

2 September 2026

ASX Announcement

Gold Hydrogen Commences the Next Stage of Flow Testing the Ramsay World-Class Natural Hydrogen and Helium System Ramsay 3 Well Testing Set to Commence

HIGHLIGHTS

- Gold Hydrogen Limited (ASX: GHY) has moved to Ramsay 3 to commence Natural Hydrogen and Helium flow testing. Workover operations are underway, and flow testing is scheduled to commence immediately thereafter.
- The Ramsay 3 well location and casing/completion have been specifically selected and designed to optimise the appraisal and maximise flow rates for both Natural Hydrogen and Helium.
- Ramsay 3 is a 7-inch diameter cased well, compared with the 4½-inch casing installed on the Ramsay 1 and Ramsay 2 wells which have been successfully flow tested.
- The Ramsay 3 7-inch wellbore provides over 2.3 times the wellbore cross-sectional area to capitalise on the strong reservoir deliverability seen at the Ramsay Project to date. This enables the use of a substantially larger-capacity Electric Submersible Pump (ESP) of up to 20,000 bbl/day, providing a significant increase in flow-testing capability.
- To date, flow test results from Ramsay 1 and Ramsay 2 have confirmed the presence of a continuous and laterally extensive 180m gross Helium reservoir.
- The Company has already confirmed that world class Helium of up to 20% stabilised air-corrected purities were successfully flowed to surface and separated from Ramsay 1 and Ramsay 2, including a successful trial of the Quantum Technology Purification Equipment. Refer to attached Tables 1 and 2.
- Ramsay 1 and 2 Helium flow testing indicated strong reservoir deliverability with a Productivity Index of up to 34 bbl/day/psi, capable of raw gas rates of up to ~128 Mscf/day and Helium rates of up to ~24.3 Mscf/day from the Kulpara Dolomite.
- The Ramsay Project has the potential to underpin a commercial Helium development in line with an independent Worley Report (refer to the Company's ASX announcement of 20 May 2026).
- Contingent Resource certification is progressing and is a priority for the Company, further de-risking the Ramsay Project.

Gold Hydrogen Managing Director Neil McDonald said:

“Ramsay 3 has been designed to optimise appraisal and maximise flow rates for both Natural Hydrogen and Helium at Ramsay. The commencement of Ramsay 3 testing is an extremely important milestone for Gold Hydrogen. Formation evaluation has provided us with very encouraging information on the reservoir, including favourable porosity, natural fracturing and fluid mobility, as well as supporting continuity of important gas-bearing zones across approximately 2.3 kilometres between Ramsay 2 and Ramsay 3.

Ramsay 1 and Ramsay 2 were 4½-inch cased wells. Ramsay 3 is a 7-inch diameter cased well, providing approximately 2.3 times the wellbore cross-sectional area. In short, we now have a bigger well, a bigger pump and what independent analysis has identified as highly encouraging reservoir characteristics.

If we can demonstrate strong and sustained flow rates while maintaining significant Natural Hydrogen and Helium concentrations, it could be a major step forward in establishing the commercial potential of the Ramsay Project.

We believe the Ramsay Project has the potential to become a globally significant source of both Natural Hydrogen and Helium, and Ramsay 3 is designed to test the scale up of that potential.”

RAMSAY 3 TESTING TO COMMENCE

Gold Hydrogen Limited (“Gold Hydrogen” or “the Company”) is pleased to announce that **Natural Hydrogen and Helium testing is due to commence at Ramsay 3 once workover operations have been completed.**

The Company believes Ramsay 3 represents a major progression in the appraisal of the Ramsay Project because it brings together two critical developments:

1. Advanced petrophysical and formation evaluation. The integration of Nuclear Magnetic Resonance (NMR), acoustic imaging and resistivity imaging which has identified favourable reservoir characteristics including porosity, natural fracturing and fluid mobility across the gas bearing Parara Limestone, Kulpara Dolomite and Winulta Sandstone reservoirs at Ramsay 3;

and

2. A substantially larger wellbore and ESP system designed to scale up reservoir deliverability. The modelled flow rates assumed from Ramsay 1 and Ramsay 2 well tests can be tested through a zonal flow test of Ramsay 3 for both Natural Hydrogen and Helium bearing reservoirs. The downhole ESP is expected to flow gross fluid rates of up to 20,000bbls/day from the 7-inch cemented and cased wellbore design at Ramsay 3.

