

Uvalde Gravel¹

Uvalde Formation

Pliocene(?) : Southern Texas.

Original reference : R. T. Hill, 1891, *Am. Geologist*, v. 7, p. 368.

R. W. Mathis, 1944, *Jour. Sed. Petrology*, v. 14, no. 2, p. 87. Formation near Austin consists almost wholly of rounded flint cobbles and boulders and occasional limestone pebbles. Accumulations of this material are extensive coastward from Balcones fault. In vicinity of Austin, accumulations are on hilltops at elevations up to 320 feet above river level; they are not at definite level and do not form continuous deposit. Delaney gravel (new) tops hill 245 feet above river level on Delaney Ranch; this is lower than Uvalde formation.

A. W. Weeks, 1945, *Am. Assoc. Petroleum Geologists Bull.*, v. 29, no. 12, p. 1695 (fig. 1), 1703 (fig. 8), 1704-1707. Uvalde gravels discussed with Quaternary deposits of Texas Coastal Plain. Uvalde is restricted to deposits herein described, though it is possible that Uvalde of other geologists perhaps included writer's [Weeks] Uvalde as well as remnants of older terrace deposits which are no longer in place and which have come down

from higher levels as erosion progressed. Writer [Weeks] does not agree with Mathis' (1944) views on Uvalde formation or Delaney gravel; Delaney gravel may have come down from higher levels as erosion progressed and therefore may not be in place. Uvalde occurs between terrace deposits termed Bastrop Park and Asylum. Pleistocene.

H. R. Blank and others, 1952, Texas Univ. Bur. Econ. Geology Rept. Inv. 12, p. 10 (table 1), 16. Upland gravel (Uvalde formation), as much as 1 foot thick, unconformably overlies Pecan Gap formation and unconformably underlies Brazos River terraces near Waco. Pliocene(?).

Named for occurrences in vicinity of Uvalde, Uvalde County.

Uvalde gravel.

Tertiary ? (Pliocene ?) : Southern Texas.

R. T. Hill, 1891 (Am. Geol., vol. 7, p. 368). *Uvalde fm.*—Grand detrital deposit, 50 ft. thick, of either a fresh-water lake or great embayment of gulf, occurring 400 to 1,000 ft. above Rio Grande. Composed of flint and ls. pebbles and boulders, mostly from Comanche rocks, cemented by calc. matrix. Occurs on terraces, benches, and remnantal patches around perimeter of area from San Antonio to Del Rio, thence SE. through Mexico to indefinite distance coastward beyond Lampazos, Mexico.

A. C. Trowbridge, 1923 (U. S. G. S. P. P. 131, pp. 98–100). In 1891 Hill described remnants of a fm. that consisted of coarse and fine gravel cemented by a calc. matrix and that occupied terraces 400 to 1,000 ft. above Rio Grande to N. of this region. This he called *Uvalde fm.* Dumble applied *Reynosa div.* to the series of deposits forming the plateau btw. Nueces and Rio Grande, which he called the Reynosa Plateau. He stated that "Reynosa ls." of Penrose formed top memb. of his Reynosa div., which rested on Lagarto fm. These downstream deposits to which Dumble applied name *Reynosa* are now known to be same as the upstream remnants to which Hill applied name *Uvalde*, and the necessity for discarding one of the names has become apparent. In view of fact that *Reynosa* as applied to a part of this fm. has priority over *Uvalde*, and that the downstream deposits perhaps afford a better type loc., the name *Reynosa* has been adopted by U. S. Geol. Survey and "Uvalde" fm. has been abandoned.

A. Deussen, 1924 (U. S. G. S. P. P. 126, p. 102). The position of the ls. at Reynosa, Mex., only 50 ft. above the streamway and 732 ft. below the ls. at Torreccillas, 100 mi. to NW., would seem to suggest that it occupies a lower terrace than Torreccillas and Realitos terraces, and that its age is Pleist. rather than Plio. ~~type loc.~~ ~~and more definite information can be obtained as to age of the ls. at~~ type loc. It is considered advisable to continue the use of *Reynosa* as used by Dumble and Kennedy, it being well established in literature with this significance.

F. B. Plummer, 1933 (Univ. Tex. Bull. 3232, p. 777). *Uvalde* was name given by Hill to the upland gravel deposits of central and south Tex. Name is appropriate, applicable, and well defined. It was not generally accepted by geologists for a long time, however. Penrose had named the gravel and caliche deposits along Rio Grande *Reynosa*, for town of Reynosa, Mex. These Reynosa gravels are now thought to be Pleist., and younger than Uvalde gravel of Hill. No fossils have been found in the upland interstream deposits. The topographic position and general physiographic relationships of these deposits indicate so clearly that they antedate the river terraces that Hill's name must take precedence over others. The Uvalde gravels occur on the stream divides and in many places cap the highest hills in area S. of Edwards Plateau. They rest on fms. ranging in age from Lower Cret. to Mio. They are especially prominent in area btw. Brazos and Devils Rivers and occur in even greater thickness in northern Mex. Thickness, thin to 30 ft. Are younger than Goliad fm. and are correlated with basal part of Lissie fm. Are of late Plio. or oldest Pleist. age.

A. N. Sayre, 1934 (letter dated Dec. 29). *Uvalde fm.* is probably older than Lissie and is younger than Goliad. It is older than Reynosa at Reynosa, Mex. Name should be restored for the high-level gravels near Uvalde.

