WATERFALL POINT

STRATIGRAPHIC SECTION

Secs 30, 31, T 51 S , R 69 W MAP LOCATION NO. 322

JULY 1977

MEASURED BY: J. BOLM J. MOREHOUSE

Porosity Permeability Environment Age INTERBEDDED SANDSTONE AND MUDSTONE - Sandstone 1 inch to 6 feet, medium gray 06 mD (N5), fine- to medium-grained, locally pebbly. Mudstone 12.1% 13,14,15-GB-77-1/4 inch to 4 feet, brownish black (5YR2/1), laminated. SANDSTONE - Olive-black (5Y2/1), medium to very coarse grained, pebbly, contains mudstone stringers and calcareous concretions. INTERBEDDED SANDSTONE AND MUDSTONE - Sandstone 1 inch to 6 inches, medium gray *12-GB-77 (N5), fine- to medium-grained. Mudstone 1 inch to 6 inches, grayish black (N2), laminated. Pelecypods common. INTERLAMINATED MUDSTONE AND SILTSTONE - Mudstone grayish black (N2). Siltstone medium gray (N5). Calcareous concretions in layers. Some INTERBEDDED SANDSTONE AND MUDSTONE - Beds 1 inch to 6 inches. Sandstone dark gray (N3), medium to very coarse grained. Mudstone olive-10,11-GB-77 grayish-black (5Y3/1), laminated. Top 1-foot conglomeratic. SANDSTONE - Medium gray (N5), medium to very coarse grained, shale stringers, crossbedded, calcareous concretions in layers. INTERBEDDED SANDSTONE, MUDSTONE, AND SILTSTONE - Sandstone 1 inch to 1 foot thick, medium-light-brownish-gray (5YR5/1), medium- to coarse-grained, locally pebbly, cross-laminated, calcareous 9-GB-77 concretions in layers. Mudstone 1/2 inch to 3 inches. dark gray (N3), laminated. Siltstone 1/2 inch to 3 inches, dark greenish-gray (5GY4/1), laminated. 3.0% CONGLOMERATE Dark greenish-gray (5GY4/1). Pebbles in fine- to mediumgrained sandstone matrix. INTERBEDDED SANDSTONE AND SILTSTONE - Siltstone cross-laminated. Some pelecypods. INTERLAMINATED MUDSTONE, SILTSTONE, AND SANDSTONE - Mudstone olive-black (5Y2/1). Siltstone grayish black (N2), sandy, crosslaminated. Sandstone grayish black (N2), fine- to mediumш grained, locally pebbly or cobbly. Individual microlithons lensy. Some pelecypods. Σ INTERLAMINATED MUDSTONE AND SILTSTONE - As above but without sandstone. Z INTERBEDDED SANDSTONE, MUDSTONE, AND SILTSTONE - Sandstone 1 inch to 3 inches, medium gray (N5), fine to very coarse grained, coarser L sandstone pebbly, coarse tail-graded. Mudstone grayish black (N2). Siltstone 1 inch to 3 inches, medium gray (N5). Unit contains carbonaceous debris; jarosite stain common. INTERBEDDED SANDSTONE AND MUDSTONE - Sandstone 1 inch to 1 foot, brownish gray (5YR4/1), medium- to coarse-grained, cross-laminated. ш 6.7-GB-77 Mudstone 1 inch to 3 feet, brownish black (5YR2/1), laminated. Cannonball calcareous concretions with associated compaction features. Contacts between lithologies are gradational. × O d INTERBEDDED SANDSTONE AND MUDSTONE - Sandstone 6 inches to 4 feet, mediumright-brownish-gray (31k3/1), line- to medium-grained, locally pebbly. Mudstone 1 inch to 6 inches, grayish black (N2). 5-GB-77 0 INTEREZDDED SANDSTONE AND SILTSTONE - Sandstone 1 inch to 1 foot, mediumlight-olive-gray (5Y5/1), fine-grained, calcareous concretions in layers. Siltstone 1 inch to 6 inches, dark gray (N3), laminated. Unit contains some pelecypods. 0 9 Δ. 0 INTERBEDDED SANDSTONE AND MUDSTONE - Sandstone 1 inch to 1 foot, mediumdark-gray (N4), medium- to coarse-grained. Shale partings. ш Mudstone 1/4 inch to 8 inches, olive-black (5Y2/1). Bedding surfaces in this unit are irregular. -INTERBEDDED SANDSTONE AND SILTSTONE - Sandstone 2 inches to 2 feet, medium dark-greenish-gray (5G5/1), very fine to medium-grained, locally pebbly or cobbly, calcareous concretions in layers, some pelecypods and gastropods. Siltstone 1/4 inch to 0 4 inches, medium olive-gray (5Y5/1), commonly lensy. 4-GB-77 60 mD 0 3-GB-77-SILTSTONE - Dark yellowish-brown (10YR4/2), sandy. Shale at top, 0 laminated. Calcareous concretions with associated compaction features. INTERBEDDED SANDSTONE AND SILTSTONE - Sandstone 2 inches to 4 feet, medium dark-greenish-gray (5G5/1), fine- to medium-grained, pebbly, cross-laminated. Calcareous concretions in layers. Siltstone 0 1/4 inch to 4 inches, olive-black (5Y2/1), lensy. SILTSTONE - Olive-black (5Y2/1), laminated. INTERBEDDED SANDSTONE AND SILTSTONE - Sandstone 1 inch to 6 inches, medium dark-greenish-gray (5G5/1), medium-grained, cross-1.7 % .04 mD 2-GB-77 laminated, calcareous concretions in layers, lensy. Siltstone 1/4 inch to 4 inches, olive-black (5Y2/1), 1-GB-77 - Olive-black (5Y2/1), sandy, laminated, lensy, contains pyrite. SILTSTONE SANDSTONE - Greenish black (5G2/1), fine- to coarse-grained, pebbly, cross-laminated. SCALE * SEE TABLE 8 FOR IDENTIFICATION I. BURKE (1965) OF MACROFOSSILS AND U.S.G.S.

20 ft.

40ft.

10m

CENOZOIC LOCALITY NUMBER.

STATE OF ALASKA
DEPT. OF NATURAL RESOURCES
Div. of Geological & Geophysical Surveys

PLATE VI