# Pre-Feasibility Report

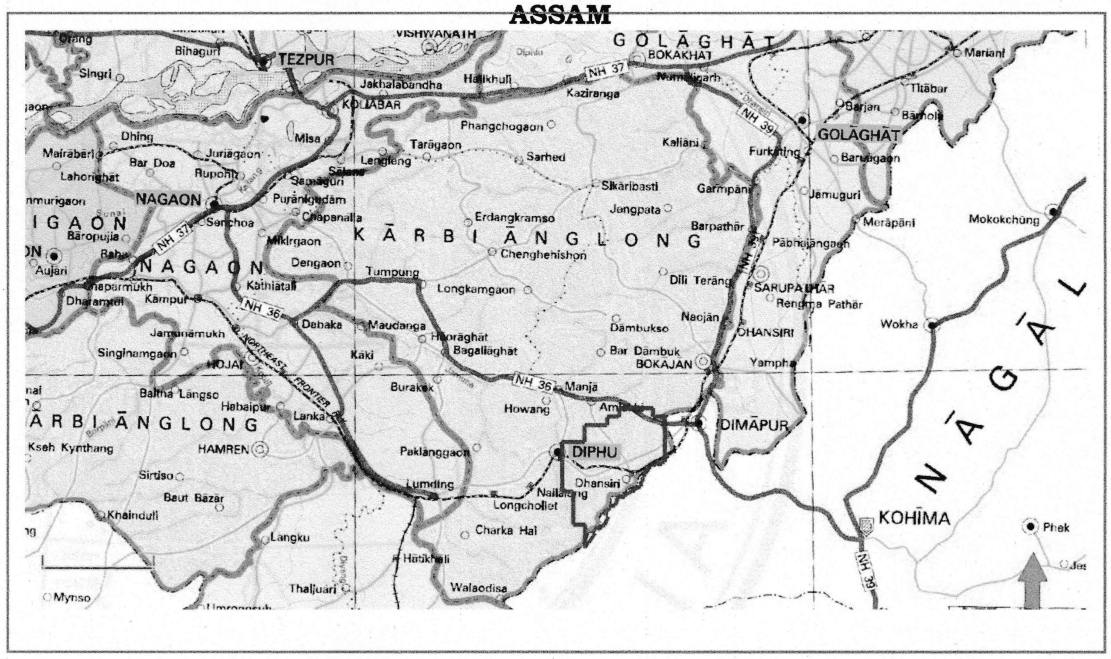
Oil India Limited (OIL), a Government of India Navaratna Enterprise, is currently engaged in carrying out exploration activities for hydrocarbon in its operational areas of Upper Assam, Arunachal Pradesh and Mizoram in the North Eastern part of India. OIL also has significant presence in pan-India and overseas.

The NELP-IX Block AA-ONN-2010/2 (Karbi Anglong) was awarded to a consortium of M/s. Oil India Limited (OIL), M/s. Oil & Natural Gas Corporation Limited (ONGCL), M/s. Gail India Limited (GAIL) and M/s. East West Petroleum, Canada with Participating Interests (PI) of 40%, 30%, 20% and 10% respectively. Following the signing of PSC on 28.03.2012, M/s. East West Petroleum expressed their willingness to exit from the block and accordingly OIL being operator of the block, with consensus from partners and regulator took the 10 % PI thereby increasing its stake to 50% PI.

The exploration block AA-ONN-2010/2 (396 Sq.km) is located in the district of Karbi Anglong. The location of the block is shown in **Fig. 1**. The block has an undulating topography with maximum elevation of 350 m in the north western part.

During recent past, 3D seismic data was carried out in this block as a part of the exploration campaign followed by its processing and interpretation integrating all geoscientific data. Based on the review and interpretation of seismic data, a total two (2) number of drilling locations have been identified for drilling in view of oil/gas exploration within this block in this current exploration phase.