J. T. Lonsdale and J. R. Day, 1937 (U. S. G. S. W. S. P. 778). The Uvalde gravel of this rept. [on Webb Co., Tex.] is regarded as—in age to the high-level gravel near Uvalde. The materials are similar to the sand and gravel of the Goliad but are found at considerably lower altitudes and hence are probably younger.

The Tex. Geol. Survey and U. S. Geol. Survey have discontinued the use

of *Reynosa* in Tex. *Uvalde gravel* (Plio.?) is present approved name of U. S. G. S. for the high-level gravels near Uvalde, and *Goliad sand* (Plio.) is the approved name for the deposits that are apparently older than the Uvalde and that overlie Lagarto clay (restricted).

Uvalde Gravel

1952

Welder, F. A., and Reeves, R. D., Geology and
Ground-water resources of Uvalde County, Texas:

Texas Water Commission Bull. 6212.

490(245)

Strat. Column

T29b

p. 10, 27

Pliocene(?)

S.-cent. Texas

Uvalde

1962

Connell, J. F. L., A supplementary catalog of type
localities of Coastal Plain stratigraphic units:
Southeastern Geology, vol. 4, no. 1 S(231)
 So8

p. 4

Texas

Pliocene

Uvalde Formation

1961

Murray, Grover E., Geology of the Atlantic and Gulf Coastal Province of North America: New York, Harper and Bros.

p. 420

Pleistocene(?)

Texas
Atlantic and
Gulf Coasts

Uvalde gravel

1964

Welder, F. A., and Reeves, R. D., Geology and ground-water resources of Uvalde County, Texas: USGS Water Supply Paper 1584

Table 1, p. 22

Pliocene(?)

Cent. Texas

Uvalde Gravel

1966

*Alexander, W. H., Jr., and White, D. E., Ground-water resources of Atascosa and Frio Counties, Texas:

Texas Water Devel. Bd., Rept. 32, Dec.

P. 18, 24

490(245)

qT29r

Pliocene

Texas

Uvalde gravel

1968

Wilson, J. A., Position of Tertiary Shore Lines,
Texas Coastal Plain: in Abs. for 1967, GSA
Spec. Paper 115.

p. 506

G(200)
G29sp

Low. Plio.-
M. Pleist.

C. Texas

1970

Uvalde Gravel

* Follett, C. R., Ground-Water Resources of
Bastrop County, Texas: Texas. Water Devel. Bd.,
Rept. 109, Mar. p. 1-138 490(245)
13 qT29

p.26

Plio.?

EC. Tex.

Uvalde Gravel

1971

Byrd, C. L., Origin and History of the Uvalde
Gravel of Central Texas: Baylor Univ., Baylor
Geol. Studies, Bull. #20, Spring. G(245)
p. 1-48 qB35b

13-22 detailed study
29-age

Mio.-Plio.

C. Texas

Uvalde Gravel/Fm

1973

Epps, L.W., A Geologic History of the Brazos
River: Baylor Geol. Stud., B. 24, Spring.

p. 1-44

G(245)

qB35b

1, 30...unit is probably
time transgressive

p. 40

U. Plio. and Low. Pleist.

Brazos River
basin covers 15%
of state TX

Uvalde gravel (0-30')

1974

Morton, R.A., Delineation and Environmental
Application of Active Processes mapped in
Recharge Area of the Edwards Aquifer: TX Bur.
Econ. Geol., Rept. Inv. no. 81.

(245)

p. 204-219

T7ri

205 (T.1)

Plio?

Edwards Plat.
sc. TX

Uvalde Gravel (+20') (age ext?)

1974

Barnes, V. E., (Proj. Dir.), Geologic Atlas of Texas.
San Antonio Sheet: Texas U. at Austin, Bur. Econ.
Geol. (map & text)

(245)

qG29a

Plio(?) only in B. 1200

Plio. or Pleist.

TX

Uvalde Gravel (± 30')

1976

Barnes, V.E. (proj. dir.), Geologic Atlas of Texas,
Crystal City-Eagle Pass sheet: TX Geol. Atlas at
1:250,000. (245)

p. 1-6 (text + map)

qG29a

1

under: Lissie Fm. (Pleist.)

over : Goliad Fm. (Plio.)

Plio. to Pleist.

sc. TX

Uvalde Gravel (30')

1976

Barnes, V. E., Geologic Atlas of Texas, Brownwood Sheet:
TX Bur. Econ. Geol., U. at Austin, scale at 1:250,000
(map + text) (245)
p.1-21 G29a

under: playa dep.(Pleist.)
over : Indio Fm.(Eoc.)

Plio. or Pleist.

C.TX

Uvalde Gravel (up to 20')

1976

Barnes, V. E., Geologic Atlas of Texas, McAllen-Brownsville Sheet: TX Bur Econ Geol, U. at Austin, scale at 1:250,000 (map only)

under: Lissie Fm (Pleist)
over: Goliad Fm (Plio)

chert (pebbles & cobbles)

Plio or Pleist

sc.TX

Uvalde Gravel (20')

1976

Barnes, V.E., Geologic Atlas of Texas, Laredo Sheet: TX Bur.
Econ. Geol., University at Austin scale at 1:250,000 (map
only).

chert

under: Lissie Fm (Pleist.)

over: Goliad Fm (Plio)

Plio or Pleist.

sc. TX

Uvalde Gravel

1981

Barnes, V.E., project director, Geologic Atlas of Texas,
Sonora sheet, The Univ TX at Austin, Bur Econ Geol. scale
1:250,000 (R.T. Hazzard Memorial Edition) M(245)2s
2so

under: playa deposits (Pleist)
over: Austin Chalk (U. Cret)

Plio or Pleist

TX