RAMSAY 3 FORMATION EVALUATION

The geological case for Ramsay 3 has been strengthened by detailed formation evaluation undertaken by the Company and its independent consultants including Baker Hughes and ImageStrat Pty Ltd.

The formation evaluation supports the interpretation that key gas-bearing zones are laterally continuous between Ramsay 2 and Ramsay 3, approximately 2.3 kilometres apart. This provides additional support for the Company's geological model that the Natural Hydrogen and Helium-bearing formations extend across a substantial area rather than representing an isolated occurrence.

The NMR data provides additional formation-level information relevant to pore structure, fluid characteristics and mobility, complementing the exceptional gas concentrations observed during drilling and the subsequent flow-testing results. After the drilling of Ramsay 3, NMR log analysis was conducted by Baker Hughes and Gaffney Cline energy advisory.

NMR analysis has been used widely in the gas industry identify and assess subsurface fluids including gas and water. As shown in **Figure 1** below, the log shows a strong dissolved gas effect at an interval between 682m and 690m. Ramsay 3 has a total of 105m Helium gas anomalies interpreted to be similar to this within the Kulpara dolomite which will be perforated and flow tested as part of this campaign.

Interval 682–690m MD

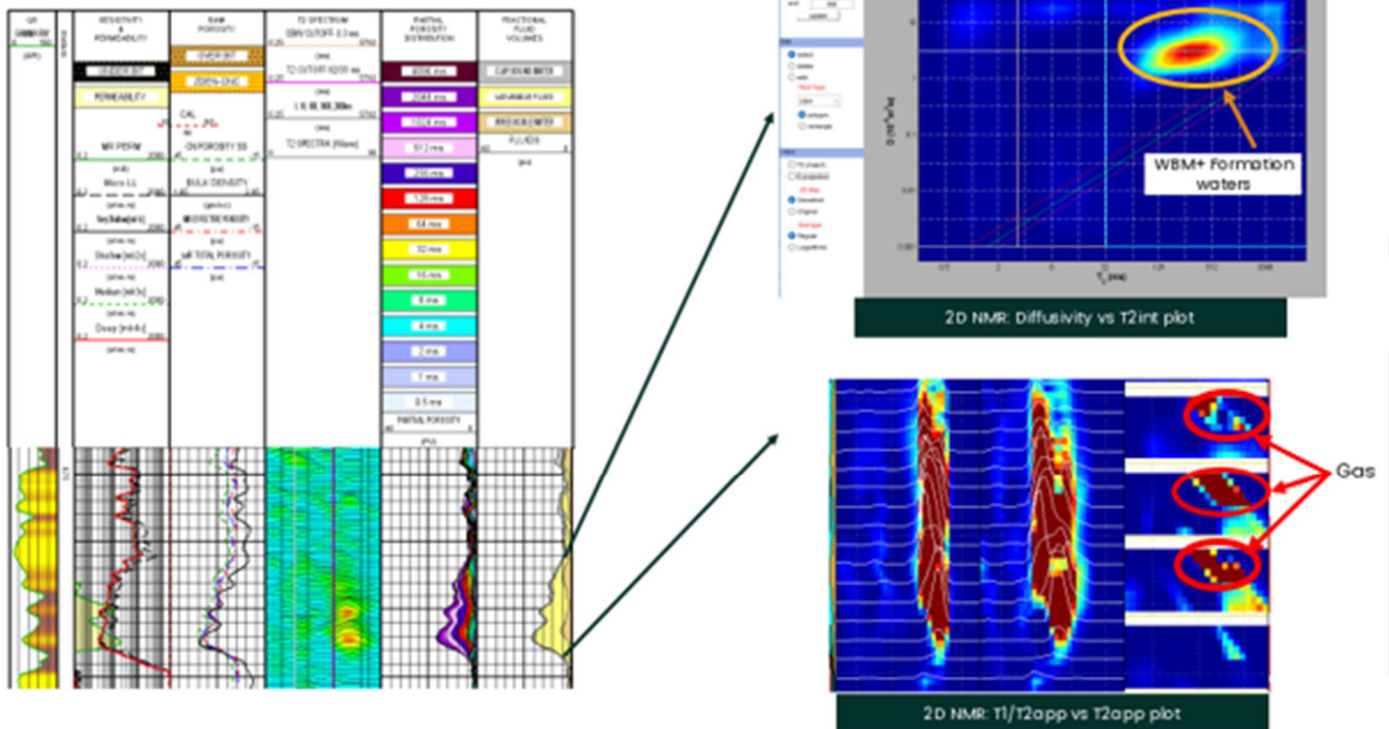


Figure 1: NMR Log analysis from Ramsay 3 highlighting an interpreted Helium anomaly

THE RAMSAY 3 WELL DESIGN

Ramsay 1 was completed with a 4½-inch slotted liner and was considered a commingled test utilising the 2,000bbl/day capacity ESP with all formations open to the borehole.

Ramsay 2 was completed with a 4½-inch cemented casing. Select depths were perforated allowing for gas bearing intervals to be open to the borehole and the zonal test was completed using the same 2,000bbl/day capacity ESP.

