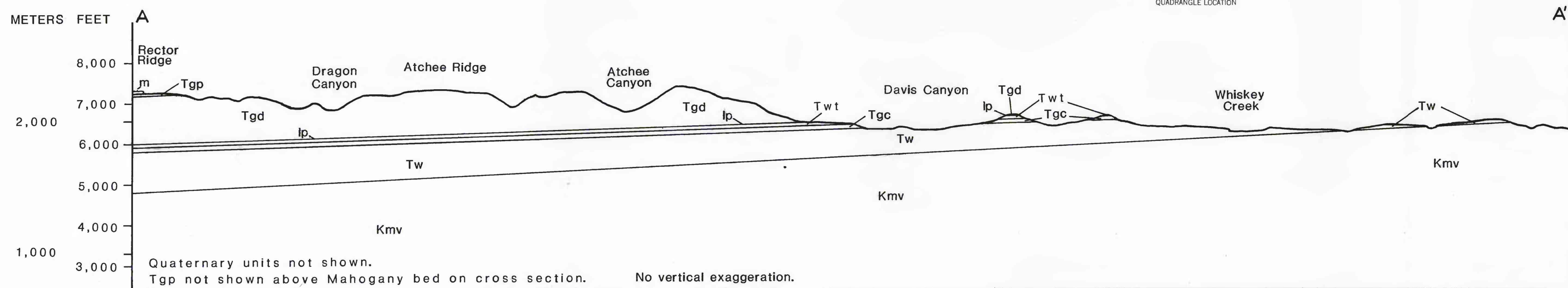
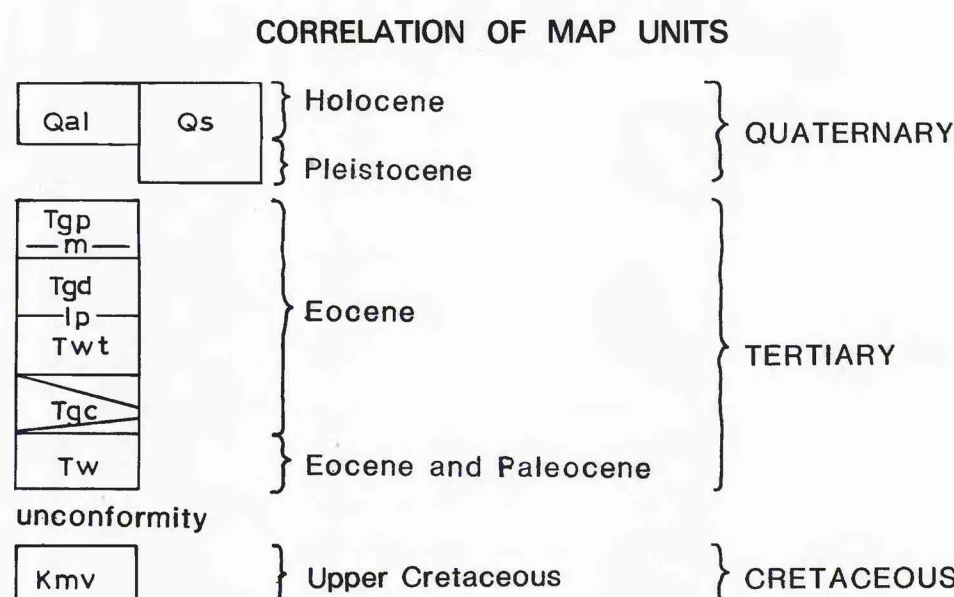
Base from U.S. Geological Survey, 1966
Photoinspected in 1972

Geology mapped 1985

PRELIMINARY GEOLOGIC MAP OF THE DAVIS CANYON QUADRANGLE, UINTAH COUNTY, UTAH, AND
GARFIELD AND RIO BLANCO COUNTIES, COLORADOBy
Michael P. Pantea
1987

DESCRIPTION OF MAP UNITS

(1 ft=0.305 m; 1 in.=2.54 cm;
all Quaternary units are approximately located)

