

21 February 2024

ASX ANNOUNCEMENT

## Large-scale Stratigraphic and Structural Trap Potential Revealed at the Raya Prospect

### Highlights

- Work has commenced at the second area nominated for seismic re-processing focussing on the Raya prospect located within the Company's 4,585km<sup>2</sup> offshore Peru oil and gas block
- Combination of a stratigraphic and structural trap at Raya significantly increases the area under closure, with the potential for multiple pay zones indicative of a large scale target

Global Oil and Gas Limited (ASX: GLV) (**Global or Company**) has identified the second of three areas nominated for 3D seismic re-processing work at its 4,585km<sup>2</sup> Tumbes Basin Technical Evaluation Agreement (TEA or block) offshore Peru. An aggregate of 1,000km<sup>2</sup> of 3D seismic will be reprocessed as the Company compiles an inventory of leads, prospects and Resources.

The block comprises over 3,800km<sup>2</sup> of existing 3D seismic data and more than 7,000km of 2D seismic. The first prospective area (announced 12 February 2024) covers 250km<sup>2</sup> in the southern part of the TEA incorporating the Bonito and the Volador prospects (Figure 1). The second project area is in the northern part of the block covering an area of 400km<sup>2</sup> over the Raya prospect.

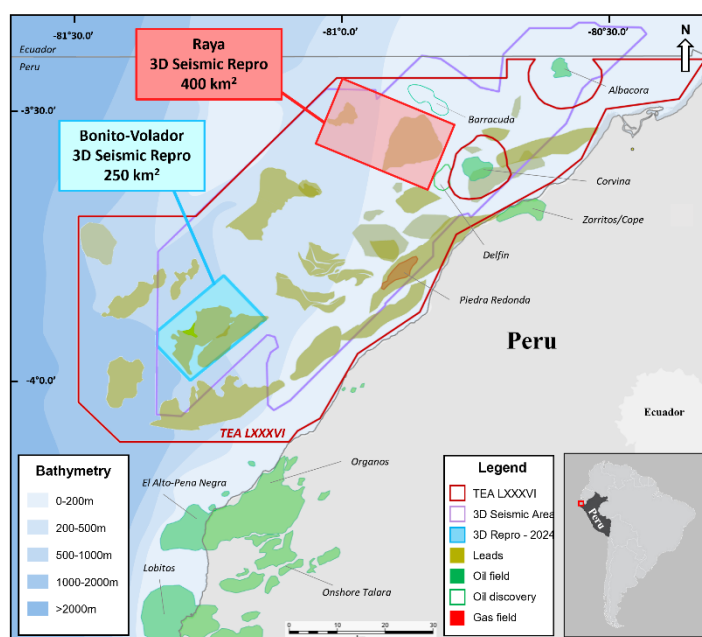


Figure 1 – Raya seismic re-processing area

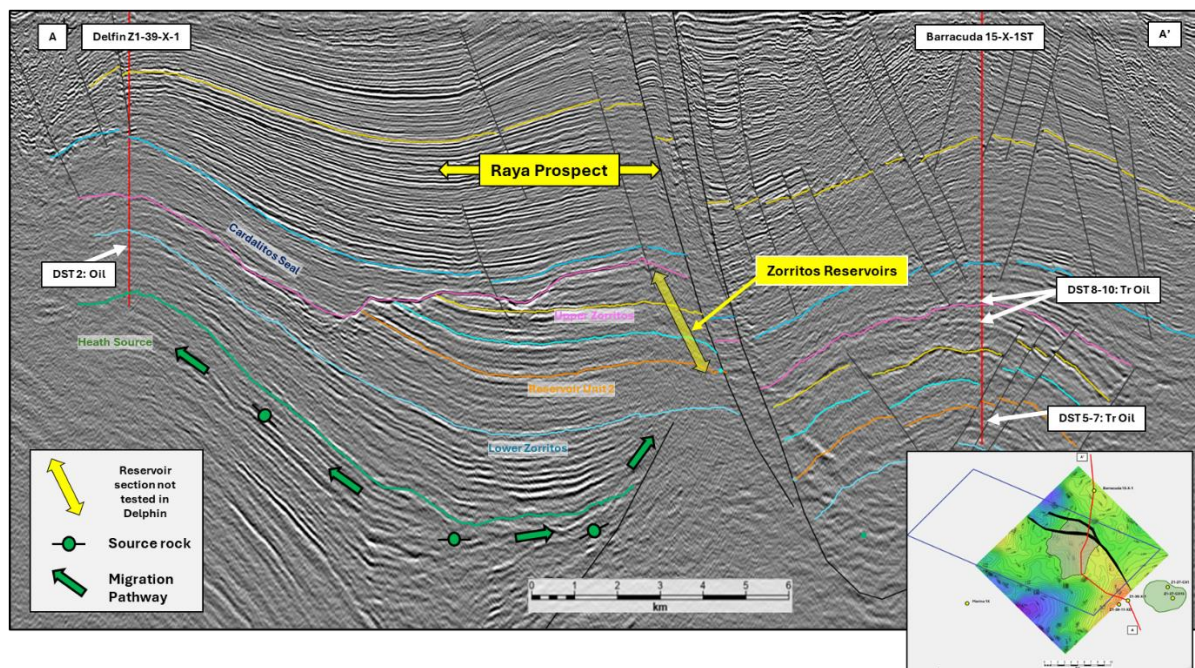
The selection of the second area was based on interpretation of the existing data which demonstrate that the Raya prospect has the potential to hold significant hydrocarbon volumes. Further, Raya has access to a different oil migration pathway than Bonito and Volador, offering a degree of risk independence.

