

CORRELATION OF MAP UNITS

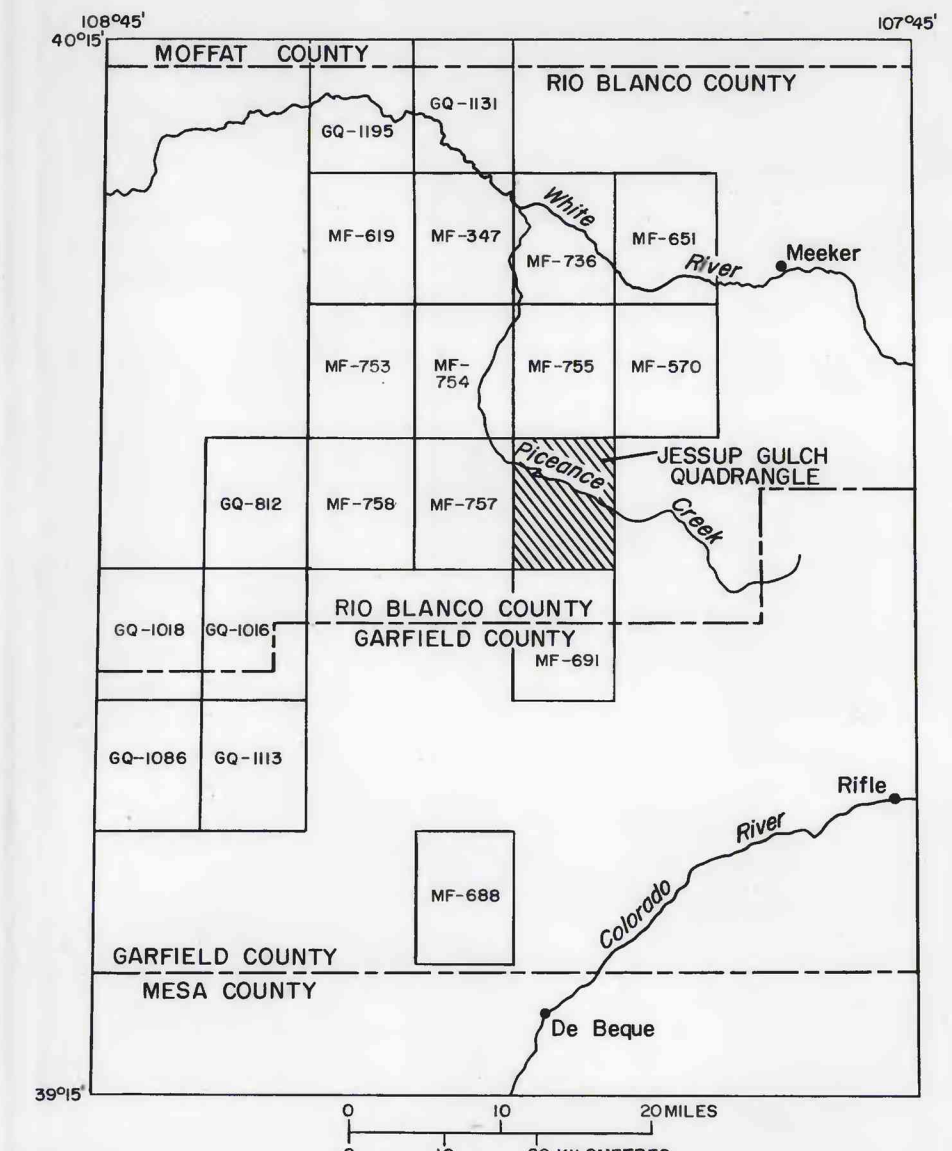
| | | |
|--------|-------------|------------|
| Qa1 | Holocene | QUATERNARY |
| Qt | Pleistocene | |
| Tu 6-4 | Eocene | TERTIARY |
| Tu 5-3 | | |
| Tu 5-2 | | |
| Tu 5-1 | | |
| Tgt | | |

DESCRIPTION OF MAP UNITS

- Qa1 ALLUVIUM (HOLOCENE)--Silt, sand and gravel of flood plains and alluvial fans in larger valleys. Flood-plain deposits are mostly gray, buff, and brown silt and sand. Alluvial fan deposits consist of 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 (15-31 m) above present level of Piceance Creek. The deposits contain some locally derived angular sandstone and marlstone boulders; they also contain numerous smoothly rounded pebbles and boulders of chert, limestone, quartzite, arkose, and sandstone derived from Mesozoic and Paleozoic rock east of the map area. Thickness 0-25 ft (0-7.6 m).
- UINTA FORMATION (EOCENE)
- Tu 6 Unit 6--Brown, gray and tan sandstone and gray siltstone. Massive brown sandstone with gray and tan siltstone and thin gray marlstone beds in lower part. Unit locally contains petrified wood. Numerous plant leaves and a few poorly preserved unidentified large mammal bones observed near the mouth of West Fork of Stewart Gulch. Thickness 270 ft (82 m). Bed 5 in the Standard Draw area is silty marlstone with brown sandstone zone in the middle that correlates with Coughs Creek Tongue of Green River Formation to the south. Only top of bed 5 is shown. Bed 4 is a gray siltstone shown in a small area west of Willow Creek.
- Tu 5 Unit 5--Buff to brown weathering sandstone with minor lenticular marlstone and gray siltstone beds. Local marlstone beds 1, 2, and 3 each as much as 20 ft (6 m) thick were mapped to show stratigraphic and structural relationships. Thickness 400-500 ft (122-152 m).

