



CORRELATION OF MAP UNITS

Qal	Holocene	QUATERNARY
Qt		
Tu ₆	Eocene	TERTIARY
Tu ₅		
Tgt		

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM (HOLOCENE)--Silt, sand, and gravel of flood plains and alluvial fans in the larger valleys. Flood-plain deposits are mostly gray, buff, and brown silt and sand. Alluvial fan deposits consist of unsorted sediments including angular boulders and pebbles of sandstone and marlstone mixed with silt and sand, and are derived from nearby hilly terrain and deposited by torrential floods. Alluvial fans are generally outlined by surface contours that are convex around the mouths of tributary gulches. Thin alluvial deposits in some upland gulches are not shown. Thickness 0-50 ft (0-15 m).

Qt TERRACE DEPOSITS (PLEISTOCENE)--Remnants of stream deposits of sand and gravel on terraces 50-100 ft (15-30 m) above present level of Piceance Creek. Deposits contain some locally derived angular sandstone and marlstone boulders, but also contain numerous smoothly rounded pebbles and boulders of chert, limestone, quartzite, arkose, and sandstone derived from the older Mesozoic and Paleozoic rocks near the head of Piceance Creek. Thickness: 0-25 ft (0-7.6 m).

Tu₆ UNIT 6--Sandstone, siltstone, and thin lenticular marlstone above the Black Sulphur Tongue of the Green River Formation. Thickness 300-550 ft (90-168 m).

Tu₅ UNIT 5--Sandstone, siltstone, and marlstone below top of the Black Sulphur Tongue of Green River Formation and above the Thirteenmile Creek Tongue of the Green River Formation. Thickness 170-300 ft (52-91 m).

GREEN RIVER FORMATION (EOCENE)
Black Sulphur Tongue--Light-gray and tan marlstone. Unit weathers to a light-gray to white outcrop band. Locally it contains a zone 6-10 ft (1.8-3 m) thick of tan-weathering siltstone. The unit merges with the main body of the Green River Formation east of this quadrangle. Thickness 20-60 ft (6-18 m).

Tgt The top of the Black Sulphur Tongue is mapped as a line labeled Tgt. The Black Sulphur Tongue itself is mapped with the underlying Uinta Formation Tu.

Tgt Thirteenmile Creek Tongue--Light gray to white-weathering marlstone; forms slopes and ledges. The upper part of the unit contains 3-4 thin brown to black organic-rich oil-shale beds. The Thirteenmile Creek Tongue overlies and underlies by sandstone beds of the Uinta Formation. The tongue merges with the Parachute Creek Member of the Green River Formation in the subsurface of the central part of this quadrangle. Thickness 90-100 ft (27-30 m).

