

45-1-4-111

Middle-Upper Devonian - Cretaceous  
in the Mountain River, Norman Wells  
and Great Bear Plain Areas  
Final Report on 1970 Geological  
Field Party in the N.W.T.  
June 5 - July 15, 1970  
Government Project 45-1-4-70-6

EXPLORATION PROGRESS REPORT

Middle-Upper Devonian - Cretaceous in the Mountain River,  
Norman Wells and Great Bear Plain areas

This report covers work by Chevron Standard Limited during the period of June 5 to July 15, 1970. This report is submitted in support of application for work credits. This application is Government Project Number 45-1-4-70-6 in your files, and Group 203.

R. Schreiner

Report prepared by: R. P. Schreiner

under direct supervision of  
H. R. Novak, P. Geol. (Alberta)

J.W. Head

ILLUSTRATIONS

Figures: 1. Area of study and physiographic features.

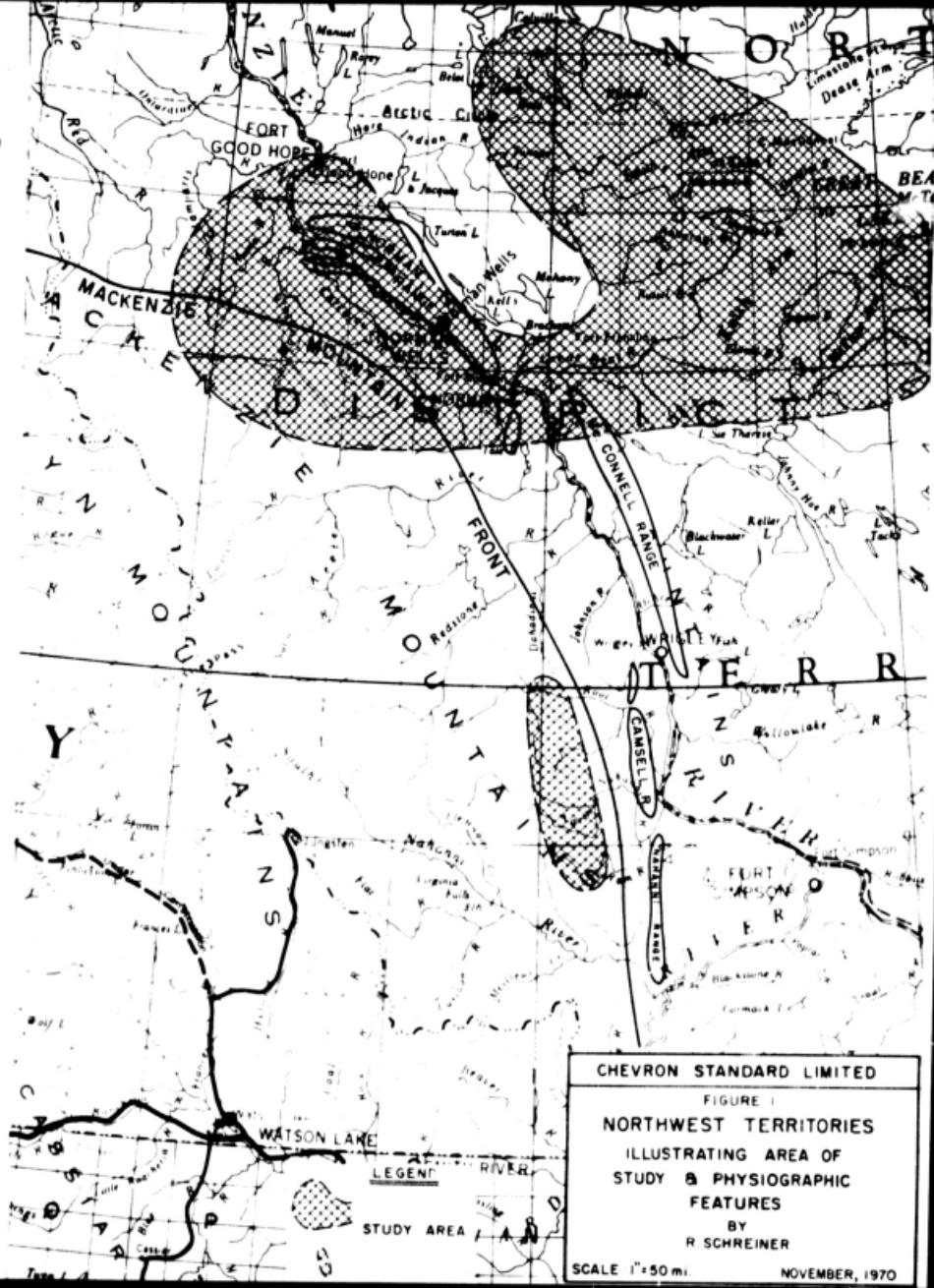
2. Devonian age conclusions in the Northwest Territories.

