



1st July 2025

ASX Market Announcements
Australian Stock Exchange Limited
ASX Limited, 20 Bridge Street
Sydney NSW 2000

Independent Validation of Major Gas Resources in the Gippsland Basin by GaffneyCline

HIGHLIGHTS

- International petroleum consultancy GaffneyCline has completed an independent audit of the major gas resources within the Judith Gas Field, in the Gippsland Basin of Victoria, Australia
- GaffneyCline validates petrophysics analysis of the Judith-1 well by Steve Adams in 2023, confirming an assessment of movable hydrocarbons
- GaffneyCline has estimated:
 - A 2C Contingent Resource of 166 Bcf within the Judith East Block that contains the Judith-1 Gas Discovery Well drilled by Shell in 1989
 - A P50 Prospective Gas Resource of 142 Bcf within the deeper Longtom Gas Sands, underlying the 2C Contingent Resource
- Total Unrisked Prospective Resources audited by GaffneyCline across the Judith Gas Field have increased from 1.63 Tcf to 1.86 Tcf
- Excluded from the GaffneyCline audit was an additional 0.62 Tcf previously assessed in the separate Kipper/Golden Beach Formation by 3D-Geo in 2022
- GaffneyCline has recommended twinning the Judith-1 Gas Discovery Well with an appraisal well (Judith-2) while incorporating an up-dip sidetrack well to target the adjacent Judith North-East block that contains a P50 Prospective Resource of 379 Bcf
- Judith-2 drilling is scheduled for mid-2026, with Emperor intending to secure a jack-up rig currently operating nearby in the Gippsland Basin
- The Judith Gas Field is located near existing pipeline infrastructure including the Tuna Platform owned by Exxon and Woodside located within 14km, and the Orbost Gas Plant owned by Amplitude located 40km away onshore (See Figure 6)
- Judith has the potential scale to have a materially positive impact on the East Coast gas crisis that is driven by rapidly declining production from the Southern Gas Fields¹
- Emperor holds 100% of VIC/P47, providing flexibility for deal structuring, farm-outs, and strategic partnerships with a formal process to commence shortly

¹ AEMO – “2025 Gas Statement of Opportunities”, dated 20th March 2025



Emperor Energy (ASX:EMP) (**'Emperor'** or the **'Company'**) is pleased to announce a material upgrade to its gas resource base following an independent audit by global energy consultants GaffneyCline. The Judith Gas Field is now assessed to host a 2C Contingent Resource of 166 Bcf, with an additional 1.859 Tcf of P50 Prospective Resources identified in the Judith and Longtom Gas Sands across the Vic/P47 permit.

Emperor Energy Executive Director Phil McNamara commented:

"This independent resource audit by GaffneyCline has been carried out using a package of information assembled over several years of work by Emperor's team of consultants. Core to this package is a state of the art, modern 3D seismic data set acquired in 2020 that has been thoroughly interpreted by a team of Geologists with extensive Gippsland Basin experience and then analysed by industry leading Geophysicists. The seismic data has been tied to an expert Petrophysical Evaluation of the Judith-1 Well that confirms the presence of mobile gas and indicates permeabilities that will support high flow rate commercial wells.

It has taken considerable time to assemble this level of industry-leading analysis, and we are pleased to receive GaffneyCline's positive review after their audit. The Environmental Approval to drill the Judith-2 Well is progressing through NOPSEMA and we are now actively advancing plans for well funding with strategic partners. It is an exciting time, and the Company is ready to drill this appraisal well to validate Judith's scale and confirm its potential to become a cornerstone gas supply project for South-East Australian domestic markets."

Summary of Resources in the Judith and Longtom Gas Sands

Emperor Energy has received an Independent Resource Statement from international petroleum consultancy GaffneyCline, a globally respected firm with over 60 years of experience exclusively focused on the petroleum and energy industry. Resource and reserves certification is a core competency of GaffneyCline's global business, making them a trusted authority in the field.

GaffneyCline conducted an independent audit of the Contingent and Prospective Resources associated with the Judith Gas Discovery. This audit was based on a recently updated 3D geological static model and volumetric resource estimates developed by Emperor's geological consultants 3D-GEO using modern 3D seismic data acquired in 2020 and processed by CGG in 2021 as part of the Gippsland Basin Multi-Client seismic acquisition program.

