U.S DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

SCIENTIFIC INVESTIGATIONS MAP 3105
Version 1.0

Pamphlet accompanies map

100°30′ 100°22′30″ 100°15′ 100°07′30″
29°37′30″ 29°30′ 29°22′30″ 29°15′

Base from U.S. Geological Survey Del Rio, Texas-Coahuila,1986, and Camp Wood, Texas, 1985, metric 100,000-scale maps
1927 North American Datum (NAD 27)
Projection: Universal Transverse Mercator, zone 14
Texas coordinate system, south central zone
Shaded relief base from U.S. Geological Survey National Elevation Dataset (NED), *http://ned.usgs.gov/)*

APPROXIMATE MEAN DECLINATION, 2005

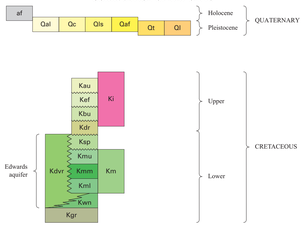
SCALE 1:50 000
1 1/2 0 1 2 3 4 MILES
1 .5 0 1 2 3 4 5 KILOMETERS
CONTOUR INTERVAL 10 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

TEXAS
MAP LOCATION

Drill hole RP–70–55–2AA
1.4 km southeast of map boundary (see fig. 8)

Geology mapped by D.W. Moore in 2005
Digital map database by Scott Snyders, Tom Adamson, Lyndsay Hazen, and D. Paco Van Sistine
Editing and digital cartography by L.J. Binder
Denver Publishing Service Center

CORRELATION OF MAP UNITS



LIST OF MAP UNITS

[Due to the addition of a shaded-relief base, colors in the List of Map Units may not exactly match unit colors on the map]

af	**Artificial fill (modern)**
Qal	**Alluvium (Holocene and late Pleistocene)**
Qc	**Colluvium (Holocene and late Pleistocene)**
Qls	**Landslide deposit (Holocene and late Pleistocene)**
Qaf	**Fan alluvium (Holocene and late Pleistocene)**
Qt	**Terrace alluvium (Pleistocene)**
Ql	**Leona Formation (Pleistocene)**
Ki	**Igneous intrusive rocks (Late Cretaceous)**
Kau	**Austin Chalk (Upper Cretaceous, Santonian-Coniacian)**
Kef	**Eagle Ford Formation (Upper Cretaceous, Turonian)**
Kbu	**Buda Limestone (Upper Cretaceous, Turonian-Cenomanian)**
Kdr	**Del Rio Formation (Upper Cretaceous, Cenomanian)**
Ksp	**Salmon Peak Limestone (Lower Cretaceous, upper Albian)**
Km	**McKnight Formation, undivided (Lower Cretaceous, Albian)**
Kmu	**Upper member**
Kmm	**Middle member**
Kml	**Lower member**
Kwn	**West Nueces Formation (Lower Cretaceous, Albian)**
Kdvr	**Devils River Limestone (Lower Cretaceous, Albian)**
Kgr	**Glen Rose Formation (Lower Cretaceous, lower Albian)**

EXPLANATION

Contact

Gradational boundary—A boundary on the geologic map depicted by a change in color of map units, but lacking a contact line symbol. The place where evidence is lost that allows detailed mapping of units and, across the boundary, only a more generalized, undivided unit is identifiable

Sinkhole

Terrace scarp

Dike

Normal fault—Solid where location is certain; dashed where approximately located, dotted where concealed. Bar-and-ball symbol on apparent relative downthrown side. Arrow and number indicate dip of fault plane

Normal fault, displacement unknown—Solid where location is certain, dashed where approximately located

Anticline—Solid where location is certain; dotted where concealed

Syncline—Solid where location is certain; dashed where approximately located

Monocline—Solid where location is certain; dotted where concealed

Horizontal bedding

Inclined bedding—Showing strike and dip

Inclined bedding, estimated—Showing strike and dip; bedding attitude estimated from oriented stereographic model

Type or reference section—Type or field reference section location, with name of site and source

