

## Overview of Santa Cruz Oil Field Cuba

The Santa Cruz oil field is located approximately 45km from Havana between Boca de Jaruco and Canasí oil fields and approximately 150 km west of Melbana's existing Block 9. Santa Cruz is in the northern foldbelt of Cuba – the trend that is responsible for the vast majority of Cuba's oil and gas production.

*Santa Cruz is located in the heart of the premier oil trend in Cuba*

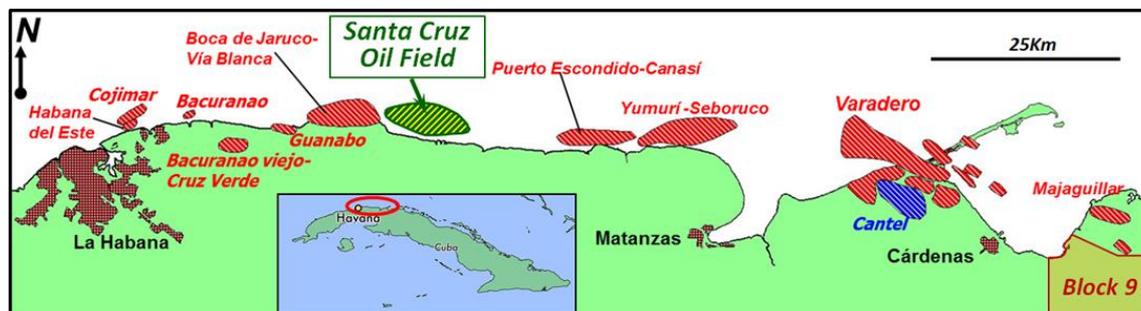


Figure 1. Santa Cruz location map showing adjacent fields.

*Early drilling established a large oil field with a 250m oil column*

*Oil quality typical of current Cuban production*

- Located immediately offshore northern Cuba.
- 3D seismic survey acquired in 2003 defined Santa Cruz as a 20km<sup>2</sup> structure
- Santa Cruz discovery well drilled in 2004 with land based rig as a deviated well out to the offshore structure. Took <3 months to drill. Tested at 1,250 barrels per day
- Oil quality varies from 10°API to 22°API, typical of most Cuban oil production
- Early estimates of up to 100 million barrels of recoverable oil
- Appraisal drilling confirmed a field area of >20km<sup>2</sup>
- Appraisal drilling indicated a significant oil column of 250 metres
- Commerciality declaration approved in 2006
- Produced >1 million barrels in first year
- Field production in 2012 was approximately 1,600 barrels/day
- By 2013 Santa Cruz had produced 7.4 million barrels from 18 wells

*Melbana has exclusive right to study and negotiate a contract over the Santa Cruz field*



Figure 2. Map view of Santa Cruz oil field facilities

In October 2018, Cuba national oil company (Cubapetroleo or Cupet) reported to Cuban media a significant discovery of lighter than typical crude oil in an exploration well drilled on the Bacuranao prospect in the northern part of the western region of the island. The discovery was made late in 2017 and has been undergoing long term testing for 10 months. Cupet representative Mr Osvaldo Lopez reported that the oil

produced from the field has a density of 22° API, which is the highest quality oil discovered in the area and is encouraging for oil exploration activities in the area. The Bacuranao discovery is in the northern fold belt trend that continues into Melbana's Block 9 and is in close proximity to the Santa Cruz oil field.

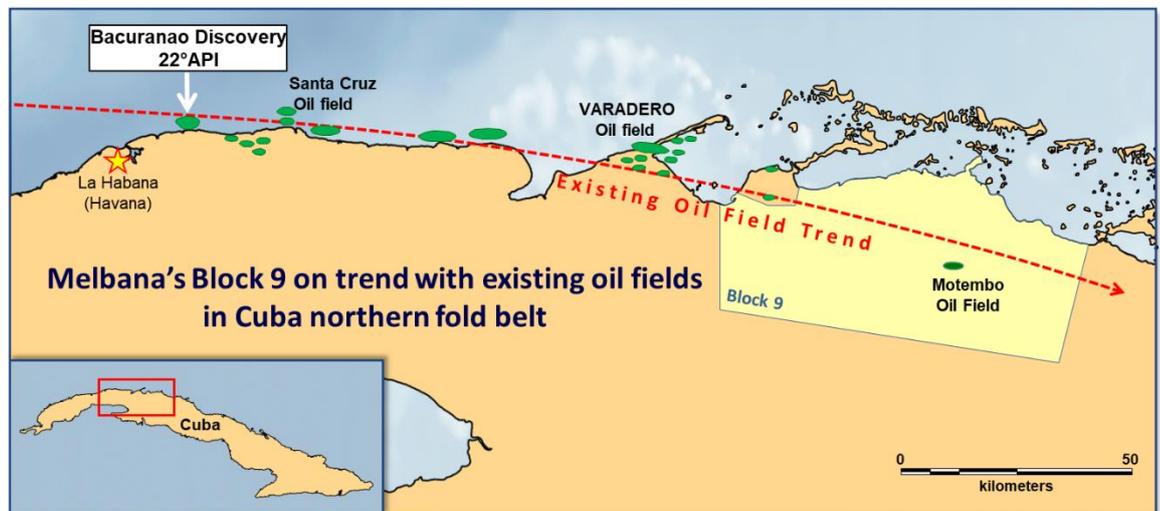


Figure 3. Santa Cruz and Block 9 on oil field trend



Figure 4. Ground level view of Santa Cruz oil field operation

### Process going forward

Melbana has executed an agreement with Cuba's national oil company, Cubapetroleo, for the assessment of opportunities to enhance current oil production from the Santa Cruz oil field. This direct negotiation is the approach typically used in Cuba for the award of new licences.

The agreement provides Melbana with an exclusive right to undertake systematic investigative studies as part of the development of Melbana's new integrated seismic interpretation methodology. This methodology aims to develop a new predictive structural/stratigraphic geoscientific approach resulting in a subsurface model that can be applied broadly across a wide range of complex settings, including Santa Cruz. New

knowledge acquired through the Santa Cruz investigative studies will enable Melbana to build a more comprehensive integrated seismic interpretation methodology.

This new knowledge will assist Melbana to assess the potential to increase oil production from the Santa Cruz field with a view to exclusively negotiating a long term incremental oil recovery production sharing agreement (IOR) for Melbana to undertake oil production enhancement activities. If such a contractual arrangement is finalised, Melbana would be entitled to incremental oil production above an agreed base line oil production rate from the Santa Cruz oil field.

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