

Appendix B: Paleontology data, in Furer, L.C., Fehlmann, R.H., Taylor, A.M., Self, G.W., and Amoco Oil Co., Data compilation of the 1971 field party, southeast Brooks Range and Fort Yukon, Alaska; Vol 1

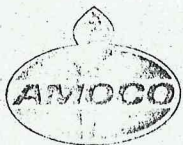
Furer, L.C., and Amoco Oil Co.

GMC DATA REPORT 464B

This GMC data report from the Amoco Heritage collection has been made available through funding from the FY2018 USGS National Geological and Geophysical Data Preservation Program, Grant Number G18AP00054. This project report is presented in its original format and has not been reviewed for technical content or for conformity to the editorial standards of DGGs. It should not be used or cited as reviewed data.

2019
State of Alaska
Department of Natural Resources
Division of Geological & Geophysical Surveys
GEOLOGIC MATERIALS CENTER





Amoco Production Company
Tulsa, Oklahoma

February 21, 1973

File: Technical Service No. 5825 IR
Locality No. 6798

MEMORANDUM

Re: Megafossils and interpretation of
the Deacon Rock Section
Sections 18 + 22, T 25N, R 22E
Coleen Quad., Alaska

Paleontologic study demonstrates the presence in this section of a considerable thickness of Salmontrout Limestone of a non-brachiopodal reef facies which is different from the brachiopod-rich type section.

Field No.	Sample No.	Taxa	Age
DR 8731	6798-3	Barren of megafossils	-
A dolomitic limestone breccia			
DR 8732	6798-4	Barren of megafossils	-
A finely brecciated dolomitic limestone			
DR 8734	6798-6	Barren of megafossils	-
A finely oolitic limestone			
DR 8735	6798-7	Barren of megafossils	-
Brecciated dolomitic limestone			
DR 8739	6798-11	Barren of megafossils	-
A dense calcilutite			

TS No. 5825 IR
Locality No. 6798

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Field No.	Sample No.	Taxa	Age
DR 8740	6798-12	<u>Eofletcheria</u> cf. <u>incerta</u> Indet. trilobites	Lower or Middle Ordovician
A dense calcilutite			
DR 8742	6798-14	Indet. ostracodes	-
Coarsely crystalline dolomitic limestone			
DR 8745	6798-17	Indet. gastropod	-
A mottled, sandy, dolomitic limestone			
DR 8319	6798-18	<u>Maclurites</u> sp. Ostracodes?	Ordovician
Coarsely crystalline dolomite			
DR 8772	6798-23	<u>Protaraea</u> sp. <u>Corrugopora</u> cf. <u>rhabdota</u> <u>Fletcheria</u> sp. <u>Paleofavosites</u> cf. <u>kirki</u> <u>Heliolites</u> cf. <u>spongiosa</u> <u>Prasopora</u> sp. <u>Pycnolithus</u> sp.	Lower or Middle Silurian
A crinoidal grainstone			
DR 8771	6798-24	<u>Columnostroma</u> sp. <u>Eridotrypa</u> ? sp. <u>Syringoporella</u> sp. <u>Entelophyllum</u> cf. <u>porvum</u> Indet. ostracodes Crinoid columnals <u>Rhabdocanthis</u> sp.	Silurian
A crinoidal packstone			

Field No.	Sample No.	Taxa	Age
DR 8770	6798-25	<u>Paleophyllum</u> ? <u>Eridotrypa</u> ? sp. <u>Columnostroma</u> ? sp. Crinoids	Silurian ?
A laminar stromatoporoid bindstone			
DR 8769	6798-26	<u>Rhabdacanthia</u> 20884 <u>Heliolites</u> cf. <u>banandei</u> <u>Columnostroma</u> sp. <u>Favosites</u> sp. Indet. brachiopod <u>Eridotrypa</u> ? sp.	Upper Silurian or Lower Devonian
A crinoidal grainstone			
DR 8768	6798-27	<u>Rhabdacanthia</u> 20884 <u>Columnostroma</u> sp. "Stromatactis" <u>Stromatopora</u> sp. Crinoids	Upper Silurian or Lower Devonian
A bindstone with packstone matrix			
DR 8767	6798-28	<u>Rhabdacanthia</u> 20884 <u>Clathracoilona</u> sp. <u>Columnostroma</u> sp. <u>Euryamphipora</u> sp. Indet. gastropods algal ? coats	Upper Silurian or Lower Devonian
A stromatoporoid bindstone			
DR 8766	6798-29	<u>Trupestostroma</u> sp. <u>Coenites</u> sp. <u>Euryamphipora</u> sp. Indet. zaphrentid coral Indet. gastropods Algal ? coats	Lower Devonian Salmontrout Limestone
A stromatoporoid framestone to bindstone			

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Field No.	Sample No.	Taxa	Age
DR 8765	6798-30	Indet. stromatoporoids <u>Coenites</u> sp. <u>Syringopora</u> sp. Crinoid columnals	Lower Devonian Salmontrout Limestone

A crinoidal wackestone

DR 8763	6798-32	<u>Vepresiphyllum</u> sp. <u>Rhabdacanthia</u> sp. "Stromatactis" <u>Gasterocoma</u> N. sp.	Lower Devonian Salmontrout Limestone
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A stromatactis grainstone

DR 8762	6798-33	<u>Utaratuia</u> 20551 <u>Favosites</u> 20561 <u>Parachaetetes</u> sp. <u>Cornuproetus</u> sp. <u>Conocardium</u> sp. <u>Desquamatia</u> ? sp.	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
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Rock is a coral floatstone

DR 8759	6798-35	<u>Gasterocoma</u> N. sp.	Devonian Salmontrout Limestone
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Rock is a crinoidal grainstone

DR 8758	6798-36	Indet. laminar stromatoporo- roid <u>Crinoid</u> 20611	Lower Devonian Salmontrout Limestone
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A stromatoporoid bindstone, grainstone matrix

DR 8757	6798-37	<u>Parachaetetes</u> sp. <u>Crinoid</u> 20611 <u>Coenites</u> sp. "Stromatactis"	Lower Devonian Salmontrout Limestone
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Crinoidal grainstone with binding organisms

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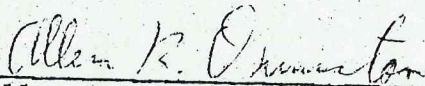
Field No.	Sample No.	Taxa	Age
DR 8756	6798-38	<u>Utaratuia</u> 20551 <u>Favosites</u> 20561 <u>Vepresiphyllum</u> sp. Indet. stromatoporoid	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
Coral bindstone, grainstone matrix			
DR 8755	6798-39	<u>Warburgella</u> sp. <u>Utaratuia</u> 20551 <u>Heterotrypa</u> sp. <u>Favosites</u> 20561 <u>Alveolites</u> sp. <u>Vepresiphyllum</u> sp. <u>Clathrocoilon</u> sp. <u>Crinoid</u> 20611	Lower Devonian Gedinnian Salmontrout Limestone
A stromatoporoid - coral bindstone			
DR 8754	6798-40	<u>Utaratuia</u> 20551 <u>Fasciphyllum</u> ? sp. <u>Favosites</u> 20561 <u>Alveolites</u> 20607 Crinoid columnals	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
A coral bindstone			
DR 8760	6798-41	<u>Rhabdacanthia</u> 20884 <u>Cyphotrypa</u> 20886 <u>Syringopora</u> sp. Indet. ostracodes	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
A coral-bryozoan bindstone, wachestone matrix			
DR 8753	6798-42	<u>Utaratuia</u> 20511 <u>Syringopora</u> sp. <u>Heterotrypa</u> sp.	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
A coral framestone			
DR 8752	6798-43	<u>Rhabdacanthia</u> 20884 <u>Cyphotrypa</u> 20886	Lower Devonian Gedinnian or

Field No.	Sample No.	Taxa	Age
DR 8752 Cont'd	6798-43	<u>Alveolites</u> 20607 <u>Vepresiphyllum</u> sp. <u>Heterotrypa</u> sp. <u>Syringopora</u> sp. <u>Crinoid</u> 20611 Indet. bryozoa Bryozoan - rich packstone	Siegenian Salmontrout Limestone
DR 8751	6798-44	<u>Favosites</u> 20561 <u>Syringopora</u> sp. <u>Heterotrypa</u> sp. Various Indet. bryozoa A tabulate - bryozoan bindstone with wackestone matrix	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
DR 8750	6798-45	<u>Favosites</u> 20561 Crinoid columnals A tabulate coral bindstone, wackestone matrix	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
DR 8749	6798-46	<u>Alveolites</u> sp. <u>Favosites</u> 20561 Indet. bryozoa Indet. trilobite large crinoid columnals Rock is a wackestone with abundant <u>Alveolites</u>	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
DR 8748	6798-47	<u>Rhabdacanthia</u> 20884 <u>Heterotrypa</u> sp. Indet. ostracodes Crinoid columnals A bindstone with a wackestone matrix	Lower Devonian Gedinnian or Siegenian Salmontrout Limestone
DR 8747	6798-48	Barren of megafossils A brecciated dolomitic limestone	-

Discussion

The section includes Ordovician strata related to those in the Amoco J section (Locality 6372) overlain by Silurian carbonates (6798-23, 24) rich in tabulate corals. Still higher are rocks of definite reef character, the lower part of which is either Upper Silurian or Lower Devonian and the upper part of which is Lower Devonian Salmontrout Reef differing from the type section in being essentially barren of shelly fossils.

The proximity of the Deacon Rock reef to a basinal Lower Devonian shale section (Locality 6261, sample LCF 61) together with the non-shelf biofacies that is represented, suggest the possibility that the Salmontrout at Deacon Rock is an intra-basinal pinnacle reef rather than the shelf-edge type of reef represented by the type Salmontrout. If correctly interpreted, the idea of intra-basinal reefing beyond the limits of the Salmontrout-age carbonate bank must be considered.


Allen R. Ormiston

ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
March 29, 1973



File: Technical Service No. 5825IR

Mr. P. H. Garrison
Denver Division

Attention: Mr. Terry Cooper

Dear Sir:

SUBJECT: Paleontological Analysis, Deacon Rock Section, Black
River Quadrangle, Alaska

The attached report by H. R. Lane deals with Ordovician through Devonian conodonts recovered from the subject section. This is another of the 1972 field sections from the Fort Yukon area.

Yours very truly,

WILLIAM R. WALTON

By

G. A. Sanderson

GAS:lc 8.9
Attachment

cc: G. J. Verville
E. E. Lafaye
A. B. Shaw



Amoco Production Company

Tulsa, Oklahoma

Research Center

74 0014
CF 74 0230

September 15, 1972

Re: Megafossils from Angry Bee Creek (Upper part - 1972), SW Sec. 24, T13S, R21E, Philip Smith Mountains Quad., Alaska

File: Technical Service 5813IR
Locality 6503

MEMORANDUM

The 1971 samples from the beds underlying the reef have been previously reported. In 1972 the work begun in 1971 was completed by measuring through and collecting the reef body (Smoke Creek Member). Those collections are reported here in descending order.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
AB 8602	6503-38	<u>Thamnopora</u> cf. <u>polyforata</u> <u>Acinophyllum</u> sp. <u>Tabulophyllum</u> ? sp. <u>Amphipora</u> sp. <u>Stachyodes</u> sp. laminar stromatoporoid <u>Nervostrophia</u> sp. <u>Tenticospirifer</u> sp. <u>Carinata</u> sp. indet. <u>Spinatrypa</u> sp. <u>Cyrtospirifer</u> sp. <u>Homoctenus</u> sp. crinoid columnals	Upper Devonian mid-Frasnian

This rock is a bafflestone with micrite matrix. The presence of tentaculitids indicates exchange with the basinal shales.

AB 8603	6503-37	<u>Hexagonaria</u> cf. <u>schucherti</u>	Upper Devonian mid-Frasnian
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Coral heads up to 18" across are present at this horizon, matrix is packstone.

AB 8604	6503-36	laminar stromatoporoid indet. <u>Thamnopora</u> cf. <u>polyforata</u> <u>Amphipora</u> sp.	Upper Devonian Frasnian
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A laminar stromatoporoid bindstone with micrite matrix.

Field No.	Sample No.	Taxa	Age
AB 8605	6503-35	<u>Stachyodes</u> cf. <u>costulata</u> laminar stromatoporoid indet. <u>Tabulophyllum?</u> sp. indet. brachiopod crinoid columnals	Upper Devonian Frasnian
A laminar stromatoporoid bindstone with a micrite matrix.			
AB 8607	6503-33	<u>Thamnopora</u> sp. <u>Amphipora</u> sp. <u>Stachyodes</u> cf. <u>costulata</u> <u>Acinophyllum</u> sp.	Upper Devonian Frasnian
A bafflestone with a micrite matrix.			
AB 8608	6503-32	laminar stromatoporoid cf. <u>Trupetostroma</u> <u>Euryamphipora</u> sp. <u>Stachyodes</u> <u>costulata</u> <u>Thamnopora</u> cf. <u>cervicornis</u>	Upper Devonian Frasnian
A complex bindstone.			
AB 8609	6503-31	<u>Stachyodes</u> <u>costulata</u> <u>Thamnopora</u> cf. <u>cervicornis</u> <u>Acinophyllum</u> cf. <u>camselli</u> <u>Amphipora</u> sp. <u>Aulopora</u> sp. <u>Thamnopora</u> cf. <u>polyforata</u> indet. laminar stromatoporoid	Upper Devonian mid-Frasnian
Rock is partly a bafflestone, partly a bindstone with packstone matrix.			
AB 8610	6503-30	laminar stromatoporoid cf. <u>Syringostroma</u> <u>Stachyodes</u> sp.	Upper Devonian mid-Frasnian
Rock is a bindstone with a packstone matrix.			
AB 8611	6503-29	<u>Thamnopora</u> cf. <u>cervicornis</u> <u>Hexagonaria</u> cf. <u>schucherti</u> <u>Coenites?</u> sp. indet. gastropods indet. stromatoporoid	Upper Devonian mid-Frasnian
Rock is a floatstone			
AB 8612	6503-28	<u>Thamnopora</u> sp. <u>Amphipora</u> sp. indet. atrypid laminar stromatoporoid	Upper Devonian
A laminar stromatoporoid bindstone.			

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
AB 8614	6503-26	<u>Amphipora</u> sp. <u>Stachyodes costulata</u> indet. stromatoporoid	Upper Devonian Frasnian

Rock is a bafflestone with micrite matrix

AB 8615	6503-25	<u>Thamnopora</u> cf. <u>cervicornis</u> <u>Amphipora</u> sp. indet. stromatoporoid	Upper Devonian Frasnian
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Rock is a bafflestone with micrite matrix

AB 8616	6503-24	massive stromatoporoid cf. <u>Stromatoporella</u>	Upper Devonian Frasnian
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A framestone.

AB 8617	6503-23	<u>Parallelopora</u> cf. <u>dartingtonensis</u> <u>Amphipora</u> sp.	Upper Devonian mid-Frasnian
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A framestone.

AB 8618	6503-22	indet. massive stromatoporoid	-
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A framestone.

Discussion

The framestone core of this reef accounts for less of the total reef thickness than at the Upper Wind River Section. There is a great deal of lime mud in the upper part of the reef, mostly bound together by laminar stromatoporoids or trapped by branching forms such as Amphipora, Thamnopora and Stachyodes.

Allen R. Ormiston
Allen R. Ormiston

Thomas L. DeKeyser (per A.R.O.)
Thomas L. DeKeyser

ARO/TLD:skw



Amoco Production Company
Tulsa, Oklahoma

January 9, 1973

File: Technical Service No. 5806 IR
Locality No. 6701

MEMORANDUM

Re: Megafossils from the Your Creek Section,
sections 23 + 24, T 15S, R 15E,
Phillip Smith Mountains, Quad., Alaska

The following megafossils are recognized from this important off-reef
Hunt Fork section:

Field No.	Sample No.	Taxa	Age
YC 8261	6701-1	<u>Coactilium</u> sp. <u>Girvanella</u> sp. <u>Euryamphipora</u> sp. <u>Thamnopora</u> sp. Indeterminate gastropods	Upper Devonian Frasnian

An oncolite bed. Clasts of Thamnopora encrusted by
Euryamphipora serve as nuclei which have algal coats
of Coactilium and Girvanella. This unit was deposited
in shallow agitated water and is correlative with the
oncolite bed at the top of the Upper Wind River reef
(6651-4).