Ramsay 3 is a 7-inch diameter cased and cemented well. Select zones are being perforated initially for the zonal Helium flow test following by a follow up Natural Hydrogen flow test. The larger diameter borehole provides approximately 2.3 times the cross-sectional area of a 4½-inch diameter cased well. This provides substantially greater capacity for flow-testing operations and allows Gold Hydrogen to deploy a 20,000bbl/day ESP capacity pumping system.

The larger Ramsay 3 well therefore provides an important opportunity to test the reservoir under significantly greater flow conditions than was possible from the Company's earlier 4½-inch cased wells.

Collected flow test data, along with data acquired from Ramsay 1 and Ramsay 2 flow tests will provide key inputs into near term independent Contingent Resource certification.

Important Risk Commentary

It is important to note that there remain both geological and potential development risks associated with the Ramsay Project and the Company's commercial and business objectives. Exploratory flow testing of the Hiltaba Basement interval may not result in a flow of Helium to surface. There is no certainty that the Ramsay 3 testing program will achieve the expected outcomes, that Contingent Resources will be able to be booked, that an accelerated FEED or a Ramsay development will proceed, or that commercial viability can be established.

Further Information

Further information on the Gold Hydrogen group, its projects, and its Board and Management can be found on the Company's website (www.goldhydrogen.com.au). Gold Hydrogen also has accounts on LinkedIn and Twitter (@GHY_ASX), and copies of market releases will be emailed to all interested parties who register via investorhub.goldhydrogen.com.au/auth/signup.

This announcement has been authorised for release by the Managing Director.

On behalf of the Board
Karl Schlobohm
Company Secretary



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Table 1 – Ramsay 1 Flow Test Results (2026 Campaign). From 5 August 2026 release.

