## Compact™ Triple-Combo, Cross-Dipole Sonic Tools Reduce Reservoir Uncertainty in a Canadian Oil-Sands Project with 35 Wells

### Objectives
- Minimize reservoir uncertainty in a major oil-sands project.
- Optimize completions. The shallow, unconsolidated sediments and washouts in this Canadian oil-sands field made adequate wellbore evaluations difficult, time-consuming, and challenging when using conventional technology.

### Results
- Weatherford deployed the Compact triple-combo tool and the Compact cross-dipole (CXD) sonic tool to deliver a comprehensive formation evaluation, including the geomechanical properties of the project.
- With a 2 1/4-in. OD, the Compact triple-combo tool navigated past the restrictions more efficiently than standard tools.
- The CXD shear slowness read up to 700 μs/ft (2,300 μs/m) despite the rugged holes washed out to 15 in.
- The data acquired for all 35 wells matched the precision and resolution of larger conventional tools and enabled the operator to make exact seismic calibrations.

### Value to Client
- Using Weatherford’s Compact triple-combo and CXD tools enabled the operator to retrieve accurate formation evaluations with rock mechanical properties, reducing the reservoir uncertainty and optimizing the completions.
- The high operating efficiency of the Compact tools enabled the operator to navigate past obstructions, saving significant rig time.

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**Location**
Canada

**Formation**
Shaly sand

**Well Type**
Onshore

**Hole Size**
8-1/2 in.

**Depth**
1,000 ft (304 m)

**Footage Logged**
800 ft (243 m)

**Products/Services**
- Compact triple-combo
- Compact cross-dipole sonic

The Compact cross-dipole tool shear slowness read 700 μs/ft (2,300 μs/m) with a rugged hole washed out to 15 in.