3. Detailed Devonian stratigraphy at Powell Creek (40 miles SW of Norman Wells).

Plates: 1. Area covered by 1970 field party (N.W.T. and N.E.B.C.).

2. Mackenzie Mountains and Franklin Mountains areas; showing physiographic features and surface location of sections measured in 1970.

Section: A print of each of the measured sections is included with only one copy of this report.



CHEVRON STANDARD LIMITED

FIGURE I  
**NORTHWEST TERRITORIES**  
 ILLUSTRATING AREA OF  
 STUDY & PHYSIOGRAPHIC  
 FEATURES

BY  
R. SCHREINER

SCALE: 1" = 50 mi.

NOVEMBER 1970

SECTIONS

006010	006091
006012	006092
006013	006094
006015	006096
006016	006098
006020	006202
006021	006101
006022	006103
006023	006104
006024	006107
006025	006108
006026	006110
006031	006111
006055	006112
006056	006118
006076	006155
006083	006156
006084	006204
006085	006205
006088	

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Mountain River, Norman Wells and Great Bear Plain areas

Introduction

The 1970 field party used a contracted Miller 172 helicopter and a float equipped, Chevron owned Turbo-Beaver for its transportation in the field. The party started in the Mountain River area, then moved east to Norman Wells and the Great Bear Plain, and then to the south as work progressed.

The geological field crew for the N.W.T. consisted of:

R. Schreiner	Party Chief
H. S. Walton	Palynologist
D. J. McIntyre	Palynologist
L. Dekker	Senior Assistant
R. Aithan	Senior Assistant
K. Bee	Student Geologist
D. Bottomley	Student Geologist
D. Christie	Student Geologist
W. Fille	Student Geologist

