



ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

Conquering Newer Horizons

EXPLORATION BASIN

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NOTICE INVITING

GLOBAL EXPRESSION OF INTEREST (EOI) NO. OIL/EB/GLOBAL/EOI/033/2017

OIL INDIA LIMITED (OIL), a Public Sector Undertaking under the Ministry of Petroleum & Natural Gas (MoP&NG), Govt. of India, engaged in the business of Exploration, Production & Transportation of Crude Oil and Natural Gas and Production of LPG invites Global Expression of Interest (EOI) against EOI No. **OIL/EB/GLOBAL/EOI/033/2017** from reputed and established E&P Service Providers/Vendors/Contractors for **hiring Bundle Service for drilling, taking conventional cores and wireline logging for two (2) wells** at Jairampur Extension PEL and Deomali PEL blocks in Arunachal Pradesh (India) for **Exploration & Exploitation of Shale Gas/Oil prospectivity**. The Brief Scope of Work and other requirements for above are available at Company's website: www.oil-india.com.

Interested Parties having relevant experience and expertise (Details are available at OIL' website:- www.oil-india.com) are invited to submit their detailed EOI(s) in physical form(Hard copies) to reach the **Office of General Manager-Exploration, Exploration Basin, Oil India Limited, Duliajan-786602, Assam (India)** latest by **14th March'2017 upto 15:00 HRS (IST)** through courier/post.

OIL reserves the right to (a) either accept or reject any/all EOIs (b) cancel the process at any time without any liability and assigning any reasons thereof to the applicants. All Corrigenda, Addenda, Amendments, Time Extension to the EOI will be hosted on company's website and no separate notification shall be issued in the press. Prospective participants against the EOI are requested to visit the website regularly to keep themselves updated.



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INVITATION FOR EXPRESSION OF INTEREST (EOI)

FOR

HIRING BUNDLE SERVICE FOR DRILLING, TAKING CONVENTIONAL CORES & WIRELINE LOGGING TO EXPLORE SHALE GAS/OIL PROSPECTIVITY

(EOI NOTICE NO.: OIL/EB/GLOBAL/EOI/033/2017)

SUB: Expression of Interest (EOI) for Shale Gas/Oil exploration and exploitation by Hiring Bundle Service for drilling, taking conventional cores and wireline logging for two wells at Jairampur Extension PEL and Deomali PEL blocks in Arunachal Pradesh.

1.0 PREAMBLE:

OIL INDIA LIMITED (OIL), a Government of India Enterprise under the Ministry of Petroleum and Natural Gas, is a premier up-stream Oil Company engaged in the business of Exploration, Production & Transportation of Crude Oil & Natural Gas as well as production of LPG, having its Field Headquarter at Duliajan, Assam in India. Its operations are largely based in the north-eastern parts of India particularly in Assam, Arunachal Pradesh and Mizoram but have also extended its activities in different parts of India and abroad. In connection with its ongoing exploration & exploitation for Shale Gas/Oil prospectivity in the States of Arunachal Pradesh & Assam, OIL's Exploration Basin invites Expression of Interests (EOIs) from reputed and established E&P Service Providers/Vendors/Contractors meeting the criteria as per scope of work mentioned below for Hiring Bundle Service for drilling, taking conventional cores and wireline logging for 2(two) wells at Jairampur Extension PEL and Deomali PEL nominated blocks in Arunachal Pradesh(India) awarded by MoP&NG, Govt. of India.

2.0 PROJECT INFORMATION:

2.1 MoP&NG, Govt. of India through Directorate General of Hydrocarbon (DGH) awarded 6(six) nominated on-shore blocks to OIL within its existing acreage in Arunachal Pradesh, Upper Assam and Rajasthan Basin for Shale Gas/Oil exploration and exploitation. Accordingly, OIL has to carry out shale gas/oil exploration in the six nominated blocks viz. Dibrugarh PML, Chabua PML, and Dumduma PML in Assam; Jairampur Extension PEL and Deomali PEL in Arunachal Pradesh and Jaisalmer PML in Rajasthan.

