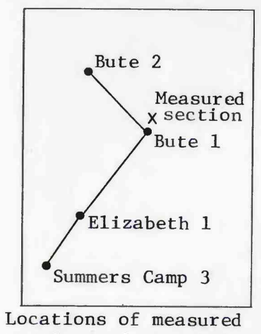
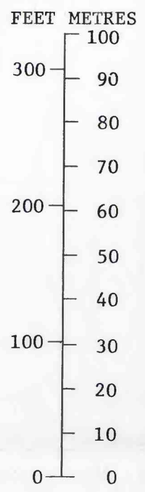
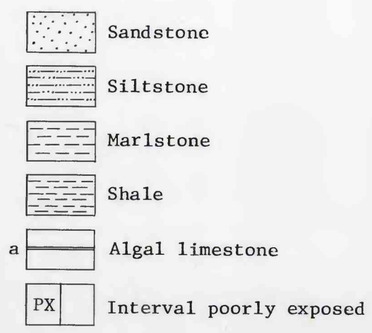
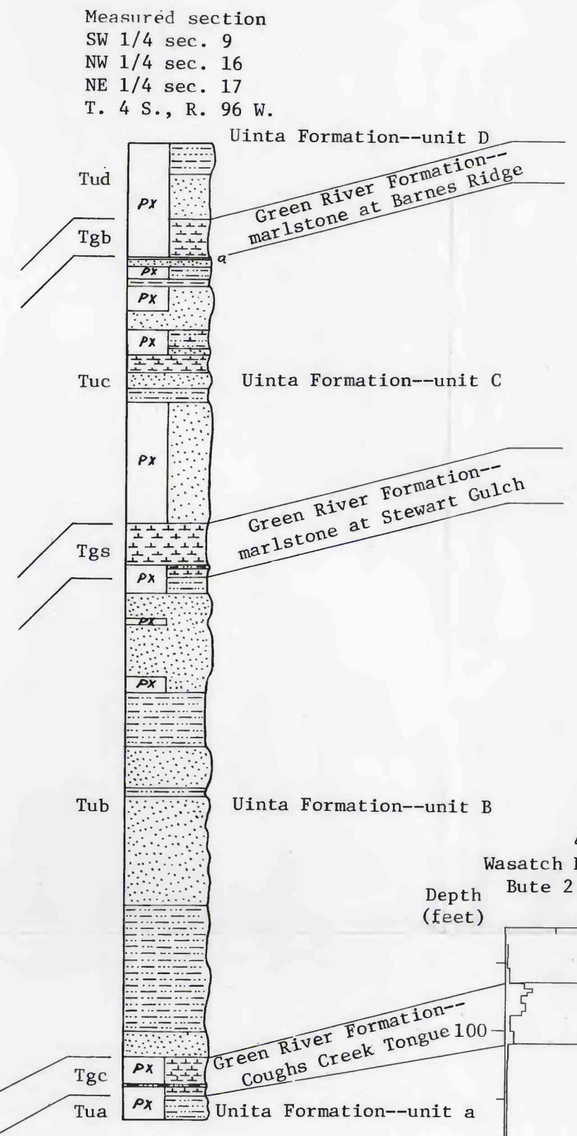
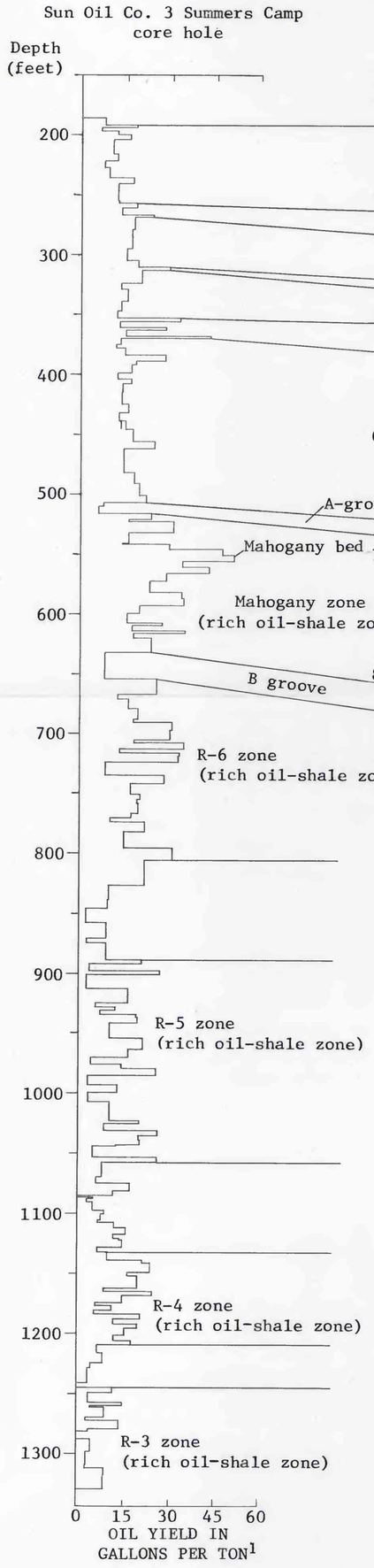


