

Dolly and Mullarkey, 1996

Data Set 19

Reference: Dolly, E.D., and J.C. Mullarkey, 1996, Hydrocarbon production from low contrast, low resistivity reservoirs, Rocky Mountain and Mid-Continent regions -- log examples of subtle plays: Rocky Mountain Association of Geologists, 290 p.

Authors' affiliation: Rocky Mountain Association of Geologists

Age: Early Cretaceous

Formation: Muddy Sandstone

Location: Collums Field, Powder River Basin, Campbell County, Wyoming

Well: Norfolk "A" No. 2

Depth range: 7170-7206 feet

Lithology: "These Muddy sandstones are very fine to fine-grained and contain abundant clay around the sand grains and in the pores between the grains."

Log response: "Low resistivity readings from logging tools are caused by the bound water held in the coating of diagenetic clay minerals around virtually every sand grain. Irreducible water bound in the clay minerals greatly diminishes the resistivity response of the logging tools, resulting in high calculated water saturations."

Production: oil

Core measurement conditions: not stated.

Data entry: manual entry from table on page 247 of the referenced paper.