

REPORT OF GEOPHYSICAL SURVEY
REPORT OF SEISMOGRAPH REFLECTION SURVEY

Conducted by
Western Geophysical Company of
Canada Limited

during the period February 18th, 1957 to March 21st, 1957 inclusive

on
YUKON TERRITORY
Permit No. 1002 (95-C-1)

Prepared by
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District Geophysicist

June 27, 1957

Submitted in accordance with work obligation under Section 30,
Sub-section 1(c) of the Regulations.

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Shot Hole Plan and Elevation Map for Yukon Permit #1002 (Fig. 2)	See maps in back pocket
"K" Mississippian Structure Contour Map Yukon Permit #1002 (Fig.3)	

TEXT

INTRODUCTION

During the period of February 19th, 1957 to March 21st, 1957 a reflection program was conducted by Western Geophysical Company of Canada Ltd., Party F-50 for the Pan American Petroleum Corporation. A total of 19 days were devoted to actual field work. The office work was carried on simultaneously with the field work and was completed on March 21st, 1957. In addition to the Western Geophysical personnel, two bulldozer operators were used to cut and clear trails. The crew was under the supervision of Mr. W.J. Kirst and was headquartered at Fort Nelson, B.C. while working on these permits.

T E X T (cont'd)

SEISMIC TECHNIQUE

Shot holes averaged approximately 30 feet in depth on Permit #1002. The depth of shot was determined by near surface lithology. Normal charge size in this area was 10 pounds. The energy was recorded on split spreads as diagrammed on Attachment #1. The recording instruments were of a type manufactured by the Western Geophysical Company in their Los Angeles laboratory.

The reflection method was used to obtain the subsurface maps, however refraction breaks were used to correct for near surface weathering and drift irregularities.

The datum that appear on the subsurface maps are vertical two-way times between an arbitrary near surface reference plane and the particular horizon mapped.

The area was worked during the winter months with tract equipment. No unusual operating problems were encountered.

Respectfully submitted

PAN AMERICAN PETROLEUM CORPORATION

By


H.A. Baker

District Geologist

72 Seismometers at 20' intervals

Shot-hole

72 Seismometers at 20' intervals

150' 150'

Party:
Area:
Hole to Hole
Distance:

Western F-50
Yukon Permit #1002
1720'

WESTERN GEOPHYSICAL COMPANY OF
CANADA LIMITED

YUKON AREA PERMIT No. 1002 (off)

	<u>Depth</u>	<u>Remarks</u>
4 - 1	0 - 20	Brown Clay
	20 - 40	Shale
4 - 2	0 - 12	Brown Clay
	12 - 28	Grey Clay & Rocks
	28 - 40	Shale
4 - 3	0 - 15	Brown Clay
	15 - 40	Grey Clay
	0 - 12	Brown Clay & Rocks
	12 - 24	Grey Clay & Boulders
	24 - 35	Shale
	0 - 20	Brown Clay
	20 - 40	Hard Grey Clay
	0 - 14	Brown Clay
	14 - 27	Grey Clay & Boulders
	27 - 35	Shale
	0 - 17	Brown Clay
	17 - 35	Grey Clay & Rocks

**WESTERN GEOPHYSICAL COMPANY
OF CANADA LTD.**

828 FOURTH AVENUE WEST
CALGARY, ALBERTA
CANADA

Party F - 50

SHOT HOLE LOGS - MARCH 1957

Beaver River Area, Yukon

Permit No. 1002 (OFF)

