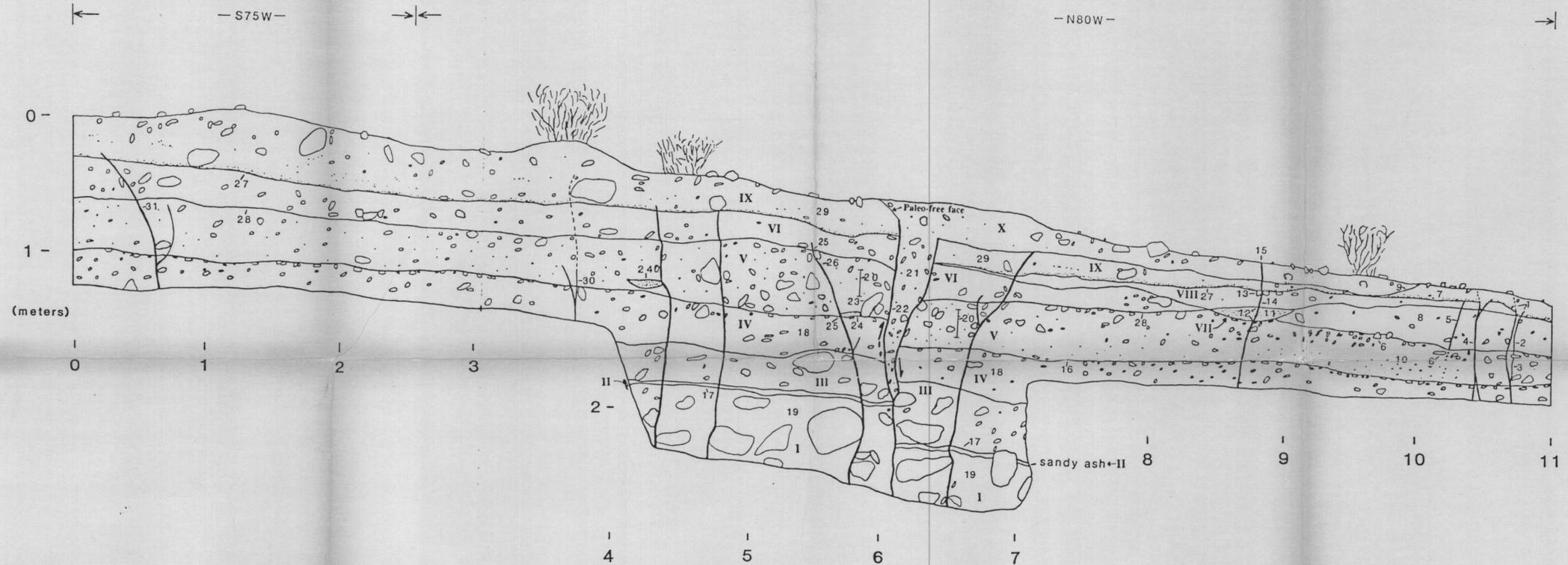


LOG OF TRENCH AT EXCAVATION SITE 1



ANNOTATIONS

- 1 Small fracture pair cut, but does not displace, contact. Westernmost fracture may extend to the surface, however the relations are not clear.
- 2 Orientation of fracture is N37°E88°W.
- 3 Coarse sand and pea gravels weakly cemented by carbonate along fracture.
- 4 Fracture orientation is N18°E90° and cuts, but does not displace contacts. Fracture is marked by a 2 to 10 cm wide zone of loose sand and gravel.
- 5 Small fracture which does not appear to cut unit described in Annotation 10 - probably due to the poor preservation of fractures in this unit.
- 6 Undersides of clasts have a thin discontinuous carbonate coating - juvenile Stage I.
- 7 Matrix-supported debris flow deposit with few cobbles.
- 8 Well-indurated matrix-supported debris flow with subangular cobbles. This unit forms overhangs and preserves fractures well. Matrix consists of fine sand and pea gravel.
- 9 Lenses of fine sand, silt, and clay with mud cracks along contact.
- 10 Loose to weakly indurated matrix-supported debris flow with few subangular cobbles. Matrix consists of sand and pea gravel.
- 11 Massive sand lens composed mostly of coarse, angular sand with some fine sand.
- 12 Apparent normal offset of 2 to 3 cm is possible.
- 13 West vertical face of clast has continuous, moderately thick (relative to Annotation 6) carbonate coating, and underside has only thin discontinuous carbonate coating. This may imply that either the clast has been rotated (preferred interpretation) or that the moderately thick coating was present on the clast at time of deposition.
- 14 Orientation of fracture is N28°E74° to 83°E.
- 15 The fracture described in Annotation 14 was traced into the log for a distance of about 80 cm. This fracture may have disrupted the surface, but due to surficial disturbance it can only be identified to within about 4 cm of the surface.
- 16 A stone line along this contact (paleosurface of the early Marble unit?) and a ledge-forming, well-indurated deposit below make it possible to follow the contact from the east end of the trench to a log (sample 5-TS-1-28FC) radiocarbon dated at 1555 calB.P. (Table 2). This contact is displaced 15 cm across the fault described in Annotation 22.
- 17 Reworked sandy ash to ashy sand is offset about 32 cm by apparent normal displacement(s) along fracture described in Annotation 22. This is a probable Mono tephra ranging in age from 3400 to 4100 yrBP (Appendix IV).
- 18 A well-indurated gravel-cobble unit that forms overhangs and preserves fractures well.
- 19 Very bouldery deposit with loose sandy matrix. Continuous, thin to moderately thick carbonate coatings on underside of boulders.
- 20 Relative stratigraphic position of sample # 5-TS-1-28FC (discussed in Annotation 16).
- 21 Fissure filling composed of about equal proportions of sand, gravel, and cobbles with no observable stratigraphy or imbrication.
- 22 Fracture orientation is N17°E80°W. This is the only fracture that clearly offsets the strata in the trench.
- 23 Possibly rotated based on a thin continuous carbonate coating on its east face and only a thin discontinuous coating on its underside.
- 24 Lens of finely laminated very fine sand and silt with a minor amount of coarse sand.
- 25 This contact appears to be broadly warped where it crosses the fracture described in Annotation 26.
- 26 Fracture orientation is N17°E78°W. Thin carbonate coatings occur along this fracture, which does not offset strata.
- 27 Along contact, the undersides of clasts have a discontinuous "dusting" of powdery carbonate.
- 28 Along contact, clasts have thin discontinuous to continuous carbonate coatings on undersides - juvenile stage I carbonate.
- 29 Moderately indurated unit that forms overhangs and is composed of sand and gravel with rare large cobbles.
- 30 Fracture appears to warp contacts and may extend into the unit described in Annotation 29.
- 31 Orientation of fracture is N34°W72°E. This fracture apparently does not offset strata.

by  
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EXPLANATION

- Stratigraphic contact; dashed where inferred
- Fractures; dashed where inferred; dotted where uncertain
- Cobbles and boulders
- Annotation
- Plant
- Stratigraphic unit

PROCEDURES

The trench wall was cleaned with hand tools and brushes. This procedure was occasionally repeated to provide fresh exposures. A horizontal baseline or datum was constructed along the wall from heavy nails and sturdy string. The horizontality of the datum was determined with a line level. The datum was demarcated at one meter intervals. Key stratigraphic contacts and geologic structures were delineated by nails and colored flagging. The trench was logged by measuring along, and vertically from the datum to contacts and structures.