Re-examination of Utah's oil shale resources: Historical database and new research

Michael D. Vanden Berg, David E. Tabet, Utah Geological Survey, Salt Lake City, UT

With the recent increase in crude oil prices and concerns over diminishing conventional reserves, the Utah Geological Survey has begun to re-examine the state's oil shale resource. A major component of this process was to collect and preserve historical oil shale data from studies conducted in Utah and present it in a useable electronic format for the business and scientific communities. Files in this database include

- Fischer assays made from drill cores or cuttings for 581 unique boreholes
- scanned geophysical logs for 155 different boreholes, along with an inventory of paper logs for an additional 310 wells available in the Utah Geological Survey's library
- spotty to complete formation-top information for key beds in the Green River Formation for over 1000 different wells
- detailed lithologic descriptions for 174 wells;
- an overview resource map
- an extensive oil shale bibliography for research done within the state

Most of the historical oil shale resource assessments conducted in Utah concentrated on the Green River Formation within the southeastern part of the Uinta Basin. This area holds the thickest and richest oil shale deposits in Utah, but other significant areas within the basin warrant further study. We have broadened our attention to include the entire Uinta Basin. Using old Fischer assay analyses as our guide, we looked at several geophysical logs from oil and gas wells and picked tops for several key oil shale beds. Using this new information, we are developing a better idea of the overall oil shale resource for the state of Utah.