



DESCRIPTION OF LITHOLOGIC UNITS

Upper Hookton Formation (Late Pleistocene)

Unit 7:

Younger ↑	7 _V	Silty clay and clayey silt with some fine sand. Strong brown (7.5 YR 5/8 dry) with pinkish white (7.5 YR 8/2 dry) coatings along columnar and blocky ped faces; sand content increases with depth; very poorly stratified to massive; strongly oxidized; locally contains manganese-oxide nodules.
	7 _{IV}	Moderately sorted fine sand with silt and some clay. Mottled very pale brown (10 YR 7/3 dry) and reddish yellow (7.5 YR 6/8 dry) with light gray (5 Y 7/1) to gray (5 Y 6/1) coatings along ped faces; predominantly subrounded to subangular quartz sand; locally contains stringers of manganese-oxide nodules; A/B indicates transition between A soil horizon, which has been stripped in most places (not mapped), and a Bt soil horizon developed on Unit 7 _V (see Table 4-1 for detailed soil profile description).
	7 _{IIIa}	Silty clay layer at the top of unit 7 _{III} .
	7 _{III}	Fining-upward sequence of interbedded sand and silt. Dark grayish brown (2.5 YR 4/2) to gray (5 Y 5/2 moist) and strong brown (2.5 YR 5/2 moist) where oxidized; layers of well-sorted fine to medium sand interbedded with thin (<1 cm) lenses of silt grading upward to clayey silt and silty clay; locally contains fine gravel along the basal contact; locally contains woody material.
	7 _{II}	Silt interbedded with some fine sand and clayey silt. Dark gray; massive to weakly stratified layers of sandy silt and clayey silt with some lenses of fine sand and silty clay; bedding is discontinuous laterally.
Older ↓	7 _I	Silty clay. Dark gray; generally massive.

EXPLANATION

— · — · — · — ·	Lithologic contact; solid line where resolution is less than 2 cm, dashed line where 2 to 5 cm; dotted line where 5 to 15 cm.
— — — — —	Very abrupt to abrupt soil horizon boundary (<1 mm to 2.5 cm resolution).
— · — · — · — ·	Clear to gradual soil horizon boundary (>2.5 cm to 12.5 cm resolution).
— / — / — / — /	Fracture
■	Radiorcarbon sample

Note:
See Figure 4-2 for location of trench and boundaries of ISFSI site.

- 1) N87E:88SE - 2mm - wide, planar fracture lined with light gray clayey silt
- 2) N77E:88SE - 2mm - wide, planar fracture lined with light gray clayey silt
- 3) N29W:73NE - 2mm - wide, planar fracture lined with light gray clayey silt
- 4) N84E: -90 - irregular fracture
- 5) Pair of conjugate fractures; N87E:90 and N29W: -70NE
- 6) N80E:N88E - planar fracture lined with light gray clayey silt

D-01

SAFETY ANALYSIS REPORT
HUMBOLDT BAY ISFSI
FIGURE 2.6-43
LOG OF TRENCH GMX-T2