61° 30' 00"

123° 30' 00"

123° 15' 00"

123° 00' 00"

B.A.—AMERADA

MOBIL

ABRAMS OIL

KERR

GRAINGER

SURFACE ELEVATION

1400
1300
1200
1100
1000
900
800
700

1600
1500
1400

BC68-822

SWAN POINT

RIVER

LIARD

SAHANNI

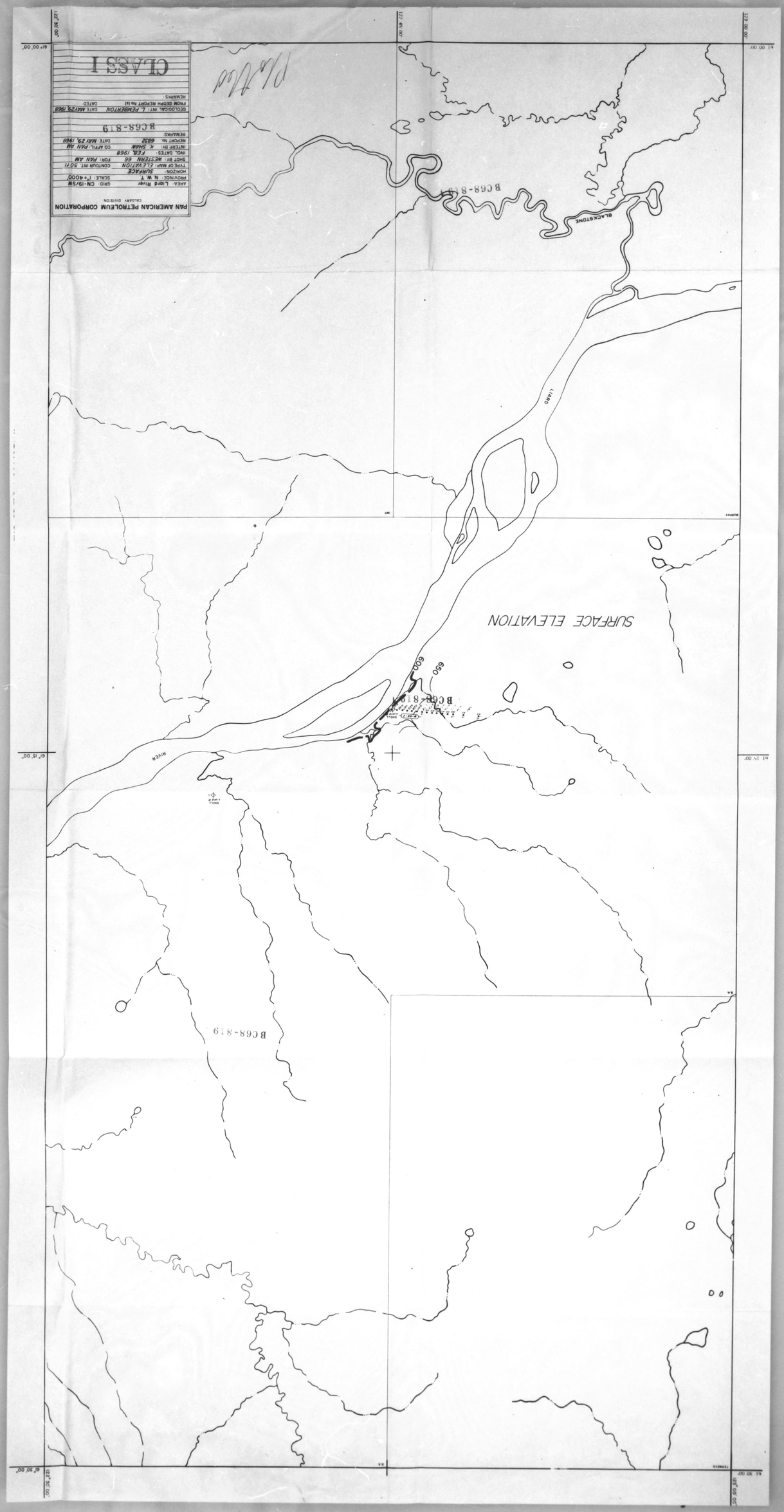
61° 15' 00"

