

Petromac Conveyance System

International patents pending

Job Report 25 Nov, 2013

The Petromac **Pathfinder** was used to successfully convey a tool-string (ILE-CMR-ILE-PPC) down a well for TAG Oil (NZ). Although the 8 ½" hole section was near vertical, there were numerous coal intervals identified on the well prognosis. These coal intervals are invariably over-gauge, creating ledges which often impede logging tool descent.

The first logging run (PEX(HRLA)-DSI) was practically centered in the wellbore with 1 ½" standoffs and centralisers. However the client was concerned that the second run (CMR), run fully eccentered with bow-spring eccentralisers, would be held up by the ledges. The client elected to run the Petromac **Pathfinder** on the CMR tool to ensure the tool descended freely to TD.

*The Petromac **Pathfinder** is usually run with the **Tool Taxi** wheels but it can also be deployed with any orientation device such as bow-spring eccentralisers or oriented standoffs.*

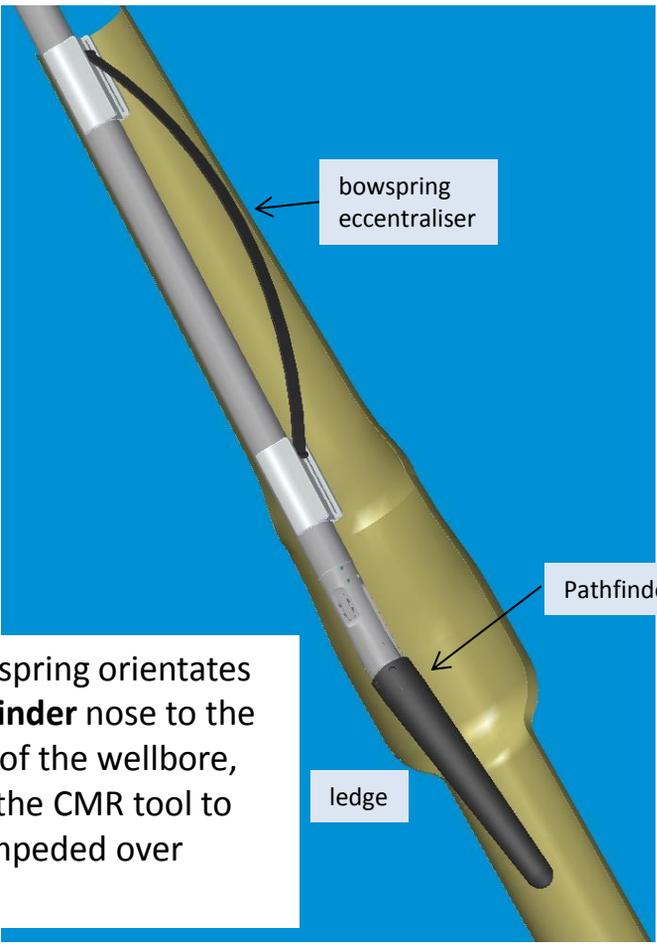
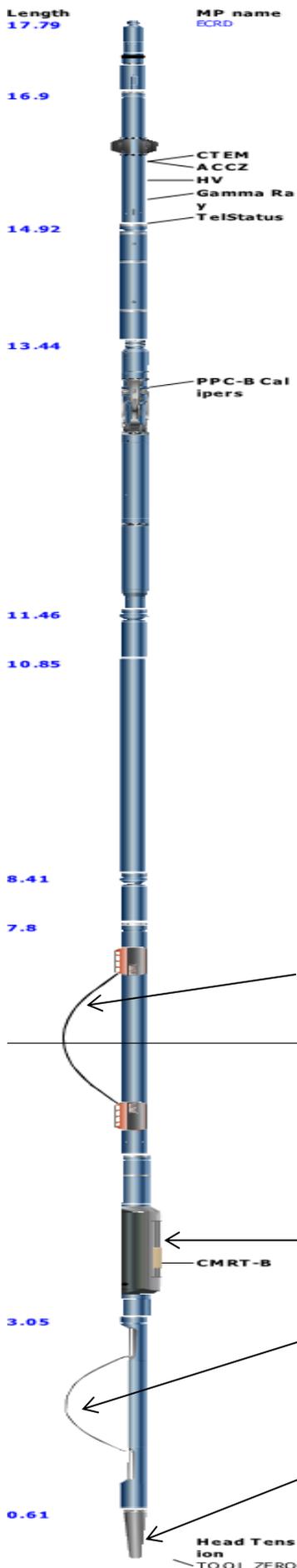
The CMR tool, with the Petromac **Pathfinder**, descended freely with no holdup. Despite being much heavier and centered in the wellbore, the PEX-DSI toolstring was held up by the ledges. The plot overleaf displays line tension during RIH for both logging tools.