YC 8263	6701-3	<u>Phillipsastraea whittakeri</u> <u>Thamnopora</u> sp. A <u>Coenites</u> sp. <u>Tabulophyllum</u> sp. <u>Synaptophyllum</u> sp. <u>Schizophoria</u> sp.	Upper Devonian Mid-Frasnian
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A coralline biostrome about 2.5' thick consisting
mostly of Phillipsastraea heads.

January 9, 1973

Field No.	Sample No.	Taxa	Age
YC 8264	6701-4	New Hyalosponge Genus <u>Coactilium</u> ? sp.	Devonian

A sponge bed. This distinctive biotope, if persistent, might be a useful local marker. The sponges are abundant and finely preserved and apparently represent a new genus. They are thick-walled forms in contrast to most described Devonian sponges. Sponges have not previously been reported from the Alaskan Devonian.

Allen R. Ormiston
Allen R. Ormiston

ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
July 27, 1973

File: Technical Service No. 5806IR
Locality No. 6701
Job No. 9792

MEMORANDUM

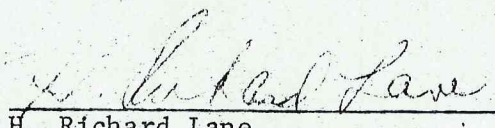
Subject: Conodonts from the Your Creek Section, Lat. 68° 07' 25" N.,
Long. 148° 33' W., Philip Smith Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts and found to be barren.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
YC 8263 C,F	3	0501	Barren of conodonts
YC 8264 C,F	4	0501	Barren of conodonts


H. Richard Lane

HRL:skw 4.07



Amoco Production Company

Tulsa, Oklahoma
Research Center

September 14, 1972

Re: Megafossils from FCH 674 Reef, Section 35, T14S, R25E, Arctic Quad., Alaska

File: Technical Service 5805IR
Locality 6667

MEMORANDUM

Grab samples FCH 670-674 were made at this locality in 1971 and samples 8600 and 8601 were taken in 1972. The 1971 grab samples have previously been reported, but are repeated here for the sake of completeness. This stromatoporoid buildup can be assigned to the Smoke Creek Member of the Hunt Fork Formation, a new unit to be fully defined in a later report. Although small in area the FCH 674 Reef is probably more than 400 feet thick (estimated) and has a well developed core of massive stromatoporoid framestone. Intergrowths of corals and stromatoporoids are also present.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8600	6667-1	<u>Spinatrypa</u> sp. <u>Atelodictyon</u> sp. <u>Alveolites multiperforatus</u>	Upper Devonian Frasnian

This rock is a boundstone with layers of Alveolites alternating with stromatoporoid layers.

8601	6667-2	<u>Phillipsastraea</u> cf. <u>whittakeri</u> <u>Alveolites</u> sp. <u>Clathrocoilona</u> sp. <u>Thamnopora</u> sp.	Upper Devonian Frasnian
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This boundstone consists of an intergrowth of massive stromatoporoid and the colonial coral, Phillipsastraea.

FCH 670	6667-3	<u>Schizophoria</u> sp. <u>Anatrypa?</u> sp. cf. <u>Trupetostroma</u> large gastropods	Devonian probably Frasnian
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FCH 672	6667-4	indet. massive stromatoporoid	Devonian probably Frasnian
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Rock is a framestone.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
FCH 673	6667-5	<u>Alveolites</u> cf. <u>multiperforatus</u> <u>Thamnopora</u> sp. <u>Cyrtina</u> sp. gastropods crinoid columnals indet. atrypid	Devonian probably Frasnian
FCH 674	6667-6	<u>Disphyllum?</u> sp. indet. stromatoporoid crinoid columnals	Middle or Upper Devonian

This rock is a floatstone.

Discussion

Sample 8601 comes from about 200' below the top of this reef, so that at least the upper part of this reef is Frasnian and can be correlated with the Angry Bee (Locality 6503) and Upper Wind River (Locality 6651) reefs.

Allen R. Ormiston
Allen R. Ormiston

ARO:skw

ALLOCTHONOUS LIMESTONES				AUTOCTHONOUS LIMESTONES		
ORIGINAL COMPONENTS NOT ORGANICALLY BOUND DURING DEPOSITION				ORIGINAL COMPONENTS ORGANICALLY BOUND DURING DEPOSITION		
LESS THAN 10% > 2mm COMPONENTS		GREATER THAN 10% > 2mm COMPONENTS		BY	BY	BY
CONTAINS LIME MUD (< 0.03 mm)		NO LIME MUD		ORGANISMS	ORGANISMS	ORGANISMS
MUD SUPPORTED		GRAIN SUPPORTED	MATRIX	WHICH	WHICH	WHICH
LESS THAN 10% GRAINS (> 0.03 mm < 2mm)	GREATER THAN 10% GRAINS		> 2mm COMPONENT SUPPORTED	ACT AS	ENCRUST AND	BUILD A RIGID
MUD- STONE	WACKE- STONE	PACK- STONE	GRAIN- STONE	FLOAT- STONE	RUD- STONE	BAFFLE- STONE
						BAFFLE- STONE
						BIND- STONE
						FRAME- STONE

Fig. 2. Classification of limestones according to depositional texture.



Amoco Production Company
Tulsa, Oklahoma

February 22, 1973

File: Technical Service Nos. 5825 and 5821

Mr. P. H. Garrison
Denver Division

Attention: L. C. Furer


Dear Sir:

Attached are two megafossil reports by Allen Ormiston on the Deacon Rock and Deacon Rock West Sections in Alaska. Both are 1972 field sections. The Deacon Rock Section is currently being processed for conodonts, and we anticipate completion of this section in the near future.

Yours very truly,

WILLIAM R. WALTON

By:


G. A. Sanderson

GAS:mjh

Attachments

cc: G. J. Verville/Research Center
E. E. Lafaye/Denver
A. B. Shaw/Denver



Amoco Production Company

Tulsa, Oklahoma

February 21, 1973

File: Technical Service No. 5826 IR
Locality No. 6799

MEMORANDUM

Re: Megafossil examination of Deacon Rock
West Section,
Section 11, T 25N, R 21E,
Black River Quad., Alaska

Field No.	Sample No.	Taxa	Age
DW 8781	6799-3	Stromatolites	-
DW 8783	6799-5	Barren of megafossils	-
Rock is a dense pel-micrite, pellets appear to be fecal in origin			
DW 8786	6799-8	Stromatolites	-
Rock is a stromatolitic dysmicrite with fenestral porosity interbedded with oolites			
DW 8788	6799-10	Barren of megafossils	-
Rock is a brecciated sandy dolomite			

Discussion:

The sequence is supratidal to shallow subtidal in origin. The oolitic beds (6799-8) are reminiscent of the oolites at Oolite Creek (Locality 6247) and the two may be correlative.

Allen R. Ormiston
Allen R. Ormiston

ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
July 6, 1973

File: Technical Service No. 5793IR
Job No. 9779
Locality No. 6661

MEMORANDUM

Subject: Conodonts from the Total Eclipse Section, Lat. 69° 0' N.,
Long. 143° 20' W., Demarcation Quad., Alaska.

INTRODUCTION

The following samples were processed and found barren of conodonts.

FAUNA

Footage	Sample No.	Taxon No.	Identification
8209	3	0501	Barren of conodonts
8210	4	0501	Barren of conodonts

H. Richard Lane

HRL:skw 25.02



Amoco Production Company

Tulsa, Oklahoma
March 26, 1973

File: Technical Service No. 5825IR
Job No. 9811
Locality No. 6798

MEMORANDUM

Subject: Conodonts from the Deacon Rock Section (Loc. 6798),
Sections 18-22, T25N, R22E, Black River Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

Field No.	Spl. No.	Taxon No.	Identification	No. Spec.
DR-72-8730	2	3071	<u>Belodina</u> sp.	1
-8731	3	0501	Barren of conodonts	
-8732	4	3071	<u>Belodina</u> sp.	1
-8733	5	0501	Barren of conodonts	
-8735	7	0501	Barren of conodonts	
-8737	9	2618	Indet. conodont	1
-8738	10	0501	Barren of conodonts	
-8740	12	0501	Barren of conodonts	
-8319	18	0501	Barren of conodonts	
-8318	19	3072	<u>Drepanodus</u> sp.	2

Field No.	Spl. No.	Taxon No.	Identification	No. Spec.
DR-72-8318	19	2618	Indet. conodonts	11
Samples 2-19 contain conodonts which are Middle or Upper Ordovician in age				
DR-72-8320	20	0501	Barren of conodonts	
-8746	22	0501	Barren of conodonts	
-8772	23	2851	<u>Trichonodella</u> sp.	1
		3051	<u>Hindeodella</u> sp.	1
		2865	<u>Panderodus</u> sp.	2
		2618	Indet. conodonts	4
-8771	24	2618	Indet. conodonts	2
-8770	25	2618	Indet. conodonts	
-8769	26	0501	Barren of conodonts	
-8767	28	0501	Barren of conodonts	
-8765	30	0501	Barren of conodonts	
-8764	31	20894	<u>Ozarkodina</u> 28094	4
		3039	<u>Plectospathodus</u> sp.	1
		2861	<u>Neoprioniodus</u> 2861	1
		2858	<u>Neoprioniodus</u> sp.	1
		2726	<u>Spathognathodus</u> sp.	2
		3051	<u>Hindeodella</u> sp.	1
		2851	<u>Trichonodella</u> sp.	2
		2618	Indet. conodonts	35

Field No.	Spl. No.	Taxon No.	Identification	No. Spec.
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Samples 23 and 31 contain conodonts which suggest Middle and Upper Silurian ages, respectively.

DR-72-8762	33	2731	<u>Spathognathodus</u> 2731	5
		4050	<u>Spathognathodus</u> 4050	3
		3051	<u>Hindeodella</u> sp.	9
		2858	<u>Neoprioniodus</u> sp.	2
		2618	Indet. conodonts	21

The conodonts in sample 33 are Lower Devonian (Gedinnian) in age.

-8761	34	4051	<u>Ozarkodina</u> 4051	1
		20896	<u>Spathognathodus</u> 20896	1
-8758	36	0501	Barren of conodonts	
-8757	37	2618	Indet. conodonts	3
-8755	39	0501	Barren of conodonts	
-8754	40	2726	<u>Spathognathodus</u> sp.	3
		2618	Indet. conodonts	6
-8753	42	0501	Barren of conodonts	
-8752	43	0501	Barren of conodonts	
-8751	44	2731	<u>Spathognathodus</u> 2731	3
		4050	<u>Spathognathodus</u> 4050	4
		2618	Indet. conodonts	7
-8749	46	4050	<u>Spathognathodus</u> 4050	6
		2845	<u>Ozarkodina</u> sp.	2
		2618	Indet. conodonts	4

Memorandum
March 26, 1973

Page 4

<u>Field No.</u>	<u>Spl. No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
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The conodonts in samples 44 and 46 are Lower Devonian (Gedinnian) in age.

DR-72-8748	47	0501	Barren of conodonts	
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-8747	48	0501	Barren of conodonts	
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H. Richard Lane
H. Richard Lane

HRL:glj 21.02



General - 2642

Amoco Production Company

Tulsa, Oklahoma
March 23, 1973

Judi.

*1 copy + file
LF.*

File: Technical Service No. 5827IR

Mr. P. H. Garrison
Denver Division

Attention: Lloyd Furer

Dear Sir:

Subject: Paleontological Analysis on John Herbert Section,
Coleen Quadrangle, Alaska

The attached report by A. R. Ormiston describes megafossils recovered from the subject section. These are 1972 field collections from the Fort Yukon Basin, Alaska. Conodont work on this section is in progress and will be reported as completed.

Yours very truly,

WILLIAM R. WALTON

By *G. A. Sanderson*
G. A. Sanderson

GAS:er 2.04
Attachment

cc: G. J. Verville
E. E. Lafaye - Denver
A. B. Shaw - Denver



Amoco Production Company

Tulsa, Oklahoma
March 22, 1973

File: Technical Service No. 5827IR
Locality No. 6800

MEMORANDUM

Subject: Megafossils from John Herbert Village Section, N 1/2, Sec. 15
T24N, R21E, Coleen Quad., Alaska

Early Mississippian rocks absent from the unconformity at the base of the
South Old Camp Section (Locality 6163) are represented by this section.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
HV 8795	6800-5	<u>Unispirifer</u> cf. <u>U. 2320</u> <u>Knightites</u> (<u>Retispira</u>) sp. <u>Pseudorthoceras</u> sp. <u>Hemiplethorhynchus</u> sp. <u>Edmondia</u> sp. indet. nuculanid	Lower Mississippian Kinderhook or Osage
HV 8796	6800-6	<u>Hemiplethorhynchus</u> sp.	Lower Mississippian Kinderhook or Osage
HV 8797	6800-7	<u>Prospira</u> sp. <u>Amplexizaphrentis</u> sp. indet. Rhynchonellid crinoid columnals	Lower Mississippian Kinderhook or Osage
HV 8798	6800-8	crinoid columnals <u>Zoophychus</u>	-
HV 8799	6800-9	<u>Amplexizaphrentis</u> cf. <u>taylori</u> <u>Menophyllum?</u> sp.	Lower Mississippian Kinderhook or Osage
HV 3800	6800-10	<u>Schuchertella</u> sp.	-

TS No. 5827IR
Locality No. 6800

2

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
HV 8801	6800-11	<u>Kakwiphyllum</u> sp. A Sutherland <u>Amplexizaphrentis</u> sp. <u>Syringopora harveyi</u> <u>Brachythriss</u> aff. <u>suborbicularis</u>	Lower Mississippian Osage
HV 8803	6800-13	<u>Spirifer</u> sp. <u>Brachythriss</u> sp. indet. <u>Hemiplethorhynchus</u> sp. <u>Fenestella</u> sp.	Lower Mississippian Osage
HV 8804	6800-14	<u>Avonia</u> cf. <u>pustulifera</u> <u>Echinoconchus</u> sp. <u>Geniculifera?</u> sp. <u>Marginatia?</u> sp. "Brachythyris" n. sp. (probably a new genus) <u>Rugosochonetes</u> sp. <u>Streptorhynchus</u> sp. <u>Aviculopecten?</u> indet. bivalves fenestellid bryozoa crinoid columnals	Lower Mississippian Osage

Discussion:

Lower Mississippian rocks are cut out by unconformity at the South Old Camp Section, but a grab sample (ARO-7, 6261-7) from a nearby fault slice probably correlates with sample 6800-14 of the subject section. The presence of Punctospirifer in the Rock Slough Section (Locality 6797) suggests those sandstones are no older than Osage and may overlie the rocks of the John Herbert Village Section.

Allen R. Ormiston

ARO:skw 1.01



Amoco Production Company

Tulsa, Oklahoma
May 31, 1973

File: Technical Service No. 5827IR
Job No. 9813
Locality No. 06800

MEMORANDUM

Subject: Conodonts from the John Herbert Village Section, N 1/2,
Sec. 15, T25N, R21E, Porcupine River Area, Coleen Quad.,
Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Footage</u>	<u>Sp1. No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8797 F,C,L	7	21076	<u>Spathognathodus</u> 21076	1
8798 F,C,L,f	8	21076	<u>Spathognathodus</u> 21076	14
		21084	<u>Dollymae</u> 21084	5
		21086	<u>Spathognathodus</u> 21086	5
		2868	<u>Apatognathus</u> sp.	7

The conodonts in samples 7 and 8 suggest an upper Kinderhook or lower Osage (Lower Mississippian) age for the samples.

