

## Burro Canyon Formation

Lower Cretaceous: Southwestern Colorado, northeastern Arizona, northwestern New Mexico, and southeastern Utah.

W. L. Stokes and D. A. Phoenix, 1948, U.S. Geol. Survey Oil and Gas Inv. Prelim. Map 93. Proposed to designate relatively thin sequence of rocks of probable Lower Cretaceous age lying between Morrison formation (Brushy Basin member) and Dakota sandstone. Includes essentially the same rocks as those designated post-McElmo by Coffin (1921, Colorado Geol. Survey Bull. 16). Consists of alternating conglomerate, sandstone, shale, limestone, and chert. Thickness 150 to 260 feet. Sandstones and conglomerates are gray, yellow, and brown; shales faintly varicolored, mainly purple and green.

E. B. Ekren and F. N. Houser, 1959, Am. Assoc. Petroleum Geologists Bull., v. 43, no. 1, p. 192-201. Described in Four Corners area where it is present in all four States. Thickness 140 to 206 feet. Intertongues with Brushy Basin member of Morrison. In Utah and Colorado, includes Karla Kay member (new) at base.

R. G. Young, 1960, Am. Assoc. Petroleum Geologists Bull., v. 44, no. 2, p. 157-158. This study indicates that two names, Cedar Mountain formation and Burro Canyon formation, have been applied to same phys-

ically continuous unit, which can be traced over wide areas of Colorado Plateau with no significant change in character. Proposed here to drop name Burro Canyon and retain older name Cedar Mountain for these noncarbonaceous deposits.

Type locality: Burro Canyon, sec. 29, T. 44 N., R. 18 W., San Miguel County, Colo.

Burro Canyon Fm.

1961

\*Weir, G. W., Puffett, W. P., and Dodson, C. L.,  
Collapse structures of southern Spanish Valley,  
southeastern Utah: USGS Prof. Paper 424-B  
p. B174, fig. 72.1

(200)  
qb

Low. Cret.

Utah

Burro Canyon Fm.

1962

Stokes, W. L., and Madsen, J. H., Jr., Northwest  
quarter - Geologic map of Utah, (scale 1:250,000):  
Utah State Land Board

col. 3, 5

Low. Cret.

Utah

Burro Canyon Fm.

1962

O'Sullivan, R. B., Age of Karla Kay Conglomerate  
Member of Burro Canyon Formation, Colorado and  
Utah: AAPG Bull., v. 46, no. 9, p. 1734.

Incl. Basal Karla Kay Mbr.

Early Cret.

Colorado and  
Utah

Burro Canyon Fm.

1963

\*Lohman, S. W., Geologic map of the Grand Junction area, Colorado: USGS Misc. Inv. Map I-404 (1:31,680)

Mapped with overlying Dakota Ss.

Lower Cret.

W.-Cent. Colorado

Burro Canyon fm.

1963

O'Sullivan, R. B., and Beikman, H. M., Geology, structure, and uranium deposits of the Shiprock quadrangle, New Mexico and Arizona: USGS Misc. Geol. Inv. Map I-345 (Sheet 1) (1:250,000)

Mapped with Brushy Basin mbr. of Morrison fm.

Jurassic

NW New Mexico  
NE Arizona

Burro Canyon Fm.

[1963]

Stokes, W. L., and Madsen, J. H., Jr., Geologic map of Utah, northeast quarter: Utah State Land Board, Project of College of Mines and Mineral Industries, Univ. of Utah (1:250,000)

Legend for eastern half of state. Date of publication in question. Apparently issued twice.

Low. Cret.

NE Utah



Burro Canyon Fm.

[1963]

Stokes, W. L., and Madsen, J. H., Jr., Geologic map of Utah, northeast quarter: Utah State Land Board, Project of College of Mines and Mineral Industries, Univ. of Utah (1:250,000)

Legend for eastern half of state. Date of publication in question. Apparently issued twice.

Low. Cret.

NE Utah

Burro Canyon Fm.

1963

\*Bromfield, C. S., and Conroy, A. R., Preliminary geologic map of the Mount Wilson Quadrangle, San Miguel County, Colorado: USGS Min. Inv. Field Studies Map MF 273 (Scale 1:24,000)

Brushy Basin Sh. Mbr. of Morrison Fm. incl. a thin equivalent of this Fm.

Early Cret.

SW Colorado

Burro Canyon Fm.

