Gold Hydrogen

Committed to Developing Naturally Occurring Hydrogen and Helium in Australia

RRS – Gather Round

The Gold Standard in Green Energy

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Prospective Resource Statements

The Prospective Resource Statements for Natural Hydrogen and for Helium have been included in presentation under the approval of Mr Billy Hadi Subrata, Chief Engineer for Gold Hydrogen, who is a Qualified Petroleum Reserves and Resources Evaluator. Mr Hadi Subrata confirms that, as at the date of this announcement, there is no change to information or additional information, since the effective dates, that would materially change the estimates of prospective resources quoted.

QPRRE Statement – Natural Hydrogen

The Prospective Resource Statement for Natural Hydrogen in this presentation is based on, and fairly represents, information and supporting documentation prepared by independent consultants "Teof Rodrigues & Associates" with an effective date of 30 September 2021, and which forms part of the Company's Replacement Prospectus dated 29 November 2022. The Prospective Resource Statement, together with all relevant notes, also appears in the Company's ASX releases of 13 January 2023 and 30 October 2024.

QPRRE Statement - Helium

The Prospective Resource Statement for Helium in this announcement is based on, and fairly represents, information and supporting documentation prepared by independent consultants "Teof Rodrigues & Associates" with an effective date of 21 February 2024, and which was announced by the Company on that date (as well as 30 October 2024) together with the accompanying assumptions and notes.

Executive Summary – Natural Hydrogen and Helium

Title over certified Prospective Resources

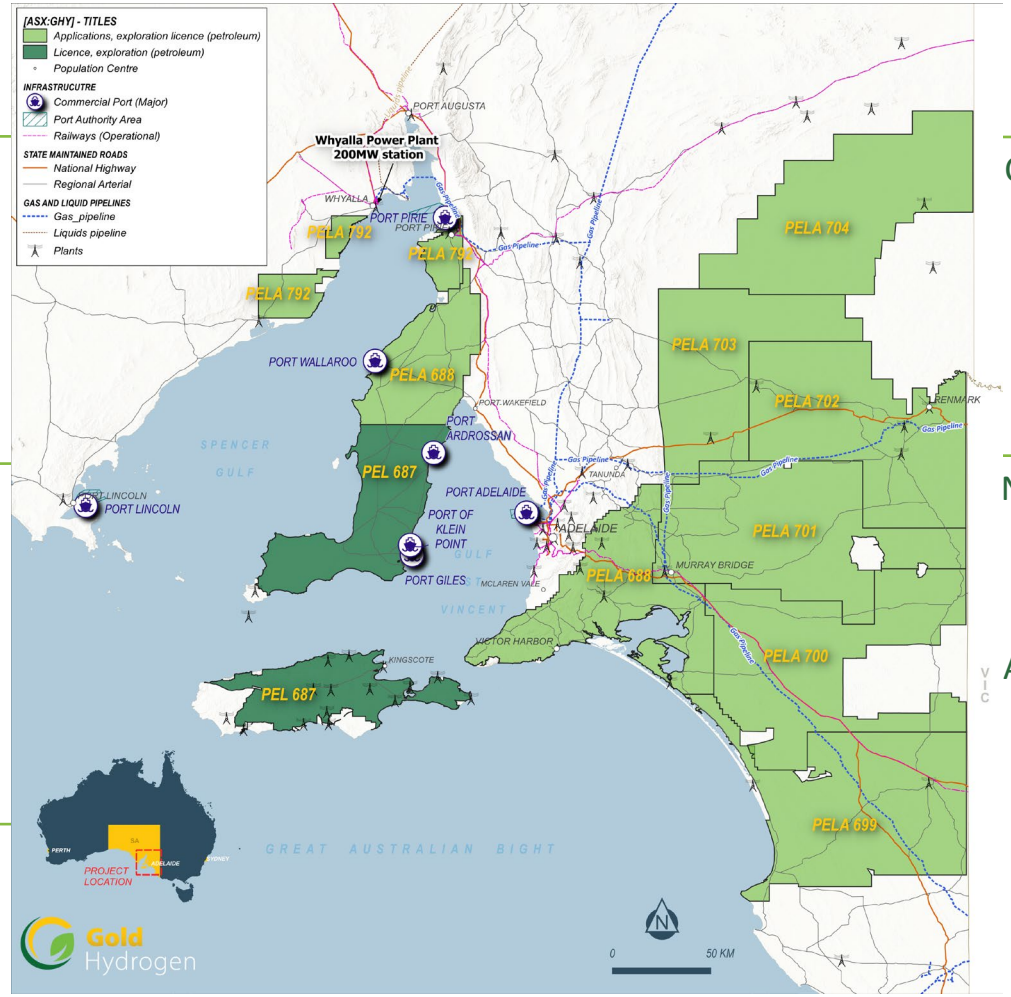
1.3 billion kg of natural Hydrogen[1]
41 Bcf of Helium[1]
(with a mean of 96 Bcf)

Ramsay Project 100% owned

7,820 km²
plus a further **69,472 km²** under exclusive application

High purity gas sample levels[2]

95.8% Hydrogen
Up to 36.9% Helium
Helium-3 Detected in Samples



Engagements to date with leading global experts and contractors

CSIRO, Schlumberger, Total Seismic, Xcalibur, Savanna Energy Services

Commercial and environmental competitive advantages

Natural hydrogen provides **cost and emission advantages** over other production sources

A number of global gas projects are **commercial with much lower concentrations** of helium
(<1% helium as a by-product)

[1] Prospective Resources are based on un-risked Best Estimate. Refer Slide 13 for full details.
[2] Laboratory gas sample analyses - air corrected. Refer ASX releases of 27 May 2024, 2 August 2024 and 17 October 2024.

Hydrogen and Helium to date in PEL687

Extensive regional play across 7,400 km^2 permit area

H_2

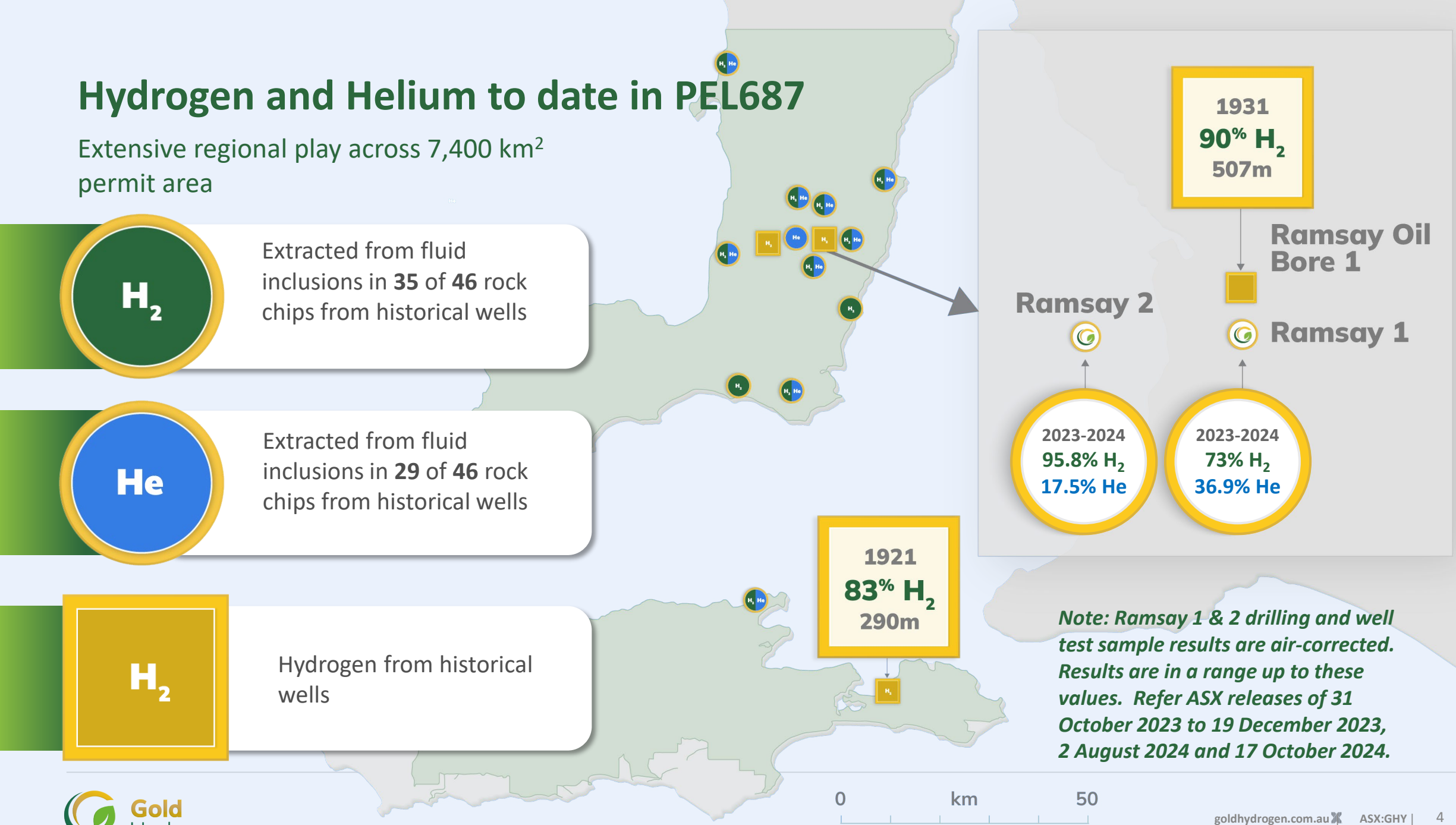
Extracted from fluid inclusions in **35** of **46** rock chips from historical wells