H. Richard Lane

HRL:mk13.08



Amoco Production Company

Tulsa, Oklahoma
September 19, 1973

File: Technical Service No. 5834IR
Locality No. 6807
Job No. 9820

MEMORANDUM

Subject: Paleontology of the Keenan Quartzite Section, Charley River
Quadrangle, Alaska.

INTRODUCTION

Three small collections of fragmentary fossils were submitted for study. A single ammonite fragment was inadequate for identification, consequently a "field identification" of Middle Jurassic is rejected. Fragmentary Inoceramus specimens resemble various species from the Middle Jurassic through Upper Cretaceous, therefore a Middle Jurassic to Upper Cretaceous age is assigned.

It is our understanding that additional specimens from float at the base of the section may be present in personal collections in the Denver Office. If a more precise age determination is required these specimens should be obtained, if possible, and submitted for additional study.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Specs.</u>
KQ-72-9039F	3	20881	Indet. ammonite fragment	1
KQ-72-9038F	4	02230	<u>Inoceramus</u> sp. (fine ribs)	1
		02230	<u>Inoceramus</u> sp. (fragments, coarse ribs)	1
KQ-72-9036F	6	02230	<u>Inoceramus</u> sp. (fragments, coarse ribs)	3

REMARKS

Sample 3 contains an ammonite fragment bearing a distinctive pattern of bifurcating ribs and umbilical nodes. Rib and node patterns of this type are

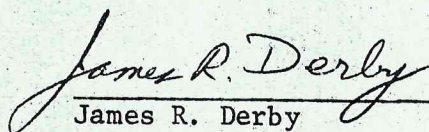
T.S. 5834IR
September 19, 1973

2

extremely common in Middle Jurassic ammonites, especially the Stephanocera-
taceae, hence the field age determination. However, similar patterns are
present in various Upper Jurassic and Cretaceous genera. A more complete
specimen with at least the whorl profile is required for identification.

Sample 4 contains about half of a single left valve of a fine-ribbed species
of Inoceramus such as I. labiatus (Turonian), I. concentricus (Cenomanian),
and I. yokoyami (Coniacian-Santonian). This would appear to suggest an Upper
Cretaceous age. However, samples 4 and 6 also contain fragments of a coarse-
ribbed Inoceramus. This ribbing is most like that of I. porrectus of Middle
Jurassic age, although it could be the coarse marginal plications of finer-
ribbed younger species.

In view of the uncertain identifications and somewhat conflicting nature of
the suggestive evidence, it seems best to assign a Middle Jurassic through
Upper Cretaceous age for these samples.


James R. Derby

JRD:skw 27.06



Amoco Production Company

Tulsa, Oklahoma
July 27, 1973

File: Technical Service No. 5823IR
Locality No. 6796
Job No. 9809

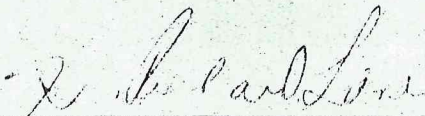
MEMORANDUM

Subject: Conodonts from the Mouth Coleen Section, NE 1/4, Sec. 12,
T26N, R23E, Coleen Quad., Alaska.

INTRODUCTION

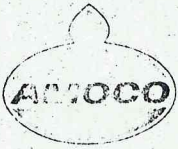
The following samples were processed for conodonts and found to be barren.

<u>Field No.</u>	<u>Sample No.</u>	<u>FAUNA</u> <u>Taxon No.</u>	<u>Identification</u>
8316 CP	8	0501	Barren of conodonts
8314 L,C	9	0501	Barren of conodonts
8315 F,C	10	0501	Barren of conodonts



H. Richard Lane

HRL:skw 4.09



Amoco Production Company

4502 East 41st Street
P.O. Box 591
Tulsa, Oklahoma 74102

Research Center
918-627-3400

January 18, 1973

File: Technical Service No. 5822 IR
Locality No. 6795

P. H. Garrison
Denver Division

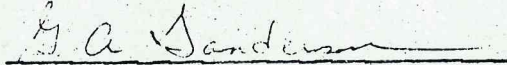
Attn: Terry Cooper

Attached is a paleontological report by Allen Ormiston on megafossils from the 1972 Nelson Bluff Section in Alaska. The samples, which are of Lower and Middle Devonian age, add to our understanding of the regional paleogeography of the Salmontrout.

Very truly yours,

WILLIAM R. WALTON

By:


G. A. Sanderson

GAS:jd

cc: G. J. Verville/Research Center
A. B. Shaw/Denver
E. E. Lafaye/Denver



Amoco Production Company
Tulsa, Oklahoma

January 11, 1973

File: Technical Service No. 5822 IR
Locality No. 6795

MEMORANDUM

Re: Megafossils from Nelsen Bluff,
NW section 29, T 21N, R 23E
Black River Quad., Alaska

Lower and Middle Devonian megafossils are reported from the subject locality:

Field No.	Sample No.	Taxa	Age
NB 8287	6795-1	<u>Moelleritia</u> cf. <u>canadensis</u> Indeterminate crinoid columnals <u>Emanuella</u> ? sp.	Lower Devonian Siegenian or Emsian

Rock is a dark wackestone

NB 8285	6795-3	<u>Idiostroma</u> sp. (abundant) <u>Clathrocoilon</u> cf. <u>sub-clathrata</u> <u>Alveolites</u> sp. <u>Thamnopora</u> sp.	Lower Devonian
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Rock is a complex bindstone with two generations of stromatoporoid encrusting Thamnoporas and Alveolites sheets coating everything.

NB 8284	6795-4	<u>Favosites</u> cf. 20069 <u>Loxonema</u> sp. (abundant) Indeterminate gastropods Indeterminate stromatoporoid crinoid columnals	Lower Devonian
---------	--------	--	----------------

Rock is a gastropod-rich pelletoidal micrite

January 11, 1973

Field No.	Sample No.	Taxa	Age
NB 8283	6795-5	Barren of megafossils	-
NB 8281	6795-6	Sample missing	
NB 8282	6795-7	<u>Lingula</u> sp. <u>Ganinella</u> 20828 <u>Nowakia</u> <u>acuaria</u> <u>Conocardium</u> sp. <u>Abditoloculina</u> sp. Other ostracodes	Lower Devonian Siegenian or early Emsian
An Ostracode - trilobite-rich wackestone			
NB 8289	6795-8	<u>Gasterocoma</u> <u>bicaula</u>	Upper Emsian or Eifelian
Rock is a crinoidal wackestone			
NB 8288	6795-9	<u>Gasterocoma</u> <u>bicaula</u>	Upper Emsian or Eifelian
Rock is a crinoidal wackestone with stromatoporoid clasts.			

Discussion:

Samples 1-7 of this sequence represent a distinctive facies of the Salmon-trout Limestone. These rocks are far muddier than the type Salmon-trout. The presence of the lagoonal ostracode, Moelleritia, abundant gastropods and pelletoidal micrites suggests deposition in a muddy lagoon within which small (6795-3) patch reefs grew. Nelsen Bluff can be added as a control point to the Salmon-trout paleogeography map where its lagoonal nature fits well between the shore facies at Salmon Village and the conjectured reef to the west (see Figure 2 in Research Department Report No. M72-G-4). Samples 8 and 9 are probably best assigned to the overlying Ogilvie Formation.

Allen R. Ormiston
Allen R. Ormiston

ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
May 4, 1973

File: Technical Service No. 5822IR
Job No. 9808
Locality No. 06795

MEMORANDUM

Subject: Conodonts from the Nelsen Bluff Section, NW 1/4, Sec. 29,
T21N, R23E, Black River Quad., Alaska

INTRODUCTION

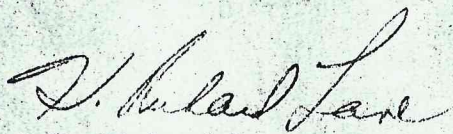
The following samples were processed for conodonts:

FAUNA

Field No.	Spl. No.	Taxon No.	Identification	No. Spec.
NB8287LCF	1	0501	Barren of conodonts	
NB8286LC	2	21060	<u>Spathognathodus</u> 21060	10
NB8284FCL	4	21060	<u>Spathognathodus</u> 21060	1
Samples 2 and 4 are Lower Devonian in age.				
NB8282FCL	7	1990	<u>Polygnathus</u> 1990	3
		3051	<u>Hindeodella</u> sp.	6
		20055	<u>Belodella</u> 20055	1
		2865	<u>Panderodus</u> sp.	3
NB8289FC	8	1990	<u>Polygnathus</u> 1990	2
		1992	<u>Pelekyognathus</u> 1992	2

Field No.	Spl. No.	Taxon No.	Identification	No. Spec.
		1983	<u>Spathognathodus</u> 1983	2
		2865	<u>Panderodus</u> sp.	9
		2901	<u>Belodella</u> sp.	12
NB8288C	9	1990	<u>Polygnathus</u> 1900	2
		1992	<u>Pelekyognathus</u> 1992	1
		4704	<u>Spathognathodus</u> 4704	3
		2845	<u>Ozarkodina</u> sp.	1
		2901	<u>Belodella</u> sp.	14
		2865	<u>Panderodus</u> sp.	13
		2618	Indet. conodonts	2

Samples 7, 8 and 9 are Late Emsian (Lower Devonian) in age.



H. Richard Lane

HRL:er 18.04



Amoco Production Company

Tulsa, Oklahoma
April 6, 1973

File: Technical Service No. 5836IR
Locality No. 6809

MEMORANDUM

Subject: Megafossils from North Salmon Village Section,
Secs. 31 and 32, T21N, R24E,
Black River Quadrangle, Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Identification</u>	<u>Age</u>
NS 8368	6809-1	<u>Nowakia parabarrandei</u> <u>Metastyliolina</u> sp.	Middle Devonian Eifelian
NS 8369	6809-2	<u>Nowakia parabarrandei</u> <u>Metastyliolina</u> sp.	Middle Devonian Eifelian
NS 8373	6809-6	<u>Saccarchites?</u> sp. <u>Moelleritia</u> n. sp.	Upper Emsian or Eifelian
NS 8374	6809-7	<u>Leiopteria</u> sp. <u>Amphipora ramosa</u> <u>Treposella</u> sp.	Middle Devonian probably Givetian

A shallow-water, lagoonal or similar depositional environment is suggested by the abundance of Amphipora and Leiopteria.

NS 8375	6809-8	<u>Stachyodes</u> sp. <u>Amphipora</u> sp. indet. ostracodes	Middle or Upper Devonian
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The dolomites of this sample can not be precisely dated, but suggest a lagoonal environment.

NS 8376	6809-9	indet. ostracodes	----
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This rock is a partly dolomitized pelmicrite. No determinable microfossils were seen in thin section.

Memorandum
April 6, 1973

2

Discussion

Middle Devonian rocks of lagoonal facies are present toward the top of this section. It can not be established whether Upper Devonian lagoonal deposits such as occur at the top of the Fort Creek (Loc. 6182) section are also present.

Allen R. Ormiston
Allen R. Ormiston

ARO:sd 23.3



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5836IR
Job No. 9822
Locality No. 6809

MEMORANDUM

Subject: Conodonts from the North Salmon Village Section, Sec. 31-32,
T21N, R24E, Black River Quad., Alaska

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8368 F	1	0501	Barren of conodonts	
8369 C	2	1990	<u>Polygnathus</u> 1990	7
		21174	<u>Spathognathodus</u> 21174	4
		4051	<u>Ozarkodina</u> 4051	2
		2901	<u>Belodella</u> sp.	6
		2618	Indet. conodonts	11

The fauna in sample 3 is upper Emsian (late Early Devonian) in age and correlates approximately with sample 57 (HRL 60) at the type Salmontrout Section (Loc. 6214).

8370 C	2	4702	<u>Polygnathus</u> 4702	3
		2618	Indet. conodonts	27

The age of sample 3 is equivocal, being either latest Early Devonian or earliest Middle Devonian. The same fauna occurs in the type Salmontrout above sample 57 (HRL 60) to the top of the formation.

8371 C	4	0501	Barren of conodonts	
8372 C	5	0501	Barren of conodonts	


T.S. 58361R
Locality No. 6809

2

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8373 FC	6	0501	Barren of conodonts	
8374 FC	7	2865	<u>Panderodus</u> sp.	4

Panderodus ranges from Middle Ordovician through the Middle Devonian.

8375 FC	8	0501	Barren of conodonts
8376 L, C	9	0501	Barren of conodonts


H. Richard Lane

HRL:skw 28.04



Amoco Production Company

May 7, 1973

File: Technical Service No. 5835IR

Mr. P. H. Garrison
Denver Division

Attention: L. C. Furer

Dear Sir:

Subject: Paleontological Analysis - Steamboat Mountain Section,
Alaska

Attached is a report by A. R. Ormiston concerning the Lower Paleozoic megafossils from the subject section. These are all 1972 Alaska field samples.

Yours very truly,

JAMES A. MOMPER

By G. A. Sanderson
G. A. Sanderson

GAS:er 33.14
Attachment

cc: G. J. Verville
E. E. Lafaye - Denver



Amoco Production Company

Tulsa, Oklahoma
April 16, 1973

File: Technical Service 5835IR
Locality 6808

MEMORANDUM

Subject: Megafossils from the Steamboat Mountain Section, Section 26,
T16N, R29E, and Sections 32-33, T16N, R30E,
Black River Quadrangle, Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
SB 9070	6808-4	barren of megafossils	--
	Rock is a calcilutite		
SB 9062	6808-7	laminar stromatoporoids? <u>Stachyodes?</u> sp.	Ordovician to Devonian
	Rock is a dololutite with recrystallized fossils		
SB 9063	6808-8	<u>Loxonema</u> sp. indet. stromatoporoids indet. leptostrophic gastropods	"
SB 9066	6808-11	indet. laminar stromatoporoid <u>Stachyodes?</u> sp.	"
	Rock is a mottled dolomite, probably originally a bindstone.		
SB 9059	6808-14	barren of megafossils	--
	Rock is coarsely crystalline dolomite		

Discussion:

The few fossils present are too poorly preserved for precise identification, but the fossil groups present suggest an Ordovician through Devonian age.

Allen R. Ormiston
Allen R. Ormiston

ARO:er 24.02



Amoco Production Company

Tulsa, Oklahoma
July 31, 1973

File: Technical Service No. 5835IR
Locality No. 6808
Job No. 9821

MEMORANDUM

Subject: Conodonts from the Steamboat Mtn. Section, Sec. 26, T16N,
R29E and Sec. 32-33, T16N, R30E, Black River Quad., Alaska

INTRODUCTION

The following samples were processed and examined for conodonts.

FAUNA


<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Specimens</u>
SB-72-9067C	1	0501	Barren of conodonts	
SB-72-9068LC	2	0501	Barren of conodonts	
SB-72-9069LC	3	0501	Barren of conodonts	
SB-72-9070FC	4	0501	Barren of conodonts	
SB-72-9071CL	5	0501	Barren of conodonts	
SB-72-9072CL	6	0501	Barren of conodonts	
SB-72-9062C	7	2910	<u>Acontiodus</u> 2910	5
		2909	<u>Scolopodus</u> 2909	2
		21242	<u>Acontiodus</u> 21242	6
		2891	<u>Paltodus</u> sp.	11
		2618	Indet. conodonts	33

The fauna in sample 7 is middle Lower Ordovician in age.

T.S. 58351R
July 31, 1973

2

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Specimens</u>
SB-72-9066C	11	0501	Barren of conodonts	
SB-72-9061CL	12	0501	Barren of conodonts	
SB-72-9060CL	13	0501	Barren of conodonts	
SB-72-9059CL	14	0501	Barren of conodonts	


H. Richard Lane

HRL:skw 10.01



Amoco Production Company
Tulsa, Oklahoma

January 3, 1973

File: Technical Service No. 5832 IR
Job No. 9818
Locality No. 6805

MEMORANDUM

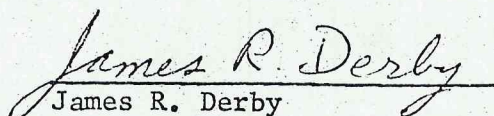
Re: Paleontology of "Triassic Oil Section",
SE/4, 7-4N-30E, Charley River Quad, Yukon-
Nation Rivers area, Alaska

In response to a recent telecon request by L. C. Furer, the megafossil samples from the "Triassic Oil Section" in east central Alaska were examined for age determinations. Three samples from the "Triassic" indicate that this section is clearly Upper Triassic in age. One sample from the top of the Tahkandit (Permian) Formation appears to contain a typical Permian fauna.

