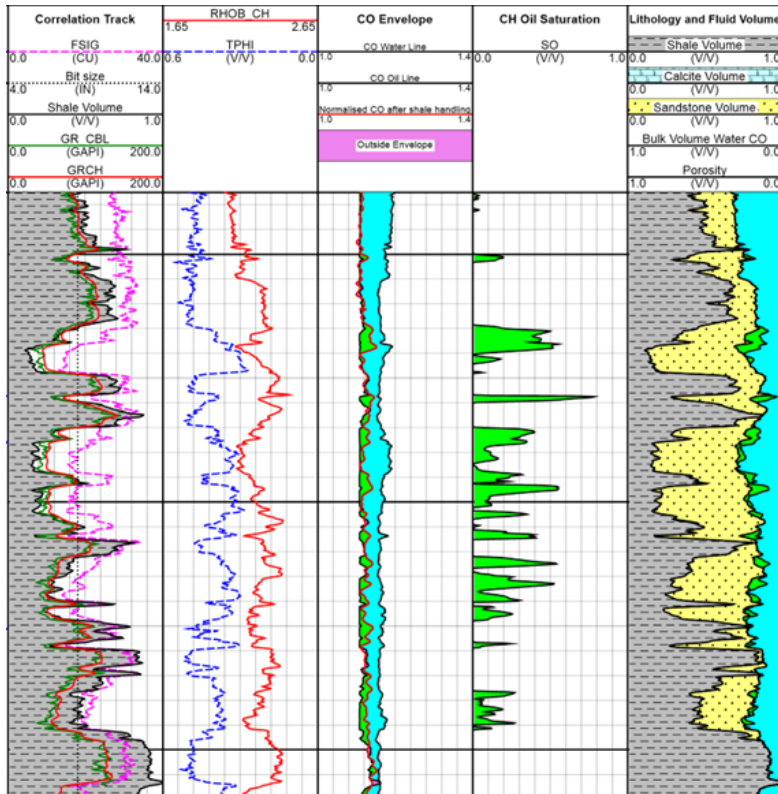


Raptor[®] 2.0 Cased-Hole Evaluation System

Determined Saturation in New Well Without Openhole Data in Less Than 12 Hours, Maintained Schedule



The above composite log shows the completed cased-hole reservoir evaluation as collected by the Raptor system.

LOCATION
Onshore Indonesia

WELL TYPE
Oil producer

FORMATION
Bangko, Bekasap Sands

HOLE SIZE
8-1/2 in.

CASING SIZE AND TYPE
7 in., 26 ppf

DEPTH
600 ft (182 m)

PRODUCTS/SERVICES

- Raptor 2.0 cased-hole evaluation system
- Universal gamma ray tool
- Temperature tool

Objectives

- Determine oil/water saturation in a new well where an openhole logging tool cannot be run in an 8 1/2-in. hole size due to a well problem. No openhole data was available in this section. The casing was set with 7-in., 26 ppf pipe.
- Deliver the results in less than 12 hours to maintain the perforation schedule.

Our Approach

- Following a thorough pre-job analysis, a Weatherford wireline and petrophysical team recommended using the Raptor 2.0 cased-hole evaluation system. The data would be acquired in both the advanced carbon-oxygen (C/O) mode (to log the well behind the casing) and in sigma mode (to help determine oil-water saturation).



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Our Approach (continued)

- Weatherford field personnel deployed the Raptor system and successfully logged the cased-hole interval.
- Experts from the Interpretation and Evaluation Services studied the data and presented the results. The interpretation provided cased-hole porosity, thermal porosity, and bulk density where each curve agreed with the openhole data from the offset wells.
- The well was successfully logged, and the interpretation result delivered on time.

Value to Customer

- The Weatherford solution maintained the customer's schedule, incurring no additional cost by waiting for the perforation job execution.
- The efficiency of the Weatherford technology and expert analysis enabled the customer to confirm the estimation of the perforation intervals and continue the drilling program.



The Raptor 2.0 cased-hole evaluation system CRE-B has proven to identify qualitatively oil-liquid saturation.

