

# Farm-in Opportunity

## PRODUCTION SHARING AGREEMENT BETWEEN BLUE CREEK EXPLORATION Ltd. AND GOVERNMENT OF BELIZE

Opportunity to earn substantial working interest in an exploration and production license (PSA) containing attractive Jurassic and Cretaceous prospectivity, with staged exploration and potential for early drilling.

**Blue Creek Exploration Ltd. is offering interested parties the opportunity to join the company in testing the underexplored potential of the southwestern Corozal Basin, northern Belize.**

- 8-year onshore PSA covering ~300 km<sup>2</sup> signed August 9, 2017.
- Located 17 km SW of the 30 MMBL Spanish Lookout oil field in the Corozal Basin, PSA block contains proven sand fairway with multiple plays along basin margin.
- Potential to earn a substantial interest in the PSA.
- Nearby wells with oil and gas shows and an active oil seep.
- Exploration leads with hydrocarbon micro-seeps already identified for seismic acquisition.
- Drill or drop decision May 2021.

**Blue Creek Exploration Ltd. (BCE)** is a privately-owned Belize company managed by petroleum industry professionals. BCE was established in Belize in 2007 and held a PSA to a block in NW Corozal Basin, Belize 2008-2015 where, together with its farm-in partner, acquired 240 km 2D seismic data and drilled three wells.

## Opportunity Details

- August 9, 2017 Blue Creek Exploration awarded 8 year PSA to 73,143 acre (~ 300 km<sup>2</sup>) block in southwest Corozal Basin, northern Belize.
- Years 3 & 4 (Aug. 2019-Aug.2020) work program commitment is minimum 45 km 2D seismic data.
- A drill or drop decision is required by May 2021.
- 25 % area relinquishment is due every two years.
- The PSA provides for a production period of 25 years.
- Government has the option to buy a 10 % working interest in a field.

## **Geological Setting**

The PSA block lies in the SW part of the Corozal Basin, northern Belize. The basin is an eastward extension of the oil and gas productive Northern Peten Basin of Guatemala. The Corozal Basin was part of a rift basin in the Jurassic but by the early Cretaceous had evolved into an intracratonic sag basin and shallow carbonate platform. From the early to the mid Cretaceous carbonate platform sedimentation was characterized by alternating sequences of dolomite and anhydrite. Important reservoir quality sandstone units occur along the basin margin where this PSA is located.

## **Source**

Hydrocarbon charge to the nearby Spanish Lookout field and the oil and gas shows found in wells and as seeps seen in the SW Corozal Basin is derived from several stratigraphically separated, carbonate source rock sequences. These were deposited in deep sub-basins downdip in eastern Guatemala just west of Belize. Laterally persistent porous dolomite beds overlain by tight anhydrites in the Hill Bank and Yalbac Formations are believed to form updip migrational pathways for these hydrocarbons.

## **Structural Geology**

Extensional and wrench faulting affected the basin from the mid to the late Tertiary. These structuring events formed different styles of traps, including anticlines, horsts and tilted fault blocks that are present in the PSA area.

## **Jurassic – Cretaceous Prospectivity in the PSA block**

The nearby Cayo West-1 and Kay Works-1 wells and outcrop data show the PSA block is located on the basin margin and contains multiple plays, including sandstone plays of Jurassic, early Cretaceous and mid Cretaceous age as well as a Cretaceous/Tertiary conglomerate play.

The different sandstones range in net reservoir thickness from 30 to 50 feet and together form a broad fairway that extends along the southwest margin of the Corozal Basin, adjacent to the uplifted Maya Mts (the sand source). The nearby 30 MMBO Spanish Lookout field, discovered in 2005, produces from a net 40 feet thick sand zone present in the upper part of the early Cretaceous Hill Bank Formation and is the proven play in this basin. The Kay Works-1 well drilled two km north of the PSA block had oil shows in this formation as well as in the younger Barton Creek Formation. Several seeps, including an active oil seep (28.2 ° API gravity) are found very close (<2 km) to the northern edge of the PSA block.

The late Cretaceous conglomerate play is the asteroid impact ejecta deposit at the K/T boundary and analogue to the reservoir of the giant Cantarell field, offshore Yucatan, Mexico. In the Cayo West-1 well, drilled 1.5 km north of the PSA block, the ejecta conglomerate is 40 feet thick (net reservoir quality) and expected to be present in the PSA block wherever the late Cretaceous-early Tertiary Barton Creek Formation has not been significantly truncated. A swab test produced a water-washed, biodegraded oil from a 10 foot interval in this conglomerate at a depth of 380-390 feet at a rate of 10 bbl/day. The oil indicates the trap was likely breached. It is isotopically identical to the produced oil (38 ° API gravity) from the Spanish Lookout field.

A Cretaceous carbonate (dolomite) play may exist in the western and southern part of the PSA block and awaits seismic confirmation. This play is proven by the Xan, Occultun, Chocop, Rubelsanto, Caribe, Atzam and other oil fields to the west in Guatemala.

The only discoveries made to date in the under-explored Corozal Basin are the Spanish Lookout field (2005) and the Never Delay field (2007).

## **Planned exploration program**

The northern PSA area should be explored first so that seismic data can be tied to the nearby Cayo West-1 well. The PSA work program commitment for the block includes the acquisition of 45 km new 2D seismic data and drilling a well to 2,500 ft or basement, whichever comes first. Leads comprised of anticlinal drainage anomalies, have already been identified for seismic data acquisition. A single well is expected to test multiple plays. Dry hole cost per well in the

northern part of the PSA block is estimated to be approximately US \$400,000. Seismic and drilling equipment are already in country and seismically defined prospect(s) in the northern area could be evaluated, permitted and ready to drill by late 2019.

## Market & Development

Crude oil can be sold to the operator of the Spanish Lookout field, price per barrel to be negotiated.

The operator has crude oil processing facility 15 km from the PSA area and storage facilities at the Big Creek port from which crude oil is shipped to refineries.

## PSA Fiscal Terms

- Royalty 10 %
- Production sharing sliding scale of 10 % for the first 2,500 bbls/day, 15 % for the next 2,500 bbls/day, 20 % for the next 2,500 bbls/day, 25 % for the next 2,500 bbls/day and 35 % for over 10,000 bbls/day.
- Corporate income tax is 40 %.
- All approved historical costs are recoverable.

## Deal Terms

Blue Creek Exploration Ltd. is offering interested parties the opportunity to join in staged exploration of this attractive, underexplored block and earn a substantial interest in the PSA, with the operator willing to negotiate either a back-in after pay-out or an Over Riding Royalty Interest (ORRI).

Parties interested in this opportunity should contact Blue Creek Exploration Ltd. at the telephone numbers and email addresses below.

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*The information contained herein is illustrative only. It is not warranted and should not be relied on for investment decisions. Interested parties should confirm their evaluation with detailed information available from Blue Creek Exploration Ltd.*



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