Sample No.	Approx. Footage below top of section	Field No.	IBM No.	Identification	Count	Age
1	900'	9058	02389	<u>Spiriferella</u> sp. Productids, other Paleozoic brachiopods		Permian, top of Tahkandit Fm.
4	496'	9055	20701	<u>Monotis</u> <u>scutiformis</u> <u>pinensis</u>	11	Middle Norian (<u>Columbianus</u> Zone) of Upper Triassic
5	490'	9054	20700	<u>Monotis</u> sp.	10	Norian-Upper Triassic
16	90'	9044	20702	<u>Halobia</u> <u>cordillerana</u>	4	Upper Karnian (<u>Welleri</u> Zone) of Upper Triassic

Remarks

These faunas indicate a range in age from Upper Karnian through Middle Norian for the Triassic Oil Section. The age determinations suggest that the section is structurally complicated. The lowest samples (4 & 5) indicate a younger age than the highest sample (16). (See attached chart of Triassic zones). Literature on the area has described local folding and folding, so this reversal of the section is not unexpected.


James R. Derby

JRD:mjh
Attachment

TRIASSIC FAUNAL ZONES IN NORTH AMERICA

TABLE XI-6

Range and distribution of Triassic pelagic faunas.
(Numbers refer to occurrence in the appropriate region.)

LOWER TRIASSIC										MIDDLE TRIASSIC										UPPER TRIASSIC										SE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Griesbachian		Dienerian		Smithian		Spathian		Anisian		Ladinian		Karnian		Norian																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	



Amoco Production Company
Tulsa, Oklahoma

September 13, 1972

Re: Megafossils from Fossil Mtn. Section, Sec. 9, T9N, R2E,
Livengood Quad., Alaska, Locality 6706
Technical Service 5803IR

MEMORANDUM

Megafossils of late Upper Ordovician age are recognized from the subject section.

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6706-7	8384F	<u>Heliolites</u> cf <u>inordinatus</u> <u>Holorhynchus</u> sp. <u>Hesperorthis</u> sp. <u>Maclurites</u> sp. <u>Beatricea</u> sp. <u>Eofletcharia</u> sp. indet. rhynchonellid <u>Lobocorallium?</u> sp. tabular stromatoporoids indet. crinoid nautiloid	Upper Ordovician Ashgillian
6706-8	8383F	<u>Eofletcharia</u> sp. <u>Saffordophyllum</u> sp.	Upper Ordovician
6706-11	8393C,F	indet. tabulate	-

Allen R. Ormiston
Allen R. Ormiston

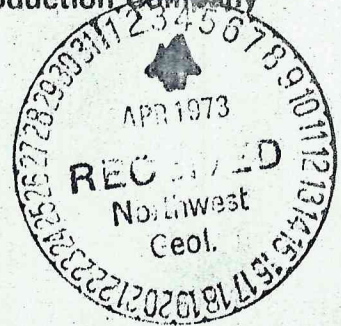
Thomas L. DeKeyser (per ARO)
Thomas L. DeKeyser

ARO/TLD:uw



Tulsa, Oklahoma
April 2, 1973

Amoco Production Company



File: Technical Service No. 5803IR

Mr. P. H. Garrison
Denver Division

Attention L. C. Furer

Dear Sir:

Subject: Paleontological Analysis,
Fossil Mountain Section, Alaska

The attached memorandum by H. R. Lane reports on the attempted conodont recoveries from the subject samples. Megafossil results have been reported previously.

Yours very truly,

JAMES A. MOMPER

By G. A. Sanderson
G. A. Sanderson

GAS:sd 1.8
Attachment

cc: G. J. Verville
A. B. Shaw
E. E. Lafaye



Amoco Production Company

Tulsa, Oklahoma
March 29, 1973

File: Technical Service No. 5803IR
Job No. 9789

MEMORANDUM

Subject: Conodonts from the Fossil Mtn. Section, Sec. 9, T9N, R2E,
Livengood Quad., Alaska


INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
8391C	9	0501	Barren of conodonts
8392C	10	0501	Barren of conodonts
8393C	11	0501	Barren of conodonts

All samples were barren of conodonts.


H. R. Lane

HRL:skw



Amoco Production Company

Tulsa, Oklahoma
May 30, 1973

File: Technical Service No. 5831IR
Locality No. 6804

MEMORANDUM

Subject: Megafossils from the East Crazy Mountain Section,
Secs. 2-11, T10N, R14E, Circle Quadrangle, Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
EC-9014	6804-2	Stromatoporoids?	--
EC-9018	6804-5	Indeterminate organic fabric	--
EC-9017	6804-6	<u>Amphipora</u> cf. <u>ramosa</u> indeterminate ostracodes	Devonian
EC-9022	6804-10	<u>Gasterocoma</u> <u>bicaula</u>	Devonian Late Emsian or Early Eifelian
EC-9023	6804-11	<u>Gasterocoma</u> <u>bicaula</u> <u>Alveolites</u> sp. A	Devonian Late Emsian or Early Eifelian

DISCUSSION

The upper carbonate of this section is late Lower or early Middle Devonian in age and probably equivalent to the Ogilvie Formation of Canada, which carries the same fossils.

Thomas L. DeKeyser
Thomas L. DeKeyser

Allen R. Ormiston
Allen R. Ormiston

TLK/ARO:sd 9.9



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5831IR
Job No. 9817
Locality No. 6804

MEMORANDUM

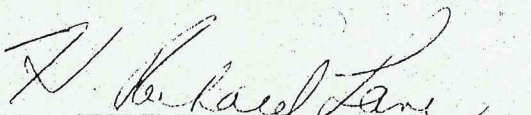
Subject: Conodonts from the East Crazy Mountain Section, Sec. 2-11,
T10N, R14E, Circle Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts and all were found to be barren.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
9013 LC	1	0501	Barren of conodonts
9014 LC	2	0501	Barren of conodonts
9016 LC	4	0501	Barren of conodonts
9018 LC	5	0501	Barren of conodonts
9017 FCL	6	0501	Barren of conodonts
9020 CL	8	0501	Barren of conodonts
9021 CL	9	0501	Barren of conodonts
9022 CL	10	0501	Barren of conodonts


H. Richard Lane

HRL:skw 28.03



Amoco Production Company

Tulsa, Oklahoma
June 11, 1973

File: Technical Service No. 5829IR
Locality No. 6802

MEMORANDUM

Subject: Megafossils from the Takoma Bluff Section,
Section 5, T7N, R20E, Charley River Quad., Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
TB-8715	6802-1	barren of megafossils	---
TB-8714	6802-2	barren of megafossils	---
TB-8716	6802-6	ostracod fragments brachiopod shell fragments crinoid fragments	Paleozoic

DISCUSSION

Sample 6 was taken from an outcrop about 500 feet south of the south end of the measured section and is not shown on the log.

Thomas L. DeKeyser
Thomas L. DeKeyser

ARO:sd 20.13



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5830IR
Job No. 9816
Locality No. 6803

MEMORANDUM

Subject: Conodonts from the West Crazy Mountain Section, Sec. 8-17,
T10N, R13E, Circle Quad., Alaska

INTRODUCTION

The following samples were processed and found to be barren of conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
WC-72-8304 C	1	0501	Barren of conodonts
8303 FCL	2	0501	Barren of conodonts
8302 FCL	3	0501	Barren of condonts
8300 C	5	0501	Barren of condonts
8299 FC	6	0501	Barren of conodonts

H. Richard Lane
H. Richard Lane

HRL:skw 28.05



Amoco Production Company

Tulsa, Oklahoma
June 18, 1973

File: Technical Service 5866IR
Locality 7168

MEMORANDUM

Subject: Megafossils from Windy Gap North, Section 13, Township 9 North,
Range 1 East, Livengood Quad., Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8419	7168-2	Indet. Loxonemid Gastropod	Paleozoic
8418	7168-3	<u>Maclurites?</u> sp. Rock is a microbrecciated, light colored limestone.	Probably Ordovician
8417	7168-4	Barren of megafossils. Rock is an oolitic grainstone.	-

Discussion: An Ordovician age seems likeliest for this short section.

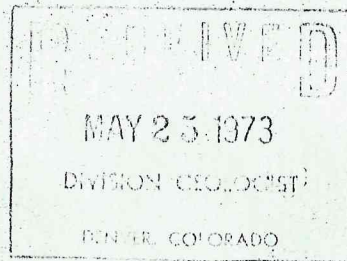
Thomas L. DeKeyser

Thomas L. DeKeyser

Allen R. Ormiston

Allen R. Ormiston

ARO:lc 6.2



Amoco Production Company

4502 East 41st Street
P.O. Box 591
Tulsa, Oklahoma 74102

Research Center
918-627-3400

Tulsa, Oklahoma

May 23, 1973

File: Technical Service No. 5828IR

Mr. P. H. Garrison
Denver Division

Attention: Mr. L. C. Furer

Dear Sir:

Subject: Paleontological Analysis, Woodchopper Limestone Section,
Alaska

Attached is a report by Allen Ormiston on the megafossil fauna of the subject section. These are 1972 Alaska field collections. Work on the conodonts from this material is in progress and will be reported shortly.

Yours very truly,

JAMES A. MOMPER

By *G. A. Sanderson*

G. A. Sanderson

GAS:el 12.01

Attachment

cc: G. J. Verville
E. E. Lafaye



Amoco Production Company

Tulsa, Oklahoma
April 9, 1973

File: Technical Service No. 5810IR
Job No. 9796
Locality No. 6793

MEMORANDUM

Subject: Conodonts from the Windy Gap South Section,
Sections 34 and 35, T9N, R1E, Livengood Quad., Alaska

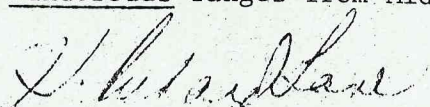
INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Field No.</u>	<u>Spl. No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8809 FL	5	0501	Barren of Conodonts	
8810 FCL	6	0501	Barren of Conodonts	
8813 FCL	10	0501	Barren of Conodonts	
8814 FCL	12	0501	Barren of Conodonts	
8821 FL	19	0501	Barren of Conodonts	
8822 FCL	20	0501	Barren of Conodonts	
8824 FL	22	0501	Barren of Conodonts	
8825 FCL	23	0501	Barren of Conodonts	
8833 FCL	31	0501	Barren of Conodonts	
8835 FL	33	0501	Barren of Conodonts	
8849 FC	47	2865	<u>Panderodus</u> sp.	2

Panderodus ranges from Middle Ordovician through the Middle Devonian.


H. Richard Lane

HRL:mk8.01



Amoco Production Company

Tulsa, Oklahoma

September 13, 1972

Re: Megafossils from Windy Gap South Section, Secs. 34 and 45,
T9N, R1E, Livengood Quad., Alaska, Locality 6793
Technical Service 5810IR

MEMORANDUM

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6793-4	WS8808	Barren of megafossils	-
		Rock is a plemicrite	
6973-6	WS8810	<u>Eofletcharia</u> sp. <u>Chaetetes</u> sp. streptelasmid indet. indet. trilobites	Middle or Upper Ordovician
		Rock is a packstone	
6973-5	WS8809	indet. brachiopods	-
		Rock is a grainstone	
6973-7	WS8815	<u>Paleophyllum argus</u> <u>Paleofavosites</u> sp. <u>Saffordophyllum</u> sp.	Upper Ordovician
6973-8	WS8811	undet. streptelasmid	Ordovician or Silurian
6973-9	WA8812	<u>Paleofavosites</u> sp.	
		Rock is a packstone	
6793-10	WS8813	<u>Propora</u> sp. <u>Paleofavosites</u> sp. <u>Catenipora</u> sp. indet. stromatoporoid crinoid columnals	Middle or Upper Ordovician

Rock is a floatstone (Sensu Klován and Embry, 1971)

September 13, 1972

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6793-12	WS8814	<u>Paleofavosites</u> sp. <u>Favosites</u> sp. indet. ostracodes	Middle or Upper Ordovician
		Rock is ostracodal micrite to packstone	
6793-14	WS8816	Barren of megafossils	"
		Rock is a micrite with birdseye texture	
6793-15	WS8817	Barren of megafossils	-
		Rock is a micrite	
6793-16	WS8818	Barren of megafossils	-
6793-17	WS8819	<u>Eofletcheria</u> sp.	Middle or Upper Ordovician
6793-18	WS8820	Barren of megafossils	-
6793-19	WS8821	<u>Stromatoporoids?</u>	-
		Possibly a boundstone	
6793-20	WS8822	Barren of megafossils	-
6793-21	WS8823	Barren of megafossils	-
6793-22	WS8824	<u>Zaphrentis?</u> sp.	Ordovician?
		Rock is a grainstone	
6793-23	WS8825	<u>Pentamerid?</u> brachiopods indet. streptelasmid	Ordovician or Silurian
6793-26	WS8828	Barren of megafossils	-
6793-27	WS8829	Barren of megafossils	-
		Laminated micrite	
6793-28	WS8830	Barren of megafossils	-
		A micrite with birdseye fenestrae	

September 13, 1972

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6793-29	WS8831	<u>Stromatolites?</u> A laminated micrite of possible algal origin	-
6793-30	WS8832	Barren of megafossils Rock texture obliterated by shear	- -
6793-31	WS8833	Barren of megafossils	-
6793-32	WS8834	Barren of megafossils Rock is a finely laminated micrite with 15% intraclasts, 5% pellets, and birdseye fenestrae, a lophorite	-
6793-33	WS8835	indet. gastropod Rock is an oolitic grainstone, most of nuclei being pellets, but gastropods rarely serving as nuclei	-
6793-34	WS8836	Barren of megafossils	-
6793-35	WS8837	Barren of megafossils	-
6793-36	WS8838	<u>Favosites</u> sp. Rock is a packstone	Ordovician to Devonian
6793-37	WS8839	Barren of megafossils Rock is a micrite	-
6793-38	WS8840	Barren of megafossils	-
6793-39	WS8841	Crinoid columnals Rock is a packstone	-
6793-41	WS8843	Barren of megafossils	-
6793-42	WS8844	<u>Paleofavosites</u> sp.	Ordovician or Silurian
6793-43	WS8845	<u>Safforodophyllum?</u> sp.	Ordovician?
6793-44	WS8846 (float)	<u>Safforodophyllum?</u> sp.	

September 13, 1972

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6793-47	WS8849	<u>Favosites</u> sp. <u>Halysites?</u> sp. crinoid columnals	Silurian?

Discussion:

Field interpretation of this section as including abundant stromatoporoid boundstones has been shown to be incorrect. The dominant rock type is micrite; some of these may be stromatolitic, but rock fabrics are too poorly preserved to be certain. Dominance of shallow water (probably intertidal rather than supratidal) carbonates is clear from the presence of oolitic grainstones (WS8835), ostracodal micrites (WS8814) and related rock types.

Middle and/or Upper Ordovician rocks are definitely present, but Silurian rocks only questionably so. Conodont studies may provide more definite dating.

