



BLOCK OPL 293

OFFSHORE NIGERIA

FARM IN OPPORTUNITY



Introduction

Oranto Petroleum Ltd owns a 100% working interest in the OPL 293 PSC, covering 1,023 km² in water depths of 200-1,100 metres. The Block was re-awarded to Oranto and in 2016 a contract was signed. It contains one well and two 3D seismic surveys located in the Southern ~400km². The remainder of the block has a ~2x3 km² 2D seismic grid.

OPL 293 is located in the southern part of the offshore Niger Delta between an oil-prone trend to the North and

West and a more gas-prone trend to the South and East. The major oil field of Agbami (800 mmbo) lies 30 km to the west and came on stream in 2008, while the large Nnwa discovery (Statoil, 1999) lies 10 km to the south with 8 TCFG condensate (including the Doro, Shell extension) and is planned to come on-stream in 2022. Prior to Nnwa, Statoil also discovered the smaller Sehki field in 1997 and two satellite pools from this accumulation appear to extend into OPL 293. Apart from greater Sehki (~500 TCFG or 170 mmbo, with 5-10% on OPL 293), two main prospective areas have been identified from amplitude response on the 3D seismic in the southern half of the block.

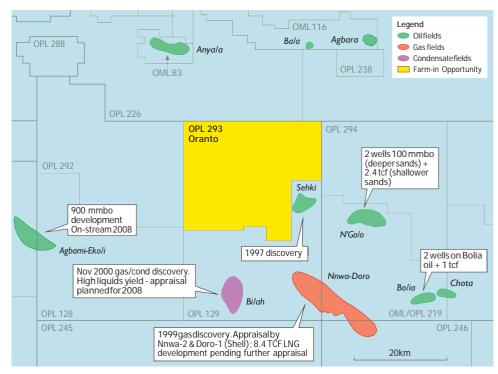


Figure 1 Location Map

The SW Diapir leads (deep and shallow) potentially contain up to 400 BCFG or ~70 mmbo, while the South Central leads could be 300 bcfg or 100 mmbo. These figures assume mid case sizes and depending on the split of oil/gas and condensate, the hydrocarbon fill could be a mix of these numbers. Additional (and potentially larger) oil-prone prospectivity can be expected to lie within the major sediment sink areas that mostly lie outside the present 3D seismic coverage.

The block is therefore at a very early stage of evaluation and requires further 3D seismic acquisition and regional work to fully appraise its potential.





Block Leads

The following are the most obvious leads derived from amplitude extraction, using large windows over the area covered by existing 3D seismic. It should be stressed that several major sediment sinks have been mapped on the block, which also contain amplitude anomalies, although most lie outside the 3D coverage. These will be the focus of the next 3D acquisition.

SW Diapir (650-750m WD): A large diapiric ridge runs W-E in the SW part of the block, with a major sink area to the south. On the southern flank of the ridge (and in some cases extending to the crest) a halo of sands have been deposited, which display strong amplitudes and several flat events. The largest body of amplitudes (~5 km²) lies between 500-900m below mudline and this is assumed to be gas prone (mid-case potential resource 300 bcfg).

A lower zone extending down to \sim 1,100m below mud-line also displays similar character and covers about 2 km² to the east. This has an end member mid-case potential resource of \sim 300 bcfg or 66 mmbo (or combination thereof).

South Central (750m WD): The southern diapiric ridge displays a marked col, halfway through OPL 293, which appears to have acted as a main clastics fairway in transporting sediment downslope from north to south. A thick gross interval of >200m, displaying strong amplitudes and several flat events, covers an area of >5 km², across the col shoulders and lies at a depth of ~2,000m below mud-line. At this depth, a more oily h/c fill can be contemplated, with end member mid-case potential resource of ~320 bcfg or 100 mmbo (or combination thereof).