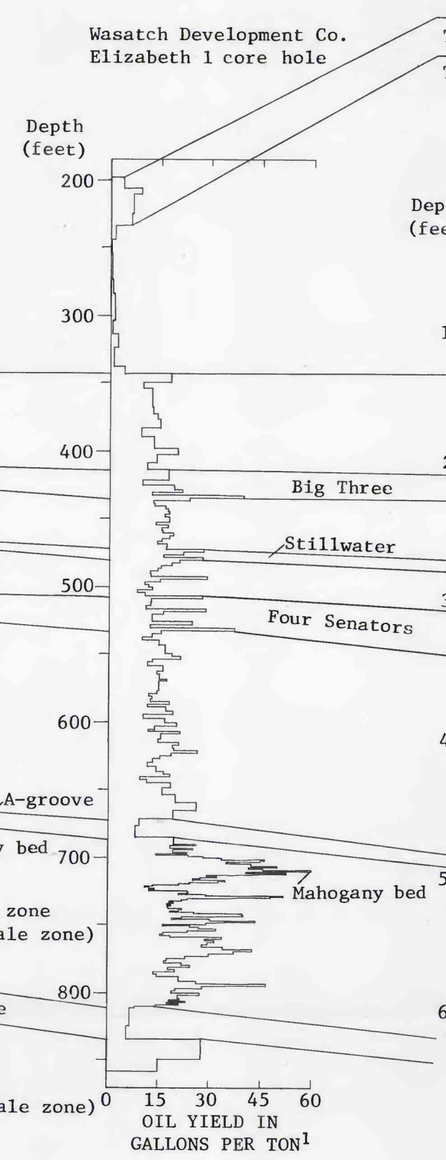
Locations of measured section and core holes, Cutoff Gulch quadrangle