2.2 Keeping in view of above Shale Gas/Oil exploration campaign, OIL has planned to drill 02(two) nos. of core-holes in Jairampur Extension PEL and Deomali PEL blocks in Arunachal Pradesh for acquiring conventional core and suites of wireline logs to carry out detailed analysis for shale gas/oil exploration upto a target depth of about 1500 m to 2000 m. Both the blocks are situated in undulating terrains with heights up to @ 600 m above MSL.

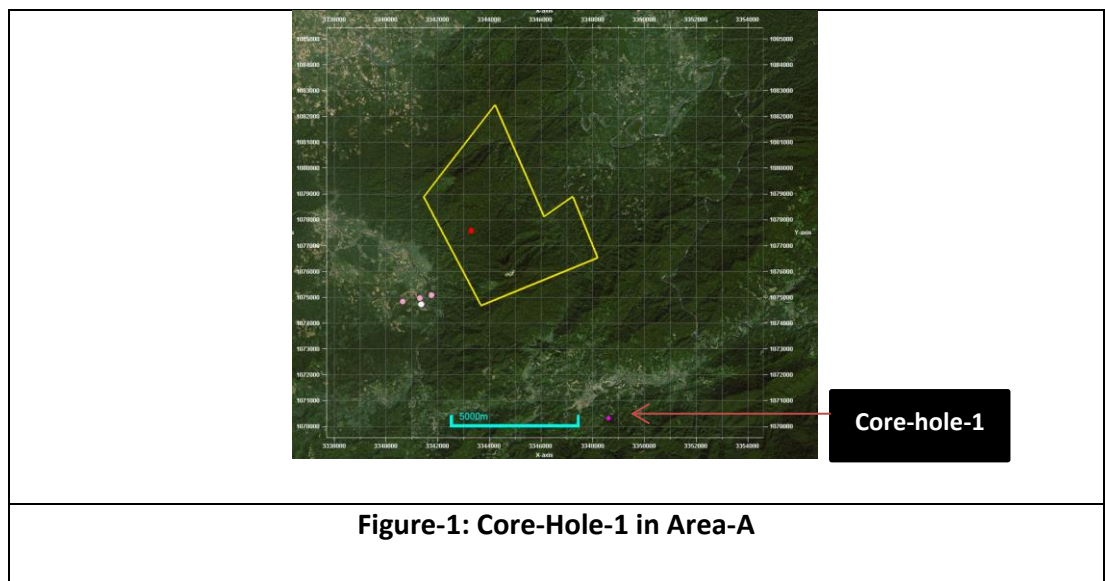
The number of core-holes to be drilled may be extended depending upon the findings and detailed results of the cores.

2.3 In this connection, it is planned to hire Bundle Service for drilling & taking cores from the above 02 (two) No. of core-holes from an experienced and internationally reputed service provider.

3.0 **BRIEF DESCRIPTION OF THE AREA:**

The target areas for Shale Gas/Oil exploration & exploitation are located in Jairampur Extension PEL and Deomali PEL block of Arunachal Pradesh. The state of Arunachal Pradesh is located between 26.28° N and 29.30° N latitude and 91.20° E and 97.30° E longitude and has 83,743 square kilometre area. Arunachal Pradesh's terrain consists of deep valleys flanked by highland plateaus and ridges that rise to the peaks of the Great Himalayas. The area for Shale Gas/Oil exploration & exploitation lies in farthest south of Arunachal Pradesh in a series of foothills that ascends from the Assam plains to elevations of 1,000 to 3,300 feet (300 to 1,000 metres).