The reprocessing of the 3D seismic data will allow for a better evaluation of the prospects and estimation of Prospective Resources.

### **Raya Prospect**

The Raya prospect is adjacent to the Delphin and Barracuda discoveries which demonstrate the presence of an oil charge in the area (Figure 1 and 2).

The Raya prospect is a structural high against an east-west fault (Figure 2) where the Zorritos Formation, the primary reservoir in the basin, is at a depth of c. 1,970m (~2,050m sub-sea).

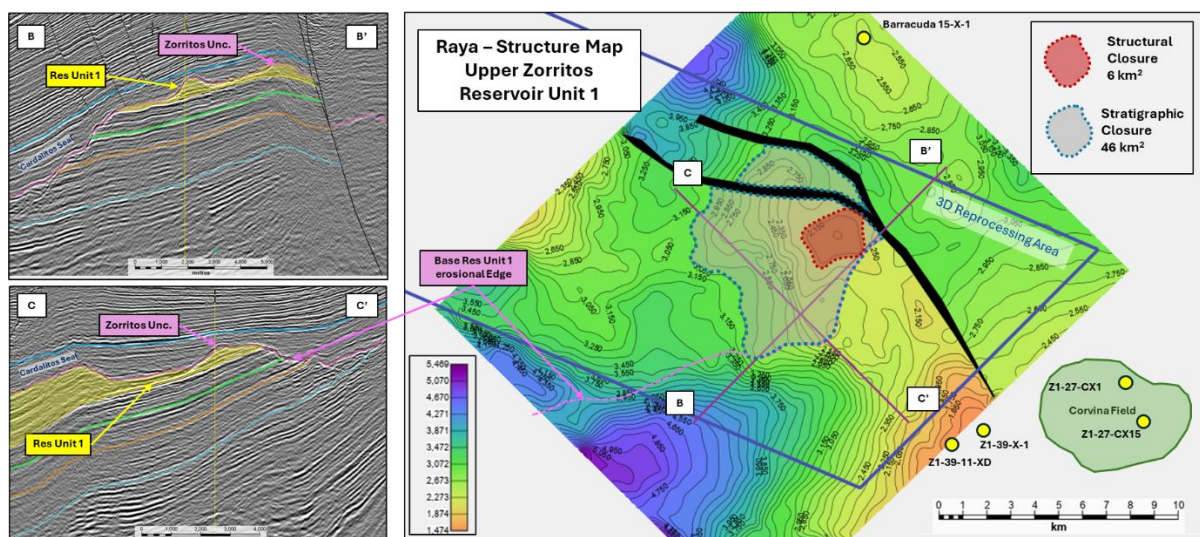


**Figure 2** – Raya illustrative seismic section.

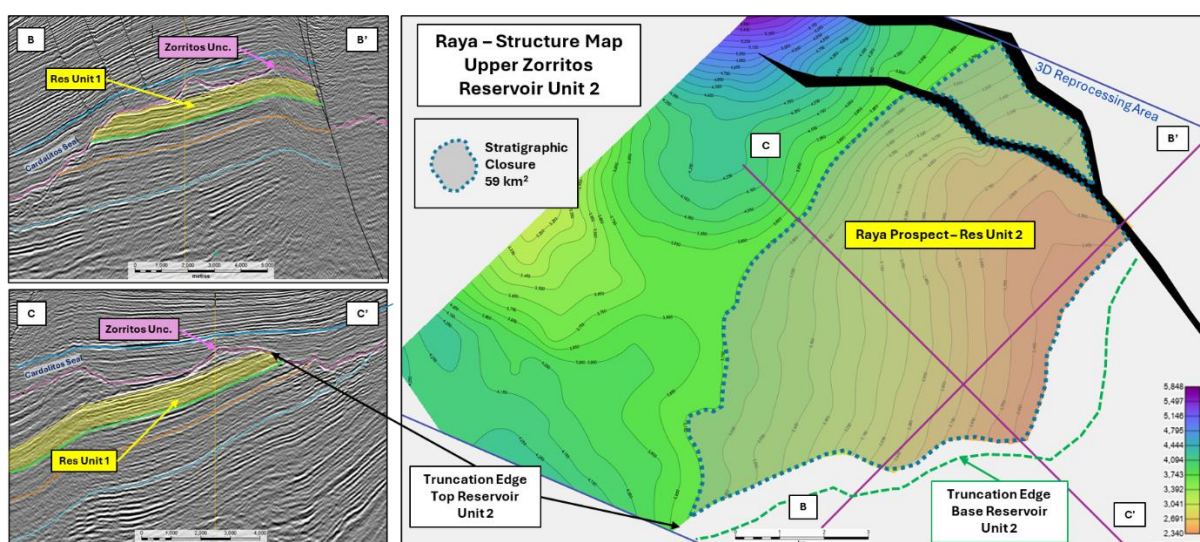
There are structural closures against the major east-west fault within the Raya prospect at a number of levels in the target Zorritos Formation (Figure 3). By comparison to other targets within the TEA, the area of structural closure is modest however there is potential for stacked pay with multiple Zorritos reservoir-seal pairs being present. The section above the Zorritos unconformity is typically a sealing shale which creates opportunities for combination structural/stratigraphic traps (Figures 3 and 4) where Zorritos Formation sands are truncated by the unconformity. The area under closure within the combination structural/stratigraphic traps is considerably larger than the structural closures with the same potential for multiple pay zones.

Once the reprocessing is complete, the Raya Prospect will be mapped in more detail and various lithology and fluid discrimination techniques based on seismic attributes calibrated by nearby wells will be used to identify target intervals.





**Figure 3 – Raya Reservoir Unit One Structure map with illustrative seismic sections**



**Figure 4 – Raya Reservoir Unit Two Structure map with illustrative seismic sections**

Seismic reprocessing will improve data quality at Raya that will refine both the accuracy of depth mapping and the ability to discriminate lithology and fluids, which could ultimately result in Raya being elevated to drill-ready status. Resource estimates of the potential volumes of hydrocarbons contained within the target reservoirs will also be published.

The seismic reprocessing is being undertaken by Advanced Geophysical Technologies (“AGT”) in Houston, Texas. AGT were selected through a competitive tender process based on their track record of delivering high quality products using innovative technology including various patented processes applicable to the imaging challenges presented by the Tumbes Basin.

