



ONGC

OISD Workshop 28th -29th December 2016

Emerging Risk in E&P Operations and lesson Learnt from Past Incidents



Kharsang # 60

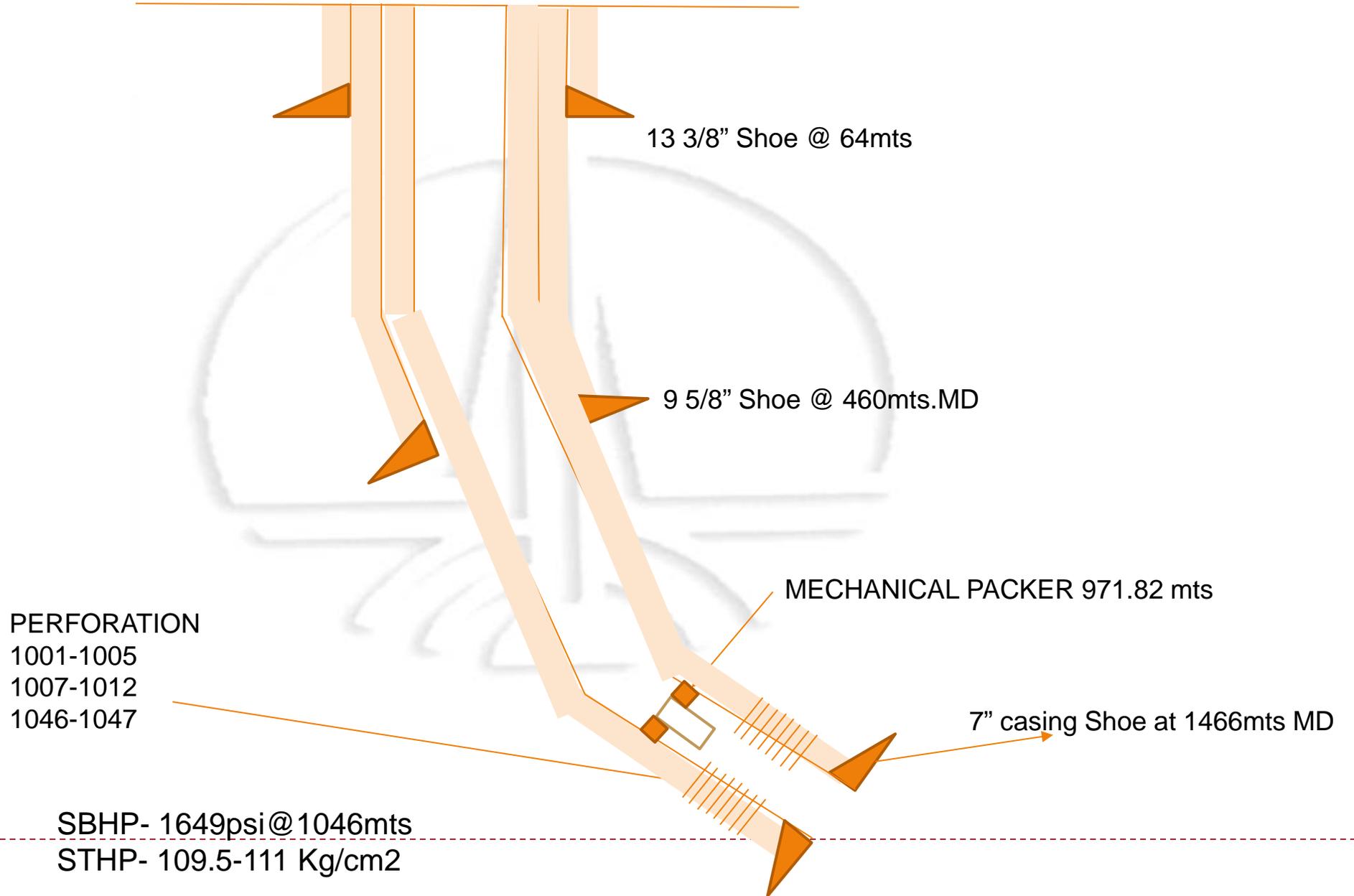
Pioneering technique of Blowout Control

**OISD Workshop
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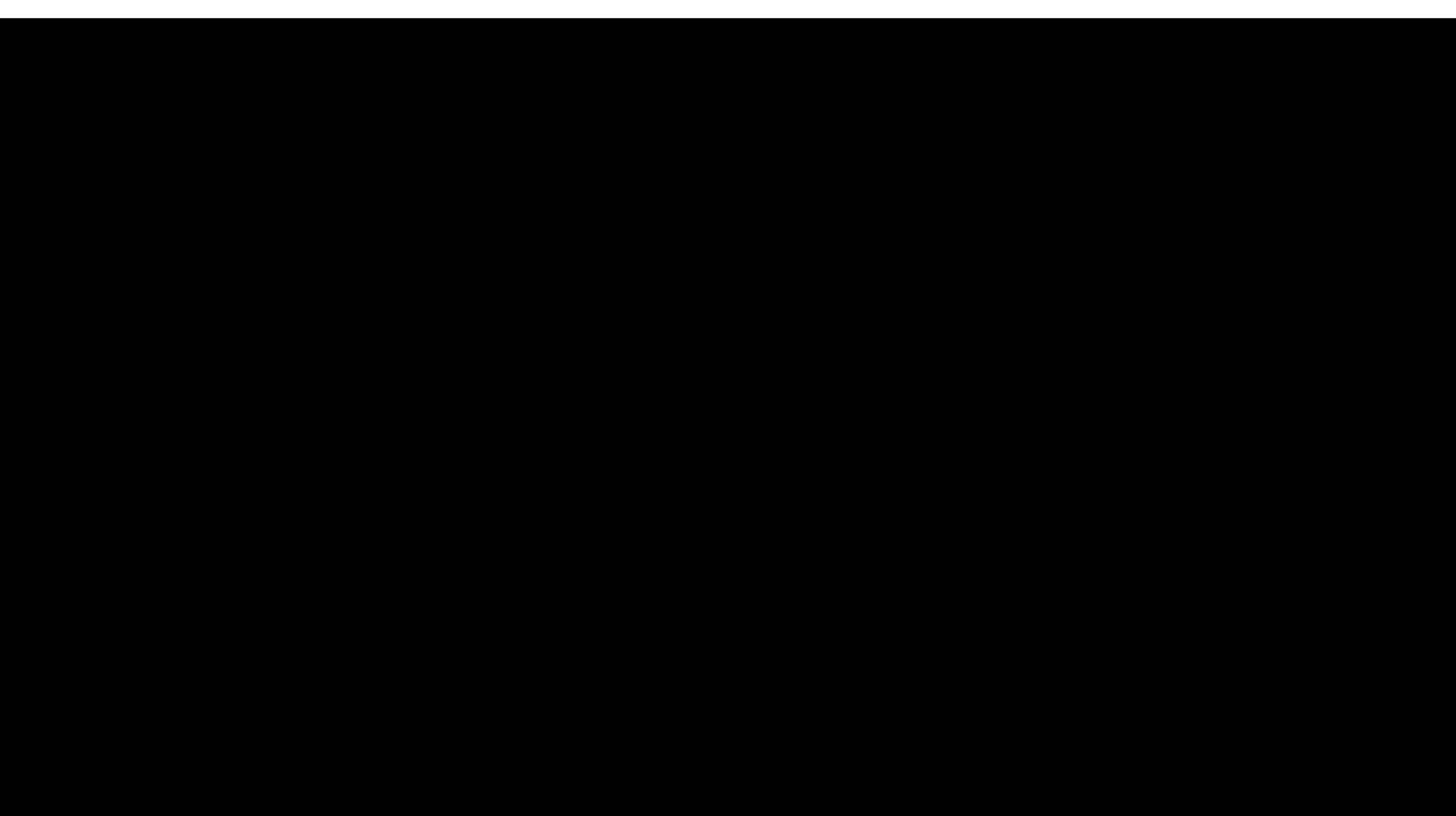
- ▶ Kharsang oil field is situated in Arunachal Pradesh around 04 hrs drive from Dibrugarh, Assam.
- ▶ GeoEnpro Petroleum Ltd along with Oil India having a 40% stake is operating this oilfield.
- ▶ Kharsang oil field is located in an area of around 14 sq. kms. It is a small field having many Zone of interest.
- ▶ Mainly oil is produced for commercial purpose and gas is produced only for their internal consumption and running their captive power plant

- ▶ A 50 ton work over rig was deployed at Kharsang#60 operated by GeoEnpro Petroleum Ltd.
- ▶ Mechanical packer was set at 971.82 mts and could not be released.
- ▶ Tubing string was backed off above the packer.
- ▶ Fishing operation was being carried out in the well and retrieval of packer with male tap was going on.



- ▶ During pulling out of fishing tool and pulling out of last two drill collars there was sudden activity in the well .
- ▶ Uncontrolled flow of gas started gushing out of the well.
- ▶ Rig crew closed the 2 7/8” Pipe rams and the blind rams against the 4 1/4” drill collar.
- ▶ Flow intensified further and a full-fledged Blow out was in hand.