As part of the audit, GaffneyCline reviewed the reservoir parameters incorporated into the model, which were based on the Judith-1 petrophysical analysis completed by Steve Adams (The Petrophysicist Ltd) in 2023. GaffneyCline independently verified these parameters and arrived at consistent interpretations.

In addition, GaffneyCline carried out a quality control assessment of Emperor's seismic horizon interpretation by generating a 3D velocity model and cross-checking it against the Judith-1 Vertical Seismic Profile. These checks confirmed that the data was appropriate for volumetric evaluation using the 3D-GEO static model.

Finally, GaffneyCline conducted its own interpretation of seismic Amplitude Versus Offset (**AVO**) attributes and reviewed the AVO analysis performed by 3D-GEO, as well as the earlier Quantitative Interpretation study completed by consulting geophysicist Dr Jarrod Dunne. The consistency of results across these independent reviews adds further confidence to the geological and resource interpretations at Judith.

The estimates of Contingent Resources as assessed by GaffneyCline are summarised in Table 1.1 below.



Table 1.1: Summary of Judith-1, Development Unclarified Gross Contingent Resources (Gaffney Cline, as of 20 June 2025) (Deterministic Estimation)

Emperor Formation Reservoir	Contingent Resources		
	Low 1C (Bscf)	Best 2C (Bscf)	High 3C (Bscf)
Emperor Sand 1	7.8	23.4	41.6
Emperor Sand 2	12.6	41.8	66.4
Emperor Sand 3	23.7	85.2	117
Emperor Sand 4	5.6	15.4	34.8
TOTAL	49.6	165.7	259.8

Note: Arithmetic summation of Contingent Resources by category. The audited volumes presented above have been estimated utilising deterministic 3D Model scenarios with additional uncertainty checks performed utilising 2D maps with tops and base reservoir surfaces, Fluid contacts and petrophysical parameters audited by GaffneyCline

GaffneyCline reviewed the volumes previously estimated by 3D-GEO for the near field fault blocks within the Greater Judith structural closure and accepted the volumes based on the similar technical checks performed for the Contingent Resource volumes above. The estimates for Prospective Resources are summated in Table 1.2 below.

Table 1.2: Summary of Prospect Prospective Resources for Judith area of VIC/P47 Judith and Longtom Sandstones (Gaffney Cline, as of 20 June 2025) (Probabilistic Estimation)

Greater Judith Area		Unrisked Prospective Resources		
		P90	P50	P10
Judith Deep	Bcf	89	142	209
West	Bcf	88	135	192
Central	Bcf	40	364	872
North	Bcf	64	252	455
North-East	Bcf	51	379	688
North-West	Bcf	13	118	281
South	Bcf	102	469	919
Total	Bcf	447	1,859	3,616

Note: Gaffney Cline reviewed the above Unrisked Prospective Resources by assessing and reported by individual Gas Sand within each Fault block. Arithmetic summation of the Prospective Resources by category in this table has been completed by Keven Asquith who is the Director of 3D-GEO Pty Ltd and competent person for this release.

Table 2: Key Parameters from Judith-1 Petrophysics Evaluation by Steve Adams (ASX: 7th September 2023)

Zone	Depth	Interpretation	Net Thickness (m)	Porosity (%)	Av. Permeability (mD)	Av. Gas Saturation (%)
Gas Sand 1	2370m to 2441m	Mobile Gas	40.5	14.1	12.3	52.2
Gas Sand 2	2489m to 2543m	Mobile Gas	38.8	15.0	24.2	63.8
Gas Sand 3	2626m to 2720m	Mobile Gas	63.1	13.6	5.2	61.1
Gas Sand 4	2778m to 2839m	Mobile Gas	47.1	12.6	1.6	56.4