He

Extracted from fluid inclusions in **29** of **46** rock chips from historical wells

H_2

Hydrogen from historical wells



Note: Ramsay 1 & 2 drilling and well test sample results are air-corrected. Results are in a range up to these values. Refer ASX releases of 31 October 2023 to 19 December 2023, 2 August 2024 and 17 October 2024.

Industry Overview

Gold Hydrogen

Key Trends: Hydrogen

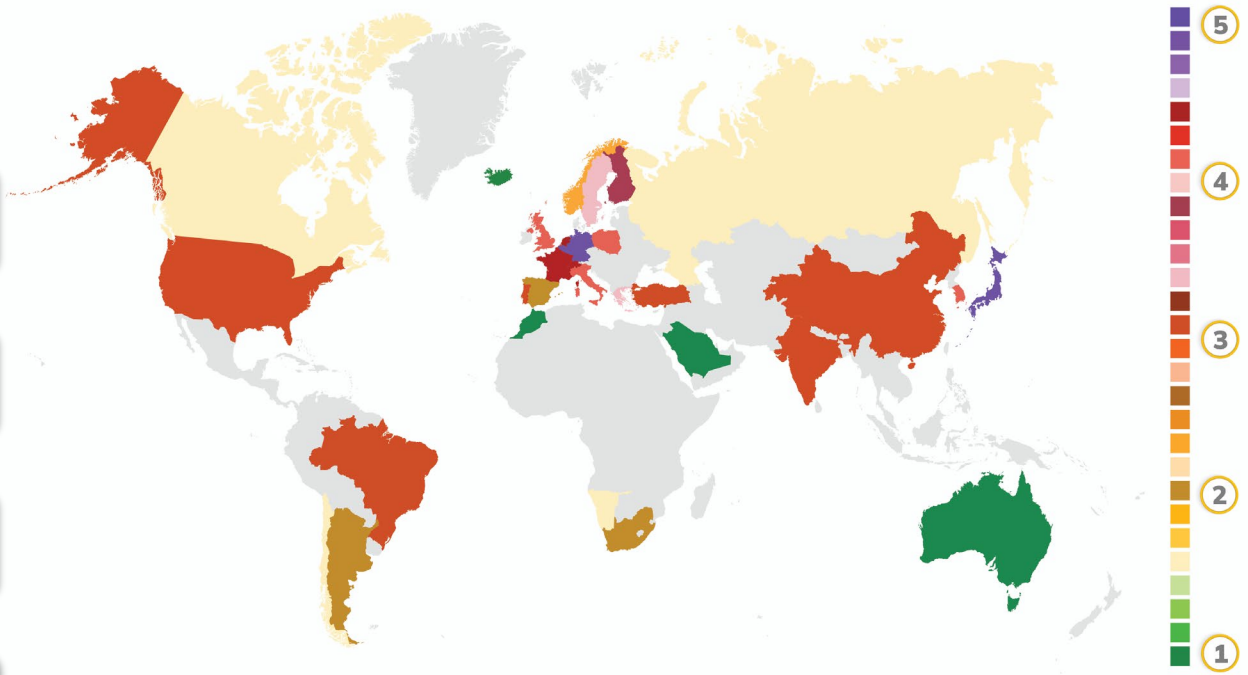
Hydrogen demand is forecast to include heavy transportation, ammonia production, steel manufacturing, and various energy uses. Future growth will be driven by key adoption trends and the drive towards decarbonisation.

Key drivers for Hydrogen adoption trends

- ESG investment and decarbonisation policies
- Hydrogen as an energy, industry & transport source
- Advances in hydrogen technology
- Hydrogen boosts grid and industrial flexibility

Likely exporters / importers[1]

Australia has been identified as a likely exporter of natural hydrogen given its undeveloped land and renewable energy strategies

