

CRT System with Drillable Bit Technology Enables Drilling of

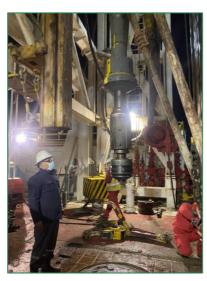
Development Well, Saves Operator 20 Drilling Days

OBJECTIVES:

KOC initiative to use NESR CRT to drill 280 ft of three different challenged formations (Lower Burgan, Shuaiba, Zubair Top) to run 13 3/8-in. casing in development Well# MN-0312 on Rig# SP-295 in an effort to find the best practice to overcome drilling difficulties, improve casing running efficiency and enhance operational safety.

- Drill, Case and set a 13 3/8 in casing with minimal drilling time.
- Avoid drilling hazards such as mud losses, lost in hole bottomhole assemblies (BHAs).
- Control the risk to the personnel involved in an operation with conventional equipment.





RESULTS:

- NESR deployed its 13 3/8-in CRT drilling-with-casing system first time in Kuwait successfully.
- NESR CRT system was used to make-up casing connections up-to 30K ft.ib and transmitting Drilling torque 12-16 K ft.ib, also to provide the ability to transmit mud flow (600-700 GPM) from the top drive to the casing.
- The operator completed drilling to a total depth (TD) of 7864 ft in hr, with an average rate of penetration (ROP) of 9.8 ft/hr.
- NESR cementing run began immediately after TD had been reached, and the hole cleaned.

VALUE:

- NESR CRT system eliminated NPT by mitigating the risks associated with drilling in 280 ft.
- The CRT system improved drilling efficiency, compared to conventional methods saving the operator 20 Drilling Days in operating cost.

KOC TEAM:

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o Mr. Saleh Muqeem

- XI Senior Engineers:
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 - o Eng. Yasser Al-Essel
 - o Eng. Anish Sekhri
- XI Engineer:
 - o Ms. Mai Sulaiman
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 - o Mr. Ibrahim Moammed
- Company man:
 - o Mr. Chandra & Mr. Lajos

NESR TEAM:

- Kuwait Country Director:
 o Aiman Al Khabbaz
- Operations Manager:
 o Emad Mujahed



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