Geology

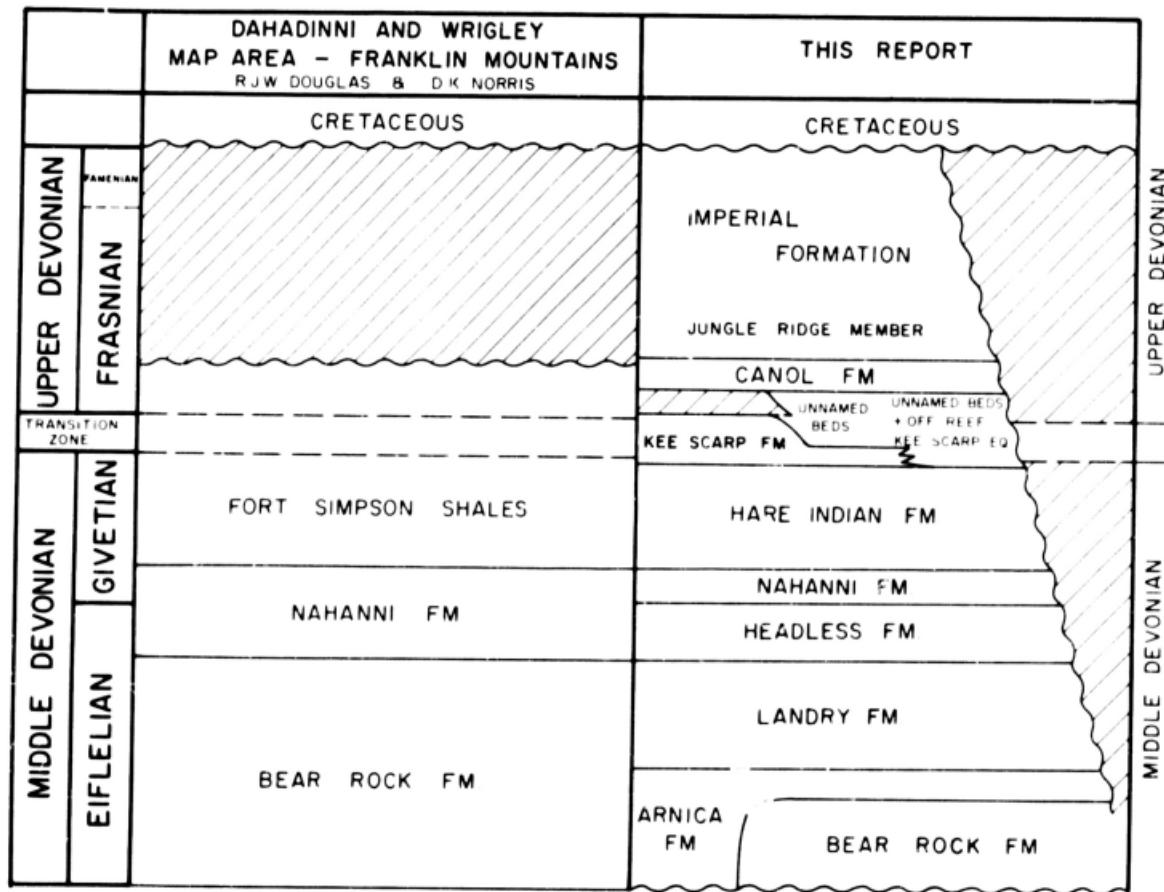
In the Mountain River - Norman Wells areas, the objective was to complete work started during the 1969 field party in the same area. In 1970 our efforts were concentrated on the Upper Devonian and the Cretaceous, often extending sections measured lower in the section in previous years.

In addition to this more detailed work was carried out on the Middle-Upper Devonian boundary around Powell Creek (figure 3).

In the Great Bear Plain, our objective was to map the Cretaceous beds overlying the Devonian. Especially in the Great Bear Plain, the outcrop is very sparse and most sections measured are incomplete. Nevertheless we hope that palynological analysis of the samples collected will enable us to get a better understanding of the Cretaceous in the Great Bear Plain.

A few days were spent around Trench Lake (west of Wrigley) to finish two incomplete sections of 1969, as well as study a Middle Devonian reef on the Root River.

After Trench Lake the party moved to N.E.B.C.



WEST

EAST

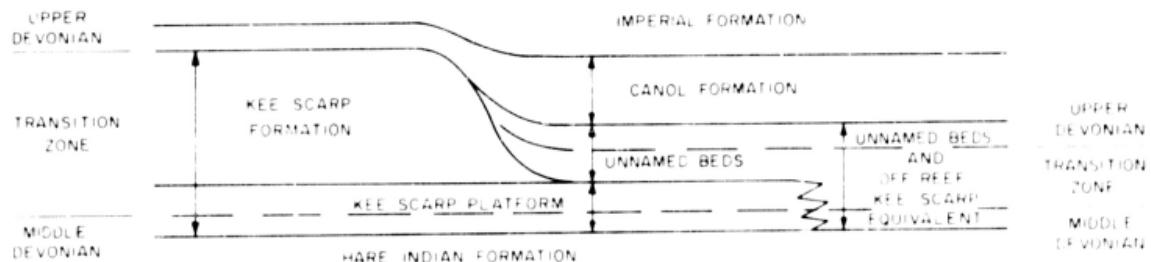


FIGURE 3

DIAGRAM SHOWING DEVONIAN STRATIGRAPHY

AROUND POWELL CREEK

MARVIN B. SCHREINER

FERMILAB, 1969