

JUSTIFICATION OF THE PROJECT

Contract Area Details: The contract area AA/ONDSF/DUARMARA/2016 was awarded to Oilmax Energy Private Limited (OE) (100% PI) during the first Discovered Small Fields (DSF-2016) round in 2016. A Revenue Sharing Contract was executed between OE and Government of India (GOI) on 27th March, 2017. The Petroleum Mining Lease was awarded by the Assam State Government on 26th July, 2017.

Overview: The contract area is located in Assam Shelf of the Assam-Arakan Basin in Northeast India. Duarmara field was discovered by OIL in 1970. OIL drilled 3 wells, namely DMR-1, -2 & -3. All three wells encountered multiple oil/gas/condensate bearing zones in Tipam Group (Miocene age). The field has a contract area of about 8.91 km² and is surrounded by a number of discovered oil and gas fields e.g. Digboi, Dumduma and Nahorkatiya. The field was put on production by OIL in 1970 after discovering gas and condensate in well DMR-1. A total of 15.74 LKM of 2D seismic data has been acquired by OIL in the region. OIL carried 3D seismic survey in the Samdang-Duarmara area from 2009-2011 for better understanding the structure. 8.9 km² of 3D seismic data covering the field area was provided to OE.

Wells and Production: Duarmara 1P Field production profile as reviewed by GOI is generated with maximum of six wells. Three wells will be targeting the Gas zones and other three the Oil/Condensate zones. 3 wells will target T-40, TS-2, TS-3 gas zones respectively; while 2 wells will target TS-3 oil zone and 1 well will target TS-4 oil zone. Production profile is generated for 20 years with the cumulative gas production of 72.72 BCF and 3.98 MMBBL of cumulative oil/condensate. Peak oil and condensate rate of 770 BPD is observed and a plateau of 7 years for gas with gas rate around 10 MMSCFD.

Development Strategy: The development plan is aimed to tap the proved reserves (1P) initially. Depending on the production behaviour, revised FDP will be proposed to tap additional reserves. Current development strategy for the field has been worked out as follows:

Step I:- First try to sidetrack/ recomplete existing wells and test the gas/condensate and oil zones. If possible, try to use the existing wells as production wells by completing them in suitable zone(s).

Step II:- Drill and complete new development/production vertical/inclined wells drilled directionally from one surface location and complete one well in one reservoir zone. Try to maximise reservoir contact within the limitations of drilling. The perforation intervals will be selected so as to achieve maximum productivity from zones.

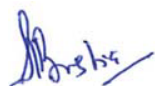
Step III:- Initially, oil zones will be produced with primary depletion method. Reservoir response such as well productivity, pressure decline rate, aquifer strength will dictate the future development such as infill drilling, water/gas injection. Artificial lift will be planned at a later stage when the WHP drops below 300 psig, in order to achieve higher recovery factor.

Development Well Design and Planning: Development well design and planning has been worked out from data obtained from drilled wells in and around the field. Factors such as pressure, temperature, lithology encountered and drilling complications (mud loss, swelling clay, reactive shales) have also been considered. Appropriate drilling technology using Rotary Steerable Systems (RSS) / Motor Drilling Assembly (MDA) have been considered for obtaining cost effective real time accuracy during drilling and to avoid interference with the existing wells.

Facilities: Facility design including gas, water, oil/ condensate handling have been carried out using 2P production profiles. The facility consists of flow lines from the well heads to the facility, the production manifold, process section consisting of the separation, condensate stabilization, produced water treatment, gas compression, gas dehydration followed by dew point control, condensate storages, utilities, fire water and flare system.

HSE: The HSE aspects of the project will be managed under a set of business principles supported by policies, standards and business controls. All the HSE aspects of the projects will be monitored, as per Operator's HSE policy which is in tune with industry standards.

For **Oilmax Energy Private Limited,**



Dr. Rabi Bastia
CEO – Oil and Gas