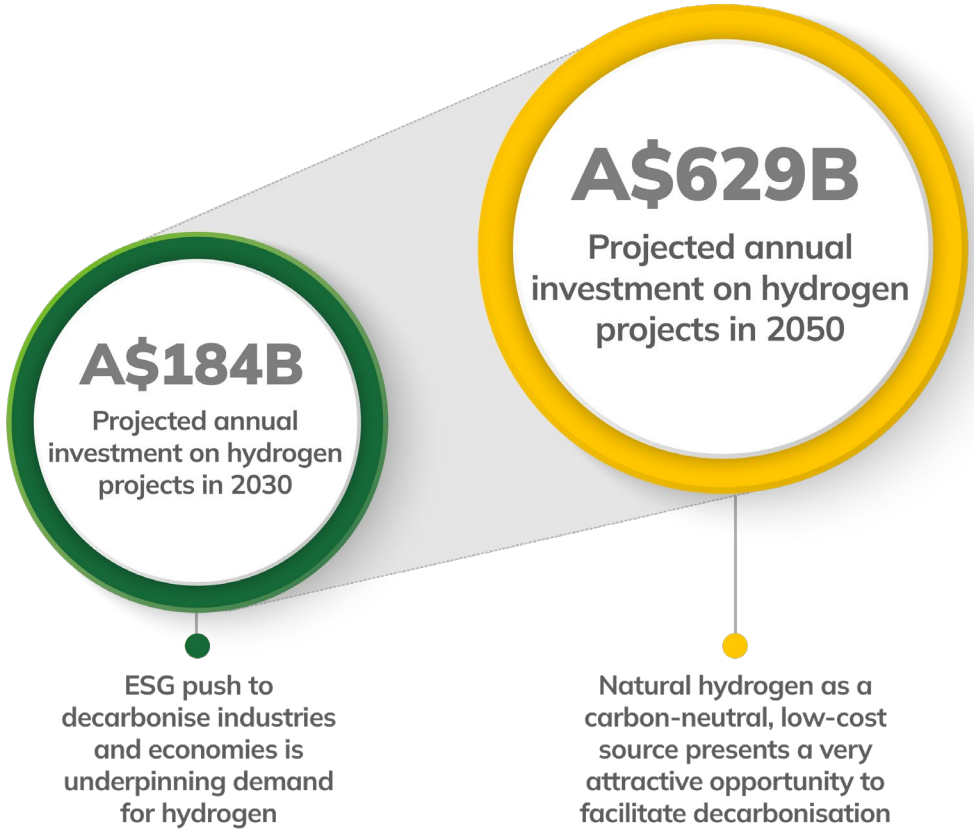


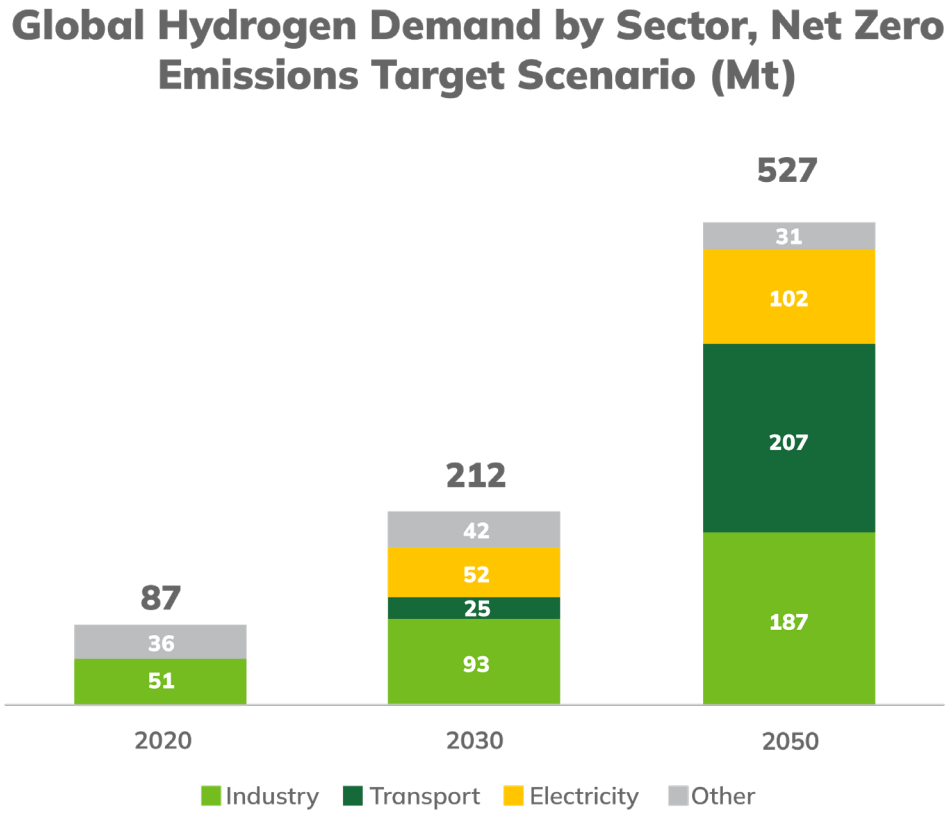
1 = Strongly export-oriented, **2** = Slightly export-oriented,
3 = Neutral, **4** = Slightly import-oriented, **5** = Strongly import-oriented

[1] Source: PwC, https://www.pwc.com/gx/en/industries/energy-utilities-resources/future-energy/green-hydrogen-cost.html

Global Hydrogen Forecast

Substantial investment laying the foundation for Hydrogen use





Source: Frost & Sullivan Report - Page 29 of Gold Hydrogen Prospectus

Source: International Energy Agency, Oct-2021 1. Other includes buildings, agriculture and refineries

Types of Hydrogen Production

Today, ~95% of all hydrogen produced is from natural gas

Naturally occurring Hydrogen offers significant cost and / or carbon advantages relative to other Hydrogen production (manufacturing) processes

Gold Hydrogen is exploring for 'gold' or 'white' (natural) Hydrogen

	Gold / White (natural)	Grey	Black/Brown	Blue	Green
Energy source	Natural hydrogen	Natural gas	Coal	Natural gas / coal	Renewables / biomass
Environmental impact	Low	High	Very High	Low	Low
No thermal process	✓	✗	✗	✗	✗
Production cost (A$/kg)[1,2]	$1.00	$5.60	$6.20-$6.40	$10.20-$10.30	P: $6.40-$25.50 A: $4.70-$23.20
Cost comparable to existing power generation[3]	✓	✗	✗	✗	✗

Source: Frost and Sullivan, Sep-2022 (Refer Gold Hydrogen Replacement Prospectus dated 29 November 2022)

1. Source: Christophe Rigollet1, Alain Prinzhofer2,3, Natural Hydrogen: A New Source of Carbon-Free and Renewable Energy That Can Compete With Hydrocarbons, First Break, Volume 40, Issue 10, Oct 2022, p. 78 – 84 DOI: https://doi.org/10.3997/1365-2397.fb2022087; "The Bourakébougou field, in Mali, represents the first natural hydrogen deposit studied both scientifically and industrially. It gives us information on its renewability, on the natural flows involved and therefore on its sustainable exploitation. It is possible to estimate that the cost of operating hydrogen would be less than $1/kg, which is significantly cheaper than any manufactured hydrogen, whether green, grey, or blue. Equivalent work is in progress in other continents, in order to be able to compare our knowledge of this Malian field with other fields in the world, which will make it possible to better ensure the industrial and societal interest of R&D for this new field." Available on the Gold Hydrogen website.

2. P = Polymer electrolyte membrane electrolysis. A = Alkaline Electrolysis. Gold Hydrogen cost is an estimate

3. For industrial buyers, a hydrogen offtake price of €3 ($4.50) per kg would be required to incentivise hydrogen production over power generation

Key Drivers for Helium

The global wholesale helium market is expected to grow from an estimated **US$5bn in 2023** to over **US$8bn in 2030**[1]

There are commercial global gas projects with significant lower helium concentrations (>1%)

Indicatively pricing is currently approximately **USD400-500 per Mcf** (thousand cubic feet)
(Source: Kornbluth Helium Consulting)

[1] Source: USGS, 2023: https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-helium.pdf
[2] Air-corrected laboratory analyses for Helium purities. Refer ASX releases of 2 August 2024 and 17 October 2024.

Results

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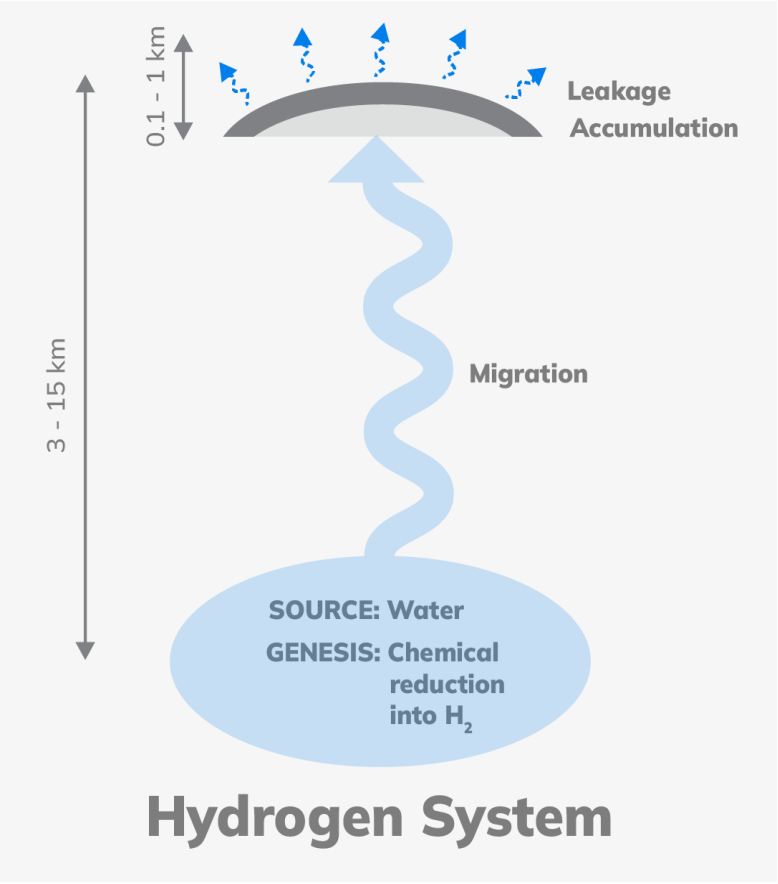
Ramsay Project Milestone Snapshot

Key Success Factors Exploration

Ramsay Project ticks the boxes in respect of the key attributes for the formation and accumulation of Natural Hydrogen and Helium

Key Success Factor		Results of Exploration Activities	
Source & Generation	**Via hydrolysis and / or radiolysis reactions in old rocks**	The presence of Natural Hydrogen at **up to 95.8% purity and Helium at up to 36.9% purity** (both air-corrected) has been confirmed at the Ramsay Project location via mud gas measurements, MDT samples and exploration well testing. Results are air-corrected. Refer ASX releases of 27 May 2024, 2 August 2024 and 17 October 2024.	✓
Seals & Traps	**Required to enable accumulations of naturally formed hydrogen**	The presence of retained Natural Hydrogen and Helium indicates that the stratigraphy includes valid seals and traps at the location of the Ramsay Project.	✓
Structure	**Major structural boundaries in an extensional geological regime where natural fractures exist**	The airborne gravity and magnetic geophysical survey and the FMI (image log) data from the wells supports the interpretation that the Ramsay Project is located in a structurally favourable position for a large scale Natural Hydrogen and Helium accumulation.	✓
Reservoir	**To be commercial, a reservoir of adequate volume, accessibility, flow rate and quality is required**	The FMI data from the wells and results of the stage 1 testing has demonstrated that the fractured limestones, dolomites and basement acts as suitable reservoir for accumulating extractable Natural Hydrogen and Helium.	✓