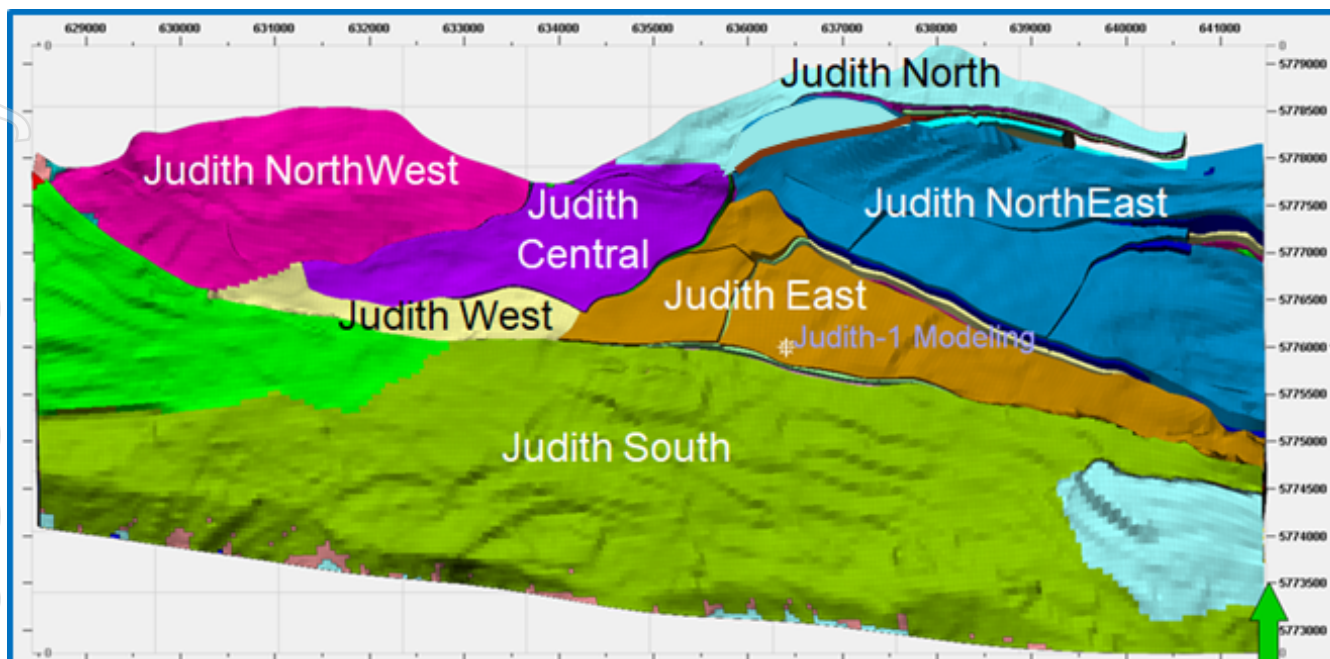


Figure 1: Greater Judith Structural Compartments. 2C Contingent Resource of 166Bcf is assessed within the Judith East Fault Block where the Judith-1 Well is located

