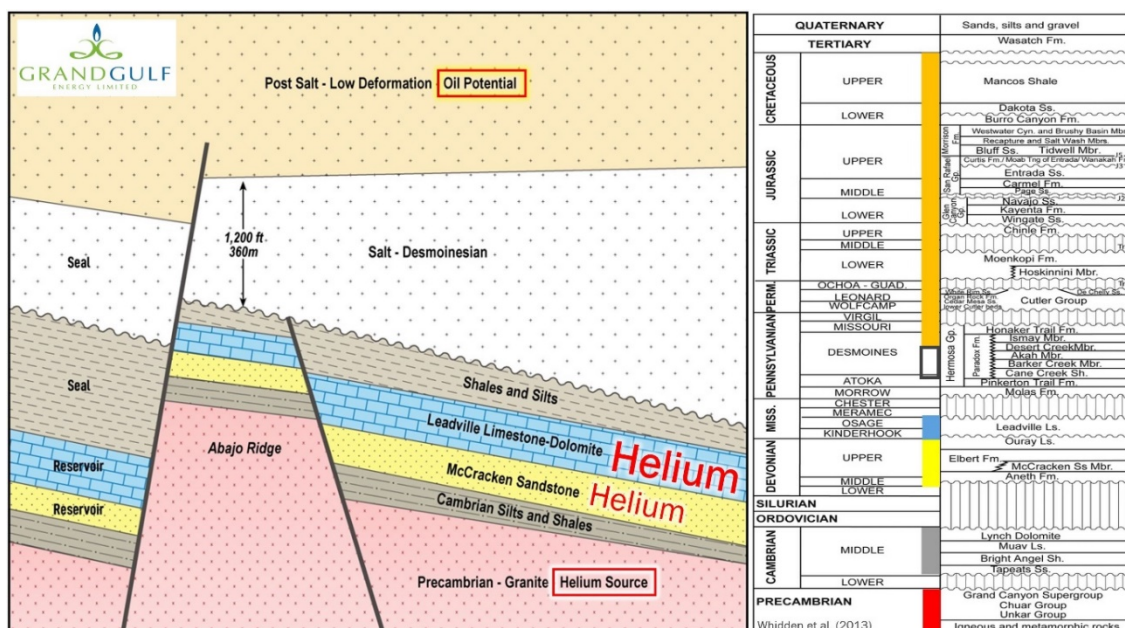


Figure 2 – SE Utah Stratigraphic Chart colour coded to a stylized representation of the Red Helium structure

This release has been approved by the Board.

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Competent Person's Statement

The information in this report is based on information compiled or reviewed by Mr Keith Martens, CEO 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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