# Appendix F: X-ray 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

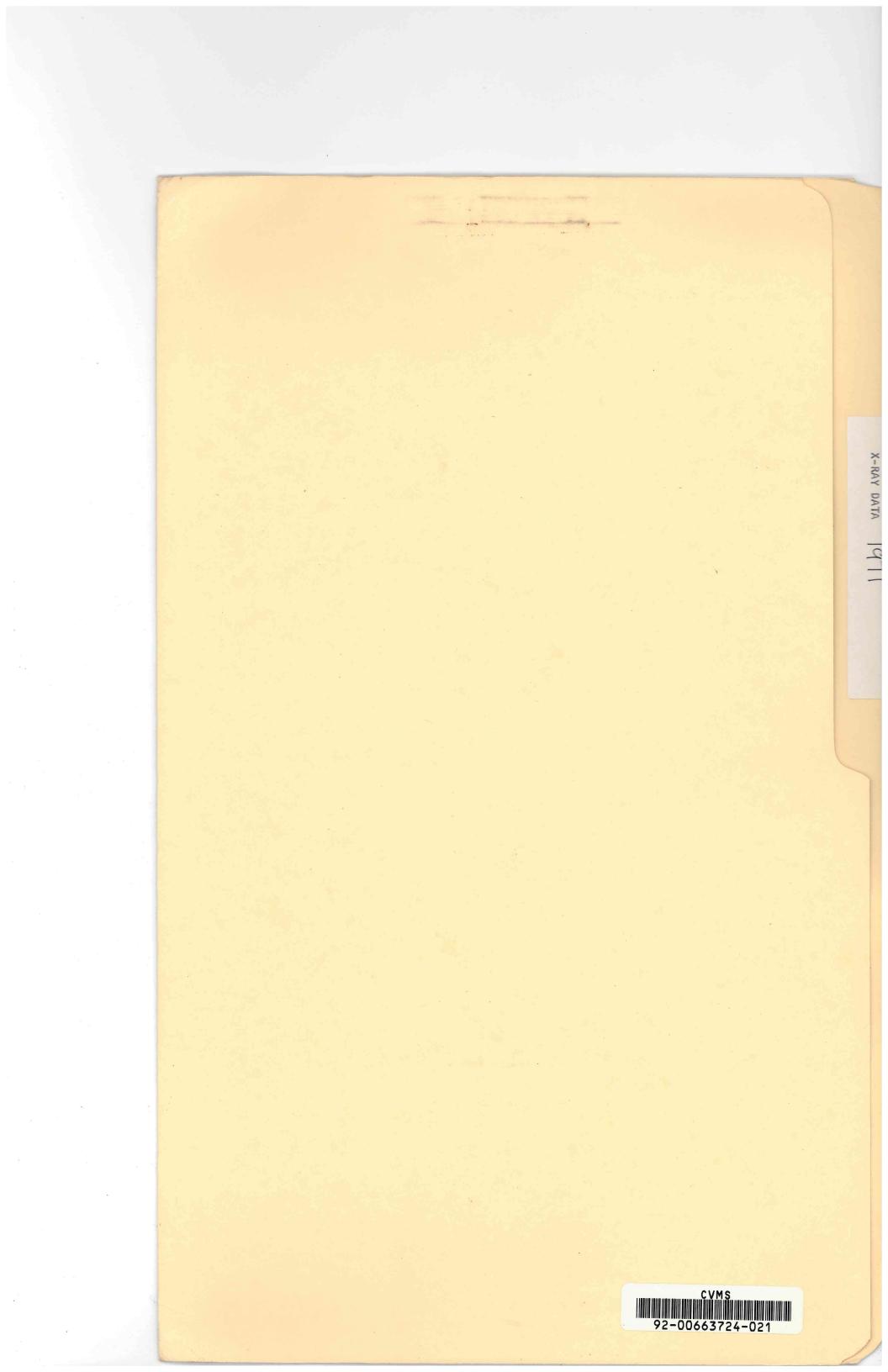
Furer, L.C., and Amoco Oil Co.