ASX Listing Rule 5.30	Ramsay 1 – 2026 Flow Test
(a) Name and type of well	Ramsay 1 – vertical exploration well, flow tested with electrical submersible pump
(b) Location, permit or lease	PEL 687, Yorke Peninsula, South Australia. UTM zone 53 GDA2020: X 748,208.07 / Y 6,149,545.7
(c) Entity's working interest	Gold Hydrogen Limited 100%
(d) Net pay thickness (conventional)	Insufficient information is presently available to determine net pay thickness. 180m gross pay thickness in Kulpara Dolomite (Helium zone)
(e) Geological rock type	Parara Limestone, Kulpara Dolomite, Granite basement
(f) Depth of zones tested	212m to 1,005m
(g) Type and duration of test(s)	Production flow test using a 2,000 bbl/day electrical submersible pump, commenced 25 July 2026, total duration 7 days including 5 days of stabilised flow
(h) Hydrocarbon phases recovered	Not applicable – no hydrocarbons recovered. Gas stream comprises predominantly Helium, nitrogen and natural hydrogen.
(i) Other recovery and proportions	Formation water produced at rates between 500 - 2,000 bbl/day; Gas dissolved in water. An in-situ gas–water ratio of approximately 3 scf/bbl is calculated from the downhole bailer samples collected during the Ramsay 1 2024 flow test. Gas-water ratios of up to 6.4 scf/bbl were also measured from surface samples during 2024 flow testing
(j) Choke size, flow rates and volumes	Gross fluid rate of up to 2,000 bbl/day (constrained by ESP rated capacity, not reservoir deliverability); raw gas rate of approximately up to 6.0 Mscf/day; Helium rate of approximately 1.14 Mscf/day; choke size 14/64 inch; cumulative volumes recovered 3808 bbl. Derived Productivity Index of approximately 20 bbl/day/psi at approximately 100 psi drawdown. PI of up to 34 bbl/day/psi were also calculated
(k) Fracture stimulation	None
(l) Material non-hydrocarbon gases	Helium (air-corrected concentration of up to 30%, stabilised at 19%), Hydrogen, Nitrogen, CO ₂
(m) Other material information	The well is completed with 4.5-inch slotted liner and the test was constrained by installed pump capacity. Field measurements are preliminary and subject to independent laboratory confirmation. Modelled flow rates at 20,000 bbl/day are set out in Note 1 and have not been demonstrated by flow testing.

Information compiled by Billy Hadi-Subrata, Gold Hydrogen's Chief Technical Officer.

Table 2 – Ramsay 2 Flow Test Results. From 25 August 2026 release.

Name of well:	Ramsay 2
Location (UTM zone 53 GDA2020)	UTM zone 53 GDA2020: X 747,761.61 / Y 6,149,371.41
Permit	PEL 687
Entity's working interest	Gold Hydrogen 100%
Resources	Helium
Formation	Test 1: Kulpara Dolomite (primary Helium target zone, and ESP pump depth), Parara Limestone. Test 2: Hiltaba Basement (Primary Helium zone and ESP pump depth), Kulpara Dolomite, Parara Limestone
Gross thickness and net pay thickness	180m gross primary target zone for flow testing. Perforation interval of 24m in Kulpara dolomite. 200 m gross thickness in Hiltaba Basement. Perforation interval of 6m into basement fracture network Insufficient information is presently available to determine net pay thickness.
Geological rock type	Kulpara Dolomite, Limestone, Hiltaba Granitic Basement
Depth of the zones tested	Perforated intervals between 219m to 1050m depth
Type of test and duration	Zonal Electrical Submersible Pump (ESP) flow tests across both the Kulpara Dolomite and Hiltaba Basement intervals (with well open above), commenced 12 August 2026, completed 23 August 2026. Test 1, ESP at 800m depth closer to Kulpara formation, whereas Test 2, ESP at 1002m depth in the basement
Phase recovered	Gas, water
Corrected He concentration in gas recovered during flow test (Other recovery and proportions)	20% He (air-corrected) from the gross 180m Kulpara Dolomite interval, without purification 19% He (air corrected) from 200m Hiltaba basement interval, without purification
Flow rates, choke size, volumes recovered	Gross fluid rate of up to 2,300 bbl/day (constrained by ESP rated capacity); choke size 13/64 inch; cumulative volumes recovered on Test 1 - 1983 bbl; cumulative volumes recovered on Test 2 – 2702.9 bbl. Insufficient information is presently available to determine final flow rates
Fracture stimulation	N/A
Material non hydrocarbons	Hydrogen, Helium, Nitrogen, CO2

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