<u>LINE & SHOT POINT NO.</u>	<u>DEPTH</u>	<u>REMARKS</u>
4 - 8	0 - 12	Brown Clay
	12 - 23	Grey Clay & Rocks
	23 - 35	Shale & Layers of Sandstone
4 - 9	0 - 11	Brown Clay
	11 - 25	Grey Clay & Rocks
	25 - 35	Shale & Layers of Sandstone
4 - 10	0 - 12	Brown Clay
	12 - 23	Grey Clay & Rocks
	23 - 35	Shale & Layers of Sandstone
4 - 11	0 - 9	Brown Clay
	9 - 26	Soft Sandstone
	26 - 35	Shale & Layers of Hard Sandstone
4 - 12	0 - 7	Brown Clay
	7 - 16	Soft Sandstone
	16 - 35	Shale & Layers of Hard Sandstone
4 - 13	0 - 4	Brown Clay
	4 - 27	Sandstone
	27 - 35	Shale & Layers of Hard Sandstone
4 - 14	0 - 20	Sandstone
4 - 15		
4 - 16		
4 - 17		
4 - 18	0 - 10	Brown Clay
	10 - 30	Shale & Sandstone Ledges
4 - 19		
4 - 20		
4 - 21	0 - 20	Brown Clay
	20 - 40	Shale & Sandstone Ledges
4 - 22		
4 - 23	0 - 12	Brown Clay
	12 - 23	Shale
	23 - 30	Hard Sandstone

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828 FOURTH AVENUE WEST
CALGARY, ALBERTA
CANADA

Party F - 50

SHOT HOLE LOGS / MARCH 1957

Beaver River Area, Yukon

Permit no. 1002

<u>LINE & SHOT POINT NO.</u>	<u>DEPTH</u>	<u>REMARKS</u>
4 - 24	0 - 13	Brown Clay
	13 - 26	Grey Clay
	26 - 35	Shale & Layers of Sandstone
4 - 25	0 - 14	Brown Clay
	14 - 25	Grey Clay
	25 - 35	Shale & Layers of Sandstone
4 - 26	0 - 15	Brown Clay
	15 - 25	Grey Clay
	25 - 35	Shale & Layers of Sandstone
4 - 27	0 - 12	Gravel & Brown Clay
	12 - 35	Shale & Layers Of Sandstone
5 - 39	0 - 10	Brown Clay
	10 - 17	Grey Clay
	17 - 29	Sandstone
	29 - 35	Grey Clay
5 - 40	0 - 13	Brown Clay
	13 - 35	Grey Clay & Layers of Sandstone
5 - 41	0 - 16	Brown Clay
	16 - 23	Soft Sandstone
	23 - 35	Grey Clay & Layers of Sandstone
5 - 42	0 - 17	Brown Clay
	17 - 35	Grey Clay & Layers of Sandstone
5 - 43	0 - 16	Brown Clay
	16 - 35	Grey Clay & Layers of Sandstone
5 - 44	0 - 17	Brown Clay
	17 - 35	Grey Clay
5 - 45	0 - 15	Brown Clay
	15 - 29	Soft Sandstone
	29 - 35	Grey Clay
5 - 46	0 - 18	Brown Clay
	18 - 35	Grey Clay & Layers of Sandstone
5 - 47	0 - 16	Brown Clay
	16 - 35	Grey Clay & Sandstone Ledges
5 - 48	0 - 19	Brown Clay & Soft Sandstone
	19 - 35	Grey Clay & Sandstone Ledges
5 - 49	0 - 16	Brown Clay
	16 - 35	Grey Clay & Sandstone Ledges
<u>Permit No. 760</u>		
3 - 109	0 - 12	Brown Clay & Sandstone Ledges
	12 - 13	Rock

60°05'

60°05'

P 1002

2423

2423

SPR

PAN AMERICAN PETROLEUM CORPORATION

YUKON PERMIT 1002

SHOT HOLE PLAN & ELEVATION MAP

SCALE: 1" = 4000' CONTOUR INTERVAL: 50'

ELEVATION DATUM: MEAN SEA LEVEL

DATE: JUNE 25, 1957. PERMIT BOUNDARY: —

SHOT HOLES: PARTY, LINE & SHOT HOLE NO:

DATUM: 1798

60-6-1-3

THIS MAP HAS BEEN CHECKED FOR PRESENTATION BY

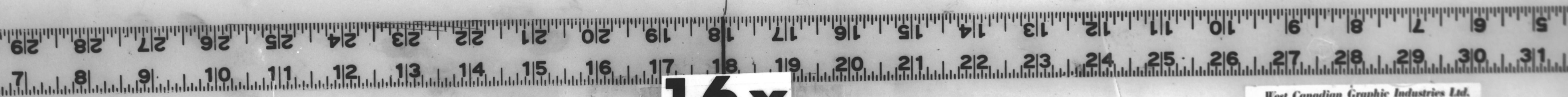
W. B. Baker *Plng. Engr.* *July 19/57*
Name Date

