

Date: 04 June 2024

ASX Code: CND

**Capital Structure**

Ordinary Shares: 578,000,343  
 Current Share Price: 3.7c  
 Market Capitalisation: \$21.4M  
 Cash: \$2.5M (Mar 2024)  
 EV: \$18.9M  
 Debt: Nil

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 Non-Executive Chairman

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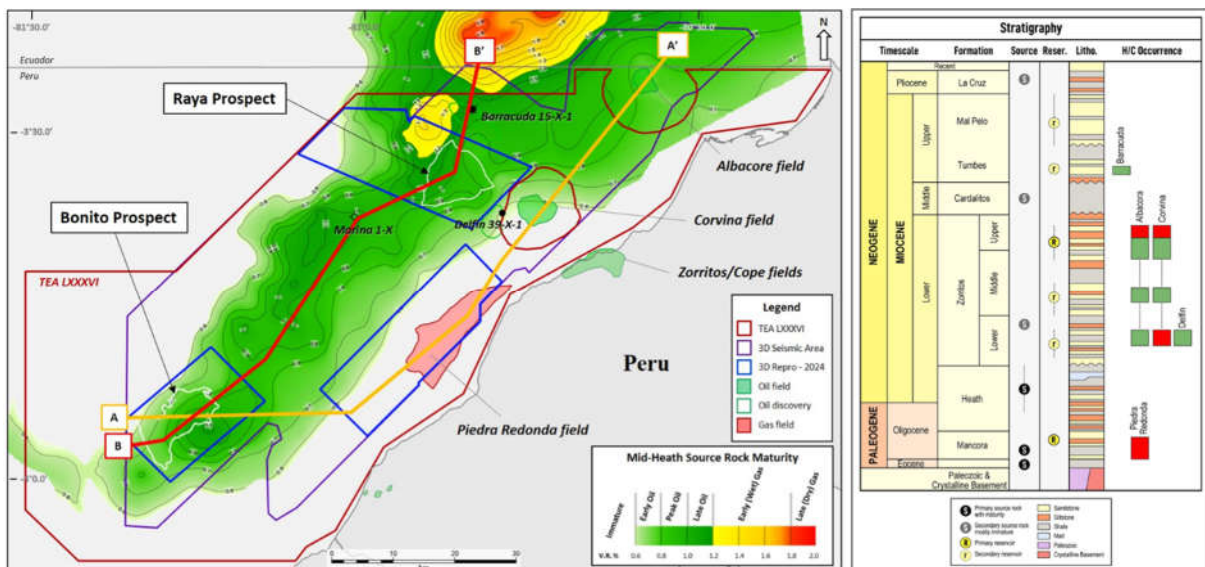
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# Evidence for Multiple Petroleum Systems Confirms Oil & Gas Plays in Peruvian TEA

## Highlights

- **Maturation mapping shows that at least two source rock intervals are present within the TEA**
- **Heath Formation source rocks shown to be oil mature over majority of the TEA**
- **Zorritos Formation reservoirs (primary target) have access to oil charge from mature Heath Formation source rocks**
- **Piedra Redonda gas field most likely to be charged by deeper source rocks in the Mancora formation**
- **Unexplored deep gas play in the TEA identified**

Condor Energy Ltd (ASX: CND) (**Condor** or the **Company**) is pleased to provide an update on exploration progress at its Technical Evaluation Agreement (TEA) offshore Peru where two large oil prospects (Raya and Bonito) have already been identified and regional mapping shows that the primary source rock interval, the Oligocene/Miocene aged Heath Formation, is mature for oil generation over much of the TEA area.



**Figure 1 – Maturation map showing expected Vitrinite Reflectance (%) in the middle of the Heath Formation. The peak oil generation zone corresponds to a range in vitrinite reflectance between 0.8 and 1.2% shown in green.**

The [Raya](#) and [Bonito](#) prospects are large features in the Zorritos Formation, which present structural closure at multiple levels and the potential for stacked pay with multiple Zorritos reservoir-seal pairs present.

Based on analysis of surface outcrops, cuttings and core samples from previous wells published by Perupetro (the Peruvian national oil regulator), there are numerous potential source rock intervals in the Tumbes Basin.