Qal ALLUVIAL DEPOSITS (HOLOCENE)—Unconsolidated clay, silt, sand, and gravel of slope wash, fan, alluvial, and colluvial deposits

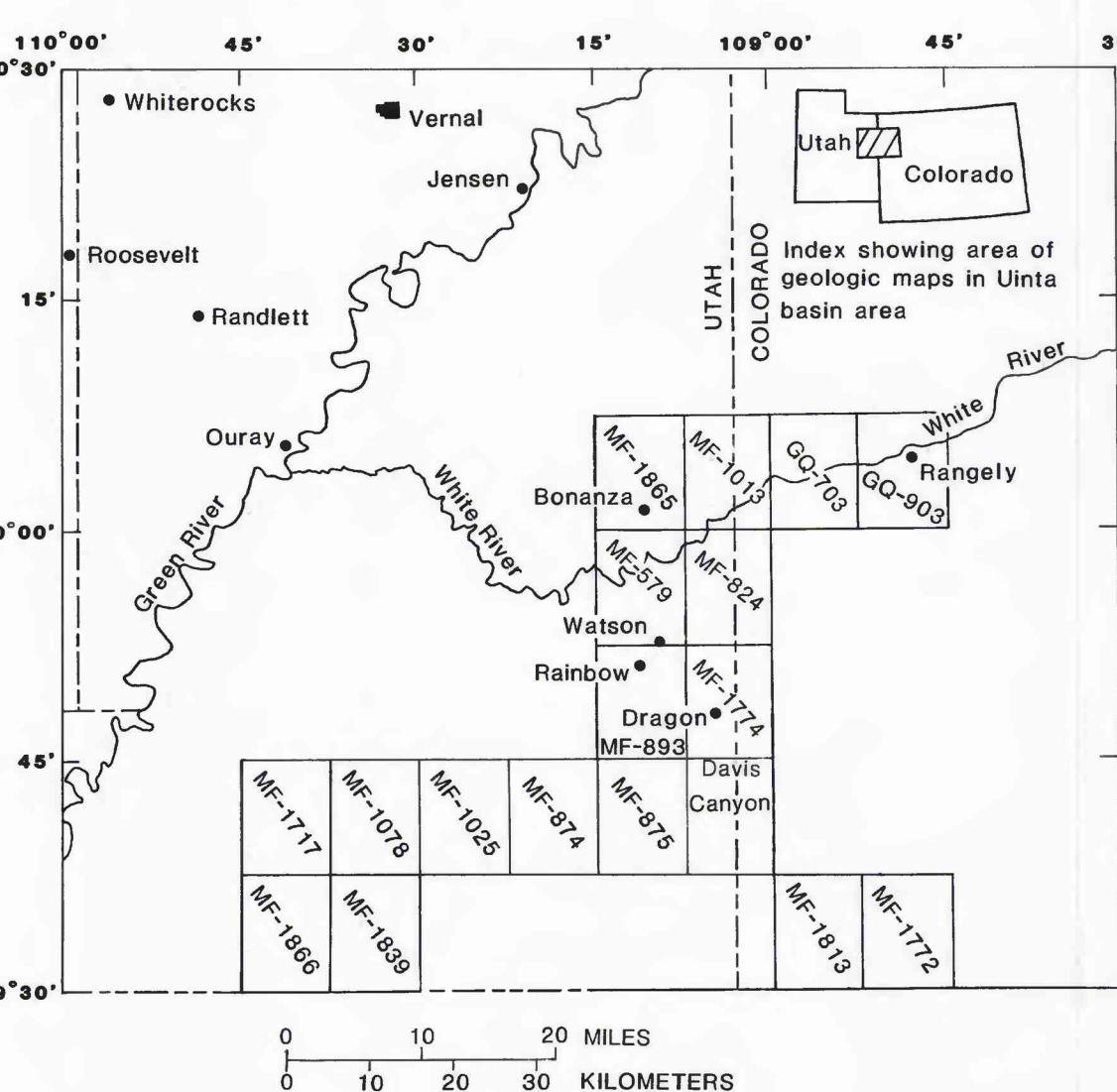
Qs SLUMP DEPOSITS (HOLOCENE AND PLISTOCENE)—Includes some talus, slope wash, and associated debris of slumping in southeastern part of quadrangle. Forms conspicuous hummocky topography. Commonly occurs on steep canyon walls along Green River Formation—Wasatch Formation contact and in areas of faulting. Other map units may be displaced as slump blocks

