

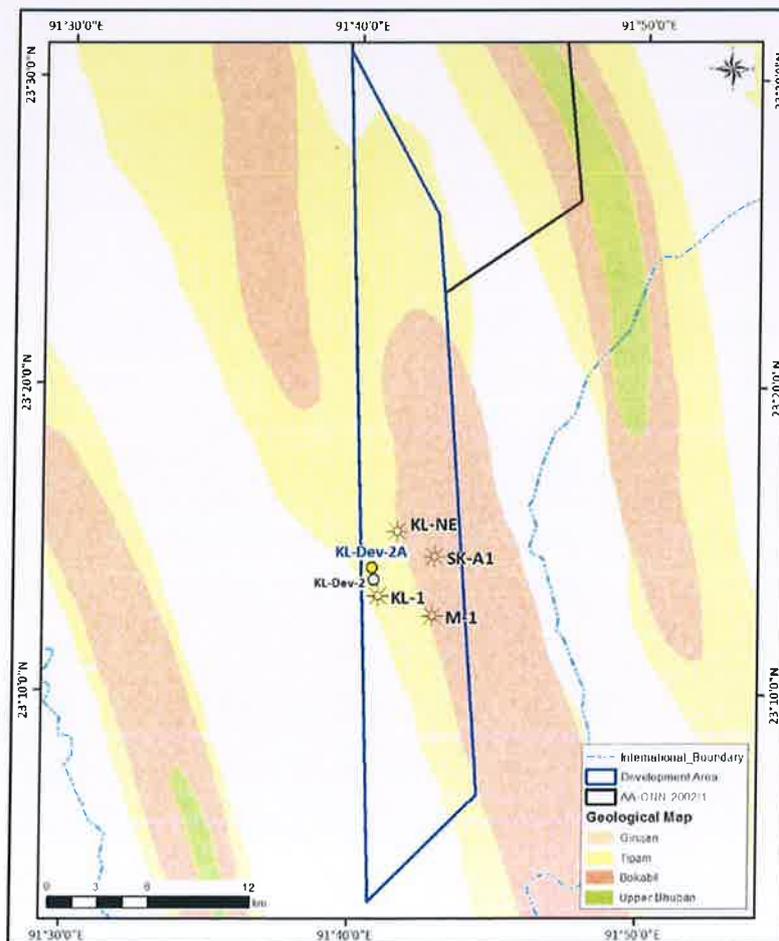
### Proposal for Location KL-DEV-2Aas Development Well

Block AA-ONN-2002/1 is situated in the South Western part of Assam–Arakan Basin, in the central part of the state of Tripura covering parts of West Tripura, South Tripura and the Dhalai District. Block is operated by JOGPL with a participating interest of 20% and the rest 80% participating interest is held by GAIL (India) Ltd. The present contract area is 1260 Sq. Km. post relinquishment of 420 Sq. Km. after exploration Phase-I period.

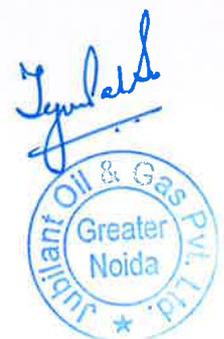
KL-1 is the first discovery well in the block. This well had discovery in the Middle Bhuban reservoir of Middle Miocene age. Testing summary of KL-1 well is given below:-

Zones	Interval (m)	Remarks
Object-I	3390 – 3372m	Primarily flowed water with very little quantity of Gas. Water flowed @ 4.8-6.7 bbl/hr with 16/64" and 19-21bbbls/hr with 32/64" choke & Gas flowed @ 19287 scfd through 14/64" choke.
Object-II	3220 – 3216m	Gas Flowed @ 5.15 mmscfd through 20/64" choke bean with 2350 psi FTHP

The primary objective of this well (KL-DEV-2A) would be to develop the Bhuban reservoir (KL-1 Object-II & Object-I equivalent sands) in the down dip region of the anticline. This would also help to establish and substantiate the fluid contact deeper than the Lowest Known Gas @ 3325mTVDSS. The proposed development well location KL-DEV-2A has been identified on the basis of geological studies, maps and existing interpreted 2D seismic data.