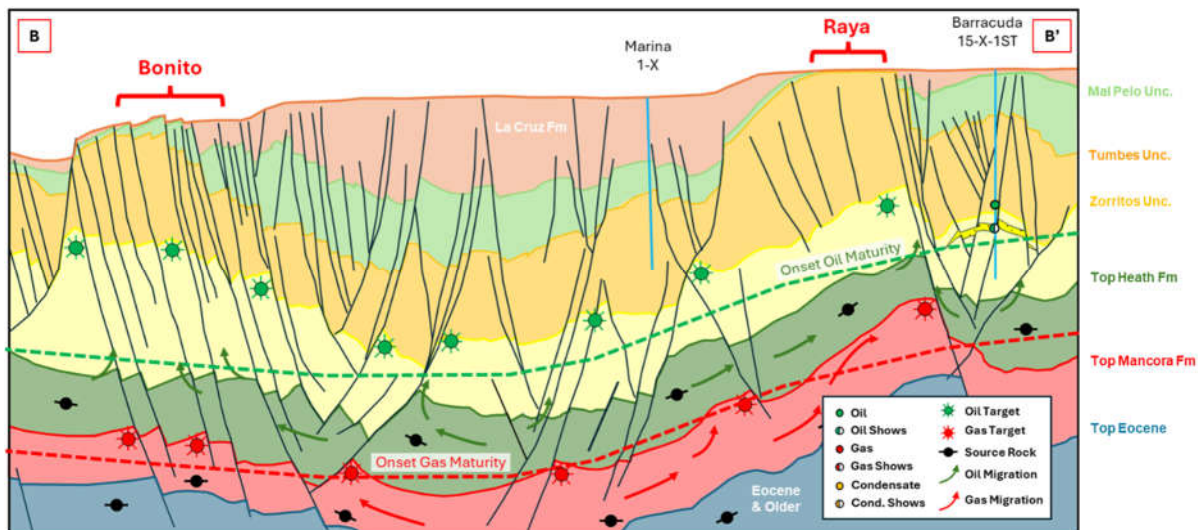
The Company recently completed an [interpretation of the wider regional seismic data](#) which mapped key intervals and confirmed that the Heath Formation (Figure 1) and Mancora Formation likely sit within the maturity window for oil and gas generation respectively.

**Primary Shallow Oil Play (Oligo-Miocene Age)**

The Zorritos reservoirs which are the primary targets for Raya and Bonito prospects have been proven by the Corvina, Albacora and Delfin oil discoveries in the TEA area. These discoveries are likely to have been charged from the underlying Heath Formation source rocks.

Figure 1 shows the anticipated present-day maturity in the middle of the Heath Formation showing the Heath Formation source rocks to be oil-mature across most of the TEA area.

The expected top of the oil and gas generative zones of the Heath and Mancora Formations are shown on two cross sections through the basin (Figures 2 and 3).



**Figure 2 – Cross section B-B' Approximate present day top oil window and top gas window based on maturity modelling by previous Operator (see Figure 1 for location).**

Based on the maturation modelling, there are mature Heath Formation source rocks down-dip from both the Raya and Bonito prospects. Hydrocarbons generated by the Heath Formation would be expected to migrate up-dip along carrier beds and may also migrate vertically through faults and/or fractures into the overlying Zorritos reservoirs.

The Raya and Bonito prospects therefore appear to be favourably located with respect to mature source rocks within the peak oil generating zone.