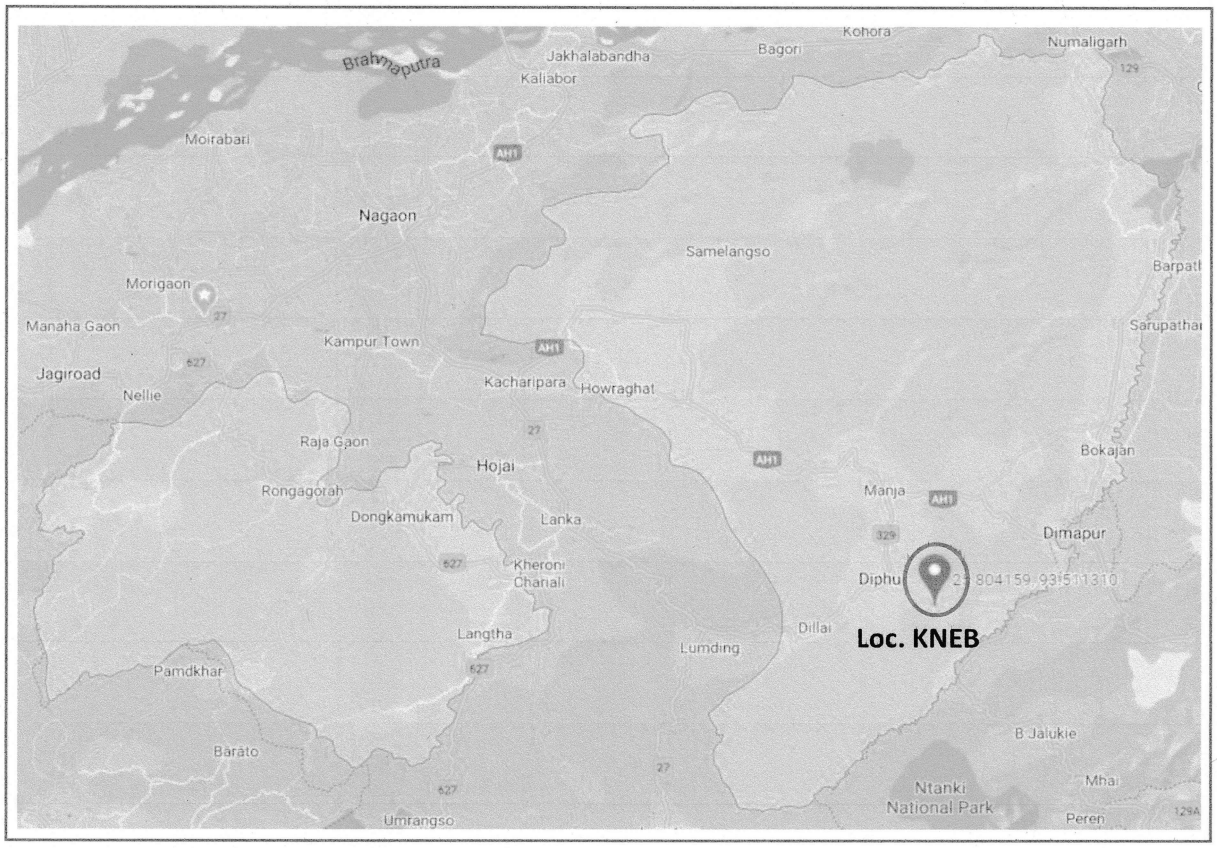
**Fig.1 : LOCATION MAP OF THE PROJECT AREA, KARBI ANGLONG DISTRICT, ASSAM**



Oil India Limited intends to drill two (2) exploratory locations in this NELP block of Karbi Anglong district to prove oil/gas bearing horizons. Out of two locations **Loc. KNEB** falls in northern part of Dhansiri Reserve Forest under Karbi Anglong West Forest Division and is about 7 km via NH-36 from Diphu town towards Dimapur. It is 2 km south of Daldali Railway Station. Once hydrocarbon is established in this area, it is expected to enhance the cumulative oil production of OIL adding to the national economy.

Location **KNEB** is planned to be drilled from independent plinth with a target depth of around 2400 m within Basement. Around 5.46 Ha of land (Plinth: 3.8 Ha + Flare : 0.06 Ha and Approach road: 1.6 Ha) will be required for drilling this location.