GMC DATA REPORT 464F

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

March 27, 1972

Re: X-Ray Diffraction Analysis, Fort Yukon Basin Field Party

File: Technical Service No. 5948SR, Job No. 5618

CF74

Mr. B. F. Baldwin Denver Division

Attention G. F. Stansberry

Dear Sir:

We have completed x-ray diffraction analyses of the samples from the Fort Yukon Basin Field Party (List 1). The percentages of the various minerals present are reported on the attached sheet.

.Thin section and porosity-permeability measurements were sent to you previously.

Very truly yours,

WILLIAM R. WALTON

Bya Eric R. Michaelis

JTR:sd Attachment cc w/attachment: R. K. Taylor L. C. Furer J. A. Momper

#### FORT YUKON BASIN

	% Quartz	% Calcite	% Dolomite	% Calcium Phosphate	% Feldspar	% Illíte	% Kaolinite
ARO-200L	-	9	91		-	-	
ARO-2011	20	19	46	15	-	-	-
ARO-202L	5	9	81	5	-	-	-
ARO-2031	60	40	-	-	-	_	_
GWS-3L	69	3	4		14	. 10	_
GWS-6L	96	-		-		4	
GWS-20L	92		-		2	6	
GWS-21L	90		44	-		10	
GWS-37L	2	9	89	-			
GWS-205L	40	5	55	-	-	-	-
GWS-210L	5	95		-	-		
GWS-246L	93	•	5	-	- 1		2
GWS-255L	96	<u>-</u>	-	<b>-</b>	2	2	
GWS-257L	100	-	• =	-		Tr.	-
GWS-259L	76	20	- 1	-		4	_
GWS-262L	40	60	_			-	
GWS-292L	30	47	23	- 11		-	-
GWS-295L	50	10	38			2	_
HRL-5L	. 96	-			-	4	<b>7</b> - 51

	% Quartz	% Calcite	% Dolomite	% Calcium Phosphate	% Feldspar	% Illite	% Kaolinite	
LCF-13L	96	_	-		12	4	_	
LCF-102L	96	· -	, -		-	4	-	
LCF-103L	94	-	-		-	6	1 -	
LCF-105L	98	-	-	<b>(</b> ) - 2	-	2	-	
LCF-228L	96	-	-	-	-	4	-	
LCF-246L	. 50	10	40	000		•	-	
LCF-247L	34	19	47	-	-	-	-	
LCF-248L	8	50	42		-	-	-	
LCF-249L	75	7	18 <sup>´</sup>	- 3	-		-	



October 20, 1972

Amoco Production Company Tulsa, Oklahoma

Jodi:

Two a pies and Pile L.F.

Re: X-Ray Mineral Analysis of 35 Surface Samples from Ft. Yukon Basin, Alaska

File: Technical Service No. 6074SR Job No. 5682

Mr. P. H. Garrison Denver Division

The attached memorandum reports x-ray mineral analysis of 35 surface samples from Ft. Yukon Basin, Alaska. The technical service request was for 68 samples; however, 33 of the samples were missing.

Very truly yours,

WILLIAM R. WALTON

Michaelis

Eric R. Michaelis

ERM:sd Attachment cc w/attachment: E. E. Lafaye Terry Cooper

Terry Cooper W. R. Walton/J. A. Momper



Amoco Production Company Tulsa, Oklahoma

CONTRACTOR DE LA CONTRACTION DE LA CONTRACTICACIÓN DE LA

October 19, 1972

Re: X-Ray Mineral Analysis of 35 Surface Samples from Ft. Yukon Basin, Alaska

File: Technical Service No. 6074SR Job No. 5682

#### MEMORANDUM

Attached is the x-ray mineralogy of 35 outcrop samples from Ft. Yukon Basin, Alaska. The request was for 68 samples. Thirty-three of the samples were missing. The talc identified in the samples is most likely contamination from the sizing in sample sacks.

