



CASE STUDY: 9-5/8" HSRT Provides Operational Cost & Time Saving - KUWAIT case study no. 0035

#### Overview

Date: 21 Oct 2019 Location: Kuwait On/Offshore: Onshore **Open Hole:** 12.25"

Section Length: 9,733 meters

Casing Spec: 9.625", 43.5 & 47 ppf, L80 BTC, L80

Location: Lower Burgan Shale

Hole Issues: Wellbore Instability, Shale caving



# **Objectives**

Run 9 5/8" casing with the 9 5/8" HSRT reamer shoe to target TD in the Lower Burgan shale at 9,733 feet. Overcome any wellbore instabilities, cavings, shales and fill by utilizing the unique hydraulic rotating feature of the HSRT reamer shoe.

# **Tool Deployment / Execution**

Engineer made up the 9 5/8" HSRT tool to the first 9 5/8" casing. The tool was picked up, run below rotary table and tested with a flow rate of 100 GPM (producing approx. 150 RPM). RIH operation commenced and bottoms up was circulated at the 13-3/8" shoe @150GPM's. Casing RIH to 7,390 ft. and HSRT tool was activated due to several tight spots while POOH with DP. String was worked down to 7,900 ft where no obstructions were observed. Obstruction was observed @9,700 ft, picked up string to 9,680 ft, engaged pumps and reamed from 9,680 ft to 9,733 ft with flow rate starting from 150gpm and increased to 200gpm then to 500gpm. TD was reached, circulated bottoms up and prepared for cement job.

## **Project Results**

The HSRT reamer was utilized throughout the open hole section and performed as expected. In some previous offset wells, the 9 5/8" casing string did not reach TD with conventional reamer shoes, resulting in an additional liner section to be added to the wellbore construction.

### **Drill-out Performance**

Bit: 8-1/2" PDC **Duration:** 1 hrs

Parameters: 300 gpm, 600 rpm, 15 kips



### **Client Rating**

Description		Client Rating					
	1	2	3	4	5	6	
HSE						Y	
Personnel						Y	
Equipment						Y	
Operation						Y	
Communication						Y	
Documents						Y	
Housekeeping						Y	
Overall Performance						Y	
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