61° 00' 00"

PAN AMERICAN PETROLEUM CORPORATION
CALGARY DIVISION

AREA:	Swan Point	GRID:	CN-18 S.E.
PROVINCE:	N.W.T.	SCALE:	1" = 4000'
HORIZON:	SURFACE		
TYPE OF MAP:	ELEVATION	CONTOUR INT.	50ft
SHOT BY:	WESTERN 66	FOR:	PAN AM
INCL. DATES:	FEB. 1968		
INTERP BY:	K. SHAW	CO. AFFIL.:	PAN AM
REPORT No.	6832	DATE:	MAY 29, 1968
REMARKS:	BC68-822		
GEOLOGICAL INT.:	L. PEMBERTON	DATE:	MAY 29, 1968
FROM GEOPH REPORT No (s)		DATED	
REMARKS:			

CLASS I


CLASS I
PAN AMERICAN PETROLEUM CORPORATION
CALGARY DIVISION
AREA: Lloyd River
PROVINCE: N.W.T.
HORIZON: SURFACE
TYPE OF MAP: ELEVATION
SHOT BY: WESTERN 66
INCL. DATES: FEB. 1968
INTERP. BY: K. SHAW
REPORT No. 6832
REMARKS
GEOLOGICAL INT.: L. PENGERTON
FROM DEPH REPORT No (s)
REMARKS
GRID: CN-19/SW
SCALE: 1"=4000'
CONTOUR INT. 50 ft
FOR: PAN AM
CO. APPR.: PAN AM
DATE: MAY 29, 1968
DATED: MAY 29, 1968
BLACKSTONE
LLOYD
RIVER
SURFACE ELEVATION
600
650
BC68-819


"D" TOP CAMBRIAN
TIME STRUCTURE
10ms ≐ 67ft
PAN AMERICAN PETROLEUM CORPORATION
CALGARY DIVISION
AREA: Swan Point
GRID: CN-18 S.E.
PROVINCE: N.W.T.
SCALE: 1" = 4000'
HORIZON: TOP CAMBRIAN
TYPE OF MAP: TIME STRUCT.
CONTOUR INT. 10ms.
SHOT BY: WESTERN 66
FOR: PAN AM
INCL. DATES: FEB. 1968
INTERP. BY: K. SHAW
CO. AFFIL.: PAN AM
REPORT No. 6832
DATE: MAY 29, 1968
REMARKS:
BC68-818
GEOLOGICAL INT.: L. PEMBERTON
DATE MAY 29, 1968
FROM GEOPH REPORT No.(s)
DATED
REMARKS:
CLASS I
Plotted
LIARD RIVER
NAHANNI RIVER
SWAN POINT
GRAINGER
Unrel.
123° 00' 00"
123° 15' 00"
123° 30' 00"
61° 00' 00"
61° 15' 00"
61° 30' 00"

REPORT OF GEOPHYSICAL AND SEISMOGRAPH REFLECTION SURVEY

On and off Federal Permit Nos. 3153 and 4940, Sibbeston area, N.W.T.

During January, February and March, 1968

Prepared By: J. L. Hudson
Exploration Group Supervisor

May 29, 1968

REPORT OF GEOPHYSICAL SURVEY
REPORT OF SEISMOGRAPH REFLECTION SURVEY

Conducted by

Western Geophysical Company of Canada Ltd.,

for

Pan American Petroleum Corporation

During January, February and March, 1968

On and off Federal Permit 4940 and on Federal Permit 3153, Sibbeston Lake Area, N. W. T. National Topographic Grids 95-G-3 and 95-G-6.

Prepared by

J. L. Hudson
Exploration Group Supervisor
May 29, 1968

Submitted in accordance with Government Regulations under Section 54 of the Territorial Lands Act.

