South West Peninsula
Exploration – Appraisal - Development

24 September 2019
Summary

• 2 producing fields
  • Bonasse
  • Icacos
• 3 separate Private Petroleum Licences (“PPL’s”) covering the SWP
  • Bonasse
  • Icacos*
  • Cedros*
• All fields and PPL’s are held 100% by Columbus.
• PPL’s are underpinned by Leases with various private landowners. The landowners own the mineral rights and grant access to those mineral rights to Columbus via the Leases.
• Economics of PPL’s (royalties paid to landowners and taxes paid to Govt) are superior to IPSC’s for other Columbus assets.

* Subject to formal grant of PPL by Ministry of Energy and Energy Industries.
Geological & Geophysical Summary

Data on the geology of the SWP can be derived from:
• 53 wells that have been drilled in the broader SWP area
• Airborne Gravity Gradiometry and Magnetic survey
• Surface geochemistry
• 160km² 3D seismic survey (completed 2002/2003 and subsequently reprocessed)
• ~1000 line km of 2D seismic (various vintages)

• In 2019, Columbus engaged EPI Group (an independent consultancy) to review the SWP prospectivity, conduct a well failure analysis and to advise on the prospects available for drilling.
• Based on this review, alongside internal work, Columbus has identified 2 prospects available for drilling in 2019:
  • Saffron
  • Clove
The UBOT-1 well was drilled in 1936 and flowed oil (207 bbl) from the Lower Cruse formation.

The primary objective of the Saffron well is to test the Lower Cruse updip from UBOT-1.
The Clove prospect will test three different horizons, Incised Valley Sands, the Upper Cruse and the Middle Cruse. The Bonasse field is already producing from Upper & Middle Cruse sands.

The Clove well will reach total depth at ~ 2200 – 2500 ft.
The Saffron well will test three different horizons, the Upper Cruse, the Middle Cruse and the Lower Cruse (the primary target).

The prospectivity of the Upper Cruse and Middle Cruse sands are difficult to judge based on available data.

The Geological Chance of Success (45%) relates the to Lower Cruse.

The Saffron well will reach total depth at ~ 4000 – 4500 ft.
Saffron prospect (field development)

A more detailed seismic interpretation has resulted in an improved correlation of FRM1/ACD4 stratigraphy into the Bonasse area & refined the geological model.

### Chance of Geological Success

<table>
<thead>
<tr>
<th>TRAP</th>
<th>RESERVOIR</th>
<th>CHARGE</th>
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</thead>
<tbody>
<tr>
<td>Presence</td>
<td>Effectiveness</td>
<td>Presence</td>
</tr>
<tr>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
</tr>
</tbody>
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Chance of Geological Success: 1 in: 2.2

**Critical risks**

- **Trap** - Structure may be segmented into multiple compartments and risk will increase downdip as larger column heights are involved.
- **Reservoir effectiveness** - UBOT produced 207bbl, but productivity uncertain.

### Play Elements

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<tr>
<td>Presence: Is a structural configuration present that is capable of confining hydrocarbons? e.g. 4-way dip closures (antithetic), 3-way dip closure relying on lateral seal in one direction (tied fault block, stratigraphic trap).</td>
<td>Presence: Is a rock unit that is known to have reservoir rock properties (permeability, porosity) elsewhere within the basin present?</td>
<td>Presence: Source Rock Presence: Is a rock unit present that has TOC’s sufficient to generate and expel hydrocarbons if mature? Maturity: Did the source rock reach sufficient maturity to generate and expel hydrocarbons?</td>
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<tr>
<td>Effectiveness: Required to seal integrity: Is a top seal present with capillary pressure capable of holding rock trapped height of hydrocarbons? Is a bottom seal and/or lateral seal present?</td>
<td>Effectiveness: Does the rock unit have sufficient reservoir quality to represent a reservoir that could commercially produce hydrocarbons?</td>
<td>Effectiveness: Timing of expulsion and secondary migration: When did the source rock expel hydrocarbons and was a trap present at this time? Migration Pathways: What was the structural configuration of the basin (carrier fields at the time of secondary migration and was the trap on a migration pathway?</td>
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### Unrisked Gross STOIIP (MMbbl) – Saffron field development – Lower Cruse