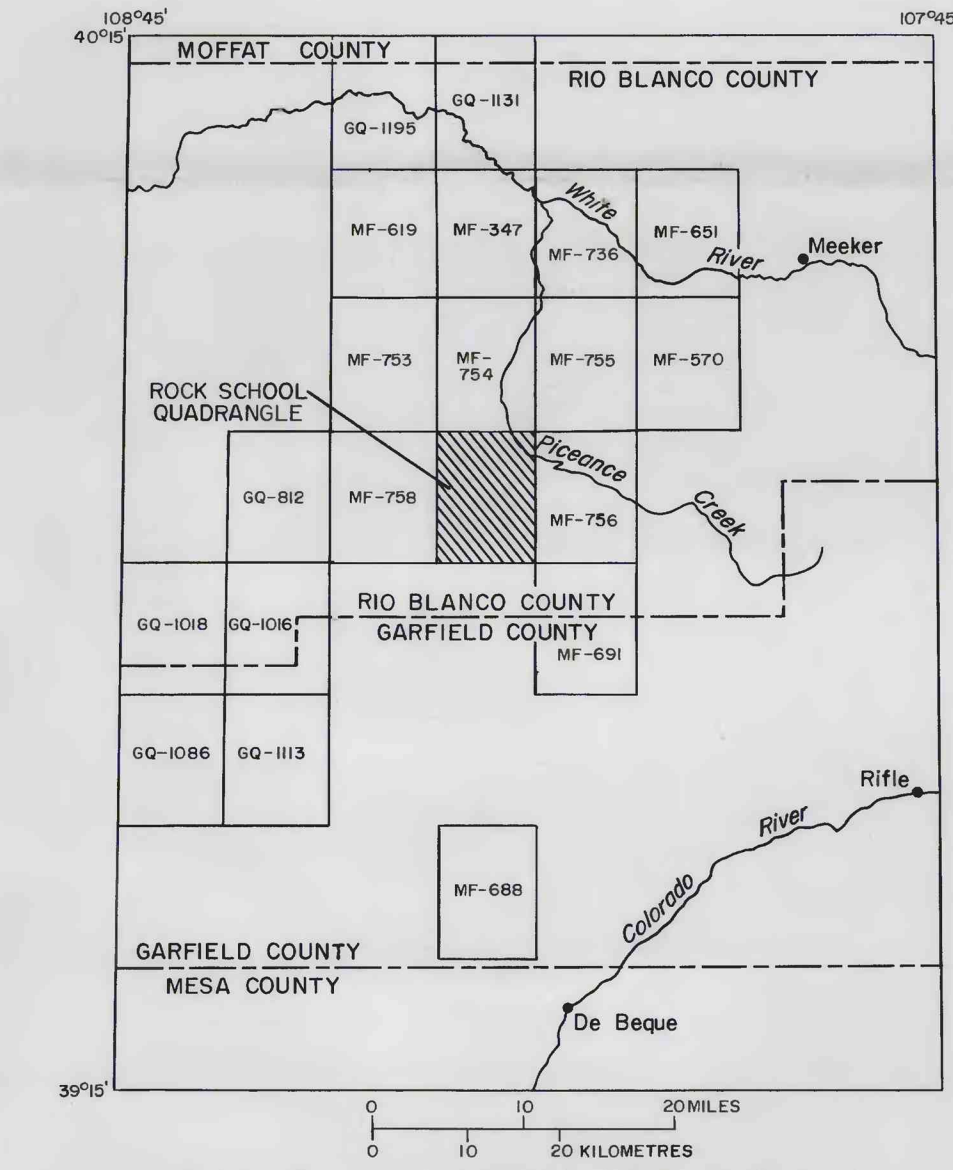
CONTACT--Dashed where approximate

U FAULT--Dashed where inferred; dotted where concealed. U, upthrown side; D, downthrown side

5000 STRUCTURE CONTOURS--Drawn on top of the Mahogany oil-shale zone of the Green River Formation. Omitted in some graben areas where displacement was not determined. Contour interval 100 ft (30.5 m)

DRILL HOLE--Number keyed to table

SHALLOW WATER WELL



Index of recently published U.S. Geological Survey geologic maps in the Piceance Creek basin area.

LIST OF DRILL HOLES
[N.D., no data]

No. on map	USGS core no.*	Location			Operator and name of well	Depth of hole	
		Sec.	T. S.	R. W.		feet	metres
1		18	2	97	Equity Oil Co. 12 Govt.	2,740	835.2
2		19	2	97	Equity Oil Co. 2 Sulphur Creek	2,410	734.6
3		19	2	97	Equity Oil Co. 5 Sulphur Creek	9,040	2,755.4
4	C-116	19	2	97	Equity Oil Co. 1 Boies	2,011	613.0
5		20	2	97	Equity Oil Co. 1 Brennen	4,889	1,490.2
6		21	2	97	Mobil Oil Co. 2 Water Well	N.D.	N.D.
7		21	2	97	Equity Oil Co. 2 Johnson	5,000	1,524.0
8		27	2	97	Equity Oil Co. 1 Johnson	2,563	781.2
9		28	2	97	Mobil Oil Co. 3 Water Well	N.D.	N.D.
10		33	2	97	Mobil Oil Co. 1 Water Well	N.D.	N.D.
11		33	2	97	Mobil Oil Co. 4 Water Well	N.D.	N.D.
12		34	2	97	Mobil Oil Co. 5 Water Well	1,739	530.0
13		13	2	98	Equity Oil Co. 9 Sulphur Creek	9,980	3,041.9
14		22	2	98	Dolezal, Stuarco, Warrior, and Bell Oil Cos. 1 Govt.	6,800	2,072.6
15		23	2	98	Equity Oil Co. 3 Sulphur Creek	7,572	2,307.9
16		24	2	98	Equity Oil Co. 1 Sulphur Creek	7,522	2,292.7
17		24	2	98	Equity Oil Co. 10 Sulphur Creek	2,280	694.9
18	C-14	25	2	98	Sinclair Oil Co. 1 Bradshaw	2,435	742.2
19	C-158	4	3	97	Shell Oil Co. 1 J. M. Greeno	2,710	826.0
20		5	3	97	Oroco-El Paso Natural Gas Co. 1 Black Sulphur	8,524	2,598.1
21		17	3	97	Equity Oil Co. 1 Greeno	2,572	783.9
22		17	3	97	El Paso Natural Gas Co. 2 Fawn Creek	8,822	2,688.9
23		21	3	97	Equity Oil Co. 2 Scandard Draw	3,600	1,097.3
24		21	3	97	C.E.R. Geonuclear Corp. Rio Blanco 2 Govt.	8,470	2,581.7
25		22	3	97	Equity Oil Co. 1 Scandard Draw	9,850	3,002.3
26		27	3	97	Equity Oil Co. 4 R. F. Magor	7,111	2,167.4
27		28	3	97	Equity Oil Co. 3 Scandard Draw	8,656	2,638.3
28		30	3	97	Equity Oil Co. 1 Eber	2,489	758.6
29		14	3	98	Equity Oil Co. 1 Fawn Creek	7,895	2,406.4
30		14	3	98	C.E.R. Geonuclear Corp. D-01 Rio Blanco	7,786	2,373.2

*U.S. Geological Survey computer storage and retrieval program for oil-shale data, corehole identification number.

PRELIMINARY GEOLOGIC MAP OF ROCK SCHOOL QUADRANGLE, RIO BLANCO COUNTY, COLORADO

By
D. C. Duncan
1976