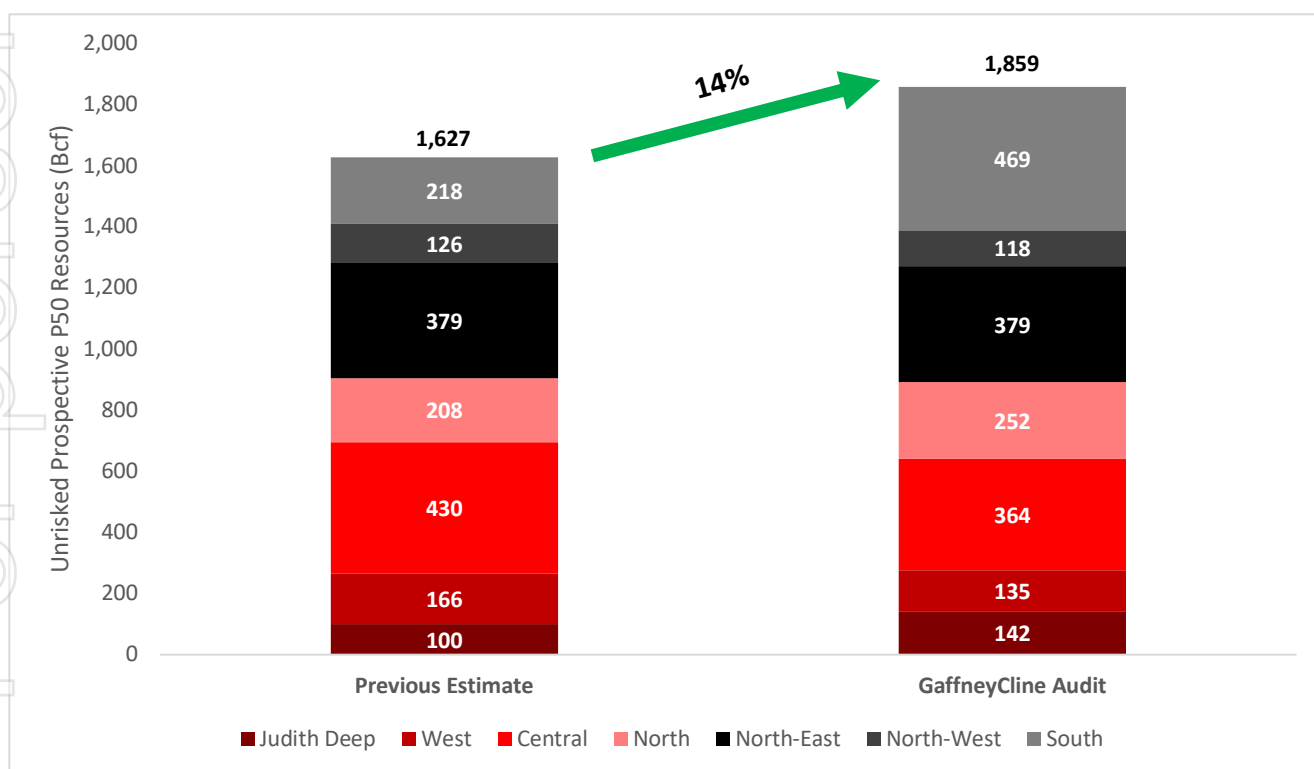


Figure 2: Comparison of Unrisked P50 Prospective Resources (Gaffney Cline June 2025) with previous assessment (3D-Geo October 2022). (Probabilistic Estimation)

Note: Arithmetic summation of the Prospective Resources by category shown in this table has been completed by Keven Asquith (3D-GEO)

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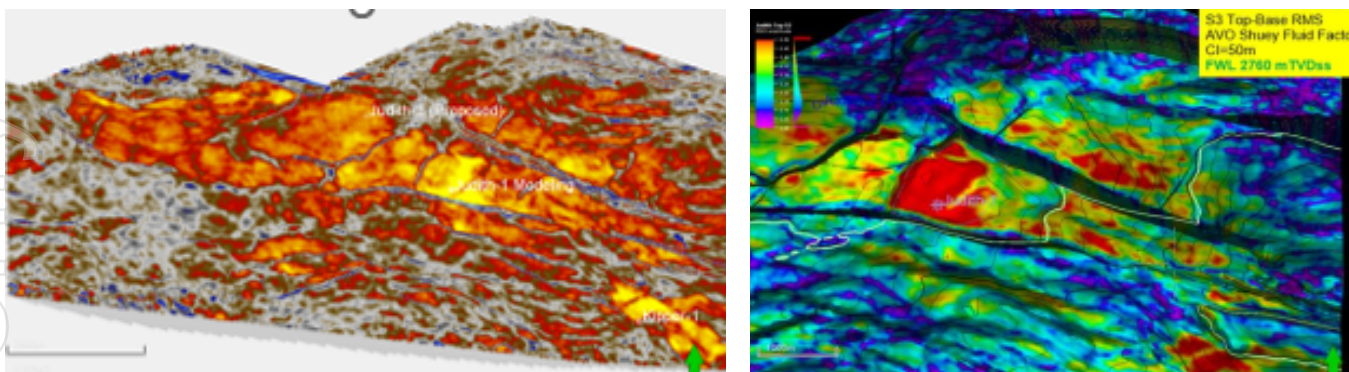


Figure 3: Comparison of Judith Gas Sand 3 AVO Analysis by 3D-GEO (Left) and Gaffney Cline (Right)