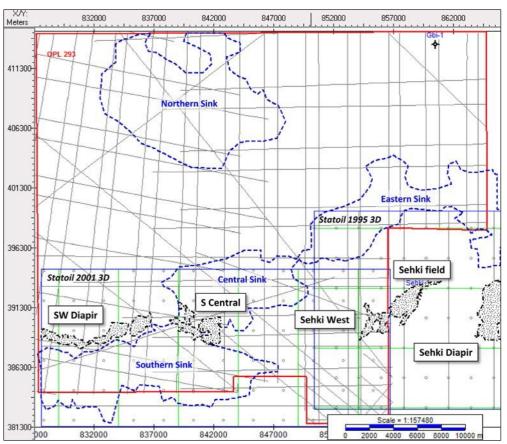


Figure 2 OPL 293 Seismic and Lead Database

West Sehki Satellites (800m

WD): The Sehki-1 discovery (1997) was drilled 2.5 km east of the OPL 293 block boundary and found ~10m gas and 5m oil in Lower Pliocene sands at ~2,200m. This is a small pool with ~60 bcfg and some oil, but a much larger accumulation can be mapped across the spillpoint to the east, where the sandsonlap against a major shale diapir. These display an excellent Far Amp termination with depth and a gross thickness of >200m, with end member mid-case potential resource of ~400 bcfg or 150 mmbo (or combination thereof).





Within OPL 293, an extension of the Sehki Field can be mapped as a series of amplitude packages with areas of 1-1.5 km². These have relatively small size (end member mid-case potential resource of ~30 bcfg or 13 mmbo), but probably represent 5-10% of the greater Sekhi overall resource.

Background

Oranto, together with its sister company Atlas, is independently owned and based in Abuja. The group has a large portfolio of offshore licences in West African countries and has been active, starting in Nigeria, since 1996.

OPL 293 was a 50% compulsory relinquishment of OPL 218 by Statoil before being subsequently awarded to Oranto.

A PSC was renewed and signed by Oranto in October 2016, valid until November 2028 and has a Phase I work programme of one well plus 500 km2 of new 3D seismic acquisition (total of \$75mm

An optional further 5 years (Phase II) is available with a two well commitment plus 200 km2 of new 3D seismic acquisition.

financial commitment).

Oranto negotiated a staged signature bonus payment of \$22mm, plus \$16.5mm on conversion of the OPL to an OML and \$16.5mm on first oil.

Cost Recovery is set at 80% and the tax/royalty fiscal model envisages fixed royalty of 8% (>500m water) plus a flat PPT of 50% (>200m water). An ITA (Investment Tax Allowance) uplift of 50% (>200m water) is also applicable.

Statoil acquired two 3D seismic surveys in the southern (~400 km2) part of the block in 1995 and 2001 with near and far angle stacks available over the 1995 volume. They drilled the Gbigiri-1 well in February 1997 in shallow water (200m) in the north of the block to test a very prominent seismic amplitude with apparent flat spot at ~1,000m, located on a thrust structure. This turned out to be an unconsolidated sand of exceptional porosity (>40%), but wet.

Statoil subsequently concentrated further south and east, making the Sehki, Nnwa and Bilah-1 discoveries between 1997-2000 and this acreage has been retained as OML 129.