Allen R. Ormiston

Allen R. Ormiston

Thomas L. DeKeyser (see ARO)

Thomas L. DeKeyser

ARO/TLD:uw



Amoco Production Company

Tulsa, Oklahoma
June 11, 1973

File: Technical Service No. 5814IR
Locality No. 6788

MEMORANDUM

Subject: Megafossils from the July 9 Section, Latitude 68°58'N.,
Longitude 143°24'W., Table Mountain Quadrangle, Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
JN-8657	6788-1	<u>Syringopora</u> cf. <u>virginica</u> brachiopod fragments crinoid columnals gastropod fragments ostracodes	Mississippian Meramec
JN-8656	6788-2	<u>Lithostrotionella</u> <u>mclareni</u>	Mississippian Late Meramec or Chester
JN-8655	6788-3	<u>Echinoconchus</u> cf. <u>genevievensis</u> gastropod fragments crinoid columnals	Mississippian Late Meramec or Chester
JN-8654	6788-4	<u>Lithostrotionella</u> sp.	Mississippian Late Meramec or Chester
JN-8650	6788-8	fenestellid bryozoa	----
JN-8648	6788-10	<u>Lithostrotionella</u> <u>mclareni</u> crinoid columnals brachiopod fragments	Mississippian Late Meramec or Chester
JN-8647	6788-11	<u>Gigantoproductus</u> cf. <u>brauzerianus</u>	Mississippian Late Meramec or Chester

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
JN-8646	6788-12	echinoderm plates	---
JN-8645	6788-13	echinoderm plates indet. tetracoral	---
JN-8644	6788-14	echinoderm plates	---
JN-8639	6788-19	<u>Girtyella?</u> sp. indet. productid crinoid columnals fenestellid bryozoa	Mississippian Meramec?
JN-8638	6788-20	sample missing	---
JN-8634	6788-24	<u>Spirifer</u> cf. <u>rowleyi</u> crinoid columnals	Mississippian Late Meramec or Chester
JN-8633	6788-25	fenestellid bryozoa crinoid columnals	---
JN-8631	6788-27	<u>Dictyoclostus</u> cf. <u>americanus</u> fenestellid bryozoa crinoid columnals	Mississippian Late Meramec or Chester
JN-8630	6788-28	<u>Dictyoclostus</u> sp. indet. gastropod crinoid columnals fenestellid bryozoa	Mississippian Late Meramec or Chester
JN-8628	6788-30	barren of megafossils	---
JN-8627	6788-31	indet. inadunate crinoid	---
JN-8625	6788-32	<u>Spiriferella</u> <u>rajah</u> "A" crinoid columnals fenestellid bryozoa ostracodes	Pennsylvanian
JN-8626	6788-33	<u>Yakovlevia</u> sp. crinoid columnals	Early Permian

Technical Service No. 5814IR
Locality No. 6788

3

DISCUSSION

As in other nearby sections, the Kayak shale at this locality gets as young as Meramec.

Thomas L. De Keyser
Thomas L. DeKeyser

Allen R. Ormiston
Allen R. Ormiston

ARO:sd 20.11



Amoco Production Company

Tulsa, Oklahoma

June 5, 1973

File: Technical Service No. 5815IR
Locality 6789

MEMORANDUM

Subject: Megafossils from the Nichenthray Mountain Section,
Section 2, T11S, R29E, Arctic Quad., Alaska

Field No.	Sample No.	Taxa	Age
8693	6789-1	<u>Paraconularia</u> sp. <u>Neochonetes</u> sp.	Lisburne, Chester or Pennsylvanian
8694	6789-2	<u>Choristites</u> sp. <u>Straparollus</u> (<u>Euomphallus</u>) sp. <u>Martinia</u> sp. A ? <u>Pseudosyrinx</u> sp. Indet. productid brachiopod Indet. disphyllid tetracoral Indet. turbate tetracoral	Early Permian
8695	6789-3	Organic burrows	---

DISCUSSION

Paraconularia and Neochonetes occur together elsewhere at the South
Old Camp Section (Locality 6163) in rocks considered Pennsylvanian.

Thomas L. DeKeyser

Thomas L. DeKeyser

Allen R. Ormiston
Allen R. Ormiston

ARO:el 11.04



Amoco Production Company

Tulsa, Oklahoma
July 27, 1973

File: Technical Service No. 5815IR
Locality 6789
Job No. 9801

MEMORANDUM

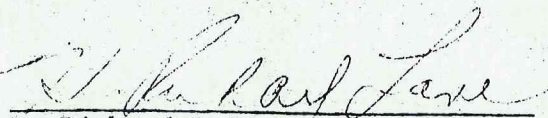
Subject: Conodonts from the Nichenthray Mountain Section, SW 1/4,
Sec. 2, T11S, R29E, Arctic Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts and found to be barren.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
8693 FCL	1	0501	Barren of conodonts
8694 FCL	2	0501	Barren of conodonts


H. Richard Lane

HRL:skw 4.11



Amoco Production Company
Research Center
Tulsa, Oklahoma

October 5, 1972

File: Technical Service 5804IR
Locality No. 6666

MEMORANDUM

Re: Megafossils from reef east of Old John Lake, section 17, T15S, R34E,
Arctic Quad., Alaska

Megafossils systematically collected from the subject locality in 1972 are reported in descending order:

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8710	6666-13	<u>Actinostroma</u> n. sp. <u>Australophyllum</u> 20413 <u>Cystiphylloides</u> cf. <u>spinosum</u> <u>Pachyfavosites</u> sp. indet. atrypid crinoid columnals	Middle Devonian

A stromatoporoid bindstone with wackestone pockets rich in corals.

8709	6666-12	<u>Actinostroma</u> n. sp. indet. gastropod	Middle Devonian
8708	6666-11	<u>Actinostroma</u> n. sp. <u>Aulopora</u> sp. <u>Stachyodes</u> sp. indet. tetracoral	Middle Devonian

A framestone formed by a consortium of stromatoporoid and Aulopora.

8707	6666-10	<u>Clathrocoilona</u> sp. <u>Aulopora</u> sp. crinoid columnals	Devonian
------	---------	---	----------

A stromatoporoid bindstone.

8706F	6666-9	<u>Cystiphylloides</u> cf. <u>spinosum</u> <u>Alveolites</u> sp. <u>Aulopora</u> sp. <u>Actinostroma</u> n. sp. <u>Schizophoria</u> indet. atrypid crinoid columnals	Middle Devonian
-------	--------	--	--------------------

A stromatoporoid bindstone with coralline wackestone.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8705F	6666-8	<u>Actinostroma</u> n. sp. <u>Alveolites</u> sp. crinoid columnals	Middle Devonian
A stromatoporoid framestone with growth cavities.			
8704F	6666-7	<u>Clathrocoilona</u> sp. <u>Alveolites</u> sp. <u>Dohmophyllum</u> sp. <u>Thamnopora</u> sp. crinoid columnals	Middle Devonian
A stromatoporoid - tabulate coral floatstone.			
8703F	6666-6	<u>Actinostroma</u> sp. <u>Cystiphyllodes</u> sp. <u>Anatrypa arctica</u> crinoid columnals	Middle Devonian
A stromatoporoid bindstone with packstone matrix.			
8702F	6666-5	<u>Clathrocoilona</u> sp. <u>Alveolites</u> sp. <u>Thamnopora</u> sp.	Devonian
A stromatoporoid bindstone, packstone matrix.			
8701F	6666-4	<u>Australophyllum</u> 20413 <u>Alveolites</u> sp. <u>Anatrypa arctica</u> crinoid columnals <u>Chaetetes</u> sp.	Middle Devonian
A tabulate coral bindstone with grainstone matrix.			
8699F	6666-2	<u>Amphipora</u> sp. <u>Dendrostella</u> aff. <u>trigemme</u> <u>Stachyodes</u> sp. <u>Mesophyllum?</u> sp. <u>Euryamphipora</u> sp. indet. gastropods	Middle Devonian
A dark coralline micrite forming a platform on which reef grew.			
8700F	6666-3	<u>Spinatrypa</u> sp. <u>Dechenella</u> cf. <u>paragranulata</u> <u>Ambothyris?</u> sp. <u>Conocardium</u> sp. crinoid columnals pteriod indet.	Middle Devonian

This sample (6666-3) comes from Hunt Fork shales adjacent to the reef and demonstrates that the shales are essentially coeval with the reef itself.

Discussion

There is no question of the Middle Devonian age of both this reef and its surrounding shales. The exact age is either late Eifelian or early Givetian. While differing in age from the Smoke Creek reefs west of Arctic Village, it has the same basic architecture.

Allen R. Ormiston

Allen R. Ormiston

ARO:skw



Amoco Production Company

Tulsa, Oklahoma
July 6, 1973

File: Technical Service No. 5804IR
Job No. 9790
Locality No. 6666

MEMORANDUM

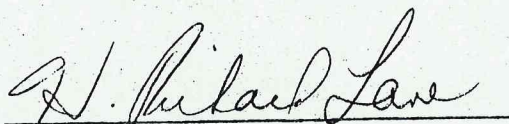
Subject: Conodonts from the Reef east of Old John Lake Section, Sec. 17,
T15S, R34E, Arctic Quad., Alaska.

INTRODUCTION

The following sample was examined and found to be barren of conodonts.

FAUNA

Field No.	Sample No.	Taxon No.	Identification
8699 F,C	2	0501	Barren of conodonts


H. Richard Lane

HRL:skw 25.01



Amoco Production Company

Tulsa, Oklahoma
June 11, 1973

File: Technical Service No. 5816IR
Locality No. 6790

MEMORANDUM

Subject: Megafossils from the Saviukviayuk River Section, W 1/2,
Sec. 21, T8S, R19E, Philip Smith Mtns. Quad., Alaska

The shale unit in this section appears to be Permian rather than Kayak
as shown on the log.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8222	6790-4	plant megafossils	-
8223	6790-5	<u>Attenuatella</u> sp. <u>Linoproductus</u> sp. <u>Yakovlevia?</u> sp.	Early Permian
8224	6790-6	crinoid columnals	-
8226	6790-8	<u>Neospirifer</u> sp. crinoid columnals	Probably Pennsylvanian
	6790-9	<u>Neospirifer</u> sp. <u>Punctospirifer?</u> sp. crinoid columnals	Probably Pennsylvanian

DISCUSSION

This short section apparently represents high Lisburne Formation and
overlying Siksikpuk.

Thomas L. DeKeyser
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Allen R. Ormiston
Allen R. Ormiston

TLD/ARO:skw 7.03



Amoco Production Company

Tulsa, Oklahoma
September 5, 1973

File: Technical Service No. 58661R
Locality No. 06956
Job No. 9861

MEMORANDUM

Subject: Conodonts from the Amoco 1972 Grab Samples, Northern Alaska.

INTRODUCTION

The following samples were processed and examined for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8403 C	1	1983	<u>Spathognathodus</u> 1983	4
		4051	<u>Ozarkodina</u> 4051	2
		2618	Indet. conodonts	15

Conodonts in sample 1 are Siegenian or lower Emsian (Lower Devonian) in age.

8364	7	4704	<u>Spathognathodus</u> 4704	6
		1990	<u>Polygnathus</u> 1990	1
		2845	<u>Ozarkodina</u> sp.	1
		2928	<u>Acodina</u> sp.	6
		2865	<u>Panderodus</u> sp.	26
		2618	Indet. conodonts	33

The fauna in sample 7 is upper Emsian (Lower Devonian) in age.

8205 L,C	9	0501	Barren of conodonts
8388 L,C	10	0501	Barren of conodonts
8404 C	11	0501	Barren of conodonts
8408 C	12	0501	Barren of conodonts

Field No.	Sample No.	Taxon No.	Identification	No Sp.
8414 C	13	0501	Barren of conodonts	
8415 C	14	0501	Barren of conodonts	
8421 C	15	0501	Barren of conodonts	
8422 C	16	0501	Barren of conodonts	
8425 C	17	0501	Barren of conodonts	
8337 C	18	21268	<u>Neoprioniodus</u> 21268	1
		2860	<u>Neoprioniodus</u> 2860	1
		2865	<u>Panderodus</u> sp.	1
		2618	Indet. conodonts	2

The fauna in sample 18 appears to be Ludlow (Silurian) in age.

8339 L,C	19	0501	Barren of conodonts	
8343 C	20	0501	Barren of conodonts	
8352 C	21	21270	<u>Eobelodina</u> 21270	3
		21242	<u>Acontiodus</u> 21242	1
		2618	Indet. conodonts	3

The fauna in sample 21 is Middle Ordovician in age.

8365 C	22	4704	<u>Spathognathodus</u> 4704	3
		2928	<u>Acodina</u> sp.	4
		2865	<u>Panderodus</u> sp.	15
		2618	Indet. conodonts	11

Sample 22 is from the same locality as sample 7. This fauna is compatible with an upper Emsian age but could be as young as Eifelian (Middle Devonian).

8201 L,C	23	0501	Barren of conodonts	
8202 C	24	0501	Barren of conodonts	
8204 L,F,C	25	0501	Barren of condonts	
8200 C	26	0501	Barren of conodonts	
8218 C	27	0501	Barren of conodonts	
FCH 789 C	28	0501	Barren of conodonts	

Field No.	Sample No.	Taxon No.	Identification	No. Spec.
8398 CFL	31	0501	Barren of conodonts	
8402 FC	33	0501	Barren of conodonts	
8214 CF	38	0501	Barren of conodonts	
8215 CF	39	0501	Barren of conodonts	
8217 CF	40	0501	Barren of conodonts	
8219 C	41	0501	Barren of conodonts	
8221 F	42	0501	Barren of conodonts	
8295 CF	44	0501	Barren of conodonts	
8336 FC	46	0501	Barren of conodonts	
8338 CF	47	0501	Barren of conodonts	
8340 F	48	0501	Barren of conodonts	
8696 FCL	49	2618	Indet. conodonts	8

The fauna in sample 49, although very poorly preserved, is upper Mississippian or Pennsylvanian in age.

8322 CF	52	0501	Barren of conodonts	
8323 FF	54	4052	<u>Spathognathodus</u> 4052	6
		4691	<u>Spathognathodus</u> 4691	8
		4692	<u>Spathognathodus</u> 4692	1
		2731	<u>Spathognathodus</u> 2731	1
		4051	<u>Ozarkodina</u> 4051	2
		2618	Indet. conodonts	23

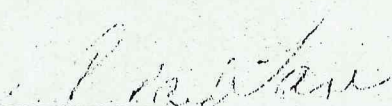
The fauna in sample 54 is upper Gedinian in age and correlates with the upper part of the exposed Road River Formation at the Type Salmontrout section and near but above the base of the Salmontrout Limestone at Linear Ridge.

8429 FC	57	0501	Barren of conodonts	
FCH 803 LC	66	0501	Barren of conodonts	
FCH 790 FC	67	0501	Barren of conodonts	

U.S. 58661R
September 5, 1973

4

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8335 CF	68	0501	Barren of conodonts	
8220 C	69	0501	Barren of conodonts	
FCH 804 FCL	70	0501	Barren of conodonts	
8380 LC	71	0501	Barren of conodonts	
FCH 791 C	77	0501	Barren of conodonts	
FCH 802 LC	80	0501	Barren of conodonts	


H. Richard Lane

HRL:skw 4.02



Amoco Production Company

Tulsa, Oklahoma
June 18, 1973

File: Technical Service 5866IR
Locality 6956

MEMORANDUM

Subject: Megafossils from Remaining Amoco 1972 Grab Samples Northern
Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8351	6956-29	<u>Eoleperditia</u> sp. Crinoid columnals Streptelasmid coral Trepastome bryozoan	Ordovician
8398	6956-31	Barren of megafossils	-
8381	6956-32	<u>Amphipora</u> cf. <u>ramosa</u> Indet. Alveolitid coral	Middle? Devonian
8402	6956-33	<u>Amphipora</u> sp. Probable Stromatoporoid	Middle? Devonian
8206	6956-37	Barren of megafossils	-
8214	6956-38	Barren of megafossils	-
8215	6956-39	Barren of megafossils	-
8217	6956-40	Dolomite, barren of megafossils	-
8219	6956-41	Barren of megafossils. Rock is pisolitic.	-
8221	6956-42	<u>Syringopora</u> sp. Indet. gastropods Loxonemid gastropod Crinoid columnals	Mississippian?

