

HDD™ Provides More Accurate Log Porosity Over High Resolution* When Compared to Core

CASE HISTORY: Comparison of HDD™ to Core Porosity through the Sparky Heavy Oil Formation, Lloydminster Area, Alberta.

Objective:

Validate HDD™ log porosity values against core porosity to increase the confidence in log derived porosity for reserves calculations and bed boundaries.

Solution:

Compare core porosity values to HDD™ log data.

Benefits:

Increased confidence in matrix porosity values acquired with HDD™ resulting in less dependency on cutting core.

Core plug porosity values compare adequately to the average Neutron and Density porosities.

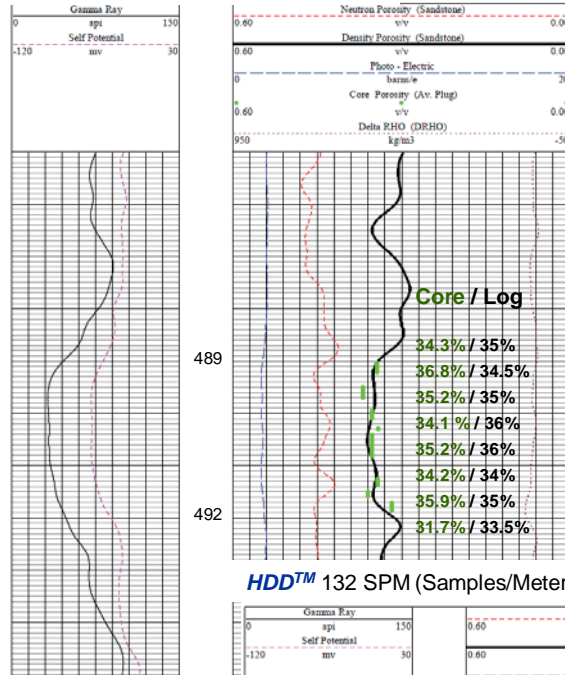
Increased confidence in the log derived porosity for volumetric calculations, resulting in more accurate reserve assignments.

HDD™ log data was acquired without incident and with minimal impact to rig time.

Allows for more accurate completions saving time and money.



Main Pass 33 SPM (Samples/Meter)



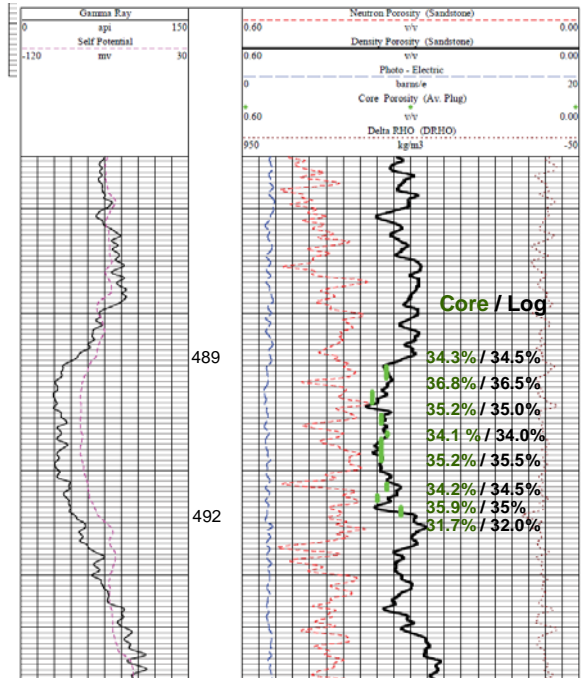
Results:

Clearly defined porosity and oil saturated top and base of formation

Clearer definition of any inter-zone permeability barriers that may affect Production

Average porosity variance (log vs. core):
 33 Samples/meter +/- 2.3%
 132 Samples/meter +/- 1%

HDD™ 132 SPM (Samples/Meter)



* 33 samples/meter, RECON Standard Logs, Industry High Resolution Logs