Tgp GREEN RIVER FORMATION (EOCENE)
Parachute Creek Member—Brown and gray marlstone, yellow-brown siltstone, gray, dark-brown to black oil-shale, and a few light-brown tuff beds. Marlstone and siltstone beds weather to light-brown or light-gray slopes and ledges. Oil-shale beds commonly form ledges that weather silver-gray or dark-brown. Parachute Creek Member contains richest oil-shale beds of Green River Formation; most of these beds are found in exposed Mahogany ledge (Mahogany zone in subsurface). Boundary between Parachute Creek Member and Douglas Creek Member is base of brown, well-laminated marlstone that overlies a light-gray to white algal limestone. Approximately 100 ft of lower part of Parachute Creek Member is exposed in quadrangle

Tgd Douglas Creek Member—Consists of brown sandstone and siltstone, light-gray and brown oolitic, ostracodal, and algal limestone, brown and gray marlstone, and gray-green and green claystone. Sandstone beds are fine grained. Sandstone and siltstone beds weather to ledges and cliffs that contain many channel-form features, locally displaying lateral accretion bedding. Five to ten ft of bitumen-impregnated sandstone underlies algal limestone that caps Douglas Creek Member. Upper part of sandstone has a ledgy appearance; bottom part is more massive. Locally, this sandstone outcrop is coated with bitumen that oozed from sandstone bed. Bitumen appears to lessen in northern and southern parts of quadrangle. Algal limestones weather white or light-gray and may form laterally extensive algal beds, locally from 1 foot to several feet thick. Oolitic and ostracodal limestone beds weather to yellow-brown or orange-brown ledges. Marlstone beds weather to gray or light-brown slopes. Claystone beds weather to slopes or to reentrants in cliff faces. Approximately 1,200 ft of Douglas Creek Member is exposed in quadrangle

Twt Top of Mahogany oil-shale bed—Dark-brown to black oil-shale weathering to blue-gray, silver-gray or dark-brown ledges. Mahogany oil-shale bed is richest oil-shale bed in Mahogany ledge and is located approximately 80 ft above Douglas Creek Member. Mahogany oil-shale bed and underlying rocks of Mahogany ledge cap ridges in west-central part of quadrangle. Mahogany oil-shale bed is about 10 ft thick in quadrangle

Tw Long Point Bed—Light-brown to tan ostracodal limestone marker bed that forms lower boundary of Douglas Creek Member of Green River Formation (R. C. Johnson, 1984). Bed weathers orange-brown to red-brown and forms ledge or bench. Long point bed is approximately 2 feet thick in quadrangle



Index map showing published U.S. Geological Survey geologic maps in the Uinta Basin and surrounding area in Utah and Colorado.

Tgc Cow Ridge Member—Part of Cow Ridge Member of Green River Formation (R. C. Johnson 1984) consisting of light-brown and tan, oolitic and ostracodal limestone, light-brown, fine-grained to very fine grained sandstone, and a few beds of gray shale. Unit forms ledges, cliffs, or benches where exposed in quadrangle. Unit is approximately 100 feet thick in northern part of quadrangle, thinning southward to a few thin (from 1 inch to several inches thick) ostracodal and oolitic limestone beds covered by Wasatch Formation and (or) slump of debris. Mapping of unit ended where beds are too thin or deeply buried to find; where very thin, unit is shown as a single line