Source: SPE Hydrogen Section, online. November 2, 2023 (Ref: Prinzhofer, 2021)

Gold Hydrogen Prospective Resources (Using PRMS guidelines)

Certified Prospective Hydrogen Resources, existing occurrences and drill ready hydrogen prospects (calculated volume not determined)

Unrisked Prospective Hydrogen Resources, PEL 687			
SPE-PRMS Sub-Class Category	**Low Estimate (kTonnes)**	**Best Estimate (kTonnes)**	**High Estimate (kTonnes)**
Prospect	165	1135	8050
Lead	42	178	770
Total	**207**	**1313**	**8820**

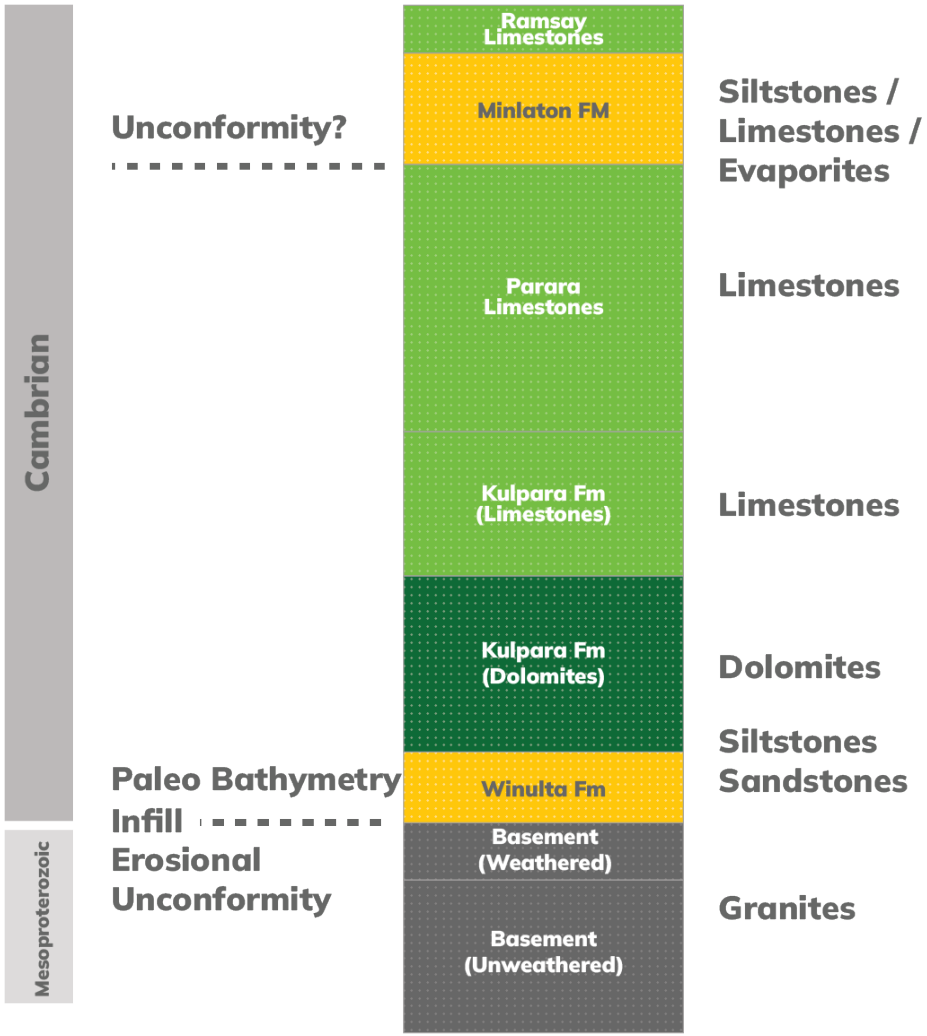
Certified Prospective Helium Resources, Ramsay Field (PEL 687 Yorke Peninsula)

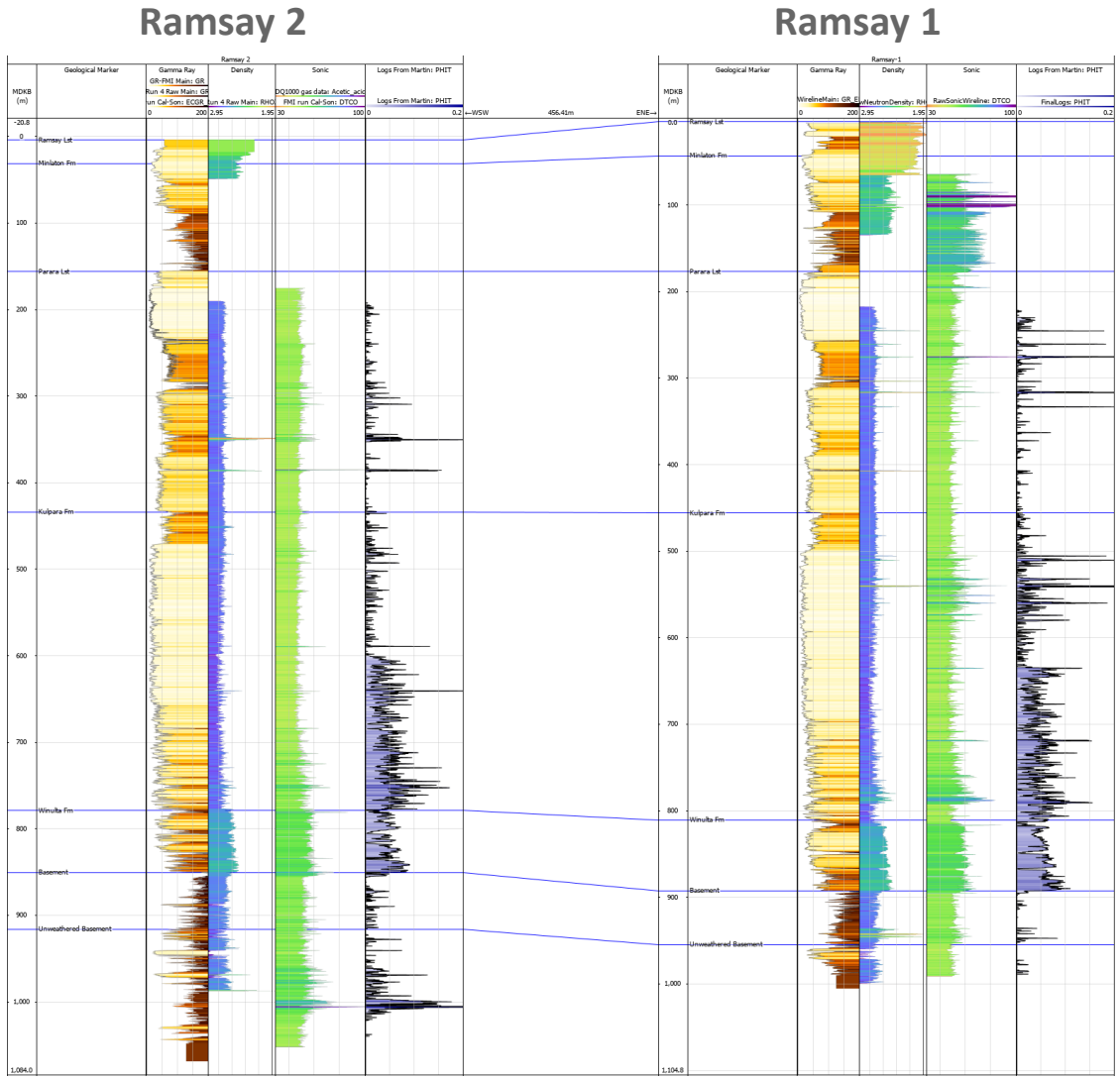
Unrisked Prospective Helium Resources, PEL 687			
SPE-PRMS Sub-Class Category	**Low Estimate (Bscf)**	**Best Estimate (Bscf)**	**High Estimate (Bscf)**
Prospect Ramsay Fault Block	2	8	38
Prospect South of Ramsay Fault Block	5	33	205
Total	**7**	**41**	**243**

See ASX releases of 13 January 2023 and 30 October 2024 (Hydrogen) and 21 February 2024 and 30 October 2024 (Helium) for full details and notes

NOTE - All estimates are unrisked and aggregated arithmetically by category, hence caution that the aggregate low estimate maybe a conservative estimate and the aggregate high estimate maybe very optimistic estimate due to the portfolio effects of arithmetic summation. The estimated quantities of hydrogen and / or helium that may potentially be recovered by the application of future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery (Pg), risk of development (Pd) and risk of commercialization (Pc). Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially recoverable hydrogen and / or helium.

