Amoco Production Company

Surface Log

Name JONES RIDGE COMPOSITE

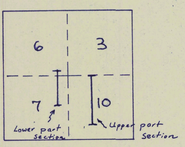
COUNTY Eagle Area **STATE** Alaska

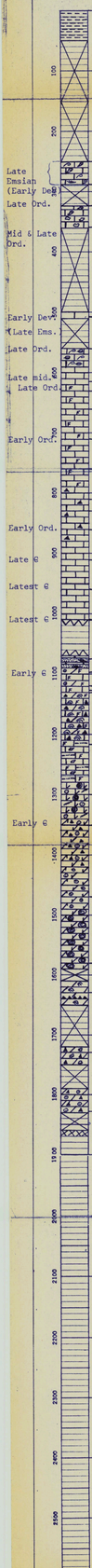
LOCATION ____ °N ____ °W **Sec.** 10 **TWN** 3N **RNG** 33E
SE S-NE 7 3N 33E

MEASURED BY A. Ormiston, G. Self, E. Pehlmann, G. Harrison, L. Furer **DATE** 8/11/71

INTERVAL PE to Early Dev. (Jones Ridge Ls. - McCann Hill)

REMARKS The section was measured in two localities; one on Jones Ridge (Early Dev. - Є) and the lower part (Cambrian) 3 miles west.





Sh. gray, siliceous, looks like McCann Hill cht

Covered

Covered

Covered

LCF254 — Ls,brn wea.lgt gry, crinoidal grainstn, few bracks,petroliferous odor
Gasteroconia bicauda, Alveolites sp. A., Cortexorthis sp.

LCF255 — Ls,brn,packstn,crinoidal,x-bedded,Alveolites sp. A. Gasteroconia bicauda

Covered

LCF256 — Ls,tan gry,wackstn,crinoidal clasts,brn micrite,pent-axic crinoids
Sphaerexochus romingeri

LCF257 — Ls,tan,micrite,breccia clasts of ls.

Covered

LCF258 — Ls,brn,wackstn,crinoidal, Gasteroconia bicauda, Clathrodictyon sp., Emanuella sp.

Covered

LCF259 — Ls,brn,interbed,crinoidal packstn and micrite,bracks,ostracods,crinoids w/pentagonal axial canal, Biphorulis sp., Bumastid tril., Cutazyma sp.

LCF260 — Ls,packstn,interbed w/wackstn,crinoid (pentagonal) Blumbonia sp.

LCF261 — Ls,v lgt tan,wea v lgt gry,micrite-f-xyall,thin-thick bedded,trilobite frag.

GWS305L — possible (?) unconf.

GWS304L — Ls,aa,trilobite frag. Symphysurina sp.

GWS303L

Ls,aa,trilobite frag.

GWS302 — Ls,v lgt tan,wea. v lgt.gry,micrite-f-xyall,cht stringers,thin-thick bed.
Symphysurina uncaspicata, Missisquoia, Homagnostus sp. Bailyithis sp.

GWS301 — Strepelasmia coral

GWS300L — Symphysurina uncaspicata

GWS299L — Ls,aa,no cht. Corbinia sp., Yukonagnis kindlei

GWS296L — aa, Corbinia apopsis, Conodiscus burlingi

GWS297L — Dip 170° @ 50° aa, Corbinia, Conodiscus burlingi

Break in section-moved to Jones Ridge-3 miles to the east.
(possible unconf. w/mid Є missing?)

GWS292L — Ls,dolo,tan-creme,wea.lgt gry,cryptox,yall,interbed w/ss,tan qtz,dolomitic, f-g,subrd qtz,irreg.bed,poss X-bed,chert stringers

GWS293 — Ls&dol,ab,sil oolitic(?), Archaeocyathids, Archaeocyathus sp. A.

GWS290 (Float) — Archaeocyathus sp. B., Archaeocyrina sp.

GWS294

GWS295L — Ls&dol,f-xyall,rexyall,chertified,algal heads and mats,some apple green cht. replacing dol. Ethmophyllum sp. A, Metethmophyllum sp., Collinia sp.

LCF253 — Ls,tan,wea.brn-gry,f-xyall,veins&vugs calcite,abudt. Archaeocyathids,bitumen(?) flakes,sil.silty. Ethmophyllum sp. A.

LCF252 — Ls,lgt gry,dolo sil oolitic,sil pisolitic,poss.gastropods. Paterina

LCF251 — Dol,limy,med-gry,chertified,oolitic,poss.microfos. Ethmophyllum sp. A.

Dol,limy,oolitic

LCF250 — Dol,limy,med gry,abndt pisolites,oncolites

LCF249L — Dol,limy,med-gry,abndt pisolites,oncolites(?) Por. 1.9% Perm. .67 md.

Dip S @ 60°

LCF248L — Dol,med-gry,stromat.,dense,hard tite,chert veins

Poorly exposed,prob. same ab.

LCF247L — Dol,med-gry,chertified,circular struct.(?), lam.,breccia frag.(3-4 inch)

Dol,med gry,oolitic,chertified,comolic & interpart.poro,bitumen(?) in colites

LCF246L

Covered

Rhyolite,grn-gry,phenocrysts augite(?)

NOTE: Thicknesses in the lower 800 feet may be too small. High dip angle may have caused underestimation of thickness.

Jones Ridge Section

This section was measured in two well exposed segments--one on Jones Ridge and the other on the northern extension of Nimrod Peak. The section starts at the Cambrian-Precambrian contact where carbonates overlie Precambrian igneous rocks. The break in section occurs within the Cambrian interval. The Early Cambrian is at least 750' thick. The lower part of the Cambrian is cherty dolomite with alternating beds of oolitic and pisolitic dolomite. The upper part is mostly limestone with interbeds of dolomite. It contains abundant Archaeocyathids. Thin dolomitic quartz sandstones occur at the top of the Early Cambrian section.

Middle Cambrian rocks were not measured, but probably occur within the break in section. Only 100' of Late Cambrian rocks were measured. Additional Late Cambrian rocks probably occur within the break in section. The Late Cambrian is trilobite-bearing micritic limestone.

The Ordovician is 370' of cherty fossiliferous limestone. The lower contact is transitional and the upper contact an unconformity. It grades upward from trilobite-bearing micrites to crinoidal wackestone and packstones. Early to Late Ordovician rocks are present. Silurian and earliest Devonian rocks are missing at the unconformity where Late Emsian rocks overlie Late Ordovician rocks.

The Early Devonian section contains a minor fault; however, at least 300' of section is present. This part of the section is not well exposed. It is crinoidal grainstones at the base, covered in the middle, and gray siliceous shale (McCann Hill Chert) at the top. Most likely the grainstones are equivalent to thin carbonates that occur at the base of the McCann Hill Chert at the type locality.