- **WN I** **WN I**—Type section, West Nueces Formation (Lozo and Smith, 1964)
- **WN II** **WN II**—Type section, West Nueces Formation (Lozo and Smith, 1964)
- **M 1** **M 1**—Outcrop reference section, McKnight Formation (Lozo and Smith, 1964)

EDWARDS AQUIFER STUDY
LOGGING INFORMATION FOR WIDCO 1200 - GAMMA LOG
RP 70 55 2AA–0482–G
Odlaw Quadrangle

Date 4-29-82
Party M.I.A. FL. TS
Lat-Long. 29°14′22″ 100°10′10″
Well Number and Name RP–70–55–2AA
Elevation 1,080
Depth to Water 106 ft.
MP Ground level

GAMMA LOG
Initial Counter Setting 5.0 ft.
TC Switch 3
Zero 5.48
Vert. Scale 2.0
Log Depth 1,055
Final Counter Setting 5.0 ft.
Rec. Out 2.50 ft./min.
Span 9.11
Logging Speed 2.5

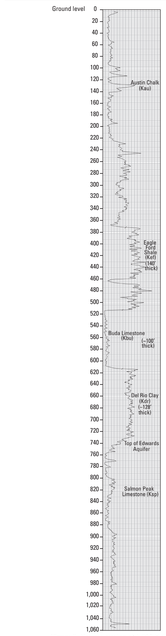
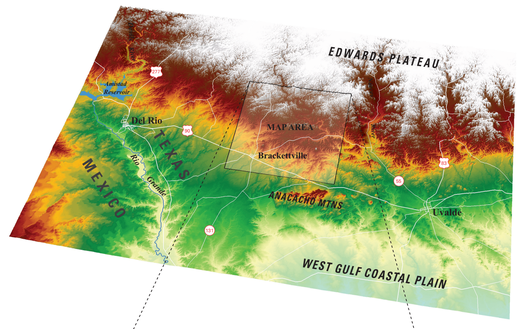
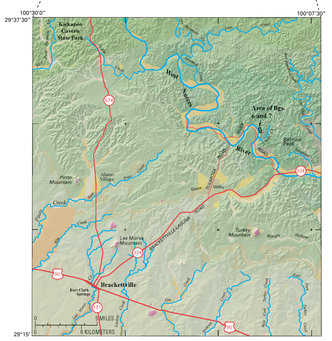


Figure 8. Gamma-ray log of 1,055-ft deep drill hole RP–70–55–2AA, drilled April 29, 1982. Location: Lat 29°14′22″N., long 100°10′10″, 1.4 km south of the boundary of the map area. Log shows gamma-ray record (from top to bottom) of partial Austin Chalk, (**Kau**), Eagle Ford Formation (**Kef**), Buda Limestone (**Kbu**), Del Rio Formation (**Kdr**), and partial Salmon Peak Limestone (**Ksp**). Depth below ground level is in feet.





Generalized map with shaded relief. Black box indicates the area of figures 6 and 7, the type section and type locality of the West Nueces Formation (Lozo and Smith, 1964). The topographic relief block diagram (above) places the mapped area in relation to highways and adjoining cities. It depicts a part of south-central Texas that includes the relatively low coastal plain in the foreground (pale and medium greens), and the higher plateau (dark terra cotta and white) in the middle and back ground to the north. The Balcones Escarpment separates these two provinces and is shown as a narrow, uneven yellow zone that extends east-west (right-left) in the United States. The region shown is approximately 100 mi in the east-west direction and 70 mi in the north-south direction (U.S. Geological Survey National Elevation Dataset (NED) 30-m resolution available at *http://ned.usgs.gov/*).

CONVERSION FACTORS

Multiply	By	To obtain
inches (in)	2.54	centimeters (cm)
feet (ft)	0.3048	meters (m)
miles (mi)	1.609	kilometers (km)

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GEOLOGIC MAP OF THE EDWARDS AQUIFER AND RELATED ROCKS IN NORTHEASTERN KINNEY AND SOUTHERNMOST EDWARDS COUNTIES, SOUTH-CENTRAL TEXAS

By
David W. Moore

2010

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