Ramsay 1 & 2 – Drilling Australia's First Natural Hydrogen Wells



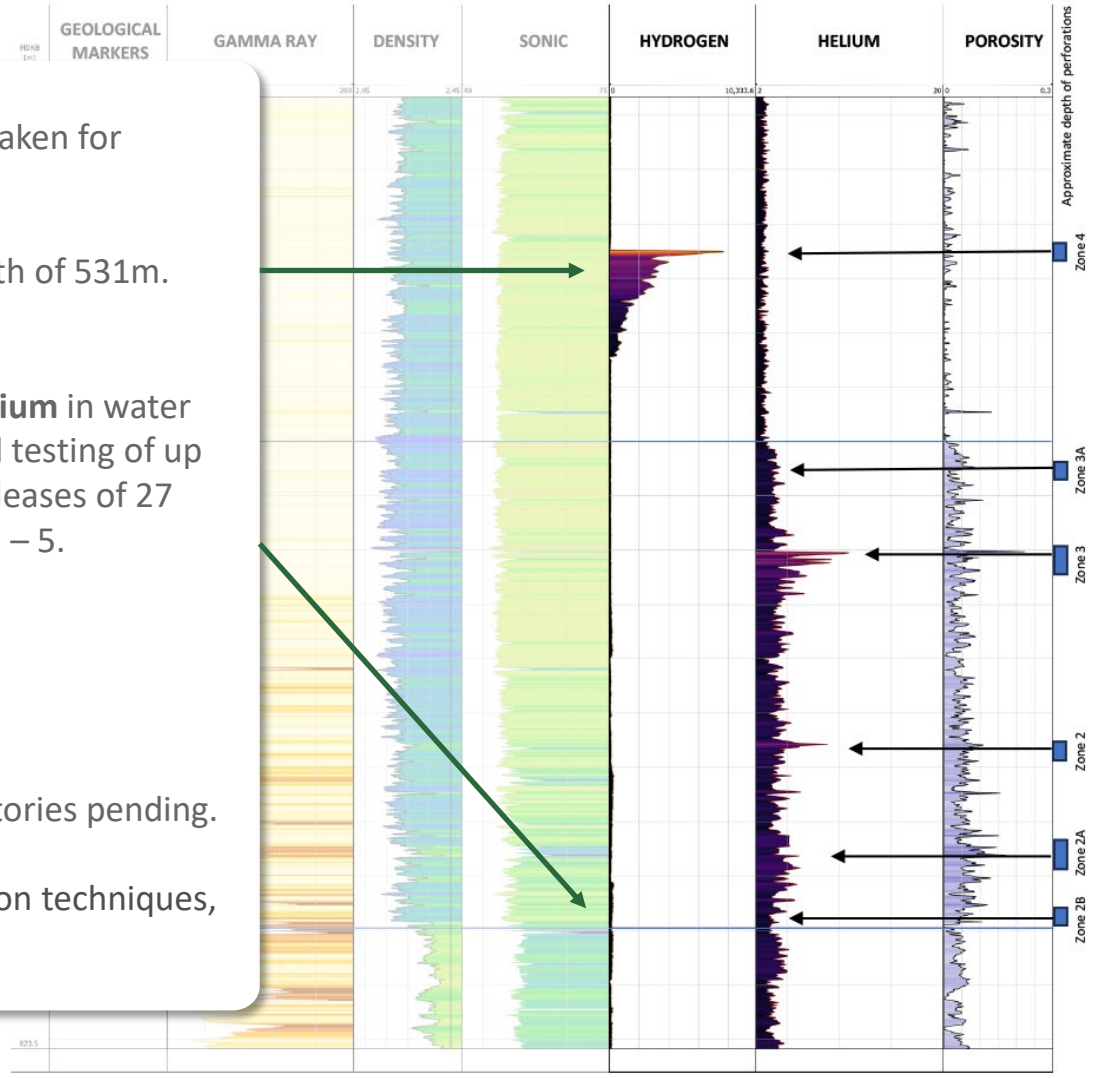


Well Testing Program – Objectives

Primary Objective – Obtain gas samples for international analysis	**Achieved**
Secondary Objective – Extract gases to surface, including in formation fluid	**Achieved**
Conduct both open hole (R1) and isolated zone (R2) testing	**Achieved**
Analyse samples for purity and isotopic composition	**Achieved**
Facilitate initial Pilot Project planning and design: • Hydrogen to energy • Helium bottling plant	**Initial discussions**

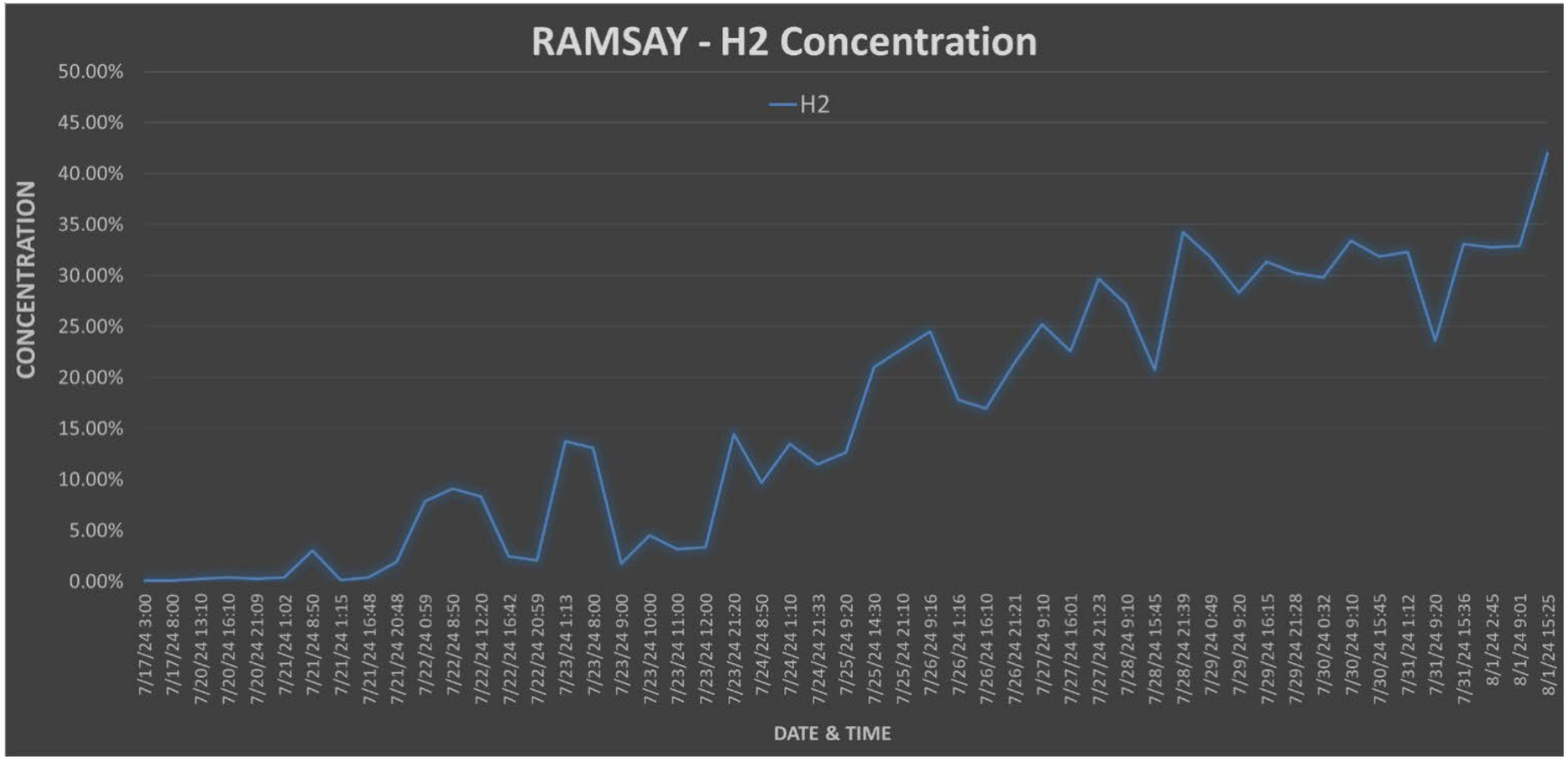
Exploration Well Testing Program – Sample Purity Results