"Given the hole conditions, it is unlikely the CMR tool would have reached TD without the Petromac Pathfinder." Carey Davis, TAG Oil Exploration & New Ventures Manager, November 2013

a PARADIGM change for the industry



Logging Tool Configuration

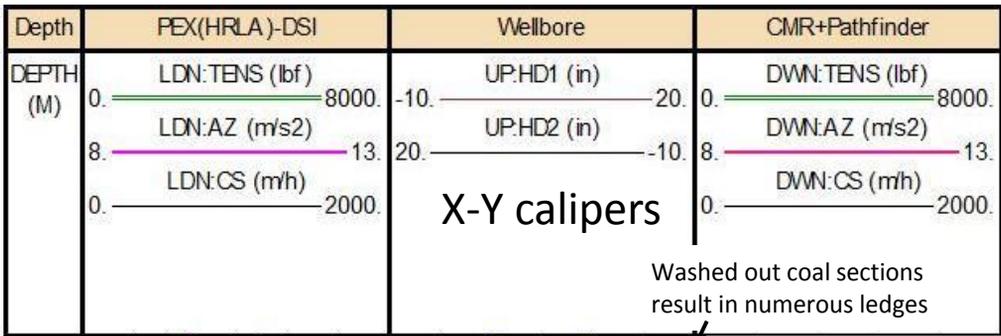


The bow-spring orientates the **Pathfinder** nose to the high side of the wellbore, enabling the CMR tool to “ski” unimpeded over ledges



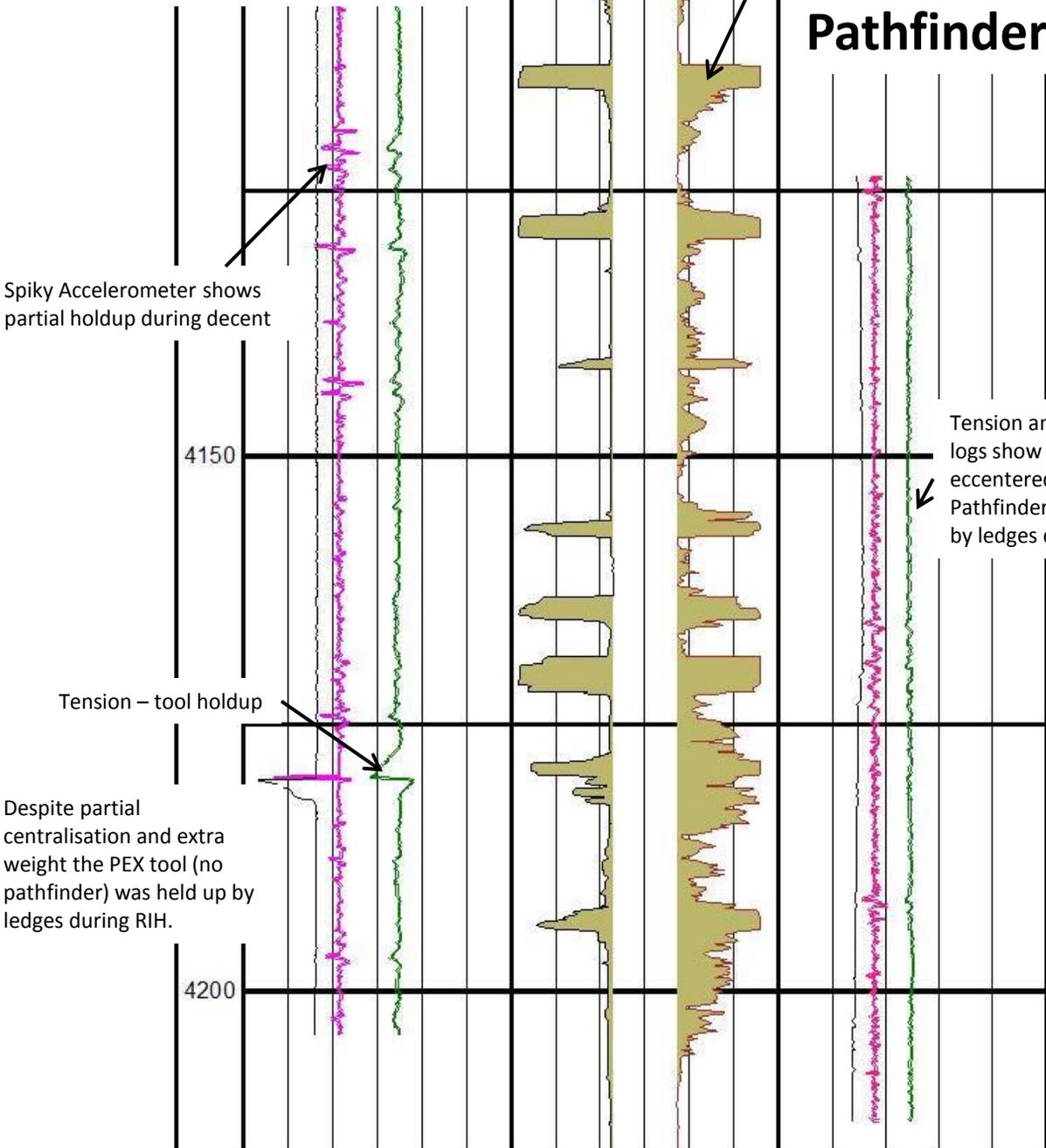
The **Pathfinder** will ski over a ledge 4 ½” high in an 8 ½” hole.

Petromac **PATHFINDER** set at 6deg – no tool hold-ups



PEX(HRLA)-DSI

CMR with Pathfinder



Spiky Accelerometer shows partial holdup during decent

4150

Tension - tool holdup

Despite partial centralisation and extra weight the PEX tool (no pathfinder) was held up by ledges during RIH.

4200

Tension and accelerometer logs show that the fully eccentric CMR tool, with Pathfinder, was not held up by ledges during RIH