- ▶ GeoEnpro sought the help of ONGC Management.
- ▶ Head CMT Corporate mobilized a team from RCMT Sivsagar in the wee hours of 01.07.2015

- ▶ Looking at the severity of the incident two senior experts from Central CMT, Ahmedabad were also mobilized which reached blowout site on 02.07.2015 and took control of the situation.
- ▶ On reaching the site it was observed that the well was blowing gas vociferously.
- ▶ 1 1/2 singles of 4 1/4" Drill collar was in the well and half Drill collar and one single drill pipe was above rotary table with FOSV in closed condition which was connected with rotary hose.
- ▶ The well was blowing gas with flow reaching above monkey board.
- ▶ It was observed that both pipe rams and blind rams were in closed condition against drill collar with manual lock tightened.



- ▶ Pipe ram and Blind ram are not meant to be closed on Drill Collars.
- ▶ Annular BOP and Variable ram should be used in BOP stack when different sizes of pipes are in the string.
- ▶ The key operational personnel should have very good knowledge of well control procedures and equipment. It should be ensured that they are having valid IWCF/IADC certificate.
- ▶ Proper use of trip tank should be done religiously.
- ▶ Trip sheet should be filled in every shift and proper monitoring of well volume should be done during pulling out/run in the hole.
- ▶ Round the clock 24x7 supervision and monitoring of operation by competent person should be ensured during work over operation.

Thank you