1964

Williams, P. L., Geology, structure and uranium deposits  
of the Moab quadrangle, Colorado and Utah: USGS Misc. Geol.  
Inv. Map I-360 (1:250,000)

Up. Cret.

E. Utah-W. Colorado

Burro Canyon fm.

1964

Hintze, L. F., and Stokes, W. L., Geologic map of southeastern Utah (1:250,000): Utah State Land Board.

Up. Cret.

SE Utah

Burro Canyon Fm.

1964

Whitkind, I. J., Geology of the Abajo Mountains  
area, San Juan County, Utah: U.S. Geol. Survey  
Prof. Paper 453

Plate 1, Table 2 (p. 9)

p. 27

Cret.

SE Utah

Burro Canyon fm.

1965

Ekren, E. B., and Houser, F. N., Geology and  
petrology of the Ute Mountains area, Colorado:  
USGS Prof. Paper 481

p. 18

P

L. Cret.

SW Colo.

Burro Canyon fm.

1965

Lohman, S. W., Geology and artesian water supply  
Grand Junction area, Colorado: USGS Prof. Paper 451.

Table 3, (p. 18), pls.,

p. 58

L. Cret.

W.-Cent. Colo.

Burro Canyon fm.

1965

Hansen, W. R., The Black Canyon of the Gunnison:  
USGS Bull. 1191

p. 24

p. 52-53

L. Cret.

W. Colo.



1966

Burro Canyon Fm.

Owen, D. E., Nomenclature of Dakota Sandstone  
(Cretaceous) in San Juan Basin, New Mexico and  
Colorado: AAPG Bull., v. 50, no. 5, May.

p. 1023 - 1028

G(200)

1024 (T.1)

Am3

Cret.

N.M. & Colo.

Burro Canyon Fm.

1966

Dickinson, R. G., Geology of the Cerro Summit  
Quadrangle, Montrose County, Colorado: Dissert. Abs.,  
sec. B, v. 29, no. 5, Nov. 043  
p. 1511 qD63

L. Cretaceous

SW. Colo.

Burro Canyon Formation

1966

\*Feltis, R. D., Water from Bedrock in the Colorado Plateau of Utah:

Utah. State Engineer's Office, Tech. Pub. 15.

p. 28, 43

F(273)  
qEn33t

Cretaceous

Utah

Burro Canyon Fm.

1966

Johnson, H. S. Jr., and Thordarson, William,  
Uranium Deposits of the Moab, Monticello, White  
Canyon, and Monument Valley Districts, Utah and  
Arizona: USGS Bull. 1222-H.

(200)

E

p. 17

L. Cret.

SE Utah

7-13-67

Burro Canyon Fm.

1966

Tidwell, W. D., Cretaceous Paleobotany of eastern Utah and western Colorado, in Central Utah Coals: A Guidebook prepared for GSA and Associated Studies, Utah Geol. and Mineralog. Survey, Bull. 80, Nov.

P. 87

(273)

B

L. Cret.

E. Utah-W. Colo.

7-12-67

Burro Canyon Fm.

1967

Cadigan, R. A., Petrology of the Morrison  
Formation in the Colorado Plateau Region:  
USGS PP 556.

p. 1-113  
6-7

(200)  
qB

7. 8

Low. Cret.

Colo. Plat.



Burro Canyon Fm.

1967

Bromfield, C. S., Geology of the Mount Wilson  
Quadrangle, Western San Juan Mountains, Colorado:  
USGS Bull. 1227.

p. 16

(200)  
E

Low. Cret.

SW. Colo.

Burro Canyon Fm.

1968

Shawe, D. R., Petrography of Sedimentary Rocks in  
the Slick Rock District, San Miguel and Dolores  
Counties, Colorado: USGS PP 576-B.

p. 6 (age), 25

(200)  
qB

Low. Cret.

SW. Colo.

Burro Canyon Fm.

1968

Hansen W. R., Geologic Map of the Black Ridge  
Quadrangle, Delta and Montrose Counties,  
Colorado: USGS Geol. Quad. Map GQ-747.

mapped with Dakota Ss.

Low. Cret.

WC: Colo.

Burro Canyon Fm.

1970

Cater, F.W. & Craig, L.C., Geology of the Salt  
Anticline Region in South-western Colorado: USGS  
PP637.

p. 1-80

(200)

7

detailed info. on each  
unit in this report

qB

42-44,

43-meas. secs.

44-age

Low. Cret.

SW. Colo.

