



## Steamflood Analysis

THEN  
AND  
NOW



In comparing the two leases presented here, we found that the reservoir rock on the Toltec lease exhibited alteration by-products from the steamflood process that resulted in a change in rock quality. This is probably inhibiting efforts to get the higher oil recovery percentages we see in other parts of the reservoir. The reservoir rock on the Mitchell lease exhibits no alteration of the reservoir rock, has a very good permeability, and consequently a greater potential for additional oil recovery. The fact that it has not produced much in previous attempts at cyclic steaming does not appear to be a (permeability) reservoir problem. The use of focused steamflood applications and/or horizontal drilling technology may be applicable in the Mitchell lease to distribute steam to the reservoir in a more efficient and effective manner.

**Laser particle-size analysis shows unimodal distributions for all three samples and a fining-upward sequence which correlates well with the thin-section photomicrographs.**

**This log is showing, from left to right, the lithology (sandstone and siltstone), a resistivity curve, and a heat-corrected permeability curve based on the conductivity measurement. Thanks to Paul Harness, Formation Evaluation Specialist**