**Figure 1:** Surface geology map with proposed well locations



The location KL-DEV-2A lies to the down dip of the Tulamura Anticline, nearer to the discovery well KL-1 and has been identified as a Firm development well.

Following are the major objectives expected to be achieved from the proposed well:

- **Achieve field production target:** As a production well, the well is planned to help achieve the target field gas production of >10 MMscfd from 4 wells including KL-1 and M-1. Further, this well will help maintain a sustainable gas rate in the field.
  - **Target KL-1 Object-II & Object-I equivalent sands:** The proposed well would target to establish the presence/extent and geometry for the proposed and tested sand intervals of KL-1.
  - **Establish fluid contact:** The Object-I tested interval of KL-1 flowed water with minor gas. The base of this perforation is considered as the depth of the Lowest Known Gas @ 3325 m TVDSS.
- This well is expected to help establish and substantiate the fluid contact deeper than the Lowest Known Gas @ 3325m SSTVD.
- **Prove geological concept of increasing Net Pay in down-dip direction:** Though the proposed wells are a little (30-50m) up dip of KL-1, they fall in high net pay regions (down dip of KL-NE and SK-A1).
  - **Better control on well productivity:** Since the well KL-1 was drilled with high mechanical skin (>14) due to formation damage (sudden increase of mud weight), it further resulted in low well flow rate and lower estimation of reserves. With fair understanding of the region now, efficient well planning and drilling would lead to better estimation of reserves.

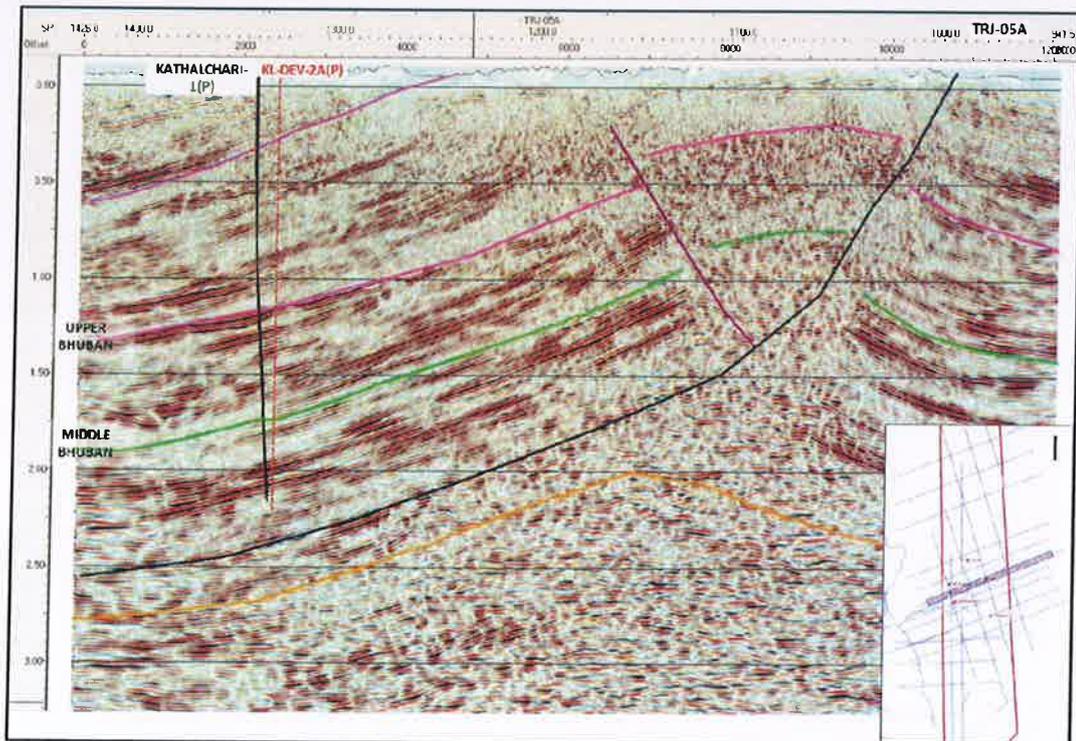


Figure 2: Seismic interpretation on dip line TRJ-05A with proposed well location

Name: - Tejinder Pal Singh  
 Designation: - Project Manager  
 Block: AA-ONN-2002/1 (Tripura)

Official Seal:-