- Gas successfully flowed to surface, numerous zones identified, and samples taken for analysis.
- Air-corrected **hydrogen** result of 95.8% confirmed for Ramsay 2 well at a depth of 531m. Refer ASX release of 27 May 2024 for full details. Refer Table 6.
- **Helium** MDT result of 17.5% confirmed for Ramsay 2, as well as dissolved **helium** in water reported at 20% - 25% purity, and laboratory helium sample results from well testing of up to 36.9%. All results have been corrected for air contamination. Refer ASX releases of 27 May 2024, 2 August 2024 and 17 October 2024 for full details. Refer Tables 3 – 5.
- 180m thick **helium** pay zone identified.
- Permeability of structures and proximity to pay zones confirmed.
- A number of results for hydrogen and helium from specialist overseas laboratories pending.
- Key learnings designed to assist with future well design, drilling and production techniques, and will ultimately assist with pilot plant concept design.



Stage 2 Well Testing – Ramsay 2 Hydrogen Concentrations Over Time

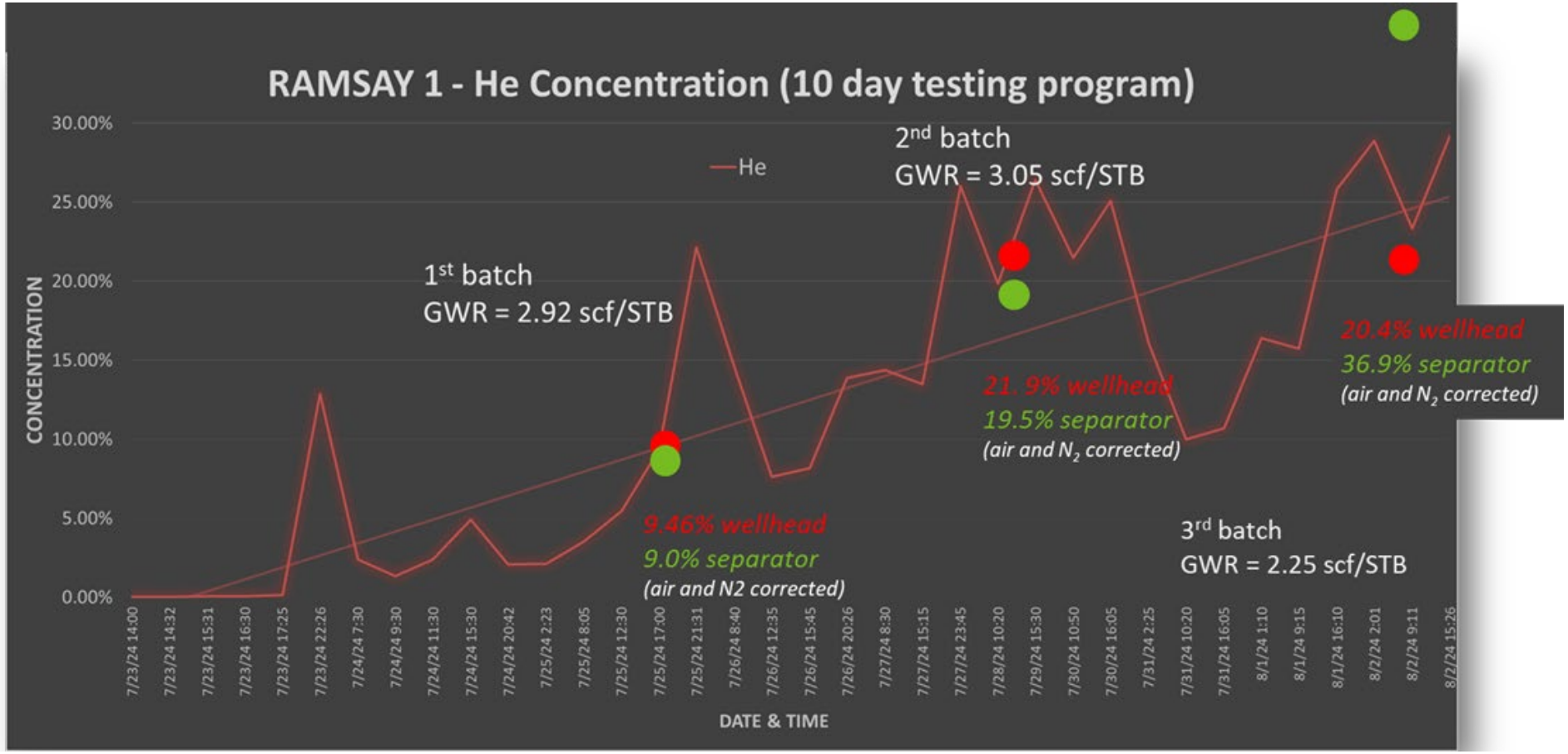
Stage 2 well testing at depth 200m to 350m (zones 7 & 8) showed Hydrogen concentrations increased over time as the well was dewatered (refer ASX release of 2 August 2024)



Note: gas samples from the annulus at the wellhead. Concentrations are corrected for air and nitrogen

Stage 2 Well Testing – Ramsay 1 Helium Concentrations Over Time

Stage 2 well testing of the open Helium zone in Ramsay 1 showed Helium concentrations increased over time as the well was dewatered (refer ASX release of 17 October 2024)



Results measured at the gas separator; air and nitrogen corrected

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Exploration Well Testing Program – Isotopic Analysis Results

- **Helium-3** detected by independent international laboratory testing of Ramsay helium samples.
- Levels of Helium-3 have been confirmed up to the magnitude of 901 ppt (atmospheric Helium-3 is 7.2 ppt).
- The isotopic analysis results from samples tested suggest up to 3.47ppb Helium-3 within a 36.9% Helium sample.
- Helium-3 is extremely rare and valuable, with current prices of approx USD18.7 million per Kg.
- Nuclear fusion and quantum computing are emerging future markets for Helim-3.
- A single 1 GW fusion plant could require up to 100 kg of Helium-3 annually, representing a potential market worth $1.4 billion per 1 GW fusion plant.
- Extracting and separating Helium-3 from Helium-4 as part of a natural gas project could be a viable alternative to Lunar-based mining for Helium-3.
- Refer ASX release of 30 October 2024 for full details and further reading about Helium-3.
- Refer Tables 1 and 2 for technical details.

Next Steps

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Post-Well Testing – Objectives

Review resource reporting and resource maturation opportunities

Interpretation and analysis of 2D Seismic Program results

Site and well design selection – further Ramsay wells

Site and well design selection – wider Yorke Peninsula plays

Initial Pilot Project – analysis, planning and design:

- Hydrogen to energy
- Helium bottling plant

Progress Gold Hydrogen / Byrock / White Hydrogen application areas

Key Success Factors Exploration & Appraisal – Work Program Next Steps

Further appraisal activities are focused on establishing the commerciality of the Ramsay Project

Key Success Factor		Results from exploration activities since IPO
Hydrogen Flow Rate and Composition	**Establish sustained flow rate to surface of hydrogen and associated gas components**	**Exploration well testing** was designed to establish a potential flow of hydrogen and associated fluids from the hydrogen-bearing reservoir units to surface and measure the uncontaminated composition of the produced gas.
Size of the Hydrogen and Helium Accumulations	**Determine the likely lateral extent of the hydrogen and helium accumulations**	**The Ramsay 2D seismic survey conducted in mid 2024** was designed to establish the lateral extent of the hydrogen and helium-bearing stratigraphic units and determine the large-scale trapping geometry of the accumulations at the Ramsay Project location.
Helium Extraction Rate	**Establish the sustained extraction rate for the helium**	**Exploration well testing** was designed to establish potential flows of helium and associated fluids from the helium-bearing reservoir to determine the uncontaminated gas composition and the helium extraction rate from the produced products.
Development Sweet Spot	**Determine the likely development sweet spot for hydrogen and helium extraction**	The **next wells to be drilled being planned for Q4 2024 or Q1 2025** are designed to confirm the hydrogen and helium development sweet spots, established from the integration of the Ramsay 2D seismic data and results from the results and learnings from the Ramsay 1 and Ramsay 2 exploration wells.

