Amoco Production Company

Surface Log

Name NATION SECTION

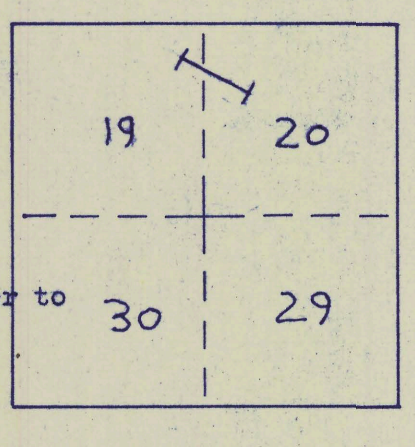
COUNTY Eagle Area **STATE** Alaska

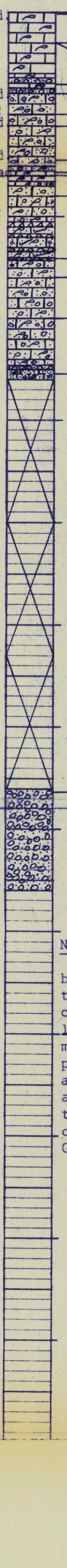
LOCATION ~~NW~~ NE °N °W Sec. ~~20~~ 19 **TWN** 4N **RNG** 30E

MEASURED BY L. Furer, C. Harrison, A. Ormiston; B. Fehlmann, G. Self **DATE** 8/04/71

INTERVAL Permian Tahkandit Fm.

REMARKS Began section at top of bluff overlooking Yukon River to the NE, apparently at top of Tahkandit Limestone.





Late Guad	GWS-233F	Ls,crinoidal grainstone, brown,abund.brachs,crinoids. Thin-bedd to massive fair porosity.
	GWS-234F(Float)	
	GWS-235LC	Crinoidal hash,coarse-grained,scattered glauconite grains Dip N 40°W @ 45°
	GWS-236FC	Very thin beds of conglomerate, pebbles are chert & qtz.
Late Guad	GWS-237F	Sand grains of above minerals&some glauconite in carbonate matrix & cement. Interbedded w/ls, as above. Maximum pebble size is 1½ inches.
Late Guad	GWS-238F	Ls w/scattered chert pebbles, sand grains & glauconite. Very abund. glauconite making rock greenish gray.
Late Guad	GWS-239F	Less glauconite
Early Guad	GWS-240FC	Ls,micrite,lgt gry,f-xtalline-aphanitic,thin-med bedded, wea. lgt gry, as above. Contains abund. small brachs
Guad	GWS-241F	Ls,as above, chert & glauconite grains
		Whitish-pink layers (1 ft. thick) of chert w/probable fossils, clams & gastropods. The chert is interbedded w/ls, wackestone-micrite, as above.
Guad	GWS242F	
	GWS243F	Ls,grainstone, as above, w/detrital grains as above.
Guad	GWS244F	Abundant chert pebbles & glauconite.
		Glauconitic conglomerate, pebbles ½-3/4 inches in glauconite matrix,grn,poss.A len
Guad	GWS245LF	Ss,calcareous, glauconitic, conglomeratic. Contains brachs-Horridonids & Canninid corals. Probably a near-to-beach deposit
		Covered (ss, at Mertie's type at river level)
	GWS246L	Conglomerate,w/black,cream,lgt, med., dark gray & apple green chert. Strike: N50°W, Dip=45°SW
		Covered below section

Nation Section

The Tahkandit Limestone was measured from near the top of a ridge above the west bank of the Yukon River. This location is a few hundred feet south of the recently revised type section (Brabb & Grant, 1971). Most of the Tahkandit is an abundantly fossiliferous crinoidal grainstone. Thin chert and quartz pebble layers are scattered throughout. A 15' layer of conglomeratic sandstone is exposed at the base of the exposed section. This is most likely a beach deposit and the unconformity report at the base of the Tahkandit is probably not far below in the covered interval. The covered interval is most likely shale and siltstone that overlie the Nation River conglomerate just north and across the river at the Cabin Section. A conglomerate ledge is exposed on the hill slope about 400' below the base of the exposed Tahkandit. This conglomerate contains apple green chert that is characteristic of the Nation River Conglomerate. The age of the Tahkandit is entirely Guadalupian, which is younger than that reported by previous workers (Brabb & Grant, 1971).