Field No.	Sample No.	Taxa	Age
8281	6956-43	<u>Amphipora</u> cf. <u>ramosa</u> <u>Alveolites</u> sp. <u>Parallelopore</u> ? sp. <u>Tabulophyllum</u> cf. <u>mcconnelli</u> <u>Strictostroma</u> ? sp. <u>Anostylostroma</u> cf. <u>laxum</u> <u>Stromatopora</u> cf. <u>mikkwaensis</u> <u>Aulopora</u> sp.	Devonian Probably Frasnian
8295	6956-44	Indet. Organic Fabric	-
8331	6956-45	<u>Rhipidomella</u> ? sp. Crinoid columnals Ichnofossils	Mississippian?
8338	6956-47	<u>Alveolites</u> sp. Indet. Stromatoporid Crinoid columnals	Lower or Middle Devonian
8336	6956-46	<u>Acanthopyge</u> cf. <u>branikensis</u> <u>Cheirurus</u> ? sp. <u>Desquamatia</u> sp. <u>Athyris</u> sp. Stromatoporids <u>Grypophyllum</u> ? sp. <u>Parachaetetes</u> sp. <u>Coenites</u> sp.	Lower Devonian Ensian
8340	6956-48	Barren of megafossils	-
8696	6956-49	Crinoid columnals	Paleozoic
8321	6956-51	<u>Orulganina</u> sp. A <u>Neochonetes</u> sp. <u>Neospirifer</u> cf. <u>tegulatus</u>	Mississippian Chester
8322	6956-52	<u>Orulganina</u> sp. A <u>Choristites</u> sp. <u>Neochonetes</u> sp.	Mississippian Chester
8323	6956-54	<u>Quadrithyris</u> cf. <u>minuens</u> <u>Atrypa</u> sp. <u>Sieberella</u> cf. <u>problematica</u> <u>Metaplasia</u> cf. <u>pauciocostata</u> <u>Rhynchospirina</u> ? sp. <u>Coenites</u> sp. <u>Enterolasma</u> ? sp. This rock is a brachiopodal packstone and apparently repre- sents a shelf facies of Salmon- trout age.	Lower Devonian Gedinnian

Field No.	Sample No.	Taxa	Age
FCH 790	6956-66	Stromatolites	Ordovician?
FCH 804	6956-70	Barren of megafossils	-
8249	6956-50	Barren of megafossils. Rock is a dark carbonate with coated grains and angular sandstone clasts.	-
8430	6956-53	Barren of megafossils	-
8781	6956-55	Stromatolites	Probably Ordovician
8428	6956-56	Sample missing	-
8429	6956-57	Sample missing	-
9000	6956-64	Laminated micrites that do not appear to be stromatolitic	-
8335	6956-68	Barren of megafossils	-
FCH 803	6956-66	Barren of megafossils	-
FCH 790	6956-67	Stromatolites?	Ordovician?
8220	6956-69	A pelmicrite with coated grains and no megafossils	-
9005	6956-30	<u>Alveolites</u> cf. <u>winchellana</u> <u>Grypophyllum</u> sp. Probable stromatoporoid	Middle Devonian Eifelian
9006	6956-58	<u>Alveolites</u> cf. <u>winchellana</u> Indet. favositid	Middle Devonian Eifelian
9007	6956-59	<u>Alveolites</u> sp. <u>Thamnopora</u> sp. <u>Acinophyllum</u> sp. <u>Anatrypa</u> sp. Indet. stick stromotoporoid	Middle Devonian Eifelian
9008	6956-60	<u>Alveolites</u> sp. <u>Thamnopora</u> sp. Calcispheres? Crinoid columnals	Middle Devonian Eifelian

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
9009	6956-61	<u>Alveolites</u> sp. <u>Thamnopora</u> sp. Crinoid columnals Calcispheres? Indet. gastropods Indet. brachiopods Indet. stromatoporoid Indet. disphyllid coral Indet. atrypid <u>Warrenella?</u> sp. <u>Ostracods</u>	Middle Devonian Eifelian
9010	5956-62	<u>Alveolites winchellana</u> <u>Warrenella</u> sp. <u>Grypophyllum?</u> sp. <u>Carinata</u> cf. <u>trigonica</u>	Middle Devonian Eifelian
9011	6956-63	<u>Alveolites winchellana</u> Crinoid columnals Indet. Favositid Indet. brachiopods	Middle Devonian Eifelian
9012	6956-64	<u>Alveolites</u> sp. <u>Thamnopora</u> sp. Calcispheres? Crinoid columnals Indet. brachiopods Indet. gastropods <u>Warrenella?</u> sp.	Middle Devonian Eifelian

Thomas L. DeKeyser
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Allen R. Ormiston
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ARO:lc 6.3.5



Amoco Production Company
Tulsa, Oklahoma

January 9, 1973

File: Technical Service No. 5866 IR
Locality No. 6956

MEMORANDUM

Re: Amoco 1972 grab samples,
Northern Alaska - megafossils

Initial work on megafossils from selected grab samples has yielded the following identifications:

Field No.	Sample No.	Taxa	Age
8403 F	6956-1	<u>Thamnopora cf. cervicornis</u>	Middle
		<u>Squameofavosites mixtus</u>	Devonian
		<u>Syringostroma sp.</u>	Eifelian
		<u>Alveolites sp.</u>	
		<u>Hexagonaria sp.</u>	
		<u>Gasterocoma bicaula</u>	
		<u>Heliophyllum sp.</u>	

Rock is a tabulate-stromatoporoid floatstone and clearly belongs to the North Schwatka Mountain (Locality 6794) reef complex near which the sample was taken.

8804 F	6956-2	<u>Glyptograptus euglyphus</u>	Upper
		<u>Diplograptus sp.</u>	Ordovician
		<u>Dicranograptus ramosus</u>	Caradocian
		<u>Climacograptus aff. innotatus</u>	

These shales are only slightly older than the carbonates in the Fossil Mountain Section. This graptolite assemblage has not previously been reported from Alaska.

8395 F	6956-3	Barren of megafossils	-
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January 9, 1973

Field No.	Sample No.	Taxa	Age
8357 F	6956-4	<u>Buchia</u> aff. <u>keyserlingi</u> Indeterminate pectinoid	Lower Cretaceous Berriasian or Valanginian
8358 F	6956-5	Indeterminate bivalves	-
8359 F	6956-6	<u>Aucellina</u> ? sp.	Cretaceous?
8364 F	6956-7	<u>Coenites</u> cf. <u>rectilineatus</u> <u>Favosites</u> sp. (small) <u>Alveolites</u> sp. <u>Amphipora</u> ? sp. <u>Emanuella</u> sp. Indeterminate bivalve	Lower Devonian
The faunal assemblage is reminiscent of the Lower Devonian part of the Fort Creek Section (Locality 6182) and indicates a lagoonal environment of deposition.			
8360 F	6956-8	<u>Pseudolimea</u> cf. <u>hettangensis</u> <u>Myopholas</u> sp. <u>Liopistha</u> ? sp. Indeterminate nuculanid	Jurassic probably Upper Jurassic
This sample provides our first megafossil evidence for Jurassic sediments in the Black River area.			

Allen R. Ormiston
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ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5828IR
Job No. 9814
Locality No. 6801

MEMORANDUM

Subject: Conodonts from the Woodchopper Limestone Section, Sec. 12,
T16N, R21E, Charley River Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

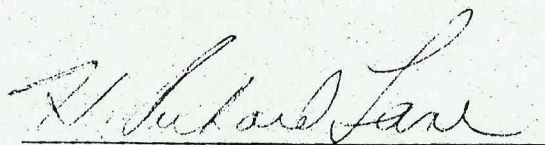
<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
FCH 786	3	0501	Barren of conodonts	
WL 8727 FCL	4	4699	<u>Polygnathus</u> 4699	2
		2928	<u>Acodina</u> sp.	5
		2901	<u>Belodella</u> sp.	1
		2865	<u>Panderodus</u> sp.	3
WL 8726	5	0501	Barren of conodonts	
WL 8725	6	0501	Barren of conodonts	
WL 8724	7	2928	<u>Acodina</u> sp.	1
		2618	Indet. conodonts	2
WL 8723	8	0501	Barren of conodonts	
WL 8722	9	0501	Barren of conodonts	
WL 8721	10	4696	<u>Pelekygnathus</u> 4696	8
		2928	<u>Acodina</u> sp.	11
		2865	<u>Panderodus</u> sp.	13
		3051	<u>Hindeodella</u> sp.	1
		1983	<u>Spathognathodus</u> 1983	

T.S. 5828IR
Locality No. 6801

2

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
WL 8720	11	4696	<u>Pelekysgnathus</u> 4696	5
		1938	<u>Spathognathodus</u> 1983	3
		2865	<u>Panderodus</u> 2865	14
		2928	<u>Acodina</u> sp	4
		3051	<u>Hindeodella</u> sp.	1
WL 8719	12	2928	<u>Acodina</u> sp.	8
		2865	<u>Panderodus</u> sp.	26
		2901	<u>Belodella</u> sp.	3
		4699	<u>Polygnathus</u> 4699	1
WL 8718	13	2901	<u>Belodella</u> sp.	1
WL 8717	14	2865	<u>Panderodus</u> sp.	7
		2928	<u>Acodina</u> sp.	1
		2726	<u>Spathognathodus</u> sp.	4

Conodonts in samples 4-12 are early Emsian in age and correlate somewhere within the interval from sample 44 (HRL-47) through sample 56 (HRL-59) at the type Salmontrout section (Loc. 6214).


H. Richard Lane

HRL:skw 28.10



Amoco Production Company

Tulsa, Oklahoma
May 18, 1973

File: Technical Service No. 5828 IR
Job No. 9814
Locality No. 6801

MEMORANDUM

Subject: Megafossils from Woodchopper Limestone Section, Sec. 12, T6N,
R21E, Charley River Quad., Alaska

INTRODUCTION

The Woodchopper Limestone which has been dated as Middle Devonian by Gryc, et al. (1968, p. 713) is shown to be Lower Devonian and coeval with part of the type Salmontrout Limestone.

Field No.	Footage Above Base	Spl. No.	Taxon No.	<u>FAUNA</u>	
				Identification	No. Spec.
FCH 785	6	3	20571	<u>Gracianella</u> 20571	2
	6	3	4771	<u>Nucleospira</u> sp	2
	6	3	3213	<u>Coenites</u> sp.	3
	6	3	21067	<u>Clathrocoilon</u> sp.	2
WL 8727	6	3	20611	<u>Crinoid</u> 20611	6
	7	4	20549	<u>Xystriphyllum</u> 20549	2
	7	4	20571	<u>Gracianella</u> 20571	4
	7	4	2240	<u>Schizophoria</u> sp.	1
WL 8726	15	5	20553	<u>Heterotrypa</u> 20553	18
	15	5	20609	<u>Trupestostroma</u> sp.	3
	15	5	20611	<u>Crinoid</u> 20611	4

WL 8725	25	6	20610	<u>Trupestostroma</u> 20610	2
	25	6	20603	<u>Favosites</u> 20603	3
WL 8724	35	7	20560	<u>Desquamatia</u> 20560	2
	35	7	20100	<u>Spongophyllum</u> halysitoides	2
	35	7	3220	<u>Favosites</u> sp.	2
WL 8723	47	8	3213	<u>Coenites</u> sp.	5
	47	8	20603	<u>Favosites</u> 20603	2
	47	8	20609	<u>Trupestostroma</u> sp.	2
	47	8	21068	<u>Pseudamplexus</u> sp.	1
	47	8	20612	<u>Canutrypa</u> 20612	4
WL 8722	63	9	20617	<u>Linguopugnoides</u> 20617	1
WL 8721	75	10	2378	Indet. orthid	2
WL 8720	93	11	20611	<u>Crinoid</u> 20611	8
	93	11	4771	<u>Nucleospira</u> sp.	2
WL 8719	93	11	2935	Indet. ostracods	2
WL 8718	110	12	2216	Indet. bryozoa	4
WL 8717	135	13	0502	Barren of megafossils	
	160	14	0502	Barren of megafossils	

INTERPRETATION

Samples 3-11 contain megafossils indicative of a late Siegenian or, more probably, early Emsian age and can be correlated with the interval between samples 6214-34 and 6214-48 of the type Salmontrout Limestone.

The corals and stromatoporoids in the Woodchopper Limestone are dominantly small clasts that have apparently transported in. The Woodchopper carbonates are wackestones and packstones, lacking organically bound fabrics. These carbonates are therefore not reefal and probably had an intrabasinal environment of deposition. Megafossil abundances are very low.

Allen R. Ormiston

ARO:mk6.06



Amoco Production Company

Tulsa, Oklahoma
April 9, 1973

File: Technical Service No. 5821IR
Job No. 9807
Locality No. 6794

MEMORANDUM

Subject: Conodonts from the North Schwatka Mountain Section,
Sections 19 and 30, T13N, R3E, Livengood Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Field</u> <u>No.</u>	<u>Spl.</u> <u>No.</u>	<u>Taxon</u> <u>No.</u>	<u>Identification</u>	<u>No.</u> <u>Spec.</u>
9085 CL	4	20437	<u>Polygnathus</u> 20437	13
		2712	<u>Polygnathus</u> 2712	9
		2751	<u>Icriodus</u> sp.	12
		3065	<u>Pelekygnathus</u> sp.	2
		4704	<u>Spathognathodus</u> 4704	1
		2618	Indet. Conodonts	48

The conodont fauna in Sample 4 is Eifelian (Middle Devonian) in age.

9083 FC	6	0501	Barren of Conodonts
9082 FC	7	0501	Barren of Conodonts
9081 FC	8	0501	Barren of Conodonts
9073 FCL	16	0501	Barren of Conodonts

TS No. 5821IR
Locality No. 6794

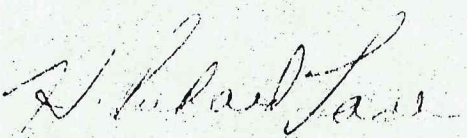
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April 9, 1973

9090 FCL	18	0501	Barren of Conodonts	
9091 FL	19	4699	<u>Polygnathus</u> 4699	3
		4696	<u>Pelekysgnathus</u> 4696	7
		2618	Indet. Conodonts	27

The conodont fauna in Sample 19 is Lower Devonian (Lower Emsian) in age.