Calico Bluff Sample GWS-283FCf contained approximately 25% strontianite (SrCO<sub>3</sub>), 5% dawsonite (NaAl(CO<sub>3</sub>) (OH)<sub>2</sub>), and 5% barite (BaSO<sub>4</sub>). The other samples collected from this area were siliceous calcites and dolomites.

Jack Nash

AJN:sd Attachment Technical Service No. 6074SR

		X-Ra	y Mine	ralogy							
		% Quartz	% Calcite	% Dolomite	% Barite	% Feldspar	% Talc	% Celestite	% Strontianite	% Dawsonite	% Pyrite
	SOUTH OLD CAMP										
	AO-1-17 Bed 4 (Base) ARO-13-F AO-1-17 Bed 1 AO-1-17 Bed 5 (4' up) ARO-12-FC	1 98 1 3 98	99 2 99 97 2	1 1 1 1			  TR				
	LIMESTONE HOGBACK										
•	GWS-211-F	4	96	8-i		-	-	-		4	
	CALICO BLUFF										
	GWS-290-FCf GWS-276-FCf GWS-283-FCf GWS-286-FCf LCF-278-CF GWS-270-CF LCF-277-CF	5 33 2 5 2 18 39	45 65 54 25 97 48 59	50 2 70 TR 34 2	- TR 5 TR - TR	- TR - - -	- TR 1 -	TR TR TR	- 25 TR - -	5	- 7. - - -
	NATION SECTION										
	GWS-240-FC GWS-237-F GWS-238-F GWS-244-F GWS-233-F GWS-245-LF	1 9 2 2 67	99 99 91 98 98 33		1 1 1 1						
	FORT CREEK										
	ARO-45-F ARO-52-LCF ARO-51-FL	1 1	37 99 99	63 _ _							

## Ft. Yukon Basin, Alaska, Surface Samples

V-Dou Minoralo

## Technical Service No. 6074SR Page 2

	% Quartz	% Calcite	% Dolomite	% Barite	% Feldspar	Talc	% Celestite	% Strontianit	% Dawsonite	% Pyrite
FORT CREEK (cont'd)										
ARO-49-CF ARO-48-FC ARO-46-F	1 1 1	99 98 77	_ 1 22	-				-	-	
LINEAR RIDGE										
GWS-68-LCF GWS-59-LFC GWS-66-LFC GWS-62-LCF GWS-71-CF	- 3 2 1 1	14 95 93 95 97	85 2 5 4 2	TR TR TR TR	1 - - -					-
JONES RIDGE										
GWS-303-FL GWS-305-FfL GWS-300-F & L LCF-253-F LCF-251-F	1 1 2 8 26	99 99 98 86 34	- - 6 40		TR TR					

0

### OUT OP FT. YUKON BASIN, ALASKA

Mineral Percentages

1	а. С. — П. <u>н</u>						Montmor-		
Sample No.	Quartz	Feldspar	Calcite	Dolomite	Pyrite	Illite	illonite	Siderite	Hornblende
GWS 22 LC	3	· - * ·		97			-	1 <b>H</b>	بر بر <del>س</del> ا
" 23 "	5	TR	1	94	- <b>-</b>	TR	<b>_</b> 907	· · · ·	
" 25 "	2	TR	-	98	•	-		<u> </u>	
" 27 LCF	2	1	3	94	-	-	-		
" 30 "	2			98	-		-		
" 32 F	4	1		95	-	, <b>-</b> *,			_
" 36 LC	4	<sup>···</sup> 1 ····	. 1	94	-	-	-	· -	- <u>4 _</u>
" 208 F	3	e englacionida e contra en entre en en En entre e	96	1	-		-	(k)	
" 235 LC	1	-	99	. <u> </u>			-		_ · · ·
" 243 F	1	. <u>-</u>	99				-	-	
" 261 CF	5	-	92	3	or <sup>a</sup> a en f a µa ➡	-	-	-	a tha thata th' a a th <b>r</b> ain
" 263 LF	2 · · ·		98	`	-				
" 299 LCF	1	· · · · · · · · · · · · · · · · · · ·	99	TR	• • • • • • • • • • • • • •				
HRL 35 LCF	2	_	97	1	-	-		11 - J	
" 39 "	TR	<b>_</b> *	99	1	-	-	-	2 <b>-</b> 1	·
" 43 "	1	, 	98	1	<b>_</b> , *	, <sup>.</sup> ,		·	
" 47 "	1		99	TR	-			-	
" 50 "	1	. <u>.</u>	99				TR	-	
" 56 "	1	а с а к	99	TR	- ,	-	·		-
LCF 59	2	· · · ·	98	-	-	-			-
" 67 FL	80	2	2	-		15		1.	TR
" 250 FCF	3	-	96	1	-		-	; <b>-</b> .	-
" 258 CF	1	-	99	TR		× •	- ,	·	s. s, <del>"</del> g *
" 259 "	2		97	· 1 · ·	-	÷		·, = ·	
" 260 "		-	99	-	1	* ****** 	-	, . 	-
ARØ 204 LC	3	_	97		<b>.</b>		_		-

