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OPERATIONS REPORT

OF

REFLECTION SEISMOGRAPH SURVEY

OF

BOVIE AREA, N.W.T.

FOR

PETRO-CANADA EXPLORATION INC.

BY

CENTURY GEOPHYSICAL CORPORATION OF CANADA

Party S-26

JANUARY & FEBRUARY 1977

GENERAL INFORMATION

The Bovie Area is situated approximately 20 miles South-East of the Ft. Liard Indian Reservation.

47.71 miles  
\* The assigned program consisted of ~~42.80~~ miles of 600% C.D.P. coverage.

Record quality was generally good throughout the area.

Five drills were used in the area, two Sewell Augers, two Garner-Denver Top Drives and one Mayhew 1000.

All recording units were 1-ton 4 X 4's. The Party Manager and Survey Units were 3/4-ton 4 X 4's.

The area was generally hilly, but did not create any serious problems.

Mr. R. Hambling was the Party Manager and Mr. F. Greilach was the Field Supervisor.

Respectfully submitted,

CENTURY GEOPHYSICAL CORPORATION OF CANADA,



F. Greilach,  
Geophysical Supervisor.



PROJECT PARAMETERS

CLIENT:	PETRO-CANADA EXPLORATION INC.,
CLIENT REPRESENTATIVE:	M. Buthfer
PROJECT NAME:	BOVIE
LOCATION:	Latitude 60° 00' to 60° 15' Longitude 122° 45' to 123° 15'
LICENCE NO:	159
LAND USE PERMIT:	N76B426
FIELD HEADQUARTERS:	Fort Nelson, B.C. (Camp)
ACCESS ROAD:	Kotcho & Cabin Lake Road
TERRAIN:	Hilly with muskeg areas
DOZING:	Kledo Construction
CLEAN-UP:	W. Fell
COVERAGE:	600%
MILES SHOT:	42.80 + 1.6 = 44.4
SURVEY:	Well location and Bench mark. Texaco Well - J-72 run South to Border Bench mark.
SPREAD LENGTH:	5280 - 0 - 5280
STATION INTERVAL:	220'
SHOT POINT INTERVAL:	880'
LINE NUMBERING:	712 to 719
DRILLING CONDITIONS:	Clay rocks, Shale and Sandstone

### DRILLS USED

Garritty & Baker: Two Sewell Augers mounted on 1966 GMC's

Ford Drilling: Two Garner Top Drives mounted on 1974 GMC Single Axle and one mounted on 1976 GMC Tandem.

Stan Miller Drilling: 1000 Mayhew mounted on 1968 Dodge 500

Ford Drilling: Spare Water Truck, 1973 GMC with 1800 gallon tank.

### CATS

Kledo Construction: One D-6-C Wide Pad with winch & dozer  
One D-7-F with winch & dozer  
One D-7-F with rear ripper & dozer

### RECORDING UNITS

Party Manager Truck: 1977 Ford 250

Recorder: 1976 Dodge W300-4 X 4

Shooting Truck: 1976 Dodge W300-4 X 4

Line Trucks: Two, 1976 Dodge W300-4 X 4

### SURVEY UNITS

Two, 1977 Chev 3/4-ton 4 X 4's

### RECORDING

INSTRUMENTS:	D.F.S.-V, 48 Trace, 9 Track
SAMPLE RATE:	2 m.s.
RECORD LENGTH:	4 sec.
GAIN MODE:	Binary
FILTER:	12 - 128
GEOPHONES:	Mark L-10, 14 cycle, 15' spacing, 18 per trace
RECORD QUALITY:	Good
OPERATOR:	M. Murray

### EFFICIENCY STATISTICS

RECORDING HOURS:	122.0
PROFILES:	263
SUBSURFACE COVERAGE:	42.80 miles
NUMBER OF SHOTS:	283
DYNAMITE USED:	3,595
CAPS USED:	477

### DRILLING STATISTICS

TOTAL FOOTAGE:	27,537
TOTAL DRILL HOURS:	579.5
TOTAL FEET PER HOUR:	47.51
TOTAL DRILLING COST:	\$20,386.75
DRILLING COST PER FOOT:	74¢

**CATS**

**Kledo Construction:**

1 - D-6-C 312.0 hrs @ \$38.00 = \$ 11,856.00

2 - D-7-F 534.0 hrs @ \$45.00 = \$ 24,030.00

**D-7-F with Ripper:**

37.0 hrs @ \$52.00 = \$ 1,924.00

**Cartage:**

**= \$ 700.00**

TOTAL .

**\$ 38,510.00**

**CAMP**

The camp was owned by Nodwell Bros., Calgary, Alberta.

