Bell Top Formation

Miocene: Southwestern New Mexico.

F. E. Kottlowski, 1953, New Mexico Geol. Soc. Guidebook 4th Field Conf., p. 145, 148 (chart). Consists of pumice, soft pinkish rhyolite tuffs, vitrophyre flows and dikes, banded rhyolite flows and domes interbedded with light-colored pumiceous and tuffaceous sand and sandstone, and a few lenses of stream gravel. Thickness more than 800 feet. Underlies Uvas basalt (new); overlies unnamed rhyolite.

Exposed in Las Cruces region of Rio Grande Valley.

1965

Bell Top Fm.

Lochman-Balk, Christina, Lexicon of Stratigraphic Names used in Southwestern New Mexico: in New Mexico. Geol. Soc., Guidebook, Southwestern New Mexico II, Field Conf. no. 16, Oct. G(272)
p. 93-109 qN46f

p.106

SW. New Mex.

Tert.

Bell Top Fm.

1970

Hawley, J.W.(ed. & Compiler), Cenozoic Stratigraphy of the Rio Grande Valley Area, Dona Ana County, New Mexico: The El Paso Geol. Soc. Guidebook #4, Ann. Field Trip, Mar.

G(245)
qEl 69f

18, 25, 26 (Fig. 5)

Cenoz.

SC. N.M.

Bell Top Fm. (age?) 1971

Seager, W. R., Hawley, J. W., Clemons, R. E., Geology of San Diego Mountain Area, Dañ̃a Ana County, New Mexico: New Mexico. Bur. Mines and Mineral Resources, Bull. 97. (272)
p. 1 - 38 B

Mio. in Bull. 1200, p. 292

9, 10-age

K-Ar: 35 m.y.
Olig. SC. N.M.

Bell Top Fm. (age ext?) 1973

Seager, W. R., Resurgent Volcano-Tectonic Depression of Oligocene Age, South-Central New Mexico: GSA Bull., v. 84, Aug. (Abs.) G(200)
p. VII-VIII G29

Mio. in B. 1200

Olig. SC. N.M.

Bell Top Fm. (lith, age)

1973

Seager, W. R., Resurgent Volcano-Tectonic Depression of Oligocene Age, South-Central New Mexico: GSA Bull. 84, #11, Nov. G(200)
p. 3611-26 G29
opp. 3612 (F. 2)
3613-14, 3618, 3622

ash-flow tuff, rhyolite flow, andesite

33-38 m.y.

SC. NM

Olig.

Bell Top Fm (1260-2000')

1973

Kottlowski, F. E., Pre-Pliocene Rocks in La Mesa Region, Southern Dona Ana County, New Mexico: El Paso Geol. Soc. Gdbk. #7, Apr.

p. 37-46
37, 42

G(245)
qE169f

ash-flow rhyolite tuff, tuffaceous ss, qz-latite tuff

underlies: Uvas Basalt

Sierra de las Uvas,
Sleeping Lady Hills
Robledo Mts.
sc. NM

Tert.

Bell Top Fm. (0-500') 1973

Clemons, R. E., and Seager, W. R., Cenozoic Geology of the Goodsight-Cedar Hills, Hills Volcanic-Tectonic Depression: El Paso Geol. Soc. Gdbk. #7, Apr.
p. 50-55 G(245)
52 qE169f
53

rhyolite, ash-flow tuff, basalt, w/pumice
lt. varicolored
under: Thurman Fm. (Olig. and Mio.)
over: Palm Park Fm. (Eoc.)

Olig.

sc. NM

Bell Top Fm. (age ch.) 1973

Clemons, R. E. & Seager, W. R., Geology of Souse Springs Quadrangle, New Mexico: New Mexico Bur. M. & M. R., Bull. #100.
p. 1-31 (272)
19- meas. secs. B

3-11 v(abs)-age, pl. 1 - lith
informally div. into 6 ash-flow tuffs, a basalt flow, and 2 sed. units of sts, ss, cgl

multi-colored (many red-gray units)

Olig. (near Las Cruces)
SC. NM

Bell Top Fm. (795') 1975

Seager, W. R.; Clemons, R. E.; Hawley, J. W., Geology of Sierra Alta Quadrangle, Dona Ana County, New Mexico: NM Bur. Mines & Min. Resources, B. 102.

p. 1-56, pl. in pocket (272)
12(T.1) B
7, 13 inf. subdiv.

varicolored tuff, tuffaceous ss., cgl., rhyolite, pumice, air-fall dept.
assoc. w/Cedar Hills rhy. complex (1050')(Olig.)

under: Uvas Basaltic Andesite(400')(Olig. to Mio.)
over: Palm Park Fm. (100-2000')(Eoc.)
33 m.y.
Olig.

sc. NM

Bell Top Fm. 1975
(Cedar Hills Rhyolite Complex)
Seager, W. R. and Clemons, R. E., Middle to Late Tertiary Geology of Cedar Hills-Selden Hills Area, New Mexico: NM Bur. Mines & Mineral Resource, Circ. 133. p. 1-23, 10(T.1), X-sec. in pocket (272)
9, 21, 11-age W. E. Elston qC
ash-flow tuff, rhyolite, porphyry, breccia
tan-white-pink-orange-black-purple-brown

under: andesite of Faulkner Canyon (Olig.-31.5 m.y.)
over: Palm Park Fm. (Eoc.)

