

REAL RESULTS

Weatherford's RedHead[®] Motor Technology Provides the Muscle Required for Successful QuickCut[™] Performance

Objectives

- Create a single-trip exit for applications with restricted rotary speed (40 RPM or less) and restricted flow.
- Create a single-trip exit with the shallow-angle QuickCut 2° system, using a RedHead downhole motor.

Results

- Successfully created a single-trip window while using a 4 3/4-in. OD *RedHead* downhole drilling motor.
- Milled window and 12 ft (3.7 m) of rathole in 5-1/2 hr with a 4.4-ft/hr (1.3-m/hr) rate of penetration.
- Mill gauge loss was 1/16 in. or less.

Value to Client

- Tests were part of preparations for a TTRD application in the North Sea and proved a more economical alternative to pulling the completion string.
- Production of single-trip windows without excessive workstring rotation protected the downhole deployment valves in the casing string.
- Tests demonstrated potential applications for milling with motors: extended-reach drilling, restricted rotary applications, TTRD applications, and wells with high dogleg severities.
- Standard 3° *QuickCut* system and contingency plans were also successfully tested, using the same Weatherford *RedHead* motors in preparation for field use, providing yet another option for the operator.



Location Weatherford Technology and Training Center, Test Rig No. 1

Whipstock OD 5-1/2 in. (140 mm)

Concave Angle 2°

Concave Length 13-1/2 ft (4 m)

Casing 7 in., 26 lb/ft and 7 in., 32 lb/ft

Drilling Motor 4 3/4-in. OD, 7:8, 5-stage

Products/Services

- RedHead motor
- Shallow-angle QuickCut casing exit system

Weatherford International Ltd. 515 Post Oak Blvd., Suite 600 Houston, Texas 77027 USA Tel: 713-693-4000 weatherford.com

Weatherford Ron Barker Global Product Service Line Manager ron.barker@weatherford.com Weatherford products and services are subject to the Company's standard terms and conditions, available on request or at weatherford com. For more information contact an authorized Weatherford representative. Unless noted otherwise, trademarks and service marks herein are the property of Weatherford. Specifications are subject to change without notice. Weatherford sells its products and service accordance with the terms and conditions set forth in the applicable contract between Weatherford and the client.