Key Team

Gold Hydrogen

Key Management

Neil McDonald
Founder & Managing Director

Neil McDonald, with over 20 years of experience in the energy and minerals sectors across Australia, has worked on major exploration projects from greenfield to early development. He is a graduate of the Australian Institute of Company Directors.

Peter Bubendorfer
Chief Geologist

Peter has extensive experience in exploration within the oil & gas industry across Australia, specifically regarding natural gas and CSG, these being gases which correlate well with the Company's Hydrogen and Helium gases. He has specific experience in the identification of gas-related leads and plays, the establishment and running of exploration programs, seismic interpretation, dataset analysis, governmental liaison and reporting, and all aspects of geological project assessment and fieldwork.

Frank Glass
Chief Exploration Adviser

Frank Glass is a respected geologist with over 30 years of experience in oil, gas, and natural hydrogen exploration, including a decade with Shell. He holds a Master's in Structural Geology from the University of Amsterdam and memberships in the Petroleum Exploration Society of Australia and the European Association of Geoscientists and Engineers.

Billy Hadi Subrata
Chief Technical Officer

Billy Hadi Subrata is an experienced petroleum and reservoir engineer with 20 years of expertise in exploration, development, and energy transition. He has significant skills in reservoir simulation, field appraisal, reserves estimation, and project management, and has been a key figure at Gold Hydrogen since its inception in 2021. Billy is a Qualified Petroleum Reserves and Resources Evaluator and a member of SPE and Engineers Australia.

Julien Bourdet
Geological Advisor

Julien Bourdet is a geological advisor to Gold Hydrogen. He worked for 16 years at CSIRO conducting research aiming at evaluating geological fluid and diagenesis and delivered petrological and fluid inclusion consulting. He has extensive contributions in the field of oil and gas exploration and development and on the natural hydrogen systems. He earned his PhD at the University of Lorraine in France.

Board of Directors

Neil McDonald
Founder & Managing Director

Neil McDonald, with over 20 years of experience in the energy and minerals sectors across Australia, has worked on major exploration projects from greenfield to early development. He is a graduate of the Australian Institute of Company Directors.

Alexander Downer
Independent
Non-Executive Chair

Alexander Downer, a prominent Australian politician and diplomat, has held top roles including Leader of the Liberal Party and Minister for Foreign Affairs. Before politics, he was an executive director at the Australian Chamber of Commerce. He currently serves on boards like Hakluyt & Company and Yellow Cake Plc, and writes for the AFR, holding the Companion of the Order of Australia title.

Katherine Barnet
Independent
Non-Executive Director

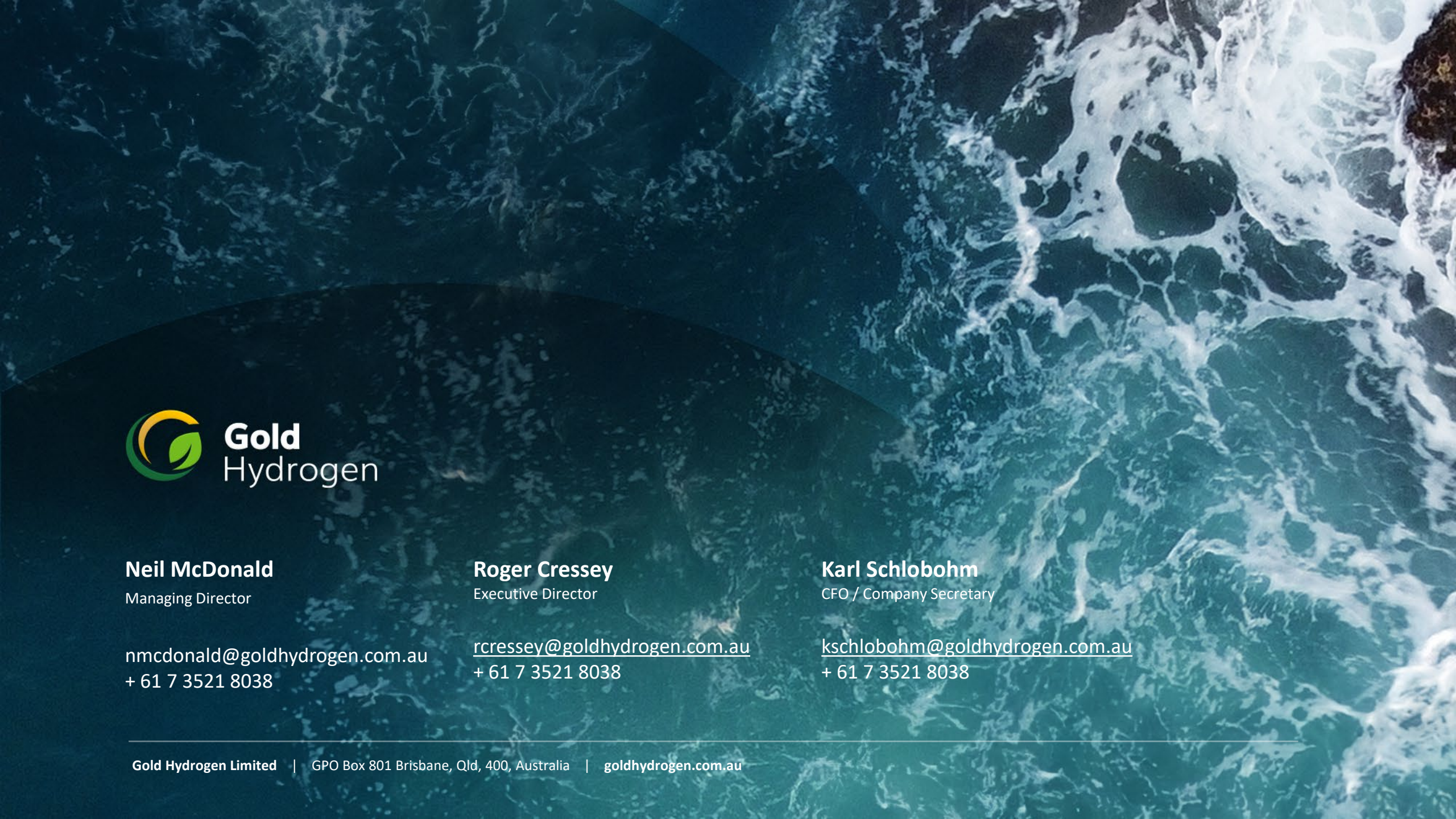
Katherine Barnet, a Chartered Accountant with 25+ years of experience, is a partner at Olvera Advisors in Sydney. She specializes in financial transactions, sustainable growth, and value optimization, with recent work in renewable energy, retail, property, and construction. She is a Fellow of CAANZ and ARITA and a member of the Australian Institute of Company Directors.

Roger Cressey
Executive Director
Commercial Operations

Roger Cressey has over 35 years of experience in the resource industry, mainly in gas exploration and production. He has held CEO, COO, and other executive roles in Australia (Queensland and NT), PNG, Indonesia, and Uganda. Roger excels in managing multi-disciplinary teams, strategy development, and stakeholder engagement.

Karl Schlobohm
Company Secretary & CFO

Karl Schlobohm, a Chartered Accountant and Fellow of the Governance Institute of Australia, has over 30 years of experience across various industries. He is a Non-Executive Director of the Australian Shareholders Association and has held multiple executive roles with listed companies on the ASX, LSE, AIM, and TSX in the natural resources sector.