<table>
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<tr>
<th>Original</th>
<th>Updated</th>
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<tbody>
<tr>
<td>P90</td>
<td>17</td>
</tr>
<tr>
<td>P50</td>
<td>53</td>
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<td>P10</td>
<td>133</td>
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<tr>
<td>Pmean</td>
<td>66</td>
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The Saffron well’s primary target - Lower Cruse – has a 45% geological chance of success with a Pmean STOIIP of 77mmbbl (~11.5 mmbbl recoverable) for the field development.
Clove prospect (single well development)

### Chance of Geological Success

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<th>Effectiveness</th>
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<tbody>
<tr>
<td>Presence Effectiveness</td>
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<table>
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<th>Reservoir</th>
<th>Presence Effectiveness</th>
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<th>0.9</th>
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</table>

<table>
<thead>
<tr>
<th>Charge</th>
<th>Presence Effectiveness</th>
<th>1.0</th>
<th>0.9</th>
</tr>
</thead>
</table>

Chance of Geological Success: 0.66

1 in: 1.5

### Critical Risks

- **Trap**: Structure may be segmented into multiple compartments
- **Charge**: Height of column is unknown and risk increases moving towards Bonasse 12

### Primary Target

Unrisked Gross STOIIP (MMbbl) – Single Well Development

- **P90**: 0.03
- **P50**: 0.17
- **P10**: 0.44
- **Pmean**: 0.21

Oil Produced Oil Shows

12 mbbls

Expected Oil Produced Oil (Thousand bbls)

Oil

CLOVE

Bon-8

Bon-2

Incised Valley

Fill

12 mbbls

30 mbbls

10 mbbls

UBOT-3 35 mbbls

TD ~2200ft

1:8343
TWSL Drilling Rig T-38
- Columbus’s preferred rig for the Saffron and Clove prospects
- HRI Load craft carrier mounted
- 1100HP Load craft 1000 Drilling Rig (410K lbs hook load capacity, 10,500’)
- 250T Top Drive, Forum Automatic Pipe Handler, NOV Iron Roughneck.
- 2 x 1000HP triplex Mud pumps, 450 bbl Circulation System outfitted with all equipment required for drilling in Trinidad.
- 1 x 563KVA and 1 x 500KVA Generators.

Permitting and Site preparations
- Private petroleum licence granted
- Certificate of Environmental Clearance (“CEC”) modified to include drilling location
- Surface locations selected
- Key documents submitted to Ministry of Energy and Energy Industries
- Access road ready and drilling site being prepared
Key economic indicators

Unlevered IRR: 117%
NPV10: $88 million*

* Based on 11.5mmbbl recoverable development

Quick to production
Certain statements in this presentation are “forward looking statements” which are not based on historical facts but rather on the management’s expectations regarding the Company's future growth. These expectations include the results of operations, performance, future capital, other expenditures (amount, nature and sources of funding thereof), competitive advantages, planned exploration and development drilling activity including the results of such drilling activity, business prospects and opportunities. Such statements reflect management’s current beliefs and assumptions and are based on information currently available.

Forward looking statements involve significant known risks, unknown risks and uncertainties. A number of factors could cause the actual results to differ materially from the results denoted in these statements, including risks associated with vulnerability to general economic market and business conditions, competition, environmental and other regulatory changes, the results of exploration, development drilling and related activities, actions by governmental authorities, the availability of capital markets, reliance on key personnel, uninsured and underinsured losses and other factors, many of which are beyond the control of the Company.

Although these statements are based upon what management believes to be reasonable assumptions, the Company cannot assure investors that the actual results will be consistent with these forward looking statements.

Qualified Person’s statement

The information contained in this document has been reviewed and approved by Stewart Ahmed, Chief Technical Officer (Trinidad), for Columbus Energy Resources plc. Mr Ahmed has a BSc in Mining and Petroleum Engineering and is a member of the Society of Petroleum Engineers. Mr Ahmed has over 33 years of relevant experience in the oil industry.