DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN FILE
1972

DH-4
Altitude: 64 ft above MLLW
SW¼SW¼NE¼ sec. 23, T. 41 S., R. 67 E.
Methodist Church Site

| Unit | Depth (ft) | Thickness (ft) | Description |
|---|---|---|---|
| 1 | 0-3 | 3 | Fill: Gravel, silty, sandy, brown |
| 2 | 3-5.8 | 2.8 | Peat: Contains pieces of charcoal, lenses of sand and gravel; water flowed for short period |
| 3 | 5.8-8.1 | 2.3 | Older delta deposits: Gravel, silty, sandy, brown; moderately firm with minor amounts of clay |
| 4 | 8.1-14.5 | 6.4 | Sand, silty, gravelly, gray; soft with minor amounts of clay, gravel lenses at 12.5 and 14 ft, scattered cobbles throughout |
| 5 | 14.5-34.5 | 20.0 | Glaciomarine deposits, first phase: Gravel, silty, sandy, gray; compact, foraminifera recovered from core at 34 ft; natural bulk densities range from 2.27 g/cc to 2.61 g/cc, natural moisture from 0.9 to 9.8 percent |
| 6 | 34.5-46.8 | 12.3 | Sand, silty, gravelly, gray; soft with scattered cobbles; core from 40-48.6 ft had only 1 ft recovery; swamp gas emitted from hole for several days; natural bulk density 2.41 g/cc, natural moisture at 34.5-35.0, 11.6 percent; may represent change in depositional cycle |
| 7 | 46.8-62.0 | 15.2 | Gravel, silty, sandy, gray; very compact; recovered foraminifera from core at 55 ft; natural bulk densities range from 2.36 g/cc to 2.57 g/cc, natural moisture from 2.0 to 6.4 percent |

DH-3
Altitude: 119 ft above MLLW
SE¼SE¼SE¼ sec. 26, T. 41 S., R. 67 E.
Behind Douglas Elementary School

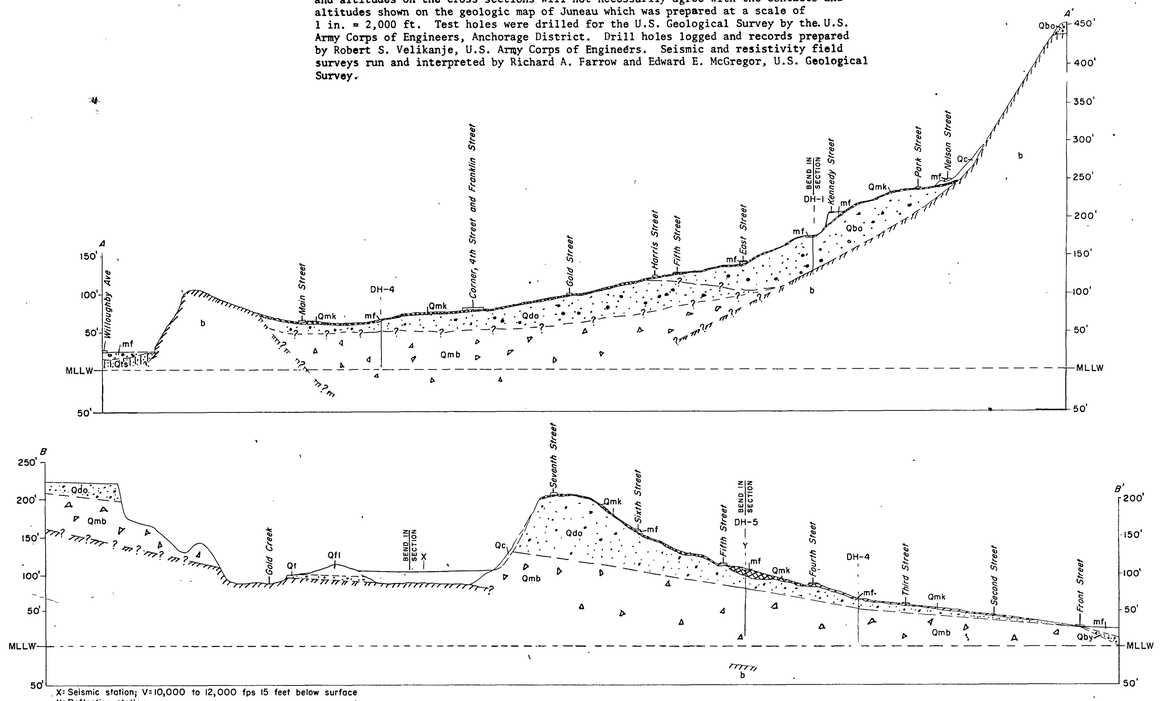
| Unit | Depth (ft) | Thickness (ft) | Description |
|---|---|---|---|
| 1 | 0-2.5 | 2.5 | Fill: Gravel, silty, sandy, brown |
| 2 | 2.5-26.7 | 24.1 | Glaciomarine deposits, first phase: Gravel, silty, sandy, gray; compact with scattered pebbles, thin sandy lenses or zones, and cobbles and boulders; foraminifera recovered from core at depths of 17, 18, and 22.5 ft; natural bulk densities range from 2.00 g/cc to 11.0 g/cc, natural moisture from 3.9 to 12.0 percent |
| 3 | 26.7-33.3 | 6.6+ | Bedrock: Slate, vertical cleavage |