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CFO / Company Secretary

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Technical Tables – ASX Listing Rule 5.30 (Refer also ASX Release of 30 October 2024)

Table 1: Summary of Helium-4 (^{4}He) and Helium-3 (^{3}He) Results (Oxford University) in Ramsay 2

Name:	Ramsay 2					
Location	UTM zone 53 GDA2020					
X	747,707.85					
Y	6149385.46					
Permit	PEL687					
Entity holders	Gold Hydrogen 100%					
Zones tested	Zone 1_sample 11	Zone 2-3_sample 19	Zone 4_sample 32	Zone 5_sample 46	Zone 6_sample 62	Zone 7_sample 79
Resources	Hydrogen-Helium	Helium	Hydrogen	Hydrogen	Hydrogen	Hydrogen
Formation	Basement	Kulpara Fm	Kulpara Fm	Parara Limestone	Parara Limestone	Parara Limestone
Gross thickness and net pay thickness	>200m Gross	180m Gross	155m Gross	406m Gross	406m Gross	406m Gross
Geological rock type	Basement	Dolomite	Limestone	Limestone	Limestone	Limestone
Depth of the zones tested	1002 mMD	712mMD	530 mMD	384 mMD	343 mMD	289 mMD
Type of test	Noble gas abundance and isotopic quantification					
Phase recovered	Gas	Gas	Gas	Gas	Gas	Gas
[^{4}He], ccSTP/ccSTP ^{3}He/^{4}He R/Ra ^{3}He ppt	1.44E-07 3.23E-07 0.23 0.05	6.52E-04 9.26E-09 0.0066 6.04	4.21E-08 1.72E-06 1.2306 0.07	5.54E-07 6.84E-08 0.0489 0.04	3.05E-08 1.55E-06 1.11 0.05	1.59E-07 7.57E-07 0.5408 0.12
Flow rates, choke size, volumes recovered	TBA					
Fracture stimulation	Yes	None	Yes	None	None	Yes
Material non-hydrocarbons	N_2, H_2, He, CO_2	N_2, H_2, He, CO_2	N_2, H_2, He, CO_2	N_2, H_2, He, CO_2	N_2, H_2, CO, CO_2	N_2, H_2, He, CO_2

Table 2: Summary Table of Helium-4 (^{4}He) and Helium-3 (^{3}He) results (Oxford University) in Ramsay 1

Name:	Ramsay 1		
Location	UTM zone 53 GDA2020		
X	748,208.07		
Y	6149545.7		
Permit	PEL687		
Entity holders	Gold Hydrogen 100%		
Zones tested	Zone 1_sample 8	Zone 2-3_sample 109451	Zone 2-3_sample 109477
Resources	Hydrogen-Helium	Helium	Helium
Formation	Basement	Kulpara Fm	Kulpara Fm
Gross thickness and net pay thickness	>200m Gross	180m Gross	180m Gross
Geological rock type	Basement	Dolomite	Dolomite
Depth of the zones tested	970 mMD	900 mMD	900 mMD
Type of test	Noble gas abundance and isotopic quantification		
Phase recovered	Gas	Gas	Gas
[^{4}He], ccSTP/ccSTP ^{3}He/^{4}He R/Ra ^{3}He ppt	3.42E-04 9.65E-09 0.0069 3.30	5.34E-02 9.31E-09 0.0067 497.39	9.59E-02 9.39E-09 0.0067 900.51
Flow rates, choke size, volumes recovered	TBA		
Fracture stimulation	None	None	None
Material non-hydrocarbons	N_2, H_2, He, CO_2	N_2, H_2, He, CO_2	N_2, H_2, He, CO_2

Technical Tables – ASX Listing Rule 5.30

Table 3: Sample Analysis from Ramsay 2 Well Testing for Helium (as released 17 October 2024)

Name:	Ramsay 2		
Location (UTM zone 53 GDA2020)			
X	747,707.85		
Y	6149385.46		
Permit	PEL687		
Entity holder(s)	Gold Hydrogen 100%		
Zones tested	1 (MDT)	2	3
Resources	Helium with minor Hydrogen	Helium with minor Hydrogen	Helium with minor Hydrogen
Formation	Kulpara Dolomite	Kulpara Dolomite	Kulpara Dolomite
Gross thickness and net pay thickness	180m Gross	180m Gross	180m Gross
Geological rock type	Dolomite	Dolomite	Dolomite
Depth of the zones tested	778mMD	712mMD	642mMD
Type of test	Pressure test - commingled zone test for few hours follow by overnight build up	Pressure test - commingled zone test for few hours follow by overnight build up	Pressure test - commingled zone test for few hours follow by overnight build up
Phase recovered	Water	Water	Water
Corrected H2 and He concentration in gas recovered from downhole sample	17.52% He	17.9% He	12.6% He
Flow rates, choke size, volumes recovered	Refer to Stage 2 well test	Refer to Stage 2 well test	Refer to Stage 2 well test
Fracture stimulation	None	None	None
Material non hydrocarbons	Nitrogen, Hydrogen	Nitrogen, Hydrogen	Nitrogen, Hydrogen

Table 4: Sample Analysis Table – Ramsay 1 Well – Stage 2 - Helium (as released 17 October 2024)

Name:	Ramsay 1
Location (UTM zone 53 GDA2020)	
X	748,208.07
Y	6149545.7
Permit	PEL687
Entity holders	Gold Hydrogen 100%
Zones tested	Zone 2 and 3
Resources	Helium
Formation	Kulpara Dolomite
Gross thickness and net pay thickness	180m Gross
Geological rock type	Dolomite
Depth of the zones tested	900 mMD
Type of test	Commingled pressure test
Phase recovered	Water
Corrected H2 and He concentration in gas recovered from downhole sample	36.9% He
Flow rates, choke size, volumes recovered	1 Mscf/day gas constraint by pump capacity and flow intermittently with water; choke size 20/64 inch; volumes recovered 0.55 Mscf
Fracture stimulation	None
Material non hydrocarbons	Nitrogen, Hydrogen

Technical Tables – ASX Listing Rule 5.30

Table 5: Summary of Preliminary Results on Additional Helium Samples (as released 2 August 2024)

Name:	Ramsay 2		
Location (UTM zone 53 GDA2020)			
X	747,707.85		
Y	6149385.46		
Permit	PEL687		
Entity holders	Gold Hydrogen 100%		
Zones tested	Zone 1	Zone 2 and 3	Zone 7 and 8
Resources	Helium	Helium	Hydrogen
Formation	Granite Basement	Kulpara Dolomite	Parara Limestone
Gross thickness and net pay thickness	>200m Gross	180m Gross	406m Gross
Geological rock type	Granite	Dolomite	Limestone
Depth of the zones tested	1002mMD	712 mMD	197mMD and 289mMD
Type of test	Pressure test	Commingled pressure test	Commingled pressure test
Phase recovered	Gas/Water	Gas/Water	Gas/Water
Corrected H2 and He concentration in gas recovered from downhole sample	20% to 25% He	20% to 25% He	42% H2 (still increasing)
Flow rates, choke size, volumes recovered	TBA		
Fracture stimulation	None	None	None
Material non hydrocarbons	Nitrogen, Hydrogen	Nitrogen, Hydrogen	Nitrogen, Helium

Table 6 - Summary Table of Ramsay 2 Stage 1 Testing

Name:	Ramsay 2	
Location (UTM zone 53 GDA2020)		
X	747,761.61	
Y	6149371.41	
Permit	PEL687	
Entity holders	Gold Hydrogen 100%	
Zones tested	MDT zone, Zone 2 and 3	Zone 4 to 8
Resources	Helium	Hydrogen
Formation	Kulpara Dolomite	Kulpara/Parara Limestone
Gross thickness and net pay thickness	180m Gross	406m Gross
Geological rock type	Dolomite	Limestone
Depth of the zones tested	612m, 642m, 712m, 754m, and 777.5mMD	197m, 289m, 346.5m, 385m, and 531mMD
Type of test	Commingled test on zone 2 and 3 for few hours followed by overnight build up	Pressure test on single zone for few hours followed by overnight build up
Phase recovered	Gas/Water	Gas/Water
Corrected H2 and He concentration in gas recovered from downhole sample	Up to 17.5% He	Up to 95.8% H2
Flow rates, choke size, volumes recovered	TBA in next extended flow test in Q2/Q3 2024	
Fracture stimulation	None	None
Material non hydrocarbons	Nitrogen, Hydrogen	Nitrogen, Helium