

## Case History

## World's First Successful RAM™ Multilateral Run

## Problem

Viscous oil extraction on the North Slope requires extended-reach drilling with horizontal departures of more than 5:1 and liner lengths of more than 8,000 ft (2438 m)—requiring pipe rotation to get liners to total depth. The operator needed a versatile multilateral system that would allow rotation at an economical cost.

## Solution

- Multilateral technology was chosen as the most economical option since conventional wellbore construction methods would provide impractically low production rates
- Helical profiles allow for proper hanger orientation, while matching collet profiles latch the hanger into the sealbore diverter for depth control
- The RAM hanger was successfully rotated and landed in the sealbore diverter

## Results

- Both lateral liners were successfully rotated to bottom with 8,689 ft (2648 m) of upper lateral liner length, 17,035 ft (5193 m) total depth and 3,212 ft (979 m) total vertical depth (TVD)
- All project objectives were met, resulting in the world's first successful RAM multilateral run

## Project Details

Location: North Slope of Alaska

Date: November 2007

Well Type: oil producer

Formation/Lithology: sandstone

Junction Type: RAM

Junction Depth: 8,365 ft (2550 m)

Main-Bore Casing: 9-5/8 in., 40 lb

Main-Bore Liner: 5-1/2-in. slotted liner

Main-Bore Liner Length: 8,631 ft

Lateral Liner: 4-1/2-in. slotted liner

Lateral Liner Length: 8,689 ft

