Independent Laboratory Analysis Confirms Elevated Helium and Natural Hydrogen at PEL 803

Highlights

- **Independent laboratory analysis confirms elevated helium and widespread natural hydrogen anomalies across PEL 803, Eyre Peninsula, South Australia**
- **Helium measured up to 63 ppm[1] more than 12 times atmospheric background levels**
- **Hydrogen concentrations up 3,427 ppm[1], more than 6,200 times atmospheric background levels**
- **64% of samples contained elevated natural hydrogen, supporting the presence of an active subsurface gas system**
- **Results validate Prominence's exploration model and support the presence of an active subsurface gas system**
- **Data integration and target ranking now underway as the company advances toward seismic acquisition and drill target generation**

Prominence Energy Limited **(ASX: PRM) ("Prominence" or "the Company")** is pleased to announce the results of independent laboratory gas chromatography ("GC") analysis completed by Atherium Pty Ltd on soil gas samples collected during the recently completed PEL 803 soil gas survey ("SGS") on the Eyre Peninsula, South Australia (ASX:PRM Announcement 7 May 2026).

Prominence Energy Chief Operating Officer, Dr Krista Davies, commented: *"Independent validation of helium and hydrogen anomalies in PEL 803 is a significant de-risking milestone for the project. Importantly, these results were obtained under recharge conditions approximately 24 hours after probe installation, increasing our confidence that we are detecting naturally migrating subsurface gases.*

The results strengthen our geological model and provide a robust dataset for defining and ranking drillable targets. Our focus now turns to integrating these results with geophysical data to identify the highest priority locations for future seismic acquisition and drilling."

[1] *Air corrected values*

The independent laboratory results confirm strongly elevated helium and hydrogen concentrations across the survey area and independently validate the Company's exploration model at PEL 803.

The results represent a significant technical milestone and provide a stronger foundation for advancing PEL 803 toward seismic acquisition and target definition.

Figure 1: Prominence Energy team collecting gas sample during PEL 803 Soil Gas Survey, April 2026. Photo by Aiden Van Nielen

The laboratory program analysed 63 soil gas samples collected during the PEL 803 Soil Gas Survey.

Results confirmed elevated hydrogen concentrations above atmospheric background levels throughout the survey area. The highest hydrogen anomaly measured a concentration of 3,427 ppm[1]. A total of 40 (64%) samples returned elevated hydrogen values above atmospheric background, demonstrating the presence of a widespread hydrogen system across PEL 803.

Elevated helium was also measured, up to a maximum of 63 ppm[1]. These results complement the Company's earlier field measurements and support the interpretation of an active subsurface gas migration system.