Explanation of geologic units

| | |
|---|---|
| mf | Manmade fill |
| Qmk | Peat |
| Qa | Colluvium |
| Qfl | Debris-flow deposits |
| Qt | Terrace deposits |
| Qht | Intertidal deposits |
| Qby | Modern beach deposits |
| Qbe | Older raised beach deposits (thin and continuous) |
| Qbo | Older raised beach deposits (thick and local) |
| Qdo | Older delta deposits |
| Qmb | Glaciomarine deposits, first phase |
| b | Bedrock, undifferentiated |

NOTE

Topography in cross sections is from maps prepared for the municipalities of Juneau and Douglas, Alaska, by Wyller, Van Doren, and Hazard, at a scale of 1 in. = 200 ft; also modified from measured sections collected as part of this study. Geologic contacts and altitudes on the cross sections will not necessarily agree with the contacts and altitudes shown on the geologic map of Juneau which was prepared at a scale of 1 in. = 2,000 ft. Test holes were drilled for the U.S. Geological Survey by the U.S. Army Corps of Engineers, Anchorage District. Drill holes logged and records prepared by Robert S. Velikanje, U.S. Army Corps of Engineers. Seismic and resistivity field surveys run and interpreted by Richard A. Farrow and Edward E. McGregor, U.S. Geological Survey.

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This illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.

Figure 9.--Cross sections A-A' and B-B', through parts of Juneau, Alaska, and C-C', through the northern part of Douglas, Alaska, and boring logs of drill holes shown on the cross sections

DH-1
Altitude: 174 ft above MLLW
SE cor. NW¼NE¼ sec. 23, T. 41 S., R. 67 E.
Near Sixth and Kennedy Sts.

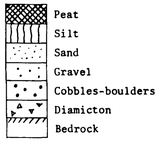
| Unit | Depth (ft) | Thickness (ft) | Description |
|---|---|---|---|
| 1 | 0-2 | 2 | Fill: Scattered rocks, bottles, wood, and rusty cans |
| 2 | 2-5.5 | 3.5 | Older raised beach deposits (thick and local): Gravel, silty, sandy, brown; some wood fragments |
| 3 | 5.5-15 | 9.5 | Gravel, silty, sandy, 3/4-in. maximum, gray; cobbles in lower 2 ft |
| 4 | 15-22.5 | 7.5 | Sand, silty, gray; contains some small pebbles |
| 5 | 22.5-27.2 | 4.5 | Gravel, silty, sandy, gray; more gravelly in upper 2 ft with shell fragments, clayey or silty lenses in lower 2 ft |
| 6 | 27.2-38.0 | 10.8 | Sand, silty, gravelly, gray; abundant cobbles with shell fragments in upper 1 ft and in middle; artesian flow of water at 36-ft depth, est. 1-2 gal/min |
| 7 | 38-44.5 | 6.5 | Sand, medium, silty, gray; becomes finer in lower 4 ft |
| 8 | 44.5-52.0 | 7.5+ | Bedrock: Greenstone |

DH-5
Altitude: 107 ft above MLLW
NW¼SW¼NE¼ sec. 23, T. 41 S., R. 67 E.
State Capitol*

| Unit | Depth (ft) | Thickness (ft) | Description |
|---|---|---|---|
| 1 | 0-2.5 | 2.5 | Fill: Gravel, silty, sandy, brown; contains sparse scattered cobbles; some humus |
| 2 | 2.5-10.5 | 8.0 | Peat: Contains 0.5-ft gravel lens at 8.5-9.0 ft; wet |
| 3 | 10.5-17.5 | 7.0 | Older delta deposits: Sand, gravelly, brown in upper 5 ft, gray below; moderately firm; natural moisture 15.2 percent at 15 ft |
| 4 | 17.5-25.4 | 7.9 | Sand, gray; firm; natural moisture 13.1 percent at 23 ft |
| 5 | 25.4-91.0 | 65.6 | Glaciomarine deposits, first phase: Gravel, silty, sandy, gray; very compact; sand and coarse gravel layers at 30.0-34.5 ft; scattered cobbles below 66 ft; natural bulk densities range from 2.39 g/cc to 2.83 g/cc, natural moisture from 2.7 to 13.5 percent |

*This hole drilled for the State of Alaska by the U.S. Army Corps of Engineers; log provided by the Corps of Engineers

Explanation of materials units




May be used separately, or in combination.

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