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

BULLETIN 1991
PLATE 2

U.S. GEOLOGICAL SURVEY
RESTON, VA.
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EXPLANATION

0.9 m, 25° — **Fault scarp**—Tick on downslope side; maximum relief across scarp less than about 10 m; value in meters is maximum relief across fault scarp; value in degrees is maximum scarp slope angle

Linear fault-related feature—Most are trenches, aligned notches, low scarps, aligned drainages, and vegetation lineaments

Subtle and (or) discontinuous fault-related feature—Many are vegetation and tonal-contrast (as interpreted from aerial photographs) lineaments

Q1B/Q1C — **Age of faulted surface**—Left symbol is oldest unfaulted surface; right symbol is youngest faulted surface; symbol alone shows youngest faulted surface, queried where uncertain

Geomorphic surfaces

Q1A — No desert varnish on surface cobbles and active bar-and-channel topography. Historic in age (0–200 years old)

Q1B — No to light desert varnish and inactive but well-defined bar and channel topography. Late Holocene age (about 200–2,000 years old)

Q1C — Medium to dark desert varnish and subdued bar-and-swale topography. Holocene age (about 2,000–10,000 years old)

0.3 m
Graben, 0.5 m deep
Complex graben
Trench
Stepped graben
1.0 m
0.9 m, 25°
Trench
0.4 m
Scarp in elevated alluvium
Southern extent of 18-km-long zone of faulted Q1B surface
Aligned notches
0.6 m
0.9 m; about 0.6 m dextral offset of channels
0.3–0.9 m
0.3 m
Q1A/Q1B
Q1A/Q1C
Small northeast-facing scarp on large southwest-facing scarp
Q1C; at least 3 faulting events
Fault surface exposed
Trench
Active channel offset 9 m dextrally
0.3 m; 7.3 m dextral offset of channel
0.3 m; 1.8 m dextral offset; salt bush and anthills along fault trace
Late Wisconsin longshore bar of Lake Manly
Ridges truncated by scarps
Vegetation lineament
Vegetation lineament
Tonal contrast in soil
En echelon pattern suggests right slip
Inferred northernmost Holocene activity on Death Valley fault
3 m
Area of figure 7
Cuts Lake Manly shoreline
2.4 m, 31°
Q1A/Q1B
0.2–0.3 m
Scarps; less than 1 m
Trench
En echelon trenches
Trench
Large bedrock scarp

Plate 1C

Base from U.S. Geological Survey, 1:62,500
Stovepipe Wells and Chloride Cliff, 1952

APPROXIMATE MEAN DECLINATION, 1991

SCALE 1:62 500
1 ½ 0 1 2 3 4 MILES
1 .5 0 1 2 3 4 KILOMETERS
CONTOUR INTERVAL 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MAP LOCATION

Geologic mapping by G.E. Brogan, 1969–79.
Field checked by C.L. Terhune in 1986 and by K.S. Kellogg and others in 1989.

LINEAR FEATURES OF THE DEATH VALLEY BUTTES AND BEATTY JUNCTION SECTIONS, FURNACE CREEK FAULT ZONE, CALIFORNIA

By

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1991