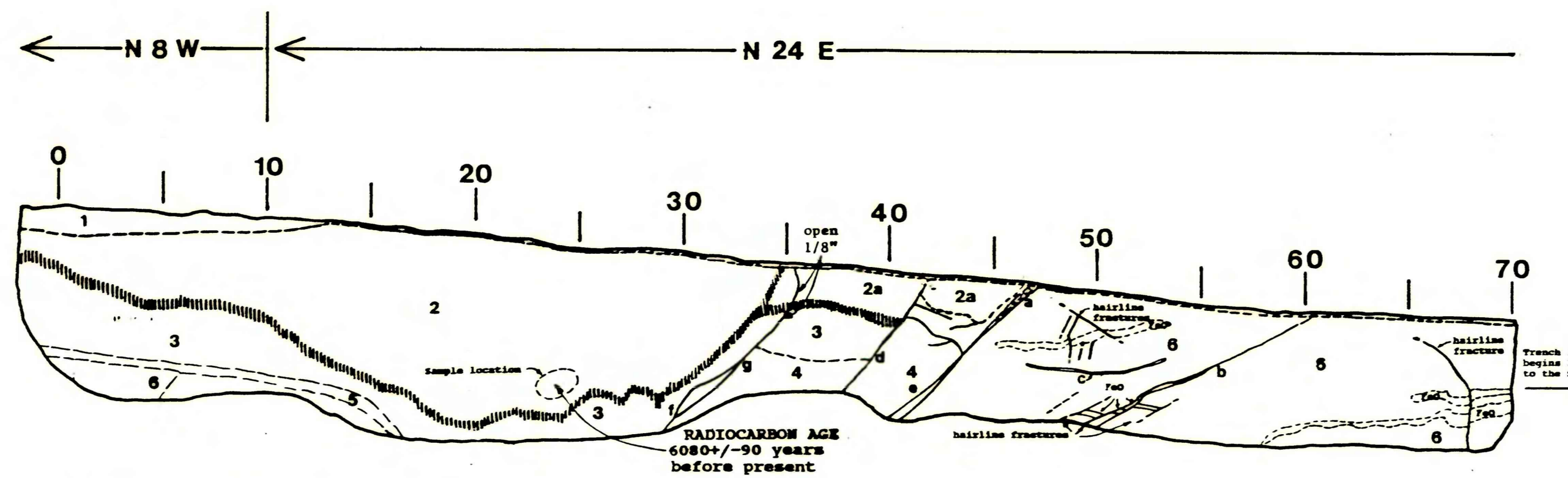


This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, product or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.



EXPLORATORY TRENCH 17A

- UNIT 1: ARTIFICIAL FILL
- UNIT 2: SAND AND SILT WITH TRACE CLAY. Very dark grayish brown (10YR 3/2) when moist, grayish brown (10YR 5/2) when dry. Contains siltstone and sandstone clasts ranging in size from 1/8" to 4" in diameter. Basal contact is gradational over 2-3" along UNIT 3, gradational over 6" along UNIT 6, and gradational over 2-7" along UNITS 5 and 6.
- UNIT 2A: SILT WITH SOME SAND. Yellowish brown (10YR 5/6 to 5/8) with orange and gray mottling. Contains clasts of very hard sandstone and siltstone 1/2" to 3" in diameter. Massive with blocky fracturing. Hard to friable. Basal contact is gradational over 2-4" along UNIT 3, sharp to clear and irregular along UNIT 4.
- UNIT 3: SAND WITH SOME SILT AND TRACE CLAY. Yellowish brown (10YR 5/6). Sand is very fine grained and contains sandstone and siltstone clasts up to 8" in diameter. The larger clasts are near the base of the unit. Basal contact is gradational over 1-3".