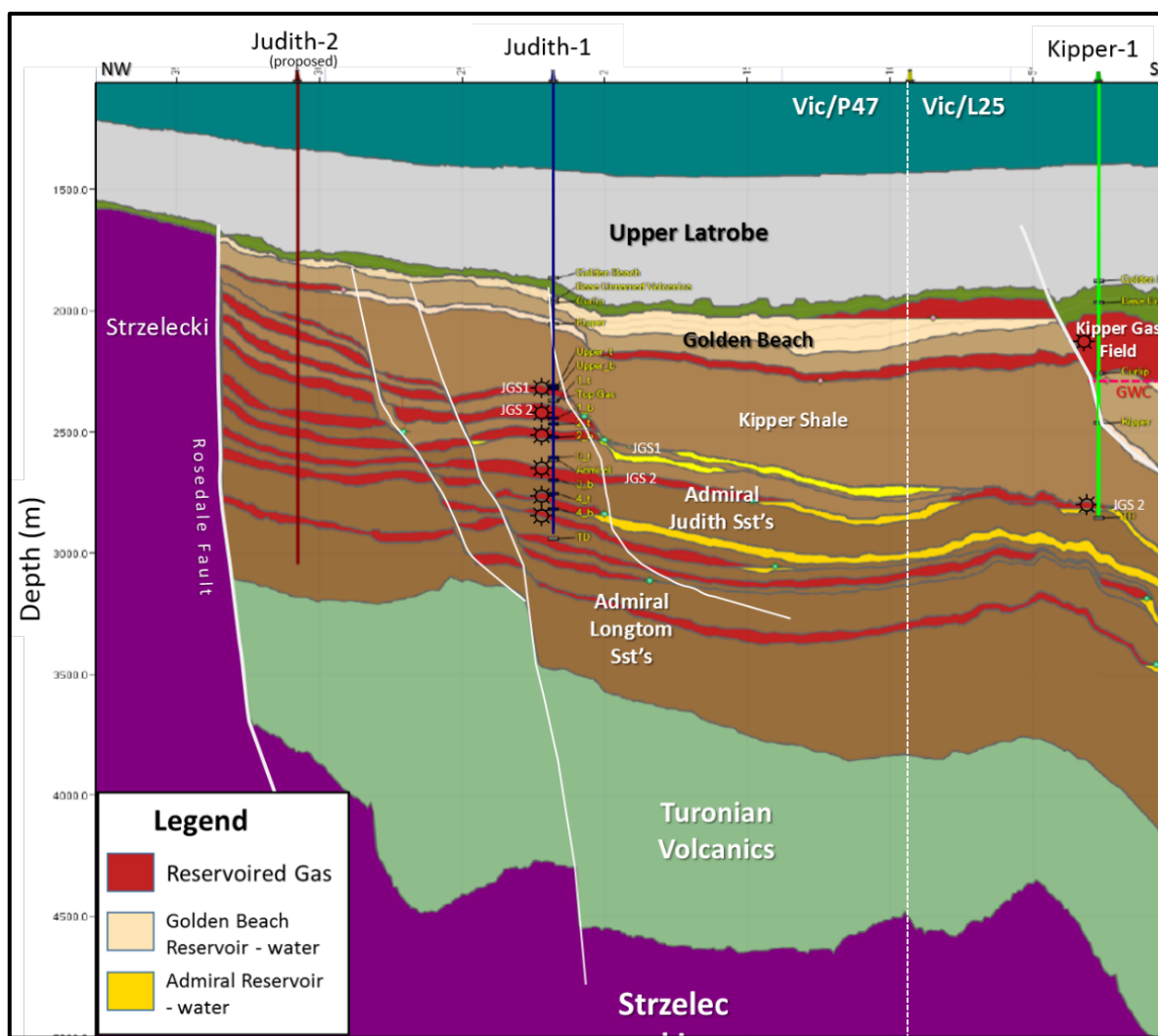


Figure 4: Composite Seismic Line: Judith Gas Field to Kipper Gas Field

Image from 2023 Quantitative Interpretation study shows AvO-modelled mobile gas reservoirs in stacked Judith Gas Sands and underlying unpenetrated Longtom reservoirs.

Kipper and Golden Beach reservoirs shown above.