39-33 m.y.
Olig.

sc. NM

Bell Top Fm.

1975

Seager, W. R., Geologic Map of South Half of San Diego Mountain Quad., New Mexico: NM Bur. Mines & Min. Resources, no. 35. (text on back).

under: Uvas Basaltic Andesite (Mio.)
over: Palm Park Fm. (Eoc.)

K-Ar:
39-26 m.y. (text)
Olig.

sc. NM

Bell Top Fm (1500') 1975

Clemons, R. E., Petrology of the Bell Top Formation:
NM Geol Soc Gdbk #26. G(272)
p 123-130 qN46f
125 (F 2)...strat chart
123-127

incl 12 inf varicolored mbrs of tuff, andesite, &
sedimentary material, and Cedar Hills rhyolite [mbr]

under: Uvas Basaltic Andesite (U Olig)
over: Palm Park Fm (Eoc)
interfingers: Thurman Fm

Low to M Olig sc. NM

Bell Top Fm

1976

Clemons, R.E., Geology of Northeast Quarter, Corralitos Ranch Quad. New Mexico: NM Bur. Mines and Mineral Resources Geol. Map no. 36.(sheets 1,2)

varicolored tuff, rhy, basalt

under: Uvas Basaltic Andesite (Mio)
over: Palm Park Fm (Eoc)

incl Cedar Hills flow-banded rhyolite [mbr]

Olig

s. NM

Bell Top Fm

1976

Elson, W.E. Glossary of Stratigraphic Terms of the Mogollon—Datil Volcanic Province, New Mexico: NM Geol. Soc. Sp. Pub. no. 5.
p.131-144 (picked up formal names only, many inf. names omitted) (detailed rept)
133, 134 incl. Cedar Hills Rhy. Mbr.

M. Tert

wc. NM

Bell Top Fm. (+ 1000') 1976

Clemons, R.E., Geology of Northwest Quarter, Corralitos Ranch Quad., New Mexico: NM Bur. Mines + Mineral Resources, Geol. Map 44 (in 2 Sheets)
13 inf. mbrs: varicolored sedimentary units, 6 tuff units, rhy. + basalt units

under: Uvas Basaltic Andesite(Mio)
over : Palm Park Fm(Eoc.)

39-35 m.y.
Olig. sw. NM

Bell Top ash-flow tuff 1976

Elston, W. E.; Rhodes, R. C.; Coney, P. J.; Deal, E. G., Progress Report on the Mogollon Plateau Volcanic Field, southwestern, New Mexico, no. 3--surface expression of a pluton: NM Geol. Soc. Sp. Pub. 5. p. 3-28(F.2 + 9 in pocket)

G(272)
N46sp

11(T.2) as used by Seager, '73

asymmet. shallow volc.-tecton. depression

[file w/Fm.]

Sierra de las Uvas
sw. NM

39 - 32 m.y.

Bell Top Fm (350-500 m) 1976

Clemons, R. E., Sierra de las Uvas ash-flow field, south-central New Mexico: NM Geol Soc Sp Pub 6 G(272)
p. 115-121 N46sp
115, 117(F.2)..strat col
115

under: Uvas Basaltic Andesite (25.9 & 26.1 m.y.=Olig)
over: Palm Park Fm (51-42 m.y.) & Rubio Peak Fm (37.6 m.y.) (Eoc)

incl. 6 ash-fl tuffs, Cedar Hills rhy, basaltic andesite, olivine-bearing basalt, 4 volc-clast mbrs, varicolored

Olig sc.NM

Bell Top Fm (max 1500') 1979

Clemons, R. E., Geology of Good Sight Mountains and Uvas Valley, southwest New Mexico: NM Bur Mines & Min Res Circ 169. (272)
p. 1-32, sheets 1 & 2 in pocket qC
(geol map & x-sec)
14-15
unconf over: Rubio Peak Fm (37-32 m.y.)
over: Palm Park Fm (51-35 m.y.)
see Clemons, '75, '76 for description of 13 inf mbrs incl 6 ash-flow tuffs, Cedar Hills rhy, basaltic andesite, andesite, basalt, & 4 interbedded sed units

36-33 m.y.
Olig sw.NM

Bell Top Fm 1989

Seager, W.R., Geology beneath and around the West Potrillo basalts, Dona and Luna Cos., New Mexico: NM Bur Mines and Min Res, "NM Geol.," v. 11, no. 3, Aug (272) p. 53-59, fig. 2..strat col Nmg

..West Potrillo Bas (Hoffer, 1976) consists of lava flows which bury older rocks and structures whose current ages and geometries are here summarized

55

under: Uvas Basaltic Andesite (Olig)
over: Rubio Peak Fm (l. Eoc-e. Olig)

Olig sw-sc. NM