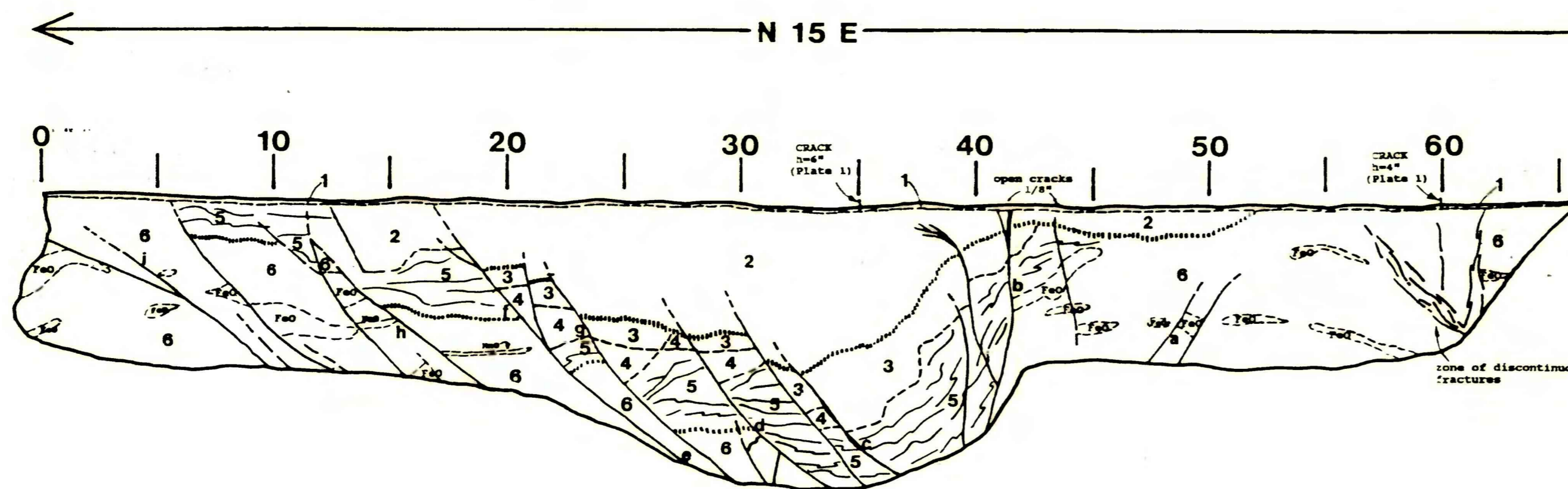
- UNIT 4: SANDSTONE. Light yellowish brown (2.5Y 6/4 to 7/4). Sand is very fine to medium grained and massive. Contains wavy 1/4" to 2" wide bands of light brown, silty fine sand. Basal contact not exposed.

UNITS 5 & 6 See Trench 18 for descriptions.

NOTES:

- a) Fracture N35W/43NE, 1-4" wide contains faint brown laminations parallel to shear plane, probable shear fabric; occasional subangular blocks of hard sandstone along fractures.
- b) fracture N33W/37NE, 1/8-1/2" wide offsets iron oxide layer 1.8".
- c) Fine to medium grained sand with dark brown to black manganese dioxide coating grains and forming small 1/16" concretions.
- d) fracture N51W/50NE
- e) fracture N30W/45NE
- f) fracture N31W/52NE
- g) Along this fracture system on the opposite wall a sandstone bed is offset 8".