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Seismic Spread Diagram	In Pocket
Location and Ground Elevation Map	" "
Structure Contour Map	" "

Introduction

During January, February and March, 1968 a seismograph reflection survey was conducted on and off Northwest Territories Federal Permit 4940 and on Permit 3153 by Western Geophysical Company of Canada Limited for Pan American Petroleum Corporation.

During January, February and March, 1968 Western Geophysical Company Party 66 spent a total of 35 calendar days in this area working on seismic lines cut and cleared at the same time as the seismic work was being done.

Western Geophysical Company Party 66 was under the supervision of Mr. L. Sidoroff, Party Manager.

Pan American's interpretive staff located in Calgary, Alberta spent a total of 100 days on this project. The interpretation was done following completion of the field work and was completed on May 29, 1968. No personnel other than those on the field party and on the interpretive staff worked directly on the project.

Conventional wheel mounted recording equipment and track mounted drilling equipment and a wheel mounted camp were used in the operation. The camp consisted of two trailer units, an office-utility-sleeper unit and a kitchen-diner-sleeper unit.

The topography presented some minor problems but rapid and large changes in temperature caused the only persistant and severe problem during operations.

Seismic Technique

Shotholes were drilled to an average of 55 feet in depth. Determination of this depth was based solely on record quality. Near surface lithology varied considerably, with the drill logs showing muskeg, clay, boulders, shale and sandstone. For most shotpoint locations, two holes each loaded with a 2-1/2 pound charge were used. The holes were drilled with three Mayhew conventional drills and two auger type drills.

A spread configuration as shown on the seismic diagram was used to obtain 600% multifold coverage.

The instruments used by Western Geophysical Company Party 66 were the TFA-1 type amplifiers manufactured by Western Geophysical Company Houston, Texas. The data were recorded on Techno type analogue magnetic tapes.

The reflection method was used to obtain the subsurface data throughout the entire area.

The data that appears on the subsurface map are vertical two way times between an arbitrary reference plane and the particular horizon mapped.

Respectfully submitted,

PAN AMERICAN PETROLEUM CORPORATION

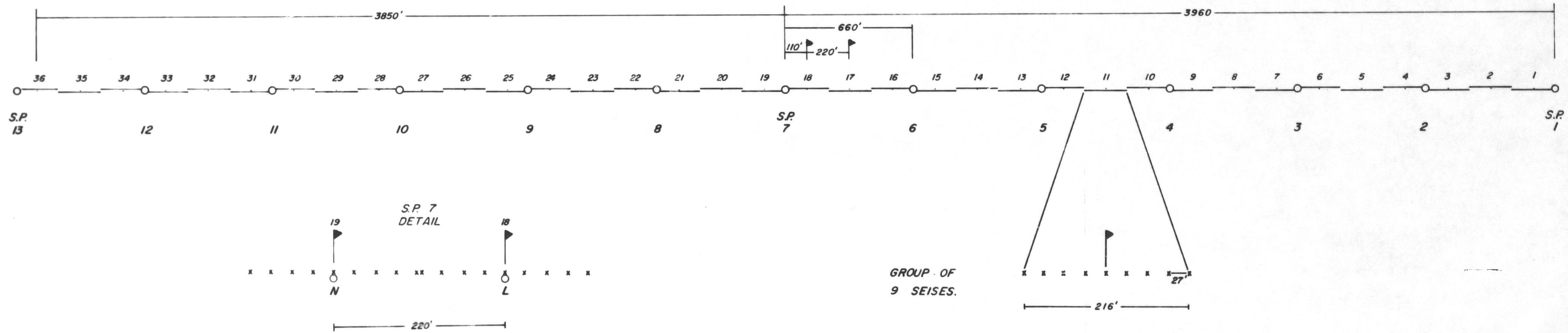
By: J. Hudson

J. L. Hudson
Exploration Group Supervisor

SIBBESTON LAKE

FEBRUARY 1968

WESTERN 66



2 HOLE PATTERN