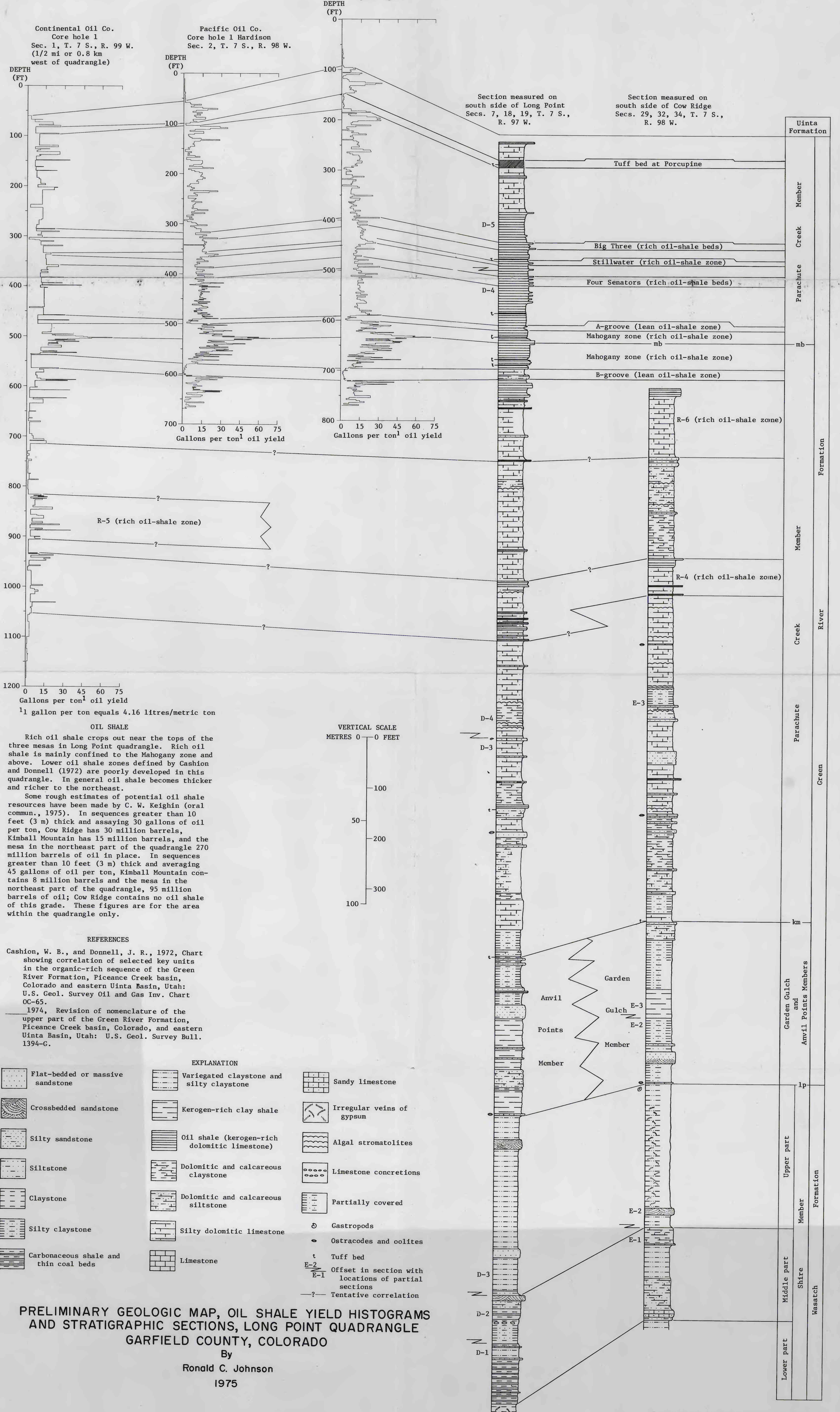


Pacific Oil Co.
Core hole 1 Allen
Sec. 27, T. 6 S., R. 97 W.
(2 1/2 mi or 4 km east of
quadrangle)