**TOTAL CAMP COST:**

**\$ 1,804.15**

## CATERING

The catering was done by Foothills Caterers.

TOTAL MAN DAYS - 285 @ \$17.50

**\$ 4,987.50**

TRUCKING CHARGES:

**\$ 10,825.00**

\* NOTE: IMPORTANT MEMO

Please note there has been 4.91 miles of program deleted from the BOVIE area Operations Report.

The lines are: #713 = 2.41 miles

North end  
of #705 = 2.50 miles

**4.91 Miles**

**BITS USED:**

Inserts:	66	-	\$2,635.20
Auger Stem:			\$3,579.15
Total Cost:			\$6,214.35
Cost per Foot:	22¢		

Garritty & Baker #15:	Footage:	5,890
	Total Hours:	114.5
	Feet Per Hour:	51.44

Garritty & Baker #18:	Footage:	5,016
	Total Hours:	100.5
	Feet Per Hour:	49.71

Ford DRilling #1:	Footage:	6,535
	Total Hours:	122.0
	Feet Per Hour:	53.56

Ford Drilling #2:	Footage:	6,907
	Total Hours:	121.5
	Feet Per Hour:	56.84

Miller Drilling:	Footage:	3,189
	Total Hours:	121.0
	Feet Per Hour:	26.35

Ford Drilling - Spare Water Truck:	Total Hours:	115.5
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Hydro-Canada Corporation Ltd.  
Geological Division

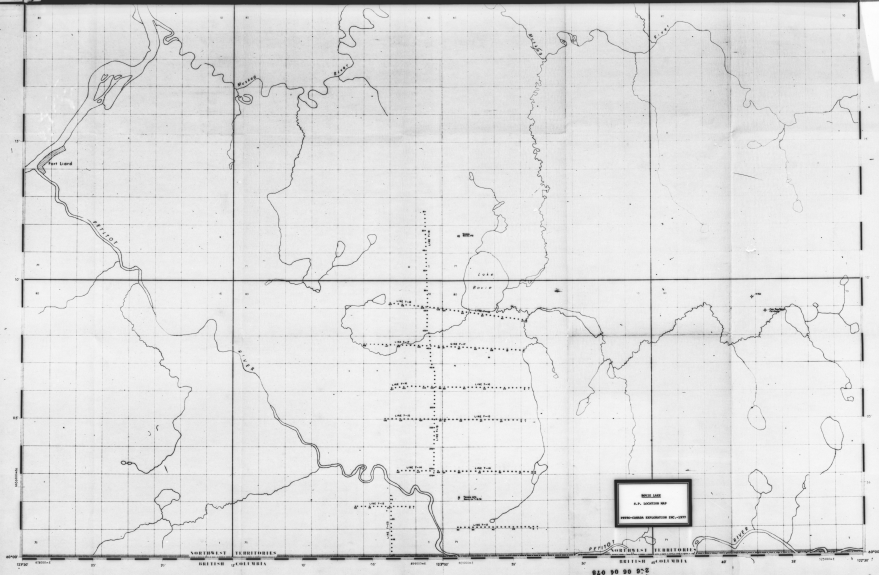
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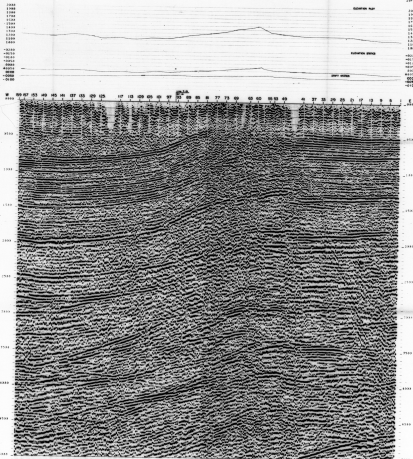
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Year	COVID-19 Cases	Dengue Cases	Malaria Cases
2019	~100,000	~100,000	~10,000
2020	~800,000	~150,000	~10,000
2021	~900,000	~200,000	~10,000
2022	~600,000	~250,000	~10,000

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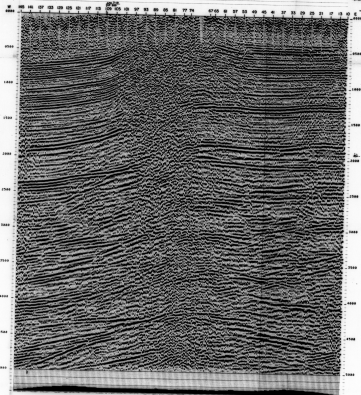
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