WASATCH FORMATION (EOCENE)

Twt Unnamed tongue of Wasatch Formation—Maroon and gray shale and mudstone, and maroon and brown sandstone. Shale and mudstone beds weather to slopes and to reentrants in cliffs. Sandstone beds are fine grained and very fine grained, weathering to ledges or cliffs. Unit is approximately 100 ft thick in quadrangle and is mapped as part of main body of Wasatch Formation (Tw) in southern part of quadrangle where mapping of Cow Ridge Member of Green River Formation ends. Tongue may be part of unit X of Renegade Tongue of Wasatch Formation (Cashion, 1967)

Tw Main body—Consists of maroon, gray, and green shale and mudstone, and light-brown sandstone and siltstone. Shale and mudstone beds weather to popcorn-like surface. Sandstone beds are very fine to fine grained, locally displaying channel-form features. Sandstone and siltstone beds weather to ledges and cliffs increasing in abundance and thickness above Mesaverde Formation. Sandstone beds overlying Mesaverde Formation tend to be fine or medium grained and contain thin conglomerate beds. Conglomerate beds consist of black, brown, maroon, and gray chert and quartzite pebbles generally suspended in a medium-grained sandstone. Locally, this conglomerate-bearing sandstone underlies a white or yellow-white leached zone. Leached zone is commonly claystone from 1 foot to several feet thick, locally developed as thin lens of white sandstone and minor amount of claystone. Locally, there may be several leached zones and conglomeratic zones. Base of lowermost conglomerate-bearing sandstone is mapped as base of main body of Wasatch Formation in this quadrangle. Approximately 1,000 ft of Wasatch Formation is exposed in quadrangle

Kmv MESABER GROUP, UNDIFFERENTIATED (UPPER CRETACEOUS)—Gray and white sandstone, some gray silty and carbonaceous shale, and a few thin beds of coal. Sandstone beds are fine grained and massive, or may display contorted bedding. Locally, sandstone beds are white or yellow-white and display salt-and-pepper appearance. Coloration is thought to be kaolinite associated with weathering during time interval represented by overlying unconformity (Johnson and May, 1978, 1980). Topmost leached sandstone bed is mapped as Cretaceous-Tertiary contact. Sandstone beds are laterally extensive and show minor folding or undulations from a few feet to several tens of feet over areas ranging from a quarter of a mile to 1 mile along West Vacavation Creek, continuing southeast of quadrangle. Sandstone units range from several feet to about 60 ft thick. Locally, major sandstone units are separated by thin shale beds, some of which contain coal seams 0.25 in. or less thick. Approximately 100 ft of upper part of Mesaverde Group is exposed in quadrangle

CONTACT—Dashed where approximately located. All Quaternary units are approximately located

FAULT—Dotted where concealed, dashed where approximately located, queried where inferred. Bar and ball on downthrown side

—7500—STRUCTURE CONTOUR—Drawn on top of Mahogany oil-shale bed in western part of quadrangle. Drawn on top of Long Point Bed in eastern part of quadrangle. Dashed where projected above ground level. Queried where inferred. Datum mean sea level in both areas

o26 PLUGGED HOLE OR NO DATA—Number keyed to list of drill holes
+16 GAS WELL—Number keyed to list of drill holes