The Company is currently finalising the location of the final seismic reprocessing project and will report on progress once the selection process is complete.

Director Scott Macmillan commented:

*"The presence of oil in adjacent wells to Raya gives us confidence in the petroleum system whilst the combination structural/stratigraphic trap has the potential to contain significant volumes of hydrocarbons."*

Authorised by the Board of Global Oil & Gas Limited.

**For further information please contact:**

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**About the Tumbes Basin TEA**

A Technical Evaluation Agreement (TEA) is an oil and gas contract that provides the holder with the exclusive right to negotiate a Licence Contract over the TEA area with Perupetro (the Peruvian national oil regulator) in return for the carrying out of greenfield exploration activities.

In August 2023 the Company with its partner Jaguar Exploration, Inc (Jaguar) entered into the 4,858km<sup>2</sup> TEA offshore Peru with Perupetro. The TEA area covers almost all of the Peruvian offshore Tumbes Basin in moderate water depths of between 100m to 1,500m. The block is surrounded by, and incorporates, multiple historic and currently producing oil and gas fields.

The TEA provides Global and Jaguar with a two-year exclusive option (with the possibility of a further one-year extension) to convert all or part of the expansive TEA area into one or more Licence Contracts in return for a minimal expenditure commitment to develop and market the TEA.

Global is 80% holder of the TEA, with Jaguar holding the remaining 20%.

**Competent Persons Statement**

The information in this report is based on information compiled or reviewed by Mr Scott Macmillan, Non-Executive Director of Global Oil and Gas Limited. Mr Macmillan is a Reservoir Engineer with more than 15 years' experience in oil and gas exploration, field development planning, reserves and resources assessment, reservoir simulation, commercial valuations and business development. Mr Macmillan has a Bachelor degree of Chemical Engineering and an MSc in Petroleum Engineering from Curtin University and is a member of the Society of Petroleum Engineers (SPE).