9096 FC	24	2618	Indet. Conodonts	1
9098 FC	26	0501	Barren of Conodonts	
9099 FC	27	0501	Barren of Conodonts	
9100 FC	28	0501	Barren of Conodonts	
9104 FC	32	0501	Barren of Conodonts	
8428 FC	34	0501	Barren of Conodonts	



H. Richard Lane

HRL:mk19.06



Amoco Production Company
Tulsa, Oklahoma

January 5, 1973

File: Technical Service No. 5821 IR
Locality No. 6794

MEMORANDUM

Re: Megafossils from the North Schwatka
Mountain Section, T13N, R3E, Livengood
Quad., Alaska

Paleontologic study of these samples shows that much of the subject
section consists of a Devonian stromatoporoid reef complex:

Field No.	Sample No.	Taxa	Age
NS 9085	6794-4	indeterminate crinoid columnals	-
Rock consists of a dark, laminated wackestone			
NS 9083	6794-6	<u>Atelodictyon</u> sp. indeterminate brachiopod	Devonian
Rock is a stromatoporoid framestone			
NS 9082	6794-7	<u>Trupetostroma</u> sp. indeterminate ostracodes	Devonian
Rock is a stromatoporoid framestone			
NS 9081	6794-8	<u>Stromatoporella</u> cf. <u>subvesiculosa</u> <u>Squameofavosites</u> <u>nodulosus</u> <u>Maikottaphyllum</u> sp. minute gastropods	Devon, Emsian or Eifelian
Rock is a stromatoporoid bindstone			

January 5, 1973

Field No.	Sample No.	Taxa	Age
NS 9080	6794-9	<u>Atelodictyon</u> ? sp.	-
Rock is a stromatoporoid framestone			
NS 9079	6794-10	<u>Stromatoporella</u> sp. <u>Aulocystis</u> aff. <u>nobilis</u>	Middle Devonian Eifelian
Rock is a stromatoporoid bindstone			
NS 9078	6794-11	<u>Amhipora</u> <u>ramosa</u> <u>Syringostroma</u> ? sp.	Middle Devonian
Rock is an <u>Amhipora</u> bafflestone			
NS 9077	6794-12	<u>Actinostroma</u> cf. <u>clathratum</u> <u>Thamnopora</u> sp.	Middle Devonian
Rock is a stromatoporoid framestone			
NS 9076	6794-13	<u>Amhipora</u> <u>ramosa</u> <u>Squameofavosites</u> <u>mixtus</u> <u>Stromatopora</u> sp.	Middle Devonian Eifelian
Rock is a complex bindstone and bafflestone			
NS 9075	6794-14	Indeterminate laminar stroma- toporoid <u>Amhipora</u> sp.	-
Rock is a stromatoporoid bindstone			
NS 9074	6794-15	<u>Amhipora</u> <u>ramosa</u> <u>Thamnopora</u> <u>cervicornis</u> <u>Euryamhipora</u> sp.	Middle Devonian
Rock is an <u>Amhipora</u> bafflestone			

January 5, 1973

Field No.	Sample No.	Taxa	Age
NS 9073	6794-16	Indeterminate stromatoporoid <u>Aulocystis</u> aff. <u>nobilis</u> <u>Squameofavosites</u> <u>mixtus</u> <u>Cyclochaetetes</u> cf. <u>inflatus</u> <u>Thamnopora</u> sp.	Middle Devonian Eifelian
Rock is a complex framestone			
NS 9080	6794-17	Indeterminate stromatoporoid Indeterminate favositid <u>Alveolites</u> sp. <u>Cyclochaetetes</u> sp.	Middle Devonian
Rock is a stromatoporoid - tabulate bindstone			
NS 9090	6794-18	<u>Thamnopora</u> <u>cervicornis</u> <u>Alveolites</u> sp. <u>Sociophyllum</u> sp.	Middle Devonian
Rock is a coralline calcilutite			
NS 9091	6794-19	<u>Thamnopora</u> <u>cervicornis</u> <u>Gasterocoma</u> <u>bicaula</u> <u>Squameofavosites</u> <u>mixtus</u> <u>Neostrophophyllum</u> sp. <u>Anatrypa</u> ? sp.	Middle Devonian Eifelian
Rock is a crinoidal calcilutite			
NS 9092	6794-20	<u>Atelodictyon</u> sp. <u>Gasterocoma</u> <u>bicaula</u> <u>Squameofavosites</u> <u>mixtus</u> <u>Alveolites</u> sp. <u>Thamnopora</u> sp. <u>Sociophyllum</u> sp.	Middle Devonian Eifelian
Rock is a stromatoporoid framestone			

January 5, 1973

Field No.	Sample No.	Taxa	Age
NS 9093	6794-21	Laminar stromatoporoids <u>Macgeea</u> ? sp. <u>Aulocystis</u> ? sp. <u>Thamnopora</u> sp. Indeterminate gastropods	Devonian
Rock is a stromatoporoid bindstone			
NS 9095	6794-23	<u>Stromatoporella</u> sp.	Devonian
A stromatoporoid framestone			
NS 9096	6794-24	Crinoid columnals	-
Rock is a light colored calcilutite			
NS 9097	6794-25	<u>Thamnopora cervicornis</u> <u>Cyclochaetetes</u> sp. <u>Atelodictyon</u> sp.	Middle Devonian
Rock is a <u>Thamnopora</u> bafflestone			
NS 9098	6794-26	Crinoid columnals	-
Rock is a light colored calcilutite			
SECTION FAULTED			
NS 9099	6794-27	<u>Gasterocoma bicaula</u> other crinoid columnals	Middle Devonian Eifelian
Rock is a crinoidal wackestone			
NS 9100	6794-28	Indeterminate massive stroma- toporoid <u>Amhipora</u> sp. <u>Stringocephalus</u> ? sp.	Middle Devonian Givetian?
Rock is a stromatoporoid floatstone with good skelmoldic porosity in dolomitized stromatoporoids			

January 5, 1973

Field No.	Sample No.	Taxa	Age
NS 9101	6794-29	<u>Squameofavosites</u> cf. <u>mixtus</u> <u>Atelodictyon</u> cf. <u>stelliferum</u>	Middle Devonian Eifelian or Givetian
		Rock is a stromatoporoid bindstone - mud matrix	
NS 9102	6794-30	<u>Thamnopora</u> cf. <u>polyforata</u> <u>Atelophyllum</u> sp.	Middle Devonian Eifelian or Givetian
		Rock is a Thamnopora - tetracoral bafflestone	
NS 9103	6794-31	<u>Thamnopora</u> <u>polyforata</u> <u>Thamnopora</u> sp. (encrusting) <u>Stachyodes</u> cf. <u>verticillata</u>	Middle Devonian or Frasnian
		Rock is a <u>Thamnopora</u> bindstone	
NS 9104	6794-32	<u>Parallelopora</u> sp. <u>Alevolites</u> sp. <u>Trupetostroma</u> sp. crinoid columnals	Middle Devonian or Frasnian
NS 8428	6794-34	barren of megafossils	-
		Rock is a dark, cherty micrite	

Discussion:

The stromatoporoid reefs which form the bulk of this section are significant by virtue of their location on the southern side of the Fort Yukon Basin and by virtue of their age which is (at least partly) intermediate between that of the Salmontrout Reef (Siegenian-Emsian) and the oldest of the Smoke Creek reefs to the north (e.g. Reef East of Old John Lake - late Eifelian or early Givetian).

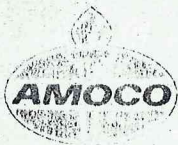
The tabulate corals in the North Schwatka Mtn. section suggest an Eifelian (probably early Eifelian) age for most of the reef, but the higher part may be Givetian or possibly even Frasnian (6794-31, 32).

January 5, 1973

The age of the North Schvotka Mountain reef complex is compatible with the suggested (Research Department Report No. M72-G-27) westward (or northwestward) migration of Devonian reefs in this part of Alaska.

Allen R. Ormiston
Allen R. Ormiston

ARO:mjh



Amoco Production Company

Tulsa, Oklahoma
August 29, 1973

File: Technical Service No. 5819IR
Job No. 9805
Locality No. 6791

MEMORANDUM

Subject: Conodonts from the West Wind River Section, W 1/2, Sec. 8, T15S, R21E, Philip Smith Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Footage</u>	<u>Spl. No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
WW 8233 F,C	8	3093	<u>Ligonodina</u> , sp.	1
		2726	<u>Spathognathodus</u> , sp.	1
		2618	Indet. conodonts	3
WW 8234 C	9	1395	<u>Spathognathodus</u> 1395	33
		2828	<u>Cavusgnathus</u> 2828	1
		2826	<u>Cavusgnathus</u> , sp.	2
		1393	<u>Geniculatus</u> 1393	1
		2618	Indet. conodonts	27
WW 8235 F,C	10	0501	Barren of conodonts	
WW 8237 L,C,F	12	1395	<u>Spathognathodus</u> 1395	7
		2618	Indet. conodonts	21

The conodonts in sample 9 are upper Meramec in age (Fauna E) and are very similar to, and correlate with, conodonts recovered from the East Kelly (samples VG-124C-VG-130C).

Technical Service # 58191R
Job No. 9805
Locality No. 6791

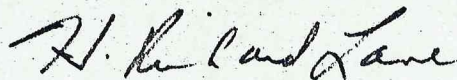
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WW 8238 C,L	13	2618	Indet. conodonts	19
WW 8240 C	15	1395	<u>Spathognathodus</u> 1395	2
		2618	Indet. conodonts	12

The fauna in samples 12-15 is Meramec or lower Chester in age.

WW 8241 C	16	2718	<u>Polygnathus</u> 2718	6
		2618	Indet. conodonts	23

The fauna in sample 16 is no younger than middle Osage and indicates that the top of this section is disturbed.



H. Richard Lane

HRL:mk2.12



Amoco Production Company

Tulsa, Oklahoma
June 4, 1973

File: Technical Service 5819IR
Locality 6791

MEMORANDUM

Subject: Megafossils from the West Wind River Section 8, T15S, R21E,
Phillips Smiths Mountain Quadrangle, Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8322 8233	6791-8	<u>Quadratia cf. hirsutiformis</u> <u>Flexaria cf. arkansana</u> <u>Leiorhynchus sp.</u>	Mississippian Late Meramec or Chester
8235	6791-10	<u>Cancrinella sp.</u> <u>Acanthopecten ? sp.</u> <u>Crinoid columnals</u> <u>Fenestellid bryozoa</u>	Mississippian Late Meramec or Chester
8236	6791-11	<u>Lithostrotion</u> <u>(Siphonodendron)</u> <u>succinctus</u>	Mississippian Late Meramec or Chester
8238	6791-13	<u>Amplexizaphrentis sp.</u> Indet. tetracoral	Mississippian
8239	6791-14	Sample missing	--
8240	6791-15	Barren of megafossils	--

DISCUSSION

A Late Meramec or Chester age for the Kayak Formation (6791-8) in this section is compatible with other age determinations on this unit in the area.

Thomas L. DeKeyser
Thomas L. DeKeyser

Allen R. Ormiston
Allen R. Ormiston

ARO:er 3.07



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5794IR
Job No. 9780
Locality No. 6651

MEMORANDUM

Subject: Conodonts from the Upper Wind River Section, SW 1/4, NW 1/4,
T13S, R20E, Philip Smith Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8659 L	3	3051	<u>Hindeodella</u> sp.	1
8660 FCL	4	21175	<u>Ancyrodella</u> 21175	1
		1425	<u>Polygnathus</u> 1425	1
		2618	Indet. conodonts	7

Conodonts in sample 4 are middle to late Frasnian in age and occur in the Ancyrognathus triangularis through Palmatolepis gigas Zones of the Upper Devonian conodont succession.

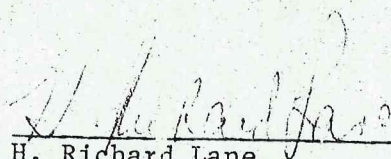
8663 FCL	6	2618	Indet. conodonts	5
8672 FCL	15	0501	Barren of conodonts	
8675 FCL	18	0501	Barren of conodonts	
8679 FCL	22	0501	Barren of conodonts	
8681 FCL	24	1425	<u>Polygnathus</u> 1425	27
		2763	<u>Icriodus</u> 2763	1
		2618	Indet. conodonts	11

T.S. 5794IR
Locality No. 6651

2

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
8683 F	25	1425	<u>Polygnathus</u> 1425	12
		2618	Indet. conodonts	5
8686 FCL	29	2805	<u>Ancyrodella</u> 2805	1
		2700	<u>Polygnathus</u> sp.	5
		2618	Indet. conodonts	14

Conodonts in sample 29 are lower to middle Frasnian in age and known from the Middle P. asymmetricus Zone. This zone occurs in the Christina through Moberly Members of the Waterways Formation in Alberta.


H. Richard Lane

HRL:skw 28.07



Amoco Production Company

Tulsa, Oklahoma
Research Center

September 22, 1972

Re: Megafossils from the Upper Wind River Section, SW NW, T13S, R20E,
Philip Smith Mtns. Quad., Alaska

File: Technical Service No. 5794IR
Locality No. 6651

MEMORANDUM

Fossils from the reefal Smoke Creek Member are described in descending order. The lowest sample is from the underlying Hunt Fork shales.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
UW 8659	6651-3	No identifiable megafossils	-
UW 8660	6651-4	<u>Coactilium</u> sp. <u>Girvanella</u> sp. <u>Euryamphipora</u> <u>Thamnopora</u> indet. gastropods indet. brachiopods <u>Parathurammina?</u> sp. <u>Nanicella</u> sp.	Upper Devonian Frasnian

An oncolite bed. Clasts of Thamnopora encrusted by Euryamphipora serve as nuclei which have algal coats of Coactilium and Girvanella. Rock was deposited in shallow, agitated water. Identifications of foraminifers and algae are by D. F. Toomey (see memo of July 25, 1972).

UW 8662	6651-5	<u>Trupetostroma?</u> sp.	Devonian
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A stromatoporoid bindstone with a pelmicrite matrix.

UW 8663	6651-6	<u>Amphipora</u> sp. <u>Thamnopora</u> sp. <u>Desquamatia</u> sp. indet. laminar stromatoporoid	Upper Devonian
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An Amphipora bafflestone with packstone matrix, transitional to a bindstone.

UW 8664	6651-7	<u>Thamnopora</u> sp. <u>Euryamphipora</u> sp. <u>Charactophyllum</u> sp. <u>Spinatrypa</u> sp.	Upper Devonian mid-Frasnian
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A Thamnopora-stromatoporoid bindstone with a packstone matrix.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
UW 8665	6651-8	<u>Stachyodes</u> cf. <u>verticillata</u> indet. laminar stromatoporoid	Upper Devonian mid-Frasnian
A complex bindstone with two generations of overgrowth.			
UW 8666	6651-9	<u>Stachyodes</u> <u>verticillata</u> <u>Syringostroma</u> sp.	Upper Devonian mid-Frasnian
A stromatoporoid bindstone with complex overgrowths.			
UW 8667	6651-10	<u>Stromatoporella</u> sp.	Devonian
A stromatoporoid framestone.			
UW 8668	6651-11	<u>Trupetostroma</u> sp.	Upper Devonian
A stromatoporoid framestone.			
UW 8669	6651-12	<u>Syringostroma</u> ? sp. <u>Stachyodes</u> sp.	Upper Devonian
A stromatoporoid framestone with idiomorphs.			
UW 8670	6651-13	<u>Atelodictyon</u> sp. <u>Stachyodes</u> cf. <u>costulata</u> <u>Amphipora</u> sp. <u>Thamnopora</u> sp. indet. gastropods	Upper Devonian mid-Frasnian
A stromatoporoid floatstone and bafflestone.			
UW 8671	6651-14	<u>Syringostroma</u> ? sp. <u>Stachyodes</u> sp.	Upper Devonian mid-Frasnian
A stromatoporoid framestone.			
UW 8672	6651-15	<u>Clathrocoelona</u> sp. <u>Amphipora</u> sp. <u>Stachyodes</u> sp.	Upper Devonian mid-Frasnian
An <u>Amphipora-Stachyodes</u> floatstone gradational to a stromatoporoid bindstone.			
UW 8673	6651-16	indet. laminar stromatoporoid	-
A stromatoporoid framestone.			
UW 8674	6651-17	<u>Syringostroma</u> sp. crinoid columnals	Upper Devonian
A stromatoporoid framestone with pockets of crinoidal grainstone.			

Field No.	Sample No.	Taxa	Age
UW 8675	6651-18	<u>Anostylostroma</u> cf. <u>phricum</u> <u>Stachyodes</u> sp. <u>Amphipora</u> sp. indet. laminar stromatoporoid indet. pelecypod	Upper Devonian mid-Frasnian
Rock consists of a stromatoporoid framestone (<u>Anostylostroma</u>) and associated <u>Stachyodes</u> - <u>Amphipora</u> bindstone.			
UW 8676	6651-19	<u>Clathrocoilona</u> cf. <u>inconstans</u>	Upper Devonian mid-Frasnian
A stromatoporoid framestone with calcite-filled growth cavities.			
UW 8677	6651-20	<u>Euryamphipora</u> sp. <u>Stachyodes</u> sp. indet. stromatoporoid algae?	Upper Devonian mid-Frasnian
A stromatoporoid-algal? bindstone.			
UW 8678	6651-21	<u>Clathrocoilona</u> sp. indet. laminar stromatoporoids	Upper Devonian
A stromatoporoid framestone with minor packstone matrix.			
UW 8679	6651-22	<u>Clathrocoilona</u> sp. <u>Stictostroma</u> ? sp. <u>Oreocopia</u> sp. indet. brachiopods	Upper Devonian
A stromatoporoid floatstone with crinoidal grainstone matrix.			
UW 8680	6651-23	indet. massive stromatoporoid	-
A stromatoporoid framestone.			
UW 8681	6651024	<u>Actinostroma</u> cf. <u>clathratum</u> <u>Clathrocoilona</u> sp. <u>Oreocopia</u> sp. <u>Gypidula</u> <u>cornuta</u> <u>Schizophoria</u> cf. <u>lata</u> <u>Desquamatia</u> sp. <u>Athyris</u> sp. <u>Melocrinites</u> cf. <u>whittakeri</u>	Upper Devonian mid-Frasnian
Rock is a stromatoporoidal, crinoidal calcarenite with layers of bindstone.			
UW 8682	6651-25	<u>Clathrocoilona</u> cf. <u>inconstans</u> indet. ostracodes	Upper Devonian mid-Frasnian
Rock is a stromatoporoid fragment.			