ASX: 7th September 2023

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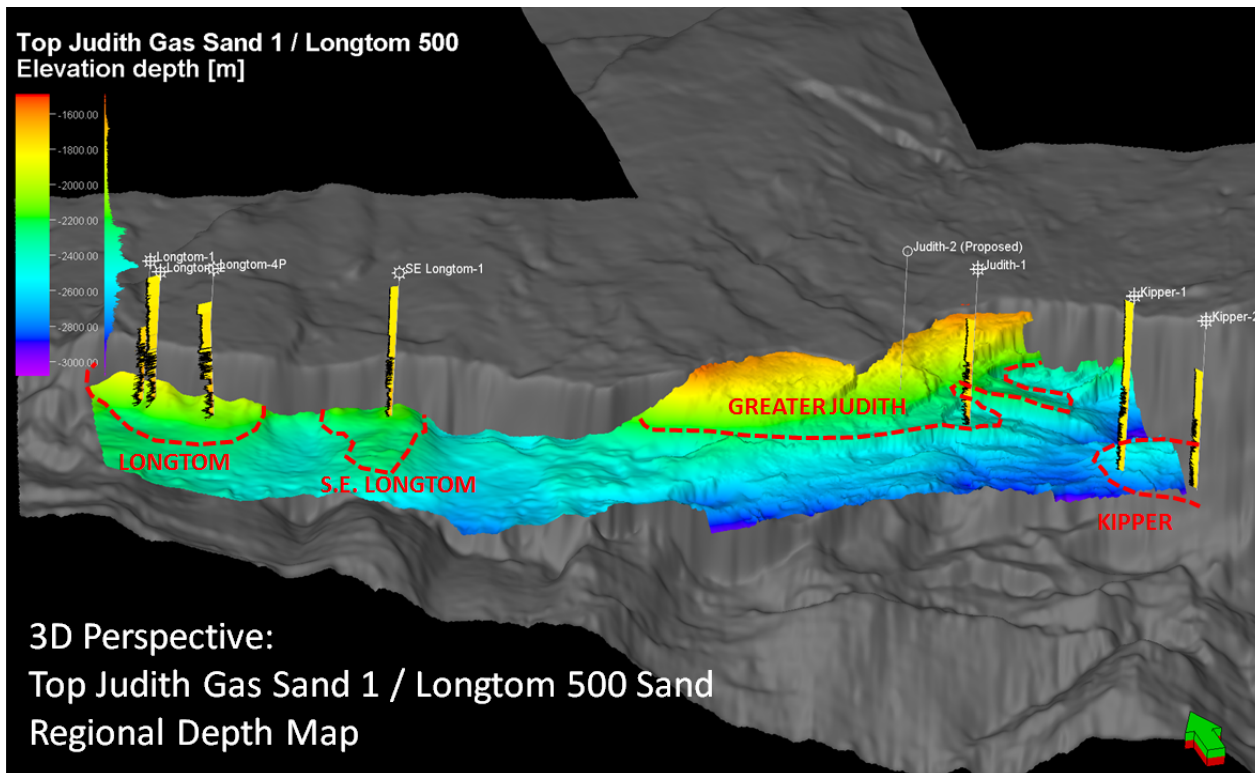


