



Geophysics  
International

PETRO-SONDE RESPONSE TO BROMIDE SAND

Petro-Sonde Survey - Oil and Gas Division

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**LOCATION.** McClain County, South-Central Oklahoma.

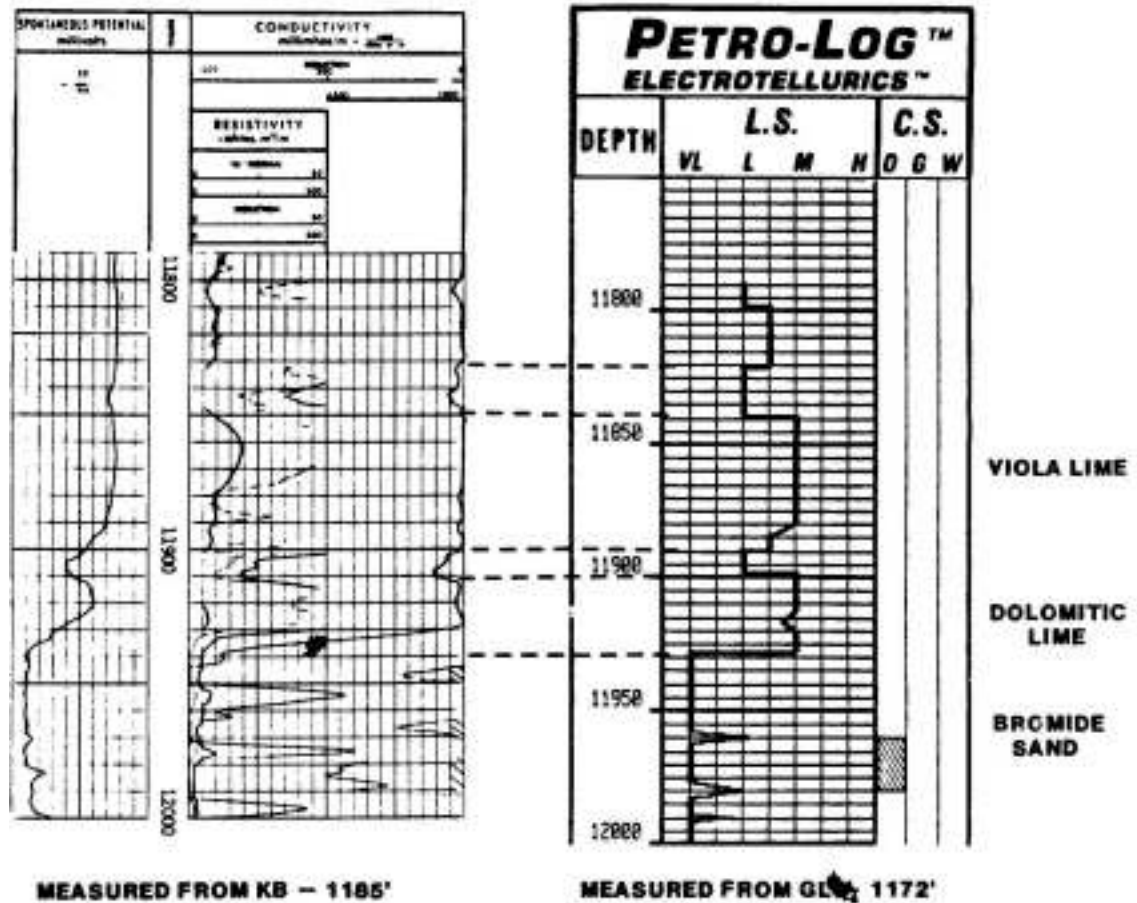
**OBJECTIVE OF THE PETRO-SONDE SURVEY.** To delineate the upper contact of the Bromide (2nd Wilcox) Sand and associated pay interval.

**GEOLOGY.** The Ordovician Bromide Sand is overlain by a 25' dolomitic lime and the Viola Limestone. The area is highly faulted with hydrocarbons trapped in individual Fault blocks.

**INFORMATION AVAILABLE.** General knowledge of stratigraphic column.

**CONCLUSIONS AND COMMENTS.** An uncalibrated Petro-Sonde reading was taken For the interval 11,185'-12,000'. The top of the Bromide Sand was successfully detected on the Petro-Log to within Five Feet of the actual contact as indicated by the induction-electric log. The top of the pay zone, within the Bromide Sand interval, was determined within one Foot in depth. Figure 1 is a comparison of the induction-electric log and the Petro-Log showing an accurate correlation between the two.

**COMPARISON OF INDUCTION - ELECTRIC LOG  
AND SURFACE GENERATED PETRO-LOG.**



*L.S.*-Lithologic Signal determines the depth, thickness, and electro-telluric responses of formations, which allows for their identification and lateral correlation.

*C.S.*-Content Signal indicates the potential presence, and the depth and thickness of oil, gas, and water resources.

**FIGURE 1**