Burro Canyon Fm.

1971

Hansen, W. R., Geologic Map of the Black Canyon  
of the Gunnison River and Vicinity, Western  
Colorado: USGS Misc. Geol. Inv. Map I-584.

Low. † U. Cret.

W. Colo.

Burro Canyon Fm.

1972

Hail, W. J. Jr., Reconnaissance Geologic Map  
of the Cedaredge Area, Delta County, Colorado:  
USGS Misc. Geol. Inv. Map I-697.

Low. Cret.

NC. Colo.

1972

Burro Canyon Fm.

Bryant, Bruce, Geologic Map of the Highland  
Peak Quadrangle, Pitkin County, Colorado:  
USGS Geol. Quad. Map GQ-932.

to show use

Cret.

WC. Colo.

Burro Canyon Fm. (200')

1973

Hedlund, D. C. and Olson, J. C., Geologic Map of the  
Carpenter Ridge Quadrangle, Gunnison County, Colorado:  
USGS Geol. Quad. Map GQ-1070.

ss & cgl; this unit is mapped w/ Dakota Ss.

Low. Cret.

wc. CO



Burro Canyon Fm. (43-180')

1974

Sear, R.S.; Marjaniemi, D.K.; Blomquist, J.T., A  
Study of the Morrison Formation in the San Juan Basin,  
New Mexico & Colorado: US At. Energy Comm., Rept.  
#GJO 912-20, Jan.

815

p. 1-102

qUn310

10

33-35

[Low, Cret.]

nw, NM & sw, CO

Burro Canyon Fm. (80- 200')

1974

Saucier, A. E., Stratigraphy and Uranium Potential of the Burro Canyon Formation in the Southern Chama Basin, New Mexico: NM Geol. Soc. Gdbk. no. 25 "Ghost Ranch".

white, lt. yellow to buff ss,  
lt. green to pink mudst., cgl

G(272)  
qN46f

G(272)  
qN46f

under: Dakota Fm. (U. Cret.)

over: Brushy Basin Mbr, Morrison Fm. (U. Jur.)

Rio Arriba Co.  
nc. NM

Low. Cret.

Burro Canyon Fm

1974

Hedlund, D. C., Geologic Map of the Big Mesa Quadrangle,  
Gunnison County, Colorado: USGS Geol Quad Map GQ-1153.

mapped with Dakota Ss

Low.Cret

sw.CO

Burro Canyon Formation (age and correl. inf.) 1979

Fouch, T. D., Hanley, J. H., and Forester, R. M., 1979, Preliminary correlation of Cretaceous and Paleogene lacustrine and related nonmarine sedimentary and volcanic rocks in parts of the eastern Great Basin of Nevada and Utah, in Newman, G. W., and Goode, H. D., editors, Rocky Mountain Association of Geologists and Utah Geological Association 1979 Basin and Range Symposium: p. 305-312.

G(271)

qR59f

Burro Canyon Fm. (which correlates with Newark Canyon <sup>and</sup> Fm<sup>s</sup>, and part of Sheep Pass Fm.) has palynomorph <sup>→ Lakota</sup> assemblages that cannot be as young as middle Aptian or older than late Barremian.

Low. Cret.

UT

Burro Canyon Fm [age info]

1979

\*Tweto, Ogden, Geologic Map of Colorado: U.S.G.S. in  
coop w/ Colorado Geol Survey, scale 1:500,000 M(271)2  
[updated list of names to show state use] 1979t

Cret-Jur

CO

Burro Canyon Fm

1980

Hintze, Lehi H. (compiler), Geologic Map of Utah:  
UT Geological & Mineral Survey, scale 1:500,000.  
(purpose: to update, since 1963, state use of stratig  
names in Utah)

mapped w/ Dakota Ss & Cedar Mtn Fm

Cret

UT

Burro Canyon (?) Fm

1988

\*Ridgley, J.L., \*Long, C.L., & Schreiner, R.A., Mineral resources of the Rio Chama wilderness study area, Rio Arriba County, New Mexico: USGS Bull 1733-C G(200) p. C1-12 qE

C5..see Ridgley (in press: MF-2046) for detailed geol map; ss & cgl ss, separated by ms at a few localities; unit is queried because detailed studies tying this seq to Burro Canyon at type (w. CO) have not been completed; up to 140' thick

under: Dakota Ss (undiv) (Late Cret)

over: Morrison Fm (Late Jur)

E. Cret

nc. NM