**Fig. 2. Geographical Map of Karbi Anglong District**



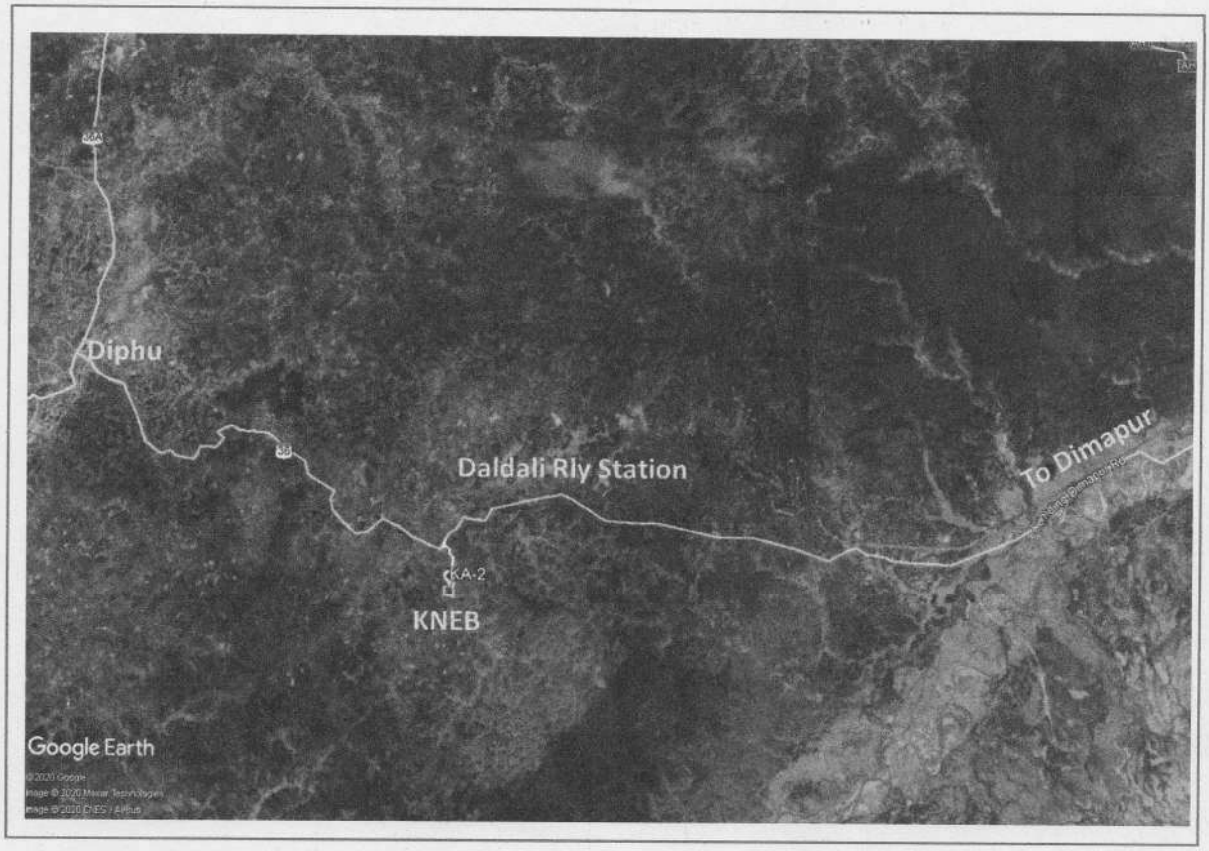



**Fig 3. Site Location of Loc KNEB (Source Google Earth)**

| Location | Latitude | Longitude |
|---|---|---|
| KNEB | 25° 48' 10.13" N | 93° 30' 56.66" E |

**Climatic and Soil Data**

Karbi Anglong District falls under the humid subtropical climate zone with warm summer and the following are the well-defined seasons of the region:

| | |
|---|---|
| Pre-monsoon | : March-May |
| Monsoon | : June- September |
| Post-monsoon | : October- November |
| Winter | : December- February |

The months with high temperatures are generally from May to September. Temperature normally remains low from November to February. Rainfall begins from mid April and continues upto early October, with June-September receiving maximum downpour. Morning relative humidity values are generally comparable for all months with values ranging from 91-97%. The afternoon relative humidity values generally varies between 43-78%. Comparatively higher relative humidity values are noted during monsoon months (May-September) which was comparatively lower during the winter months (December-February).

Karbi Anglong district has soil with dark surface horizon and rich in organic matter which decreases with depth. The textural classification of soils in the district is mainly sandy to sandy loam and clay loam. Approximately 61% of the soil is sandy loam, 22% is clay loam and 17% is sandy soil. In the district town area, soil is slightly acidic in nature where pH value of soil ranges from 4.5 to 6.5. Organic carbon percentage is reported to be high whereas the phosphorous content is poor and potash content is high. All types of tropical and sub-tropical crops can be grown successfully in these soils without minimum correction measures of soil.

**Economic Feasibility :**

Block being located in the petroliferous basin of Upper Assam Shelf, all elements necessary for generation of hydrocarbons are expected to be present in the area. The same is strengthened by the presence of the oil producing Khoraghat and Nambar fields being located in the east proximity of block.

A total in-place geological resource of 3 MMSKL has been estimated for the identified two prospects. The recoverable resource is estimated around 1 MMSKL with a cumulative daily oil production of 400 bbl per day. Expected royalty is around 5

crore to the State economy per year. Resources pertaining to the extended area will additionally enhance the quantum of entire block.

The estimated expenditure for completing each well is around ₹ 50 Crore. Based on the preliminary technical study with available geoscientific data & operational feasibility, OIL expects that the Karbi Anglong NELP Block is expected to offer a tenable cost- benefit scenario for carrying out the exploration activities.

The surface sites for drilling of the proposed well generally avoids or causes minimal displacement of homes, human and existing workforce.

If commercial viability of hydrocarbon production is established, production of oil/ gas will help in meeting energy needs of the country and will lead directly to socio-economic development of the area and its vicinity as a whole.

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