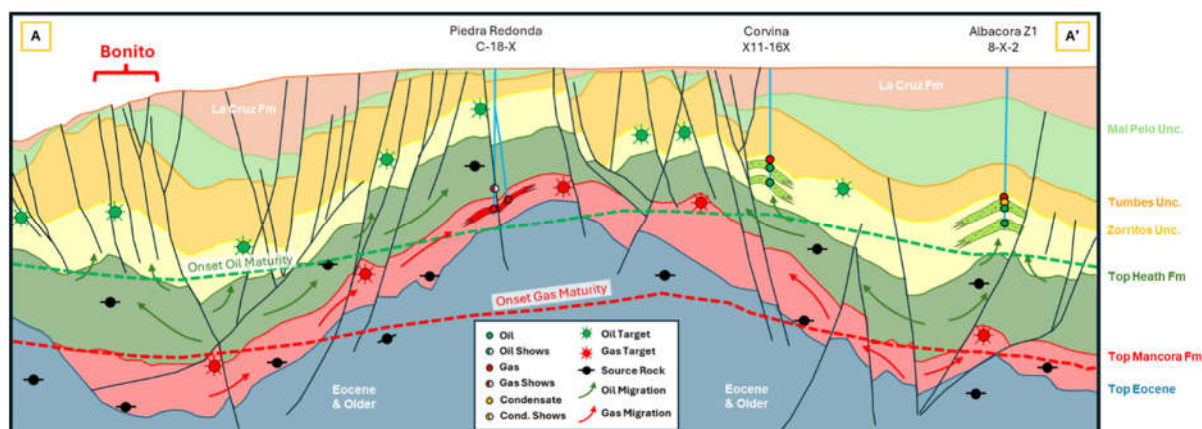
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There are several other prospective features identified from the regional data interpretation which appear to be favourably located with respect to their fetch area and anticipated migration route from the mature oil kitchen and these are currently being mapped in greater detail by the Company.

### **Additional Deep Gas Play (Eocene Age)**

The depth and location of the [Piedra Redonda gas field](#) (Figure 3) suggests that an additional deeper gas play is also present in the basin which has been charged by a more mature (deeper) source rock.

The Piedra Redonda gas discovery is located in reservoir sands at the top of the Mancora Formation and has most likely been charged by gas generated from shales within or below the Mancora Formation which has subsequently migrated updip.



**Figure 3 – Cross section A-A' Approximate present day top oil window and top gas window based on maturity modelling by previous operator (see Figure 1 for location).**

The Mancora Formation is predominantly a sequence of sands and shales which offer both reservoir and source rock potential respectively. The Mancora Formation source rocks are at the top of the gas generation maturity window downdip from the Piedra Redonda field (Figure 3).

The gas in Piedra Redonda is dry, which would typically be derived from source rocks in the peak gas generating zone meaning it is possible that the source rocks lie towards the base of the Mancora Formation or perhaps even below.

Given the structural setting, the deeper gas play in the Mancora Formation is considered independent of the shallower oil play in the Zorritos. Consequently, most of the Zorritos and younger targets are likely to be insulated from the deeper Mancora-related gas migration.

In addition to mapping structure where Zorritos, and possibly Tumbes, reservoir sands could be charged by oil from mature Heath Formation source rocks, the Company is mapping a deeper play fairway where Mancora sands could receive a gas charge from Mancora or older source rocks with the aim of identifying additional prospects and leads.

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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.

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 shallow to moderate water depths of between 50m and 1,500m.

The underexplored block is surrounded by multiple historic and currently producing oil and gas fields and contains the undeveloped shallow water Piedra Redonda gas field which contains 'Best Estimate' Contingent Resources of 404 Bcf (100% gross) and 'Best Estimate' Prospective Resources of 2.2 Tcf<sup>#</sup> (gross unrisks) of natural gas.

The TEA provides Condor 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.

The TEA's two year work commitment agreed with Perupetro is summarised below:

Period	Term	Minimum Work Program
Year 1	Twelve Months	• Reprocessing up to pre-stack depth migration (PSDM) of 1,000 km <sup>2</sup> of 3D seismic data.
		• Amplitude versus offset (AVO) studies.
Year 2	Twelve Months	• Geological and geophysical studies, including 3D seismic interpretation, seismo-stratigraphic and structural analysis.
		• Catalogue of prospects and leads.
		• Integrated Final Report of the work carried out.

Condor is 80% holder of the TEA, with Jaguar and its nominees holding the remaining 20%.

Authorised by the Board of Condor Energy Limited.

### For further information please contact:

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### Competent Persons Statement

The information in this report is based on information compiled or reviewed by Mr Scott Macmillan, Non-Executive Director of Condor Energy Ltd. 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).

<sup>#</sup>Cautionary Statement: The estimated quantities of gas that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both a 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 recoverable hydrocarbons.

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