TR = TRACE



Amoco Production Company Tulsa, Oklahoma

December 13, 1972

Re: X-ray Mineralogy of Outcrop Samples from Ft. Yukon Basin, Alaska

File: Technical Service 6074SR, Job 5682

P. H. Garrison Attention: Lloyd Furer Denver Division

Dear Sir:

Attached is a list of 26 outcrop samples from Ft. Yukon Basin Alaska with the mineralogy determined by x-ray diffraction.

The mineralogy of 34 of the samples from the list of 69 samples requested was reported October 1972.

Four samples GWS-35CF, GWS-206L, GWS-297LCF and GWS-258F were missing. Two samples GWS-261L and GWS-35CF were duplicate numbered samples. The sample sack with sample No. LCF-252F was empty.

Yours very truly,

10 J. Nash Α. AJN:uw

Attachment

cc: W. R. Walton E. R. Michaelis

#### OUT OP FT. YUKON BASIN, ALASKA

Mineral Percentages

							Montmor-		
Sample No.	Quartz	Feldspar C	alcite	Dolomite	Pyrite	Illite	illonite	Siderite	Hornblende
GWS 22 LC	3	i k 🛏 👘 i k	-	97	` <b>_</b> ``		·		-
" 23 "	5	TR	1	94	· .	TR	- 46	* • • • •	
" 25 "	2	TR	-	98	-	-		1 	-
" 27 LCF	2	1	3	94		-			
" 30 "	2		-	98			-		
" 32 F	4	1	-	95	_ *			-	
" 36 LC	4	1 .	1	94	-				
" 208 F	3	a and and a set of the	96	1			i si <del>s</del> i sa	÷ -	-
" 235 LC	1	-	99	. <del>≓</del> °.					
" 243 F	1		99	·		-		-	-
" 261 CF	5		92	3	a a a seriei <del>-</del>	-		-	
" 263 LF	2	in the second	98	· · · ·	-				
" 299 LCF	1	· · · · · ·	99	TR			-	-	-
HRL 35 LCF	2	-	97	1	_	-		-	-
" 39 "	TR	- '	99	1	_	-	-	· - ·	* •
" 43 "	1	- <u> </u>	98	1	-	- ,	-	-	·
47 "	1		99	TR	-	-		-	-
" 50 "	1	_	99		-		TR	· · ·	
" 56 "	1	-	99	TR		-	-		· · · ·
LCF 59	2	· ·	98		-	-		· · · ·	<b>-</b>
" 67 FL	80	2	2	-	- "	15	, <b>-</b> , ,	1.	TR
" 250 FCF	3	-	96	1	-	-	-est :		
" 258 CF	1	-	99	TR	· - ·	-	a	· • •	o y <del>-</del> e tra
" 259 "	2		97	1		<b>_</b>	-	• . <b>-</b> .	
" 260 "	-		99	-	1	· · · ·	-	* • • • • •	· -
ARØ 204 LC	3	-	97			-		8	

TR = TRACE