

### ***Comparison of oil shale kerogen assay methods***

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The most important property of an oil shale reservoir is its potential to produce oil and gas. Kerogen is the preserved organic matter that is the source of petroleum gases and liquids. We compare multiple physical and chemical methods of determining the kerogen content of native state Green River oil shale. Seventeen powdered samples were selected from core obtained from a well in the Piceance Basin, Colorado. Samples include rich and lean strata of the Garden Gulch member and mineralogically varied strata of the Parachute Creek member. The methods include Fischer Assay, Rock Eval, combustion analysis, demineralization analysis, and Fourier transform infrared (FTIR) spectroscopy. These laboratory methods are compared with well log estimates. Although there are systematic differences between the methods, replicate determinations demonstrated excellent precision.