Figure 5: Regional Top Judith Gas Sand-1 Depth Map showing Analogue Fields

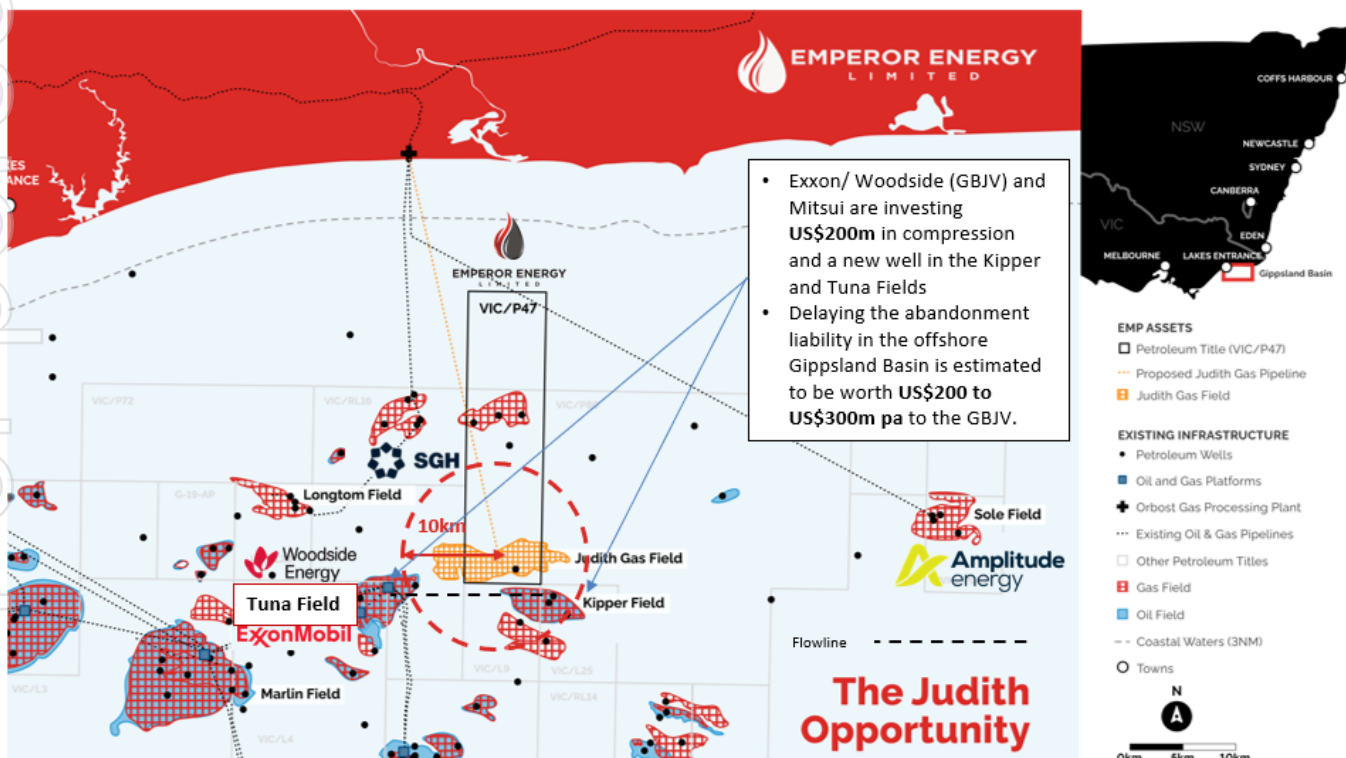


Figure 6: Location Map - Judith Gas Field, Gippsland Basin

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GaffneyCline Recommended Drill Program

GaffneyCline notes that Emperor Energy is currently evaluating the development of the Judith East Block via the twinning of the Judith-1 Well including deepening to test the underlying Longtom Sands prospective targets.

Gaffney Cline further adds that the near-field Prospective Resources, the Central and North-East Blocks, which are well supported by AVO Seismic attributes provide an exploration opportunity to create an aggregate resource volume that may lead to a larger commercial project.

GaffneyCline provides a further view that the Judith North-East Block based on AVO attribute analysis is considered to have the highest probability for the Judith Gas Sands and consideration should be given to the economics of a side-track well targeting the North-East Block from the Judith twinned well.

Next Steps: Advancing the Judith Gas Project

Following the independent certification of Emperor Energy's resource base by GaffneyCline, the Company is now focused on unlocking value through a staged work program designed to progress the Judith Gas Project toward commercialisation.

1) Appraisal Well Planning

With the independent certification of the Judith Gas Field resource base now complete, Emperor Energy is advancing a series of technical, commercial, and regulatory initiatives to unlock the value of this strategically located asset. The Company is currently finalising detailed well design and subsurface objectives for the planned Judith-2 appraisal well, which will target the certified 2C Contingent Resource and the underlying Longtom Sandstone Prospective Resource. Concurrently, Emperor is engaging with regulatory authorities to progress environmental and drilling approvals for Vic/P47, with the aim of securing the necessary permits to drill in mid-2026.

2) Strategic Partnering and Farm-Out Process

A formal strategic process is commencing soon, with the intention of attracting an investment consortium to participate in the appraisal drilling campaign and to develop the Judith Gas Field. The third-party certification by GaffneyCline, combined with Judith's proximity to existing offshore infrastructure, provides a compelling basis for strategic discussions and aligns with the increasing interest in domestic gas supply solutions on the east coast of Australia.