WESTERN GEOPHYSICAL CO. OF CANADA LTD.
PARTY F-50

124°00'

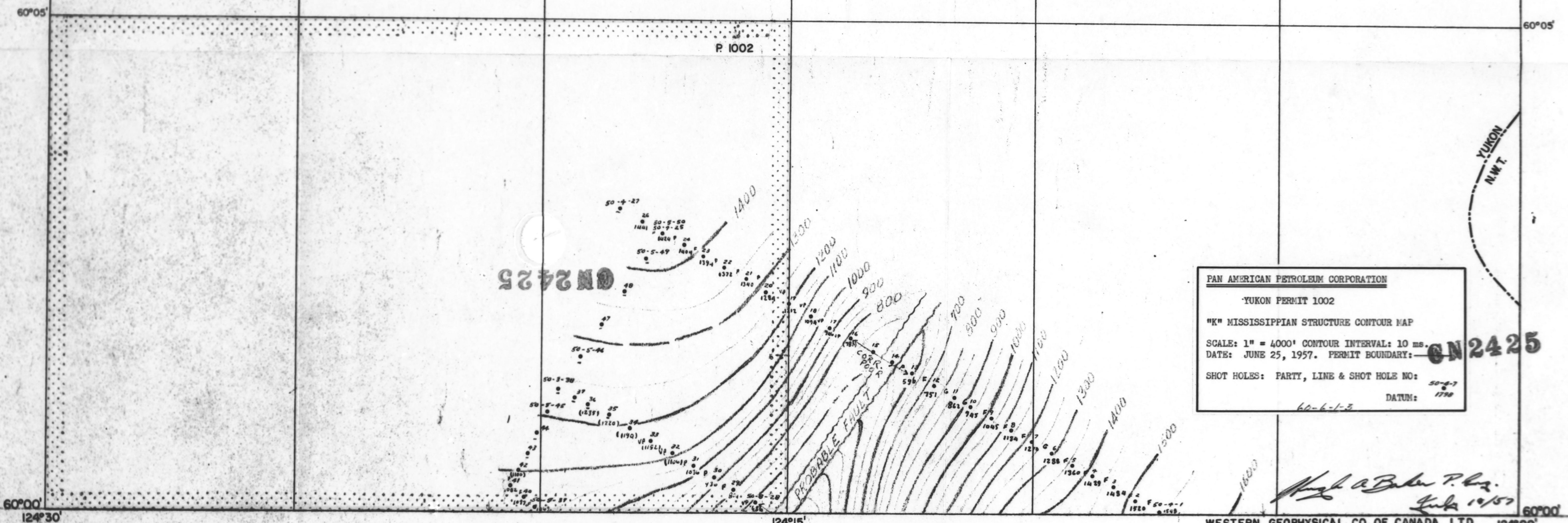
60°00'
124°30'

124°15'



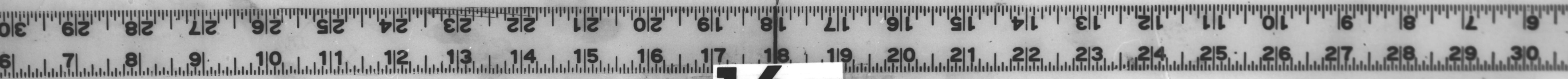
16x

West Canadian Graphic Industries Ltd.



PAN AMERICAN PETROLEUM CORPORATION
YUKON PERMIT 1002
"K" MISSISSIPPIAN STRUCTURE CONTOUR MAP
SCALE: 1" = 4000' CONTOUR INTERVAL: 10 ms.
DATE: JUNE 25, 1957. PERMIT BOUNDARY: **CN 2425**
SHOT HOLES: PARTY, LINE & SHOT HOLE NO: 50-6-7
DATUM: 1798
60-6-1-3

Hugh A. Baker P. Eng.
July 19/57
WESTERN GEOPHYSICAL CO. OF CANADA LTD. 124°00'
PARTY F-50



16x