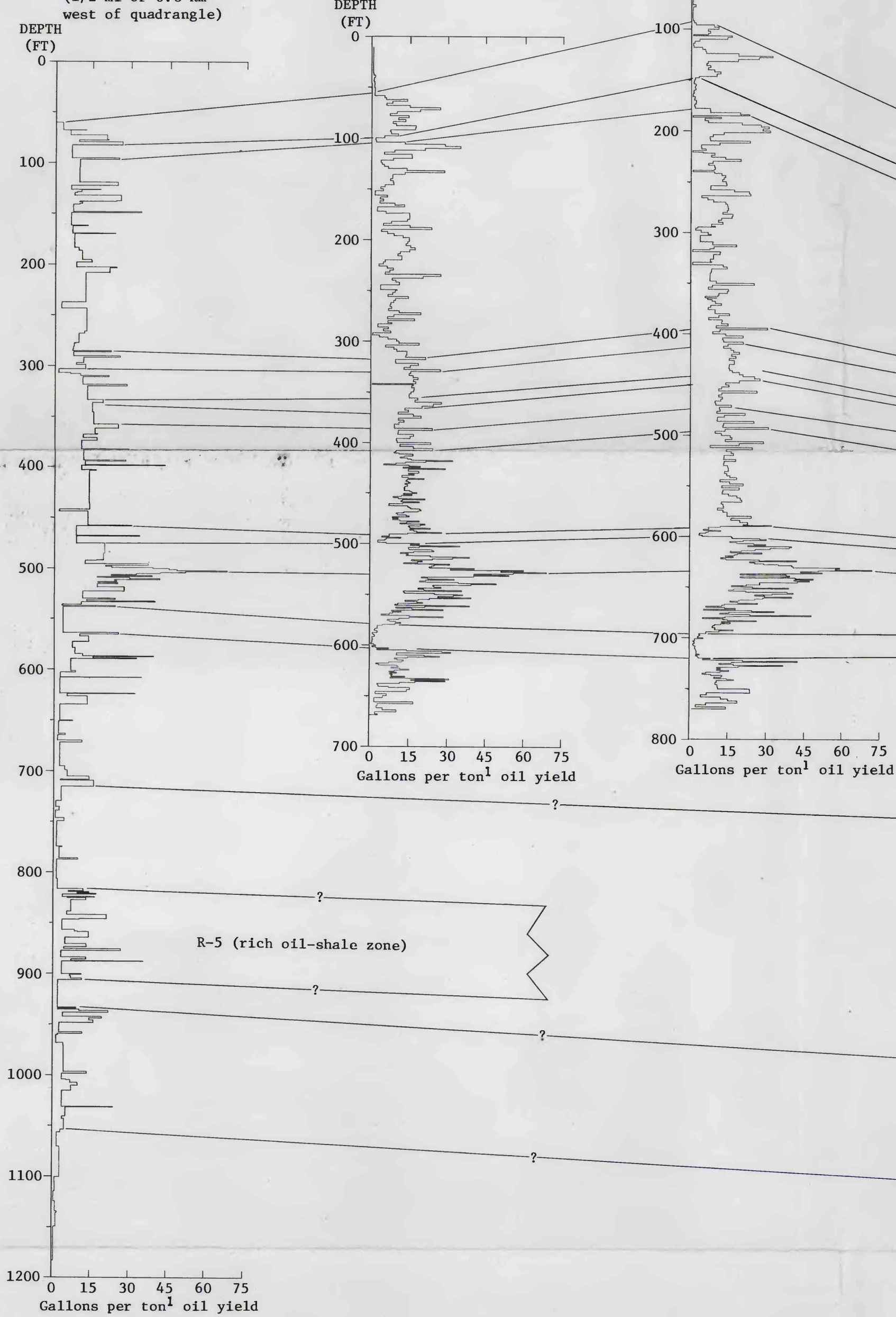


Continental Oil Co.
Core hole 1
Sec. 1, T. 7 S., R. 99 W.
(1/2 mi or 0.8 km
west of quadrangle)

Pacific Oil Co.
Core hole 1 Hardison
Sec. 2, T. 7 S., R. 98 W.

Section measured on
south side of Long Point
Secs. 7, 18, 19, T. 7 S.,
R. 97 W.

Section measured on
south side of Cow Ridge
Secs. 29, 32, 34, T. 7 S.,
R. 98 W.



OIL SHALE

Rich oil shale crops out near the tops of the three mesas in Long Point quadrangle. Rich oil shale is mainly confined to the Mahogany zone and above. Lower oil shale zones defined by Cashion and Donnell (1972) are poorly developed in this quadrangle. In general oil shale becomes thicker and richer to the northeast.

Some rough estimates of potential oil shale resources have been made by C. W. Keighin (oral commun., 1975). In sequences greater than 10 feet (3 m) thick and assaying 30 gallons of oil per ton, Cow Ridge has 30 million barrels, Kimball Mountain has 15 million barrels, and the mesa in the northeast part of the quadrangle 270 million barrels of oil in place. In sequences greater than 10 feet (3 m) thick and averaging 45 gallons of oil per ton, Kimball Mountain contains 8 million barrels and the mesa in the northeast part of the quadrangle, 95 million barrels of oil; Cow Ridge contains no oil shale of this grade. These figures are for the area within the quadrangle only.

REFERENCES

Cashion, W. B., and Donnell, J. R., 1972, Chart showing correlation of selected key units in the organic-rich sequence of the Green River Formation, Piceance Creek basin, Colorado and eastern Uinta Basin, Utah: U.S. Geol. Survey Oil and Gas Inv. Chart OC-65.

1974, Revision of nomenclature of the upper part of the Green River Formation, Piceance Creek basin, Colorado, and eastern Uinta Basin, Utah: U.S. Geol. Survey Bull. 1394-G.

EXPLANATION

Flat-bedded or massive sandstone	Variegated claystone and silty claystone	Sandy limestone
Crossbedded sandstone	Kerogen-rich clay shale	Irregular veins of gypsum
Silty sandstone	Oil shale (kerogen-rich dolomitic limestone)	Algal stromatolites
Siltstone	Dolomitic and calcareous claystone	Limestone concretions
Claystone	Dolomitic and calcareous siltstone	Partially covered
Silty claystone	Silty dolomitic limestone	Gastropods
Carbonaceous shale and thin coal beds	Limestone	Ostracodes and oolites
		Tuff bed
		Offset in section with locations of partial sections
		Tentative correlation

PRELIMINARY GEOLOGIC MAP, OIL SHALE YIELD HISTOGRAMS AND STRATIGRAPHIC SECTIONS, LONG POINT QUADRANGLE, GARFIELD COUNTY, COLORADO
By
Ronald C. Johnson
1975