The areas selected for drilling/coring are shown below:



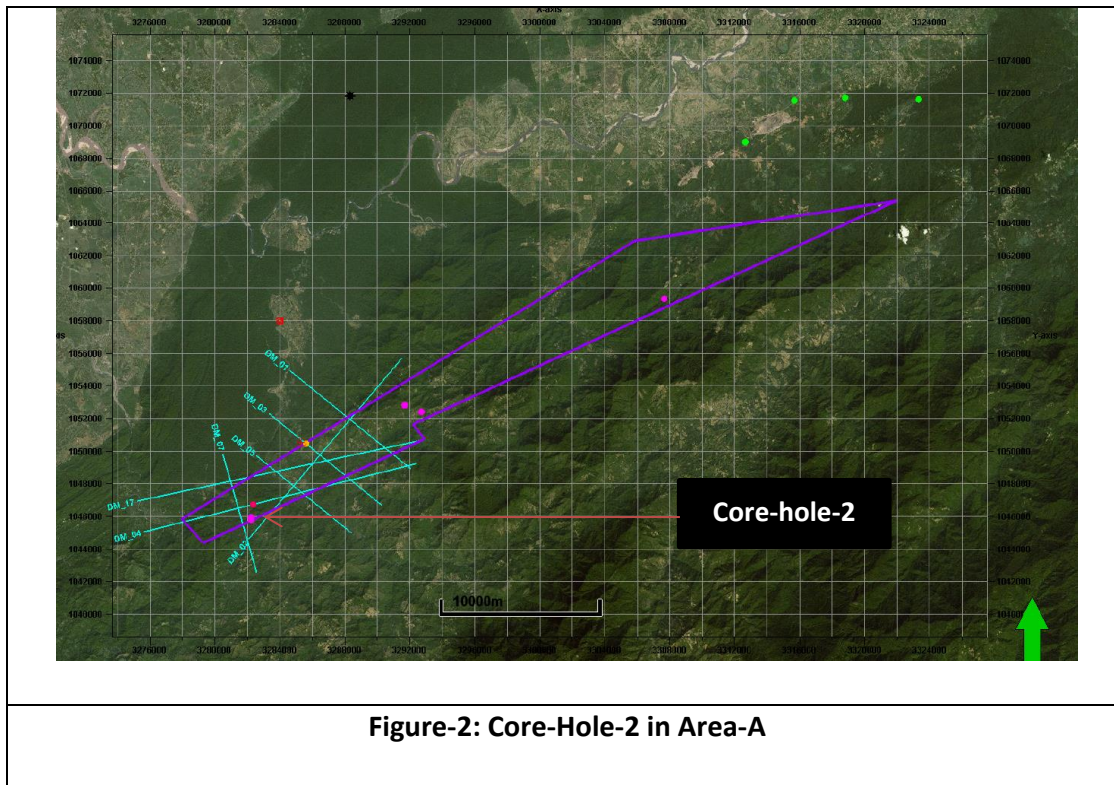


Figure-2: Core-Hole-2 in Area-A

4.0 **SUB-SURFACE INFORMATION OF THE AREAS SELECTED FOR CORING:**

- 4.1 **Sub-surface Lithology:** The target zones to be cored are in Disang Shale Section which is mostly moderately hard, non-calcareous to calcareous splintery shales with intercalations of fine to medium grained, calcareous to non-calcareous sands with thin calcareous bands and coal. Shales are expected to be encountered from surface with little thickness of overburden/ alluvials/colluvials/rubbles.
- 4.2 **Attitude of the beds:** Sub Surface dip of the beds may vary in the range of 0°-50° based on the Structural Modelling. The beds are laterally extended.
- 4.3 **Offset well data:** There is no offset well data. The above core-holes will be exclusively wild cat
- 4.4 **Formation pressure:** Formation pressure could not be predicted due to paucity of G&G data. However, there may be presence of high pressure as evidenced from the existing field behaviour. Service Provider must be able to provide the measures if high pressure is encountered.
- 4.5 Hydrocarbon may be present in clastic porous reservoir interval if it is properly entrapped.

