



19<sup>th</sup> February 2024

ASX Market Announcements  
ASX Limited

## **Approval Granted for Extension of Primary Term of Exploration Permit Vic/P47**

### **Judith Gas Field – Offshore Gippsland Basin, Victoria, Australia**

#### **Highlights**

- **Emperor Energy's application for a 2 Year extension of the Vic/P47 Exploration Permit Term has been approved by the Commonwealth-Victoria Offshore Petroleum Joint Authority.**
- **The approval provides security of tenure for Emperor Energy to complete the approvals process for drilling Judith-2 and secure a farm-in partner to co-fund the well.**
- **Drilling of the Judith-2 appraisal well is now required by August 2025.**
- **New petrophysical analysis of the Judith-1 well has significantly increased the permeability of the reservoir sands and confirms mobile gas columns.**
- **Recent Quantitative Interpretation of the AVO (Amplitude versus Offset) from the 2020 3D seismic over the Judith Gas Field provides additional confidence for the presence of gas updip and downdip from the Judith-1 discovery well showing AVO conformity to structural closure.**

Emperor Energy is pleased to announce that the Commonwealth-Victoria Offshore Petroleum Joint Authority has granted a 24-month extension of the Vic/P47 Exploration Permit Year 1-3 work program commitments, along with a corresponding 24-month extension of the overall permit term.

The granted extension moves the timeframe requirement for drilling of the Judith-2 Exploration and Appraisal Well to August 2025. Emperor Energy applied for this extension in August 2023 and has been in ongoing communication with the National Offshore Petroleum Titles Administrator (NOPTA) since the application was submitted. The granting of this extension has taken almost 3 months longer than Emperor Energy had previously forecast in ASX releases made immediately after the application was submitted and again after additional information was supplied to NOPTA.

The granted extension provides security of tenure for Emperor Energy to complete the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) Environment Plan (EP) approval process for Emperor Energy's planned Judith-2 Well while also proceeding to secure a farm-in partner to participate in drilling of the Judith-2 Exploration and Appraisal well.

Emperor Energy owns 100% of the Vic/P47 permit in the offshore Gippsland Basin which has been assessed to contain a 198 Billion Cubic Feet (BCF) 2C Contingent Recoverable Gas Resource along with a 2,249 BCF P50 Prospective Recoverable Gas Resource.

*Source: EMP ASX Resource Statement Release 13 October 2022.*



Recent petrophysical evaluation of the Judith-1 Well completed by respected industry expert Steve Adams at The Petrophysicist Limited (TPL) has provided significant order of magnitude increases in permeabilities of the Judith Gas Sands compared to previous analyses, while confirming the previous analysis of mobile gas columns and gas saturations determined by (Cernovskis, 2022). (Table 1).

Dynamic production modelling of the Judith-1 well is now being carried out to indicate what gas flow rates would likely be achieved by the Judith-1 Well in simulated production using the gas saturations and permeability analysis as completed by Steve Adams.

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

**Table 1: Key outcomes from Judith-1 Petrophysics Evaluation**

Quantitative Interpretation of the AVO (Amplitude versus Offset) has recently been undertaken by QIntegral (Jarrod Dunne) who has considerable Gippsland Basin geophysical modelling expertise, particularly in the Judith/Longtom/Kipper setting. He has calibrated the AVO response to the Judith-1 and Kipper-1 wells, and his analysis shows strong AVO gas response across the Judith structure in both the penetrated Judith sands and underlying Longtom gas sands that were not penetrated in the Judith-1 well, with conformity of the AVO response with structural closure.

Emperor Energy has been providing the results of the new petrophysics and AVO studies via detailed management presentations to a number of companies with potential interest in the offshore Gippsland Basin.

Emperor Energy has previously completed an evaluation of a Judith Gas Field development on a stand-alone basis via a 40km offshore pipeline to the Orbost Gas Processing Facility site, with a proposed dedicated new second gas processing train adjacent to Cooper Energy's existing Train 1. This evaluation was completed via a pre-FEED study in conjunction with APA and Wood when APA owned the Orbost Plant. Emperor Energy has a MoU in place with Cooper Energy in relation to this development option.