EXPLORATORY TRENCH LOGS FOR EXAMPLE #2 LOCATION

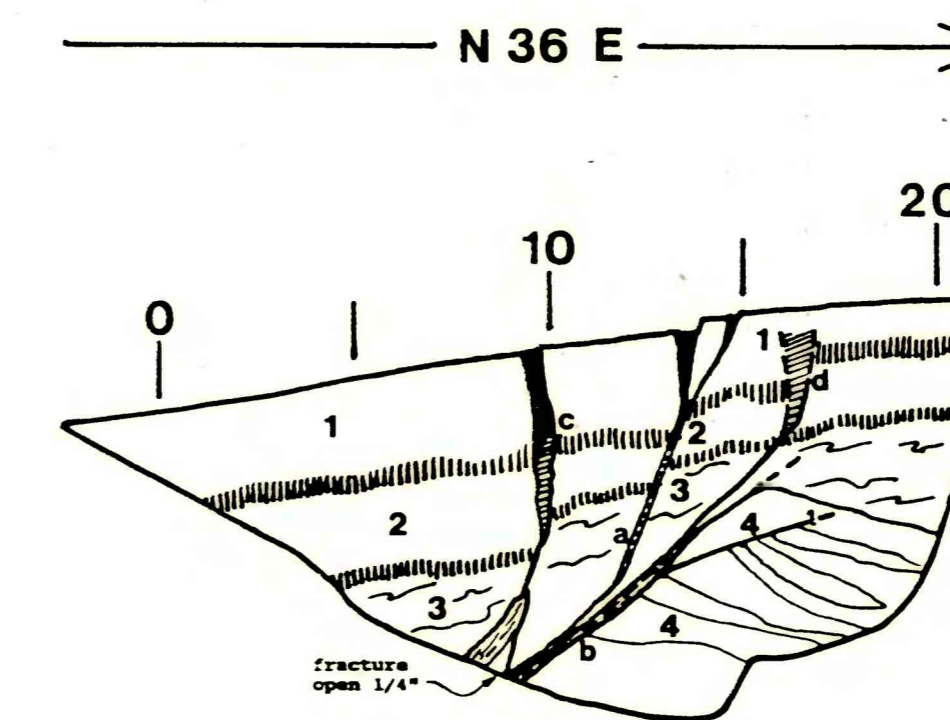


EXPLORATORY TRENCH 17B

- UNIT 1: ARTIFICIAL FILL
- UNIT 2: SAND AND SILT WITH TRACE CLAY. Very dark grayish brown (10YR 3/2) when moist, grayish brown (10YR 5/2) when dry. Contains siltstone and sandstone clasts ranging in size from 1/8" to 4" in diameter. Basal contact is gradational over 2-3" along UNIT 3, clear over 1-2" along UNIT 5, and gradational over 6" along UNIT 6.
- UNIT 3: SAND WITH SOME SILT AND TRACE CLAY. Yellowish brown (10YR 5/6). Sand is very fine grained and contains angular to subangular sandstone and siltstone clasts up to 8" in diameter. The larger clasts are near the base of the unit. Basal contact is clear over 1-3".
- UNIT 4: SILTSTONE. Dark reddish brown (5YR 3/4) on a weathered surface, to light gray (2.5Y 7/2) on a fresh surface. Massive with blocky fractures. Moderately hard to friable. Basal contact clear and irregular over 1-2".
- UNIT 5: SANDSTONE. Light yellowish brown (2.5Y 6/4 to 7/4). Sand is very fine to medium grained and massive. Contains wavy 1/4-2" wide bands of light brown, clayey fine grained sand. Basal contact is diffuse over 6-12".
- UNIT 6: SANDSTONE. Pale yellow (5Y 7/4). Very fine to fine grained sand with trace silt. Occasional pockets of fine grained sand. Massive, moderately hard to friable, moderately to deeply weathered. Oxidized zones and mottling, brownish yellow (10YR 6/8) to strong brown (7.5YR 5/8). Oxidized zones contain sand with some silt and clay. Basal contact not exposed.

NOTES:

- a) fracture N72W/46NE, hairline
- b) fracture N53W/90, 1/4" wide, filled with older colluvium that is hard and compact
- c) fracture N41W/47SW, 1/8-1" wide
- d) fracture N48W/45SW, 1/8-1/2" wide
- e) fracture N65W/29SW, 1/8" wide
- f) fracture N52W/50SW, 1/8-1/4" wide
- g) Corresponding fracture on opposite wall is 1-2" wide filled to 5' with colluvium that is loose and friable.
- h) fracture N44W/49SW, 1/16-1/8" wide
- i) fracture N50W/48SW



EXPLORATORY TRENCH 18

- UNIT 1: SILT WITH SAND. Dark grayish brown (10YR 4/2). Contains subangular sandstone clasts up to 2" in diameter. Clasts increase in size toward base of unit. Abundant roots. Large subangular blocky peds. Moderately hard to loose. Basal contact diffuse over 8".
- UNIT 2: SILTY SAND WITH SOME CLAY. Yellowish brown (10YR 5/4). Sand is very fine to fine grained and massive. Contains sandstone and siltstone clasts up to 2" in diameter. "B" soil horizon formed in upper portion of unit. Weakly developed clay films. Basal contact is sharp along fracture planes and diffuse over 6-8" along UNIT 3.
- UNIT 3: SAND WITH TRACE SILT. Yellow (2.5 7/6). Sand is very fine to medium grained with yellowish brown (10YR 5/6) wavy banding (in filled fractures?). Pockets of medium grained sand (UNIT 5 Trench 18). Basal contact is gradational over 1-2".
- UNIT 4: INTERBEDDED SILTSTONE AND SANDSTONE. Siltstone is dark reddish brown (5YR 3/4), sandstone is light yellowish brown (2.5Y 6/4 to 7/4). Moderately hard to medium hard, blocky fracturing and deeply weathered [difficult to obtain reliable bedding attitude]. Basal contact unexposed.

NOTES:

- a) fracture N73W/37SW
- b) fracture N80W/90
- c) Fractures filled with colluvium, upper portion is loose and friable and contains roots and sticks, lower portion filled with more indurated, slightly weathered (?) material.
- d) Older fracture filled with moderately indurated, weathered colluvium from "A" soil horizon.

EXPLORATORY TRENCH LOGS

EXAMPLE #2 LOCATION

DRAWN	VNB	SCALE	1" = 5'
DATE	9/90	JOB #	30062 SCZ
CHECKED			
MAPPED	GSV	TEM	