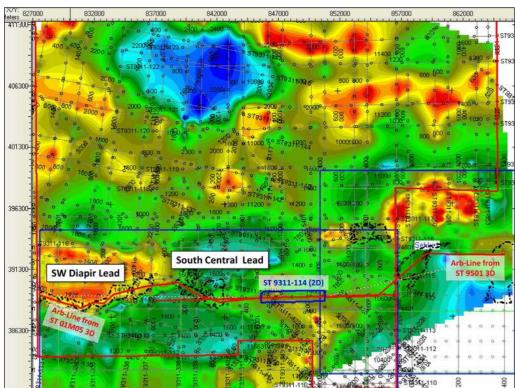


Figure 3 TWT Top Diapir With Tie From leads to Sehki





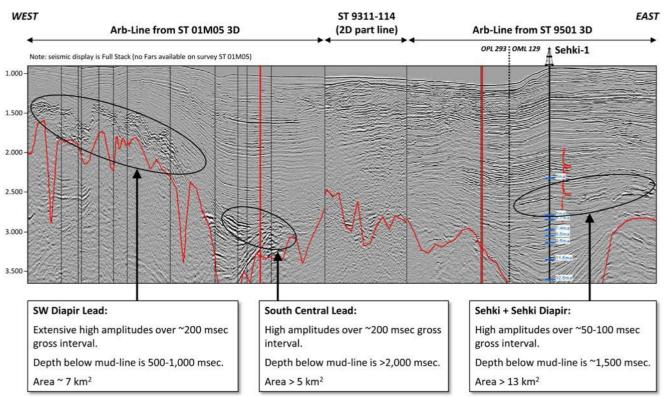


Figure 4 Composite Seismic Tie From OPL 293 Leads to Sehki

Petroleum System

This part of the offshore Niger Delta is characterised by Mid-Miocene to Pliocene deep water clastic reservoirs (Agbada Formation), deposited in a variety of slope settings, charged by underlying Oligo-Eocene source rocks (Akata Formation), deposited in a prodelta/slope environment. From the distribution of hydrocarbons encountered to date, it would seem that the source kitchen is most deeply buried to the south and east, where the dominant phase is gas. Westwards of OPL 293, there appears to be more oil, with the likelihood that the block contains both phases, becoming more oily at depth (hence all potential resources have been quoted as either gas or oil end members).

Structurally, the block is dominated by very active shale diapirism, which has formed large, rugose ridges, trending W-E through the block, separated by major sinks and cols. As the diapirs have clearly been active throughout target sand deposition,

the sand fairways have tended to thread their way through the gaps (cols), from north to south downslope.

Some of the diapirs have penetrated to near seabed and are therefore clearly bald. Trapping therefore depends on a combination of structural and stratigraphic control, where channels and fans have worked their way over the shoulders and cols of the diapir ridges, prior to filling up the major depocentres (sinks).

The initial focus of the evaluation has been these amplitude defined (generally class III AVO) anomalies, in the relatively shallower, mainly Pliocene section, with the Sehki Field as the key analogue. Once further 3D seismic is acquired and a fully merged dataset is available over main sand fairways, the deeper potential within the (probably) more oil-prone sinks can be interpreted.





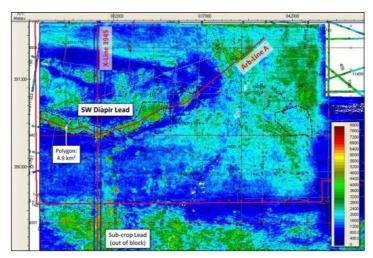


Figure 5 SW Diapir Lead: Full Stack RMS Amplitudes From 500-900 msec Window Below Mud-Line

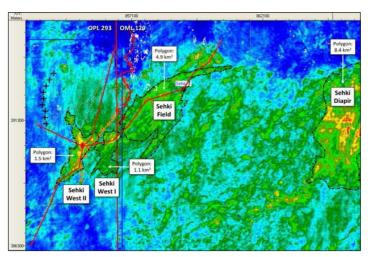


Figure 6 Far stack RMS Amplitudes From 900-1800 msec Window Below Mud-Line - Sehki Area

Proposed Deal

Oranto is offering a substantial equity stake to one or more parties to carry its costs through the future E&A programmes. The farminee will also need to cover for the initial signature bonus. Currently the licence expires November 2028.

Procedure

Simco is based in London and is Oranto's designated farm-out agent for this project. Interested parties are invited to contact the London office using the details below. On completion of a Confidentiality Agreement Simco will provide a copy of the seismic data and interpretation in Kingdom or Petrel format for up to three months for an agreed fee. A kick off overview presentation can also be provided online. Interested companies may also book to visit Simco's office for physical dataroom on a Kingdom workstation for an agreed fee.

For further information please contact:

Ellie Bell **Tel** +44 (0) 20 8876 2107 **E-mail** elliebell@simco-pet.com

DISCLAIMER

This report has been produced by Simco Energy Management Ltd of Suite B, 30 Barnes High Street, London SW13 9LW, UK, and it does not constitute an invitation to acquire an interest in the assets described and should not be treated as such. Simco shall not be liable for any errors in the contents, and any actions taken in reliance thereon. Any party wishing to take further interest in the assets should carry out its own due diligence. This document is Confidential and is only for the use of the company to whom it is provided. It may not be copied or passed on to others.

Simco is an independent international consultancy, established in 1996 and based in London, UK. Simco specialises in the upstream oil and gas sector providing advice and specialist professional support to a wide range of clients. Simco has extensive experience in the oil and gas business worldwide (see www.simco-pet.com).