Field No.	Sample No.	Taxa	Age
UW 8683	6651-26	<u>Phillipsastraea</u> sp. indet. massive stromatoporoid	Upper Devonian mid-Frasnian
A coral-stromatoporoid bindstone.			
UW 8684	6651-27	<u>Thamnopora</u> sp. indet. laminar stromatoporoids	Devonian
A laminar stromatoporoid bindstone.			
UW 8685	6651-28	<u>Thamnopora</u> sp. indet. laminar stromatoporoids crinoid columnals	Devonian
A stromatoporoid- <u>Thamnopora</u> bindstone, packstone matrix.			
UW 8686	6651-29	indet. stromatoporoids <u>Carinata</u> sp. crinoid columnals conodonts	Devonian
A crinoidal packstone with stromatoporoid debris and brachiopods.			
UW 8687	6651-30	indet. laminar stromatoporoids crinoid columnals	Devonian
A crinoidal packstone with thin stromatoporoid stringers inclined up to 15 degrees.			
UW 8688	6651-31	laminar stromatoporoid cf. <u>Hermatostroma</u> crinoid columnals	Devonian
A laminar stromatoporoid bindstone with packstone matrix.			
UW 8689	6651-32	<u>Syringostroma</u> ? sp. <u>Thamnopora</u> sp.	Devonian
A stromatoporoid framestone.			
UW 8690	6651-33	<u>Alveolites multiperforatus</u> <u>Thamnopora</u> cf. <u>polyforata</u> <u>Stictostroma</u> sp. <u>Tabulophyllum</u> sp. <u>Hypothyridina emmonsi</u> <u>Tectocyrtina</u> sp. <u>Athyris</u> sp.	Upper Devonian mid-Frasnian
An <u>Alveolites</u> -laminar stromatoporoid bindstone.			

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
UW 8692	6651-35	<u>Cyrtospirifer</u> sp. indet. tetracoral crinoid columnals	Upper Devonian Frasnian

Discussion

This stromatoporoid reef can be correlated with D₃ or slightly younger Frasnian reefs in Alberta on the presence of Clathrocoelona cf. inconstans, Actinostroma cf. clathratum, Hypothyridina emmonsi and Stachyodes verticillata. The generic identity of many of the stromatoporoids in this reef cannot be determined because of stretching and recrystallization.

Allen R. Ormiston
Allen R. Ormiston

ARO:skw



Amoco Production Company

Tulsa, Oklahoma

September 13, 1972

Re: Megafossils from the Total Eclipse Section, Lat. 69°00'01"N,
Long. 143°20'W., Demarcation Quad., Alaska, Locality 661,
Technical Service 5793IR

MEMORANDUM

<u>Sample No.</u>	<u>Field No.</u>	<u>Taxa</u>	<u>Age</u>
6661-1	TE8207	<u>Reticulariopsis</u> cf <u>reticularioides</u> <u>Astutorhynchia</u> cf <u>proserpina</u> <u>Fuscinipyge?</u> sp. <u>Actinodesma</u> sp. <u>Deceptrix</u> sp. <u>Grammysioidea</u> cf <u>princiana</u>	Devonian Upper Emsian or Eifelian
6661-3	TE8209	<u>Reticulariopsis</u> cf <u>reticularioides</u> <u>Deceptrix</u> sp. Gastropods indet.	"
6661-4	TE8210	<u>Reticulariopsis</u> cf <u>reticularioides</u> <u>Astutorhynchia</u> cf <u>proserpina</u> <u>Deceptrix</u> sp. <u>Isorthis?</u> sp. <u>Actinodesma</u> sp. indet. clam. <u>Lingula</u> sp.	"
6661-6	TE8212	<u>Actinodesma</u> sp. abundant burrow casts	"

Discussion:

The littoral environment of deposition of this sequence is apparent enough from the sedimentary structures present. Such a setting is further substantiated, however, by the fauna (abundant clams and Lingula) and ichnofossils.

Megafossils permit a dating no finer than Upper Emsian to Eifelian, and no conodonts have been recovered from samples so far processed.

Memorandum

- 2 -

September 13, 1972

The Total Eclipse Section thus represents a shore-line control point for Upper Emsian - Eifelian time.

Allen R. Ormiston
Allen R. Ormiston

ARO:uw



Amoco Production Company

Tulsa, Oklahoma

July 27, 1973

File: Technical Service No. 5816IR

Locality No. 6790

Job No. 9802

MEMORANDUM

Subject: Conodonts from the Saviukviyak River Section, W 1/2, Sec. 21,
T8S, R19E, Philip Smith Mts. Quad., Alaska

INTRODUCTION

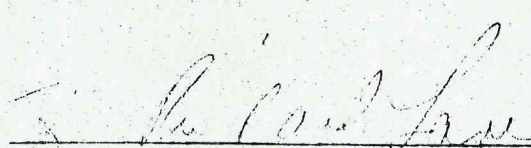
The following samples were processed and examined for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Specimens</u>
SR 8225 C,P	7	4909	<u>Spathognathodus</u> 4909	1
		1426	<u>Gnathodus</u> 1426	2
		2816	<u>Gnathodus</u> 2816	1
		2618	Indet. conodonts	11
SR 8228 C	10	0501	Barren of conodonts	

DISCUSSION

The fauna in sample 7 is earliest Morrowan (Early Pennsylvanian) in age and occurs widely in the southeastern Brooks Range at the top of the Lisburne.


H. Richard Lane

HRL:skw 4.10



Amoco Production Company

Tulsa, Oklahoma
July 12, 1973

File: Technical Service No. 5813IR
Job No. 9799
Locality No. 6503

MEMORANDUM

Subject: Conodonts from the Angry Bee Creek Section, SW 1/4, Sec. 24,
T13S, R21E, Philip Smith Quad., Alaska

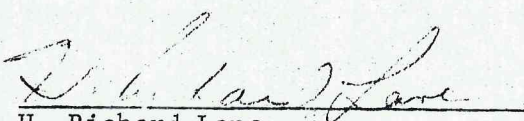
INTRODUCTION

The following sample was processed for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
AB-72-8602 FCL	38	1425	<u>Polygnathus</u> 1425	7
		2618	Indet. conodonts	16

The occurrence of P. 1425 in this sample suggests a Frasnian (Upper Devonian) age for this sample.


H. Richard Lane

HRL:skw 28.06



Amoco Production Company

Tulsa, Oklahoma
June 11, 1973

File: Technical Service No. 5830IR
Locality No. 6803

MEMORANDUM

Subject: Megafossils from the West Crazy Mountains,
Sections 8-17, T10N, R13E, Circle Quad., Alaska

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
WC-8303	6803-2	barren of megafossils	---
WC-8299	6803-6	barren of megafossils	---

DISCUSSION

The rocks in these subject samples have been considerably fractured and recrystallized so that any fossil material originally present would no longer be recognizable. No age can be assigned the subject samples.

Thomas L. DeKeyser
Thomas L. DeKeyser

ARO:sd 20.12



Amoco Production Company
Research Center
Tulsa, Oklahoma

October 11, 1972

File: Technical Service No. 5813IR
Locality No. 6503
Job No. 9799

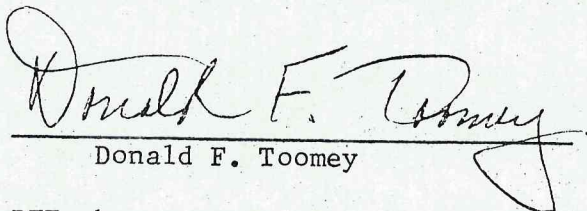
MEMORANDUM

Re: Algae and forams from the Angry Bee Creek Section, Philip Smith
Mountains Quadrangle, Alaska

Examination of one thinsection containing obvious foram material prepared from a sample collected at the Angry Bee Creek outcrop section, Philip Smith Mountains Quadrangle, Alaska, yielded the following identifiable remains:

<u>Sample Number</u>	<u>Description and Identifications</u>
AB-8617(23)	Recrystallized stromatoporoid rock with sparse skeletal debris (mainly ostracodes); some pelletoidal/intraclasts and calcispheres; forams very poorly preserved, with parathuramminids the most abundant but difficult to distinguish from calcispheres except where aperatures are apparent; many of the parathuramminids/calcispheres are circumscribed by micrite envelopes; Calcispheres (R-C), ? <u>Vermiporella</u> sp. fragment (VR); <u>Parathurammina</u> spp., most are probably <u>P.</u> of the group <u>P. paracushmani</u> Reitlinger (23), ? <u>Nanicella</u> sp. (1), <u>Bisphaera</u> sp. cf. <u>B. malevkensis</u> Birina (2), <u>Eonodosaria?</u> sp. fragment (1), indet. foram (2).

The above biota suggests that this collection is of Upper Devonian (Frasnian) age.


Donald F. Toomey

DFT:skw



Amoco Production Company

Tulsa, Oklahoma
June 18, 1973

File: Technical Service 5820IR
Locality: 6792

MEMORANDUM

Subject: Megafossils from Mississippian on Neruokpuk Section, Section 17,
Township 5 South, Range 37 East, Demarcation Quad, Alaska

At this section plant-bearing, nonmarine Mississippian rocks rest directly on Neruokpuk Formation. The plant fossils in the Mississippian rocks are not discussed in this report.

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxa</u>	<u>Age</u>
8619	6792-1	Barren of megafossils. Rocks consist of dense cherts and shale interbeds.	-

Thomas L. DeKeyser
Thomas L. DeKeyser

Allen R. Ormiston
Allen R. Ormiston

ARO:lc 6.3



Amoco Production Company

Tulsa, Oklahoma
July 27, 1973

File: Technical Service No. 5829IR
Locality No. 6802
Job No. 9815

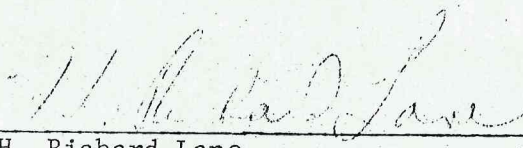
MEMORANDUM

Subject: Conodonts from the Takoma Bluff Section, NW 1/4, Sec. 5,
T17N, R20E, Charley River Quad., Alaska.

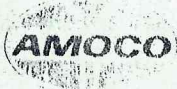
INTRODUCTION

The following samples were processed for conodonts and found to be barren.

<u>Field No.</u>	<u>Sample No.</u>	<u>FAUNA</u> <u>Taxon No.</u>	<u>Identification</u>
TB 8715 C	1	0501	Barren of conodonts
TB 8714 C	2	0501	Barren of conodonts
TB 8713 F,C	3	0501	Barren of conodonts
TB 8711 L,C	5	0501	Barren of conodonts
TB 8716 F,C,L	6	0501	Barren of conodonts


H. Richard Lane

HRL:skw 4.08



Amoco Production Company

Tulsa, Oklahoma
September 13, 1973

File: Technical Service No. 5820IR
Locality No. 6792
Job No. 9806

MEMORANDUM

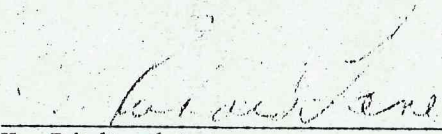
Subject: Conodonts from the Mississippian on Neroukpuk Section,
SE 1/4 Sec. 17, T15S, R37E, Demarcation Quad., Alaska.

INTRODUCTION

The following sample was processed and found to be barren of conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>
8619 FC	1	0501	Barren of conodonts


H. Richard Lane

HRL:skw 19.02



Amoco Production Company

Tulsa, Oklahoma
September 5, 1973

File: Technical Service No. 5814IR
Locality No. 6788
Job No. 9800

MEMORANDUM

Subject: Conodonts from the July Ninth Section, Latitude 68° 58' N.,
Longitude 143° 24' W., Table Mtn. Quad., Alaska

INTRODUCTION

The following samples were processed for conodonts.

FAUNA

<u>Field No.</u>	<u>Sample No.</u>	<u>Taxon No.</u>	<u>Identification</u>	<u>No. Spec.</u>
JN 8657 FCL	1	0501	Barren of conodonts	2
JN 8655 CFL	3	2869	<u>Apatognathus</u> 2869	1
		2826	<u>Cavusgnathus</u> sp.	2
		2618	Indet. conodonts	
Conodonts in sample 3 are late Meramec in age.				
JN 8653 LCF	5	0501	Barren of conodonts	
JN 8651 LFC	7	0501	Barren of conodonts	
JN 8648 LCF	10	0501	Barren of conodonts	
JN 8647 FC	11	0501	Barren of conodonts	
JN 8645 FCL	13	0501	Barren of conodonts	
JN 8644 LCF	14	2828	<u>Cavusgnathus</u> 2828	1
		2741	<u>Spathognathodus</u> 2741	1
		2618	Indet. conodonts	6

T.S. 58141R
September 5, 1973

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Field No.	Sample No.	Taxon No.	Identification	No. Spec.
JN 8643 LFC	15	1395	<u>Spathognathodus</u> 1395	2
		2828	<u>Cavusgnathus</u> 2828	2
		2826	<u>Cavusgnathus</u> sp.	1
		2741	<u>Spathognathodus</u> 2741	1
		2726	<u>Spathognathodus</u> sp.	1
		3093	<u>Ligonodina</u> sp.	1
		2858	<u>Neoprioniodus</u> sp.	1
		2957	<u>Synprioniodina</u> sp.	1
		2618	Indet. conodonts	17
JN 8642 LFC	16	2828	<u>Cavusgnathus</u> 2828	1
		2826	<u>Cavusgnathus</u> sp.	1
		2618	Indet. conodont	1
JN 8641 LFC	17	2828	<u>Cavusgnathus</u> 2828	1
		2826	<u>Cavusgnathus</u> sp.	1
		2618	Indet. conodont	1
JN 8640 LFC	18	0501	Barren of conodonts	
JN 8639 LCF	19	2828	<u>Cavusgnathus</u> 2828	11
		2827	<u>Cavusgnathus</u> 2827	6
		2826	<u>Cavusgnathus</u> sp.	12
		4489	<u>Magnilaterella</u> sp.	4
		3093	<u>Ligonodina</u> sp.	5
		2618	Indet. conodonts	57
JN 8637 LCF	21	2828	<u>Cavusgnathus</u> 2828	2
		2826	<u>Cavusgnathus</u> sp.	37
		2618	Indet. conodonts	75
JN 8636 LCF	22	2827	<u>Cavusgnathus</u> 2827	3
		2826	<u>Cavusgnathus</u> sp.	6
		2618	Indet. conodonts	4
JN 8635 LCF	23	2726	<u>Spathognathodus</u> sp.	1
		2618	Indet. conodonts	2
JN 8632 LC	26	0501	Barren of conodonts	
JN 8631 CLF	27	0501	Barren of conodonts	
JN 8630 CLF	28	2826	<u>Cavusgnathus</u> sp.	3
		4489	<u>Magnilaterella</u> sp.	1
		2858	<u>Neoprioniodus</u> sp.	1
		2618	Indet. conodonts	6

T.S. 5814IR
September 5, 1973

3


Field No.	Sample No.	Taxon No.	Identification	No. Spec.
JN 8629 CLF	29	2727	<u>Spathognathodus</u> 2727	1
		2828	<u>Cavusgnathus</u> 2828	1
		2826	<u>Cavusgnathus</u> 2826	4
		2618	Indet. conodonts	11

The faunas in samples 14-29 are late Meramec to Chester in age.

JN 8628 F	30	0501	Barren of conodonts
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JN 8625 LF	32	3076	<u>Idiognathoides</u> 3076	2
		2618	Indet. conodont	1

Conodonts in sample 32 are Lower Pennsylvanian (Morrowan) in age.


H. Richard Lane

HRL:skw 4.01