[1] *Air corrected values*

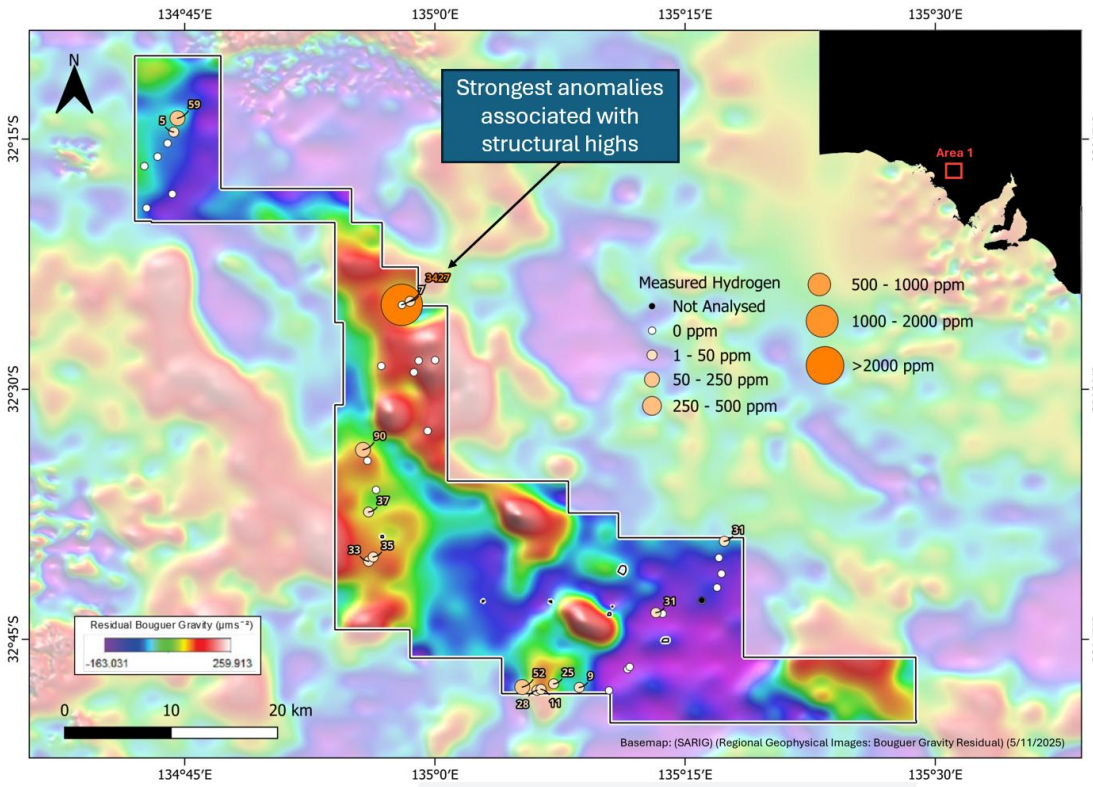

Figure 2: Hydrogen soil gas concentrations (T1 - 24hrs post drilling) in PEL Area 1, Eyre Peninsula, South Australia. Background Residual Bouger Gravity

Independent Laboratory Validation

The gas chromatography analyses were completed by Atherium Pty Ltd in East Perth using an Agilent 990 Micro Gas Chromatograph configured for permanent gas analysis including helium and hydrogen. Samples were analysed using repeated measurement cycles and calibrated against certified gas standards.

Importantly, unlike instantaneous field measurements, all laboratory samples were collected during the T1 recharge phase approximately 24 hours after probe installation. The Company considers this a critical distinction, as recharge measurements are regarded as more representative of naturally migrating subsurface gases and less susceptible to temporary drilling-related artifacts.