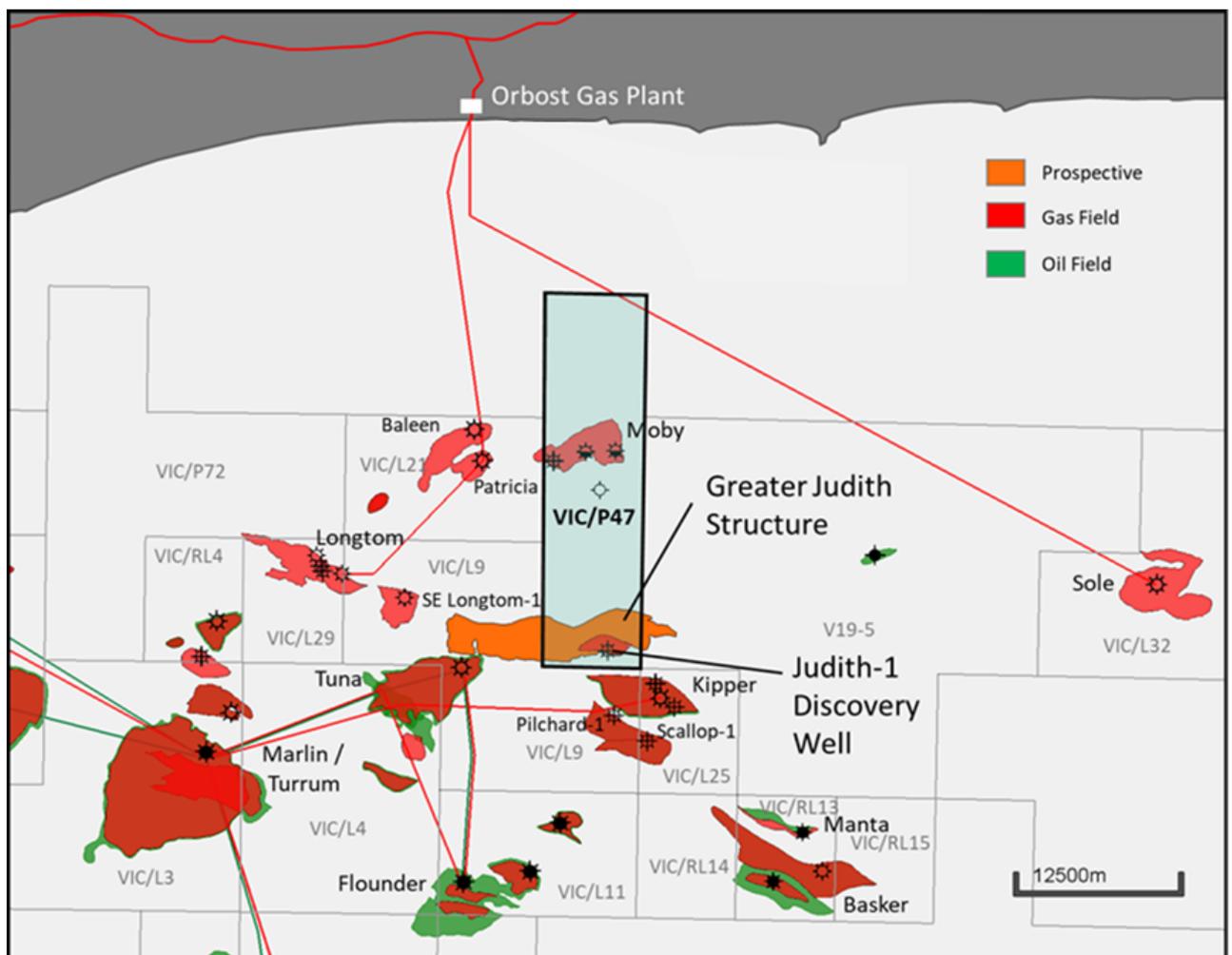
Emperor Energy is of the view that a successful Judith-2 well located in the Judith Central Fault Block that has an assessed P50 Prospective Resource of 430 BCF combined with the existing 198 BCF 2C Contingent Resource around the Judith-1 Well could provide sufficient scale to meet the Minimum Economic Threshold for development of the Judith Gas field.

The balance of supply and demand for gas on the east coast of Australia is becoming more and more critical as evidenced by the Federal Government in November providing exemptions from its \$12/GJ gas cap pricing to APLNG and Senex, and more recently Exxon Mobil / Woodside to provide a further domestic gas supply to avoid critical gas supply shortfalls.

Source: *The Australian Newspaper* 22<sup>nd</sup> January 2024

Emperor Energy considers that using gas fired electricity as the firming capacity to complement renewable energy sources is the logical solution for replacement of the high emission brown coal electricity generation currently dominating electricity supply in Victoria.

The Judith Gas Field is perfectly located to supply into this East Coast market through a new gas pipeline and processing plant at Orbost or potentially through a tie-in to the existing Gippsland Basin Joint Venture gas infrastructure that supplies the Longford gas processing plant.



**Figure 1: Location of 100% Emperor Energy owned Vic/P47 in the offshore Gippsland Basin (Bass Strait), showing the Judith Gas Field and proximity to Orbost Gas Plant, along with nearby oil and gas fields. The Sole Field is owned by Cooper Energy, Longtom Field by Seven Group Holdings and the Kipper / Tuna / Marlin / Turrum Fields by Exxon Mobil – Woodside (Gippsland Basin Joint Venture)**

We thank shareholders and our team for their ongoing support and welcome any questions they may have.

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

Yours faithfully



**Carl Dumbrell**

**Company Secretary**

Ph +61 402 277 282

[carl@emperorenergy.com.au](mailto:carl@emperorenergy.com.au)