3) Strategic Review of Development Options

Emperor will commence a strategic review of development scenarios. This will be supported by early-stage economic assessments and, where appropriate, discussions with potential regional consolidation partners to assess options for increasing development scale and marketability.

Prospective Resources in the Overlying Kipper and Golden Beach Gas Sands

A Resource Estimate completed in March 2022 by 3D-GEO for the overlying Kipper and Golden Beach gas sands (tied to the Kipper-1 gas discovery) identified a further P50 Prospective Resource of 622 Bcf as a potential extension of the producing Kipper Gas Field into Vic/P47. See Table 3 below.

These Kipper and Golden Beach P50 Prospective Resources have not been reviewed by GaffneyCline and remain as previously assessed.



**Table 3: Summary of Lead Prospective Resources for Judith area of VIC/P47
Kipper and Golden Beach Sandstones (3D-GEO, March 2022) (Probabilistic Estimation)**

ASX: 6th April 2022

Greater Judith Area		Unrisked Prospective Resources		
		P90	P50	P10
New Resource Statement				
Kipper Sand	Bcf	194	314	478
Upper Golden Beach Sandstone Sequence	Bcf	70	143	247
Lower Golden Beach Sandstone Sequence	Bcf	9	21	40
Golden Beach Basal Sand	Bcf	83	144	231
Total	Bcf	356	622	996

Competent Persons Statement

Consents

The Resources information in this ASX release is based on, and fairly represents, data and supporting documentation prepared and supplied to Gaffney Cline by 3D-GEO Pty Ltd. The preparation of this data and supporting documentation has been managed by Mr Keven Asquith who is Chairman and Director of 3D-GEO Pty Ltd.

Mr Asquith holds an Honours BSc. Geological Sciences – University of Western Ontario, Canada, 1978, and a Diploma in Project Management from the University of New England, Australia - 2000. Mr Asquith has over 35 years' experience in the sector and is a long-time member of the American Association of Petroleum Geologists (AAPG).

Mr Asquith is a qualified Petroleum Reserves and Resources Evaluator as defined by ASX listing rules. The Resources information in this ASX announcement was issued with the prior written consent of Mr Asquith in the form and context in which it appears.

Reserves and resources are reported in accordance with the definitions of reserves, contingent resources and prospective resources and guidelines set out in the Petroleum Resources Management System (PRMS) approved by the Board of the Society of Petroleum Engineers in 2018.

The data and supporting documentation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports 2005 Edition ("The VALMIN Code") as well as the Australian Securities and Investment Commission (ASIC) Regulatory Guides 111 and 112.

SPE-PRMS Society of Petroleum Engineer's Petroleum Resource Management System - Petroleum resources are the estimated quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resource assessments estimate total quantities in known and yet-to-be discovered accumulations,



resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating development projects, and presenting results within a comprehensive classification framework. PRMS provides guidelines for the evaluation and reporting of petroleum reserves and resources.

Under PRMS “**Reserves**” are those quantities of petroleum which are anticipated to be commercially recoverable from known accumulations from a given date forward. All reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability.

“**Contingent Resources**” are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development or gaining access to existing infrastructure or where evaluation of the accumulation is insufficient to clearly assess commerciality.

Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

“**Prospective Resources**” are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both a chance of discovery and a chance of development. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The estimated quantities of petroleum 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 and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

This announcement has been authorised for release by the Board of Directors of Emperor Energy Limited.

Yours faithfully

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Common natural gas unit abbreviations:

Mscf = Thousand Cubic Feet

MMscf = Million Standard Cubic Feet

BCF = Billion Cubic Feet

TCF = Trillion Cubic Feet

GJ = Gigajoule (metric measure of energy)

TJ = Terajoule (metric measure of energy) = 1000 GJ

PJ = Petajoule (metric measure of energy) = 1000 TJ

Gas unit conversions:

1Mscf = 1.05 GJ (Australian Govt Gas Cap Price is \$12/GJ)

1 MMscf = 1.05 TJ

1 BCF = 1.05 PJ

1,000 Mscf = 1 MMscf

1,000 MMscf = 1 BCF

1,000 BCF = 1 TCF