- GREEN RIVER FORMATION (EOCENE)
- Black Sulphur Tongue--Gray and light-brown silty calcareous marlstone weathering to a white slope. The unit thickens northeastward within the map area. The tongue merges with the main body of the Green River Formation east of the map area in the No Name Ridge quadrangle. Thickness 30-60 ft (9-18 m).
- Tgb The top of the Black Sulphur Tongue is mapped as a line labeled Tgb. The Black Sulphur Tongue itself is mapped with the underlying Uinta Formation Tu.
- Tgt Thirteenmile Creek Tongue--Gray and tan marlstone containing 3-4 thin oil-shale beds in the upper part. The lower half of the unit is silty at most places, and in some places contains a few thin sandstone beds. The Thirteenmile Creek Tongue merges with the main body of the Green River Formation in the subsurface of the southern part of the quadrangle. Thickness 75-100 ft (23-30 m).

- CONTACT--Dashed where approximately located
- FAULT--Dashed where inferred; dotted where concealed. U, upthrown side; D, downthrown side
- STRUCTURE CONTOURS--Drawn on top of the Mahogany oil-shale zone of the Green River Formation. Omitted in graben fault areas where displacement was not determined. Contour interval 100 ft (30.5 m).
- DRILL HOLE--Number keyed to table



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

LIST OF DRILL HOLES

| No. on map | USGS core no.* | Location | | | Operator and name of well | Depth of hole | |
|------------|----------------|----------|----|-------|---|---------------|---------|
| | | Sec. | T. | R. W. | | feet | metres |
| 1 | | 16 | 2 | 96 | General Petroleum Corp. 36-16-G | 2,450 | 746.8 |
| 2 | | 19 | 2 | 96 | Mobil Oil Co. T52-19-G | 19,710 | 6,007.6 |
| 3 | | 19 | 2 | 96 | Mobil Oil Co. F13-19-G | 3,050 | 929.6 |
| 4 | | 20 | 2 | 96 | Mobil Oil Co. T44-20-G | 5,900 | 1,798.3 |
| 5 | | 21 | 2 | 96 | Mobil Oil Co. T25-21-G | 5,390 | 1,642.9 |
| 6 | | 22 | 2 | 96 | Mobil Oil Co. F11-22-G | 3,480 | 1,060.7 |
| 7 | | 26 | 2 | 96 | General Petroleum Corp. 24X-26-G | 3,348 | 1,020.5 |
| 8 | | 27 | 2 | 96 | Mobil Oil Co. 12-27-G | 6,344 | 1,933.7 |
| 9 | | 29 | 2 | 96 | Mobil Oil Co.-General Petroleum Corp. 71X-29-G | 3,005 | 915.9 |
| 10 | | 24 | 2 | 97 | Mobil Oil Co. 43-24-G | 5,515 | 1,681.0 |
| 11 | | 35 | 2 | 97 | Pan-American Oil Co. 1 Shanahan | 2,448 | 746.2 |
| 12 | | 36 | 2 | 97 | Huber Corp.-Pan-American Oil Co. 36-1 Fed. Morrison | 8,180 | 2,493.3 |
| 13 | C-220 | 5 | 3 | 96 | TOSCO CB-3 | 2,104 | 641.3 |
| 14 | C-219 | 6 | 3 | 96 | TOSCO CB-2 | 1,482 | 451.7 |
| 15 | C-162 | 10 | 3 | 96 | Equity Oil Co. 3 Oldland | 2,395 | 730.0 |
| 16 | | 10 | 3 | 96 | Equity Oil Co. 8 Piceance Creek | 3,107 | 947.0 |
| 17 | C-175 | 10 | 3 | 96 | Atlantic-Richfield Oil Co. 2-B Federal | 3,100 | 945.0 |
| 18 | | 11 | 3 | 96 | Equity Oil Co. 1 Oldland | 2,461 | 750.1 |
| 19 | C-221 | 17 | 3 | 96 | TOSCO CB-4 | 1,470 | 448.1 |
| 20 | C-176 | 21 | 3 | 96 | TOSCO TG-2-1 | 2,325 | 708.7 |
| 21 | | 23 | 3 | 96 | Equity Oil Co. 7 So. Piceance Creek | 3,024 | 921.7 |
| 22 | C-178 | 23 | 3 | 96 | TOSCO TG-2-3A Federal | 1,131 | 344.7 |
| 23 | | 26 | 3 | 96 | Equity Oil Co. 2 Oldland | 3,008 | 916.8 |
| 24 | C-218 | 1 | 3 | 97 | TOSCO CB-1 | 2,104 | 641.3 |

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

Geology mapped in 1960-1973

PRELIMINARY GEOLOGIC MAP OF JESSUP GULCH QUADRANGLE, RIO BLANCO COUNTY, COLORADO

By
D. C. Duncan
1976