

Amoco Production Company

Surface Log

Name LIMESTONE HOGBACK SECTION (Sec. 2, Brabb, 1967, U.S.G.S. Prof. Paper 559A)

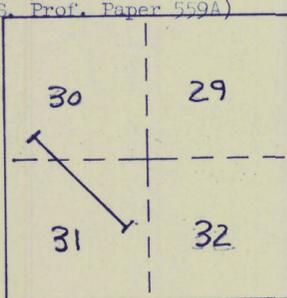
COUNTY Eagle Area STATE Alaska

LOCATION SW 1/4 NE 31 Sec. 30 T2N R33E

MEASURED BY L. Furer, C. Harrison, A. Ormiston, G. Self DATE 8/03/71

INTERVAL Adams Argillite - McCann Hill Chert

REMARKS _____



Nation Rv. Fm.

GWS213L McCann Hill Chert - Pebbly mudstone, brownish-med. gray

GWS214L Shale, dark gray, weathers med-light gray, siliceous, thin-bedded, blocky weathering, some chert bed & nodules.

U.S.G.S. section is thicker

Mid. Dev. ??

Late Ems.

GWS215L, Sr Shale, drk gry, aa, but not siliceous and weathers platy.

GWS216L Two ls beds 1 ft. thick separated by 2 ft. of shale aa, ls is a crinoidal packstone. Contains two-hole crinoids, brachs, ls&sh clasts, ls is med. gry weathers lgt gry, upper bed is USGS, 6492-SD, has strong petrol. odor & is lenticular.

Late Sieg. Ems.

GWS217L, Sr Shale, drk gry, blk, aa, siliceous, indeterminate goniatite & 3 inch chert beds & 1 inch ls. bed

GWS218L (Float) Nautiloid in float

GWS219L, Sr Ls, aa, v stg petroliferous odor, pellets, two-hole crinoid, brachiopods.

Sieg.

GWS220L, Sr Probably top of Road River-Sh. aa, but non-siliceous, drk gry, irregular, poker chip weath. shape, some thin (1') bds of v. shly ls containing tentaculitids & brachiopods. Graptolites occur from GWS223 downward.

GWS221L 6" ls bed

GWS222L Yellowish, uraniferous substance in shale

Sieg.

GWS224L 1 ft. dolo. bed, siliceous, dense, crypto-crystalline, lgt gry, weath. yellow-brn. Graptolite in float

Could be a covered unconformity-possibly the name McCann Hill should be extended downward.

Covered

Lower 250' of covered unit is probably porcellanous, slightly siliceous shale. Is exposed at several locations.

Sil. Ord. ?

By comparison w/U.S.G.S. section

Ord. (?)

GWS212L Road River-drk gry-black, siliceous shale & cherts, med. bedded, weathers brnsh-grn

Top of Hilliard Ls.

Ls, flat pebble conglomerate, med. gry, weath. brn-lgt gry. Pebbles are mostly ls. Thin-med-bedded, some gry-brn chert clasts & nodules. Becomes more cherty upward

Late E

GWS211L Trilobites in ls. bed w/no pebbles (~1 ft. thick)

Late E

GWS210L Por. 3.4% Perm .76 md.

Late E ?

GWS208L ? Ls, finely-crystalline, thin bedded, brn-gry, resistant. Contain trilobite frags. Base of exposed Hilliard.

Covered

E. Camb.

GWS207L Ls, med. br-gry, siliceous, weathers brn-lgt gry. Contains Archeocyathids and Algae

Ss, med. br. clean, qtzose, weathers platy & brown, poorly exposed.

~~Ss, med. br. clean, qtzose, weathers platy & brown, poorly exposed. Poorly exposed, similar to GWS207, but weathers like weathered worm burrows. Qtzite, as below, w/ minor x-bedding.~~

GWS205L Flat pebble conglomerate

GWS204L Qtzite, greenish yellow, finegrained, clean, hard, tight, siliceous cement

Interbedded green-gray shale & sdy siltstone, poorly exposed, nonresistant, forms saddle, possible worm burrows in siltstone.

Base Adams Argillite.

Several hundred feet of Funnel Creek Below section. (500')

Limestone Hogback Section

This section was measured at fair exposures on a high ridge (Limestone Hogback) above the northeast bank of the Yukon River just northwest of Benchmark 4085. About 500' of Funnel Creek Limestone is exposed, but was not measured. It is overlain by 225' of Adams Argillite. The basal 25' of this unit is green and gray shale and siltstone. The remainder of this unit is quartz sandstone that contains thin layers and lenses of flat-pebble limestone conglomerate. The limestone contains Early Cambrian archaeocyathids. The contact with the overlying Hilliard is not exposed. The Hilliard (170') at this locality is entirely flat-pebble conglomerate, and contains Late Cambrian trilobites. It is overlain by Road River siliceous shale and chert. The Road River is very poorly exposed.

The upper part of the section (McCann Hill Chert) was measured across a saddle from the lower part, on a ridge just northwest of Benchmark 4085, and is the type section of the McCann Hill Chert. Here the McCann Hill is 450' thick. It is underlain by 100' of Road River Shale. The Road River graptolitic shale contains thin limestone beds and is Siegenian. It is transitional with the overlying McCann Hill which also contains a thin limestone bed; however, the base of the McCann Hill is Emsian. The remainder of the McCann Hill is siliceous shale and chert, but does not contain graptolites. The McCann Hill appears to be transitional to the overlying Nation River Formation that crops out on top of the ridge.