5.0 **BRIEF SCOPE OF WORK:**

- i) **Target Depth = 1500-2000 m.** The core-holes to be drilled will be vertical.
- ii) **Casing Policy:** 02(Two) stage casing. Conductor shoe at @ 150 m and Isolation shoe at @ 800 m based on the drilling events. Final stage will be left bare and the wells will be abandoned with cement plugs with standard procedure after reaching target depth (TD). (Abandonment policy will be determined by OIL). However, Service provider may design the casing policies based on the available data as well as well events during drilling/coring.
- iii) **Drilling fluid:** Water based mud. Inhibitive mud may be required depending on formation pattern.
- iv) **G&G Requirement:**
 - a) **Wireline retrievable conventional core** (Split type retrievable inner barrel system).
 - b) **Core diameter:** In the range of **2.1/2 inch to 4 inches.**
 - c) **Core Range:** Continuous wireline retrievable coring to be conducted from approximately 800 m (isolation shoe) to TD which may vary depending on the operational events. The length of core range is expected to be 700-1200 m depending on drilling and sub-surface events. However, drilling may be incorporated against the proposed coring zones depending on formation encountered.
 - d) **Open hole Wireline logs to be recorded in the whole open hole sections of the well (prior to casing and before or after coring):** Laterolog Deep (LLD-Resistivity), Laterolog Shallow (LLS-Resistivity), Micro spherical Focussed Log (MSFL-Resistivity), Density log (SDLT), Neutron log (DSNT), Photo Electrical log (PE), Wave sonic log (WSTT) or Dipole Shear Sonic Imager log (DSI), Spectral Gamma Ray Log (SGR), Total Gamma Ray log (GR), Self-Potential log (SP), Caliper log (CAL) and Inclinator Survey (IDT).
 - e) Core cutting, Handling, Preservation and Analysis will be endowed to other service providers separately by Oil India Limited.

In respect to above information, the service provider will have to provide the following:

A diesel driven Mobile Rig of adequate horse power for drilling / coring to a target depth of 2000m with the following facilities:

- A) Wireline retrievable coring.
- B) Appropriate Well control devices for controlling the High Pressure, if encountered.
- C) Mud system with mud loading and solid control equipment.

- D) Wireline logging service as mentioned in point 5.0 iv). d) above.
 - E) Cement mixing tank and pre-flush tank.
 - F) All consumables including but not limited to drilling fluid chemicals, cement, drill bit, core heads, casing, well head etc.
 - G) Fishing tool for all sizes of tubular to be run in hole.
 - H) To treat and dispose effluent
 - I) To maintain well site during operation period (Initial civil work viz. plinth and approach road preparation will be carried out by OIL).
 - J) To reclaim the sites after completion of the project (as per CPCB norms).
 - K) Complete set of manpower for drilling, coring, logging, casing and cementing jobs including but not limited to trained drilling crew, mud engineer, cementing engineer, HSE Officer, Medical Officer etc. **in 21 days On-Off roster.**
 - L) Provision for accommodation and food for 3 (three) Nos. OIL personnel and 4 (four) Nos. of other service provider's personnel at site.
- (v) **Notes:**
- (a) **Total area required (L x B) for the rig is to be mentioned as land availability is a very critical factor.**
 - (b) **Cementing Unit is not required. Cementing to be done by Rig Pump only.**

6.0 **SAFETY COMPLIANCE:**

The Service provider shall have to comply with the applicable, standard and prevailing provisions of the Mines Act, 1952, OISD (Oil Industry Safety Directorate) guidelines and MoEF&CC (Ministry of Environment, Forest and Climate Change) and Central / State Pollution Control Board's directive.

7.0 **GENERAL NOTES:**

- (i) All documents submitted along with the EOI must be self-certified by the Vendor/Contractor/Service Provider and should be clear & legible.
- (ii) The EOI is liable to be ignored in case of submission of any misleading / false representation by the Vendor/Contractor/Service Provider.
- (iii) OIL INDIA LIMITED reserves the right to ignore any or all EOIs and also to curtail/enhance the scope of work stated above, if required, without assigning any reason thereof.