[1] *Air corrected values*

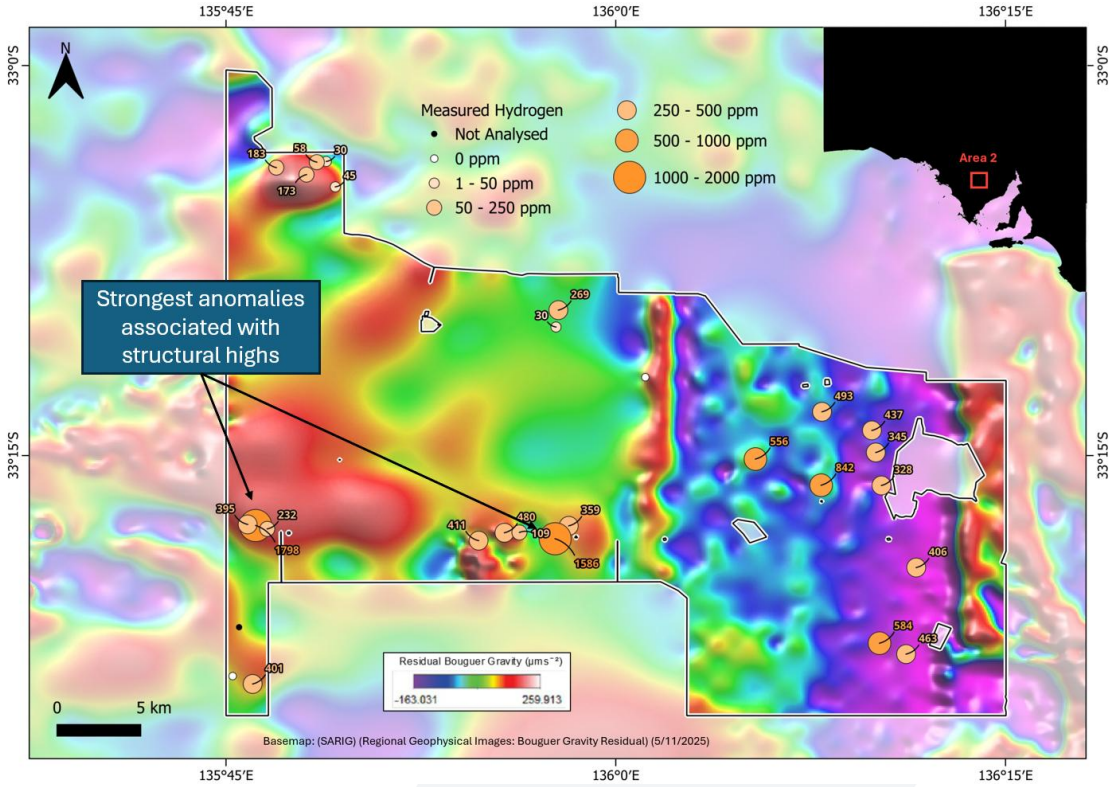

Figure 3: Hydrogen soil gas concentrations[1] (T1 – 24hrs post drilling) in PEL 803 Area 2, Eyre Peninsula, South Australia. Background Residual Bouger Gravity

Geological Significance

The laboratory-confirmed hydrogen anomalies are spatially associated with major interpreted structures and prospective Archean to Mesoproterozoic geological domains within PEL 803 (Figure 2& Figure 3).

The combined helium and hydrogen dataset supports the Company's geological model that the licence area hosts an active subsurface gas system linked to deep crustal structures and radiogenic basement rocks, including the Hiltaba Suite granites.

The coincidence of hydrogen anomalies with interpreted structural highs provides additional support for the Company's geological model and reduces a key early-stage exploration risk.

Beyond PEL 803, the results provide valuable geological calibration data for the Company's broader Gawler Project, which comprises approximately 64,000 km² of highly prospective acreage across South Australia.

[1] *Air corrected values*

Advancing Toward Drill-Ready Targets

The laboratory results complete a key phase of Prominence's exploration workflow and provide a strong technical foundation for the next stage of exploration. The Company's focus now shifts to integrating the geochemistry with geophysical datasets to identify and mature drill-ready targets.

Over the coming months Prominence intends to:

- integrate laboratory geochemistry with gravity, magnetic and structural datasets
- define and rank priority exploration leads
- identify locations for follow-up seismic acquisition
- mature the highest-ranked targets toward drill-ready status

The Company believes this work will materially improve targeting efficiency, reduce exploration risk and maximise the probability of drilling success.

[1] *Air corrected values*

Authorised for release by the Board of Prominence Energy Limited.

About Prominence Energy

Prominence Energy Limited is an ASX-listed energy company headquartered in Perth. PRM's strategy is to identify and secure high upside energy opportunities at an early stage and unlock value through disciplined, science led exploration. The Company's South Australian helium, natural hydrogen and associated natural gas portfolio provides exposure to an emerging exploration play with the potential to deliver significant shareholder value through exploration success.

About Natural Hydrogen

Natural hydrogen (also known as white or geologic hydrogen) is formed from natural processes within the earth and accumulates underground. It can be identified using conventional, low-cost, non-invasive exploration methods and represents a zero-carbon fuel, producing only water vapour when combusted.

About Helium

Helium is a naturally occurring noble gas generated through the radioactive decay of uranium and thorium within ancient crustal rocks, particularly Archean granites. Helium is a high-value, non-renewable resource with essential applications in medical imaging, semiconductor manufacturing, space technologies and cryogenics, and is currently subject to global supply constraints.

Forward-looking Statements

This document may contain certain forward-looking statements which are based on Prominence Energy Limited's expectations, estimates and assumptions as at the date of this document. Forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those expressed or implied. These risks include, but are not limited to, geological and technical uncertainties, operational and regulatory outcomes, environmental conditions and market factors. Forward-looking statements speak only as at the date of this document and Prominence undertakes no obligation to revise or update them to reflect future events or circumstances.

[1] *Air corrected values*