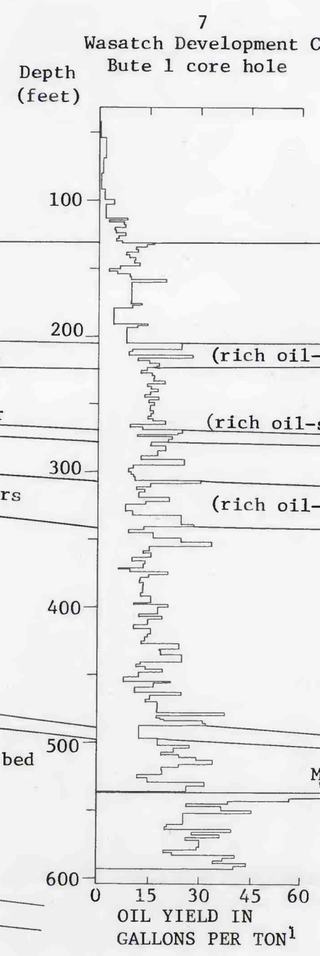


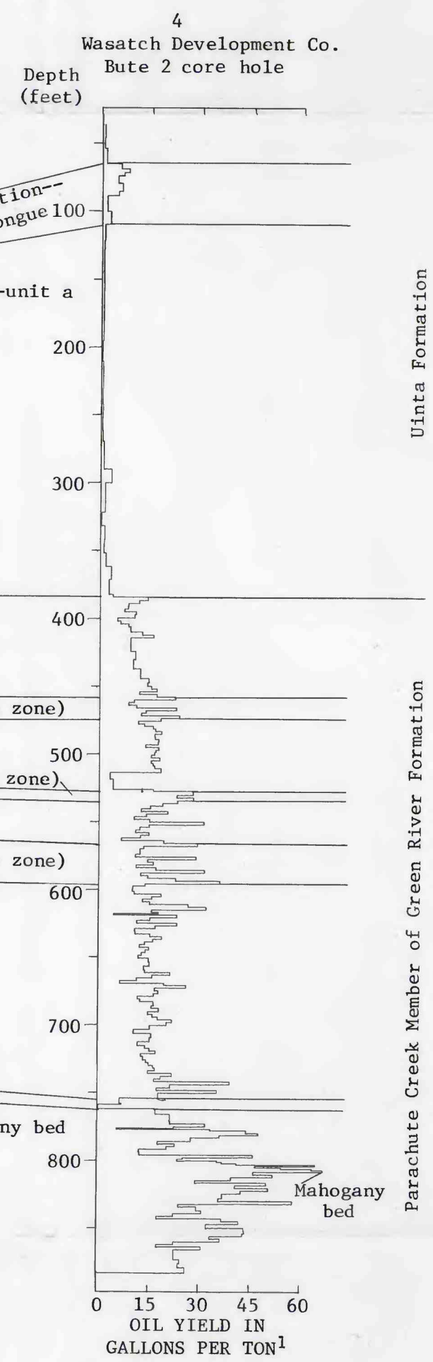












[1] 1 gallon/ton = 4.6 litres/metric ton

OIL SHALE

Rich oil shale is present in the main body of the Parachute Creek Member of the Green River Formation. Some low-grade oil shale and a few very thin beds of rich oil shale are also present in the various marlstone tongues of the Green River overlying the main body of the Parachute Creek Member.

For beds below the top of the Mahogany zone, C. W. Keighin (written commun., 1975) estimates that the aggregate thickness of oil shale averaging 25 gallons (9.5 l) or more per ton in beds at least 10 ft (3 m) thick ranges from about 160 ft (49 m) in the southwest corner of the quadrangle to about 470 ft (140 m) in the northwest corner of the quadrangle.

Pitman and Donnell (1973) evaluated oil-shale resources for beds between the top of the Mahogany zone and the top of the Big Three rich oil-shale beds. This sequence, containing several rich oil-shale beds, was divided by Pitman and Donnell into four resource units. None of these units averages more than 22 gallons (8.3 l) per ton within the Cutoff Gulch quadrangle.

Fischer assays shown on the oil-yield histograms were made by the U.S. Bureau of Mines at Laramie, Wyoming. The rich oil-shale zones (R3-R6) were established by Cashion and Donnell (1972) and by Donnell and Blair (1970).

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MAP NO.	DRILL HOLE	SECTION
	T. 3 S., R. 96 W.	
1	Equity Oil Co. 9 South Piceance Creek---------- Total depth 5,848 ft (1,782 m).	SE 1/4 35
	T. 4 S., R. 96 W.	
2	J. M. Huber 2-1 Federal Brooks---------- Total depth 5,777 ft (1,761 m).	NW 1/4 2
3	TOSCO TG71-4 core hole----------	SW 1/4 6
4	Wasatch Development Co. Bute 2 core hole--------	SW 1/4 6
5	TOSCO Bute 14 core hole----------	NW 1/4 14
6	Tell Ertl Bute core hole----------	NE 1/4 16
7	Wasatch Development Co. Bute 1 core hole--------	SE 1/4 17
8	Union Oil Co. Jill core hole----------	NW 1/4 23
9	Union Oil Co. Buff core hole----------	SE 1/4 23
10	Union Oil Co. Rett core hole----------	NW 1/4 28
14	Union Oil Co. Twigg core hole----------	SE 1/4 35
	T. 4 S., R. 97 W.	
11	Skelly Oil Co. 1 Dry Fork Unit---------- Total depth 7,992 ft (2,436 m).	SE 1/4 25
12	Wasatch Development Co. Elizabeth 1 core hole--	NE 1/4 36
13	General Petroleum Corp. 32-36 core hole--------	NW 1/4 36
	T. 5 S., R. 96 W.	
16	Union Oil Co. Blackbird core hole----------	NW 1/4 7
17	Union Oil Co. French core hole----------	NE 1/4 7
18	Union Oil Co. Parachute core hole----------	NW 1/4 9
	T. 5 S., R. 97 W.	
15	Sun Oil Co. 3 Summers Camp core hole----------	SE 1/4 2

CORRELATIONS AND OIL-YIELD HISTOGRAMS OF SELECTED CORE HOLES

PRELIMINARY GEOLOGIC MAP OF THE CUTOFF GULCH QUADRANGLE, RIO BLANCO AND GARFIELD COUNTIES, COLORADO

By

W. J. Hail, Jr.

1975

For sale by U.S. Geological Survey, price $1.00 per set

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