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- Cashion, W. B., 1967, Geology and fuel resources of the Green River Formation, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Professional Paper 548, 48 p.
- Johnson, R. C., 1984, New names for units in the lower part of the Green River Formation, Piceance Creek basin, Colorado: U.S. Geological Survey Bulletin 1529-1, p. 11-120.
- Johnson, R. C., and May, Fred, 1978, Preliminary stratigraphic studies of the upper part of the Mesaverde Group, the Wasatch Formation, and the lower part of the Green River Formation, DeBeque area, Colorado, including environments of deposition and investigation of palynomorph assemblages: U.S. Geological Survey Miscellaneous Field Investigations Map MF-1050. [Two sheets with an extensive text describing the Cretaceous-Tertiary unconformity and facies distribution in the overlying Tertiary].
- 1980, A study of the Cretaceous-Tertiary unconformity in the Piceance Creek Basin, Colorado—The underlying Ohio Creek Formation (Upper Cretaceous) redefined as a member of the Hunter Canyon or Mesaverde Formation: U.S. Geological Survey Bulletin 1482-B, 27 p.
- Keighin, C. W., 1977, Preliminary geologic map of the Burnt Timber Canyon quadrangle, Uintah County, Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-875, scale 1:24,000.
- Scott, R. W., Jr., and Pantes, M. P., 1985, Preliminary geologic map of the Dragon quadrangle, Uintah County, Utah, and Rio Blanco County, Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-1774, scale 1:24,000.

LIST OF DRILL HOLES IN DAVIS CANYON QUADRANGLE

[ND, no data available; 1 ft=0.305 m]

Drill-hole number (on map)	Operator	Drill-hole name	Total depth (feet)	Location (section-town-ship-range)
1	Coseka Resources USA Ltd.	Federal # 3-2-4-104	7,118	2-4S-104W
2	Coseka Resources USA Ltd.	Federal # 1-N-11	4,612	11-4S-104W
3	Coseka Resources USA Ltd.	Federal # 11-11-4-104	7,069	11-4S-104W
4	Bearfoot Oil and Gas Co.	ENT-Federal # 7-1	ND	7-13S-26E
5	Coseka Resources USA Ltd.	Federal # 11-14-4-104	6,948	14-4S-104W
6	Coseka Resources USA Ltd.	Federal # 6-23-4-104	7,192	23-4S-104W
7	Coseka Resources USA Ltd.	Federal # 3-14-4-104	7,402	14-4S-104W
8	Coseka Resources USA Ltd.	Federal # 13-12-4-104	6,800	12-4S-104W
9	Coseka Resources USA Ltd.	Federal # 8-11-4-104	6,866	11-4S-104W
10	Coseka Resources USA Ltd.	Federal # 7-12-4-104	6,870	12-4S-104W
11	Coseka Resources USA Ltd.	Federal # 12-13-4-104	6,693	13-4S-104W
12	Coseka Resources USA Ltd.	Federal # 13-24-4-104	6,586	24-4S-104W
13	Coseka Resources USA Ltd.	Federal # 13-25-4-104	6,615	25-4S-104W
14	Coseka Resources USA Ltd.	Federal # 5-25-4-104	6,678	25-4S-104W
15	Coseka Resources USA Ltd.	Federal # 1-35-4-104	4,242	35-4S-104W
16	Coseka Resources USA Ltd.	Federal # 16-2-5-104	6,895	2-5S-104W
17	ND	ND	ND	1-5S-104W
18	ND	ND	ND	24-4S-104W
19	Coseka Resources USA Ltd.	Federal # 9-25-4-104	6,751	25-4S-104W
20	Coseka Resources USA Ltd.	Federal # 5-7-4-103	4,029	7-4S-103W
21	Corra Energy Co.	Federal # 1-13	7,868	13-4S-104W
22	Coseka Resources USA Ltd.	Federal # 9-13-4-104	6,651	13-4S-104W
23	Coseka Resources USA Ltd.	Federal # 14-19-4-103	6,418	19-14S-103W
24	Coseka Resources USA Ltd.	Federal # 12-31-3-103	6,884	31-3S-103W
25	Coseka Resources USA Ltd.	Federal # 14-12-5-104	ND	12-5S-104W
26	Coseka Resources USA Ltd.	Federal # 2-35-13-25	8,140	35-13S-25E
27	Natural Gas Corp. of Ca.	State # 11-36	8,502	36-13S-25E
28	Coseka Resources USA Ltd.	Federal # 4-31-13-26	5,420	31-13S-26E
29	Coseka Resources USA Ltd.	Federal # 11-11-5-104	7,880	11-5S-104W