

PAN AMERICAN PETROLEUM CORPORATION
CALGARY DIVISION

AREA: Island River	GRID
PROVINCE: N.W.T.	SCALE: 1" = 4000'
HORIZON: TOP DEVONIAN	
TYPE OF MAP: S.C. MAP	CONTOUR INT: 10ms.
SHOT BY:	FOR:
INCL. DATES:	
INTERP BY: BC68-71	CO AFFIL:
REPORT NO:	DATE: FEB. 1968
REMARKS:	

CLASS I

Plotted

REPORT OF GEOPHYSICAL AND SEISMOGRAPH
REFLECTION SURVEY

On and Off Northwest Territories Permit
Numbers 2706, 2707 and 2708
Island River Area 120° 22' 30" W. Long.
60° 00' 00" N. Lat.

During the period Jan. 13, 1968 to Feb. 9, 1968

Prepared By: D. L. Birnie
Exploration Group Supervisor

May 21, 1968

REPORT OF GEOPHYSICAL SURVEY
REPORT OF SEISMOGRAPH REFLECTION SURVEY

Conducted by

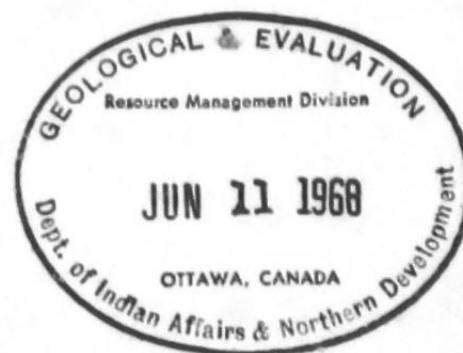
Western Geophysical Company of Canada

for

Pan American Petroleum Corporation

During the period January 13, 1968 to February 9, 1968

on and off
Island River, N.W.T. Permit Nos. 2706, 2707 and 2708



**Abstracted for
Geo-Science Data Index**

Prepared by

Date _____

D. E. Birnie

Exploration Group Supervisor

May 21, 1968

Submitted in support of application for credit; see affidavit made
by _____ of _____ and in accordance with
work obligations under Section 54(F) of the Territorial Lands Act.

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Seismic Spread Diagram.....	In Pocket
Surface Contour Map.....	In Pocket
D-1 Structure Contour Map.....	In Pocket

T E X T

INTRODUCTION

During the period of January 13 to February 9, 1968 a seismograph reflection survey was conducted on and off Island River N.W.T. Permit Nos. 2706, 2707 and 2708, by Western Geophysical Company of Canada for Pan American Petroleum Corporation.

Western Geophysical Company of Canada Party #50 spent 27 calendar days working on seismic lines cut and cleared at the same time as the seismic work was being done. The crew was under the supervision of W. J. Cherniak, Party Manager.

Pan American's interpretative staff located in Calgary spent a total of 60 days on the project. The interpretation was carried on simultaneously with the field work and was completed March 27, 1968.

No personnel other than those on the field crew and on the interpretative staff worked directly on this project.

Conventional wheel mounted recording and drilling equipment was used on this operation. The camp consisted of four expandable trailer units mounted on two "highboys" and a power-work shop trailer.

No unusual operating problems were encountered while operating in this area.

SEISMIC TECHNIQUE

One and two hole pattern shotpoints were drilled to an average depth of 40 feet. Shot depth was determined by the near-surface lithology with the best results when the shot was detonated in clay.

Normal charge size was 1-1/4 lb. per shot hole or 2-1/2 lb. per shot point.

The area was shot with 600% multifold coverage using a spread layout as shown on the enclosed spread diagram.

All data was recorded on Techno type magnetic analogue tapes using Western instruments FA-32 amplifiers.

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

The data that appears on the Top of Devonian structure map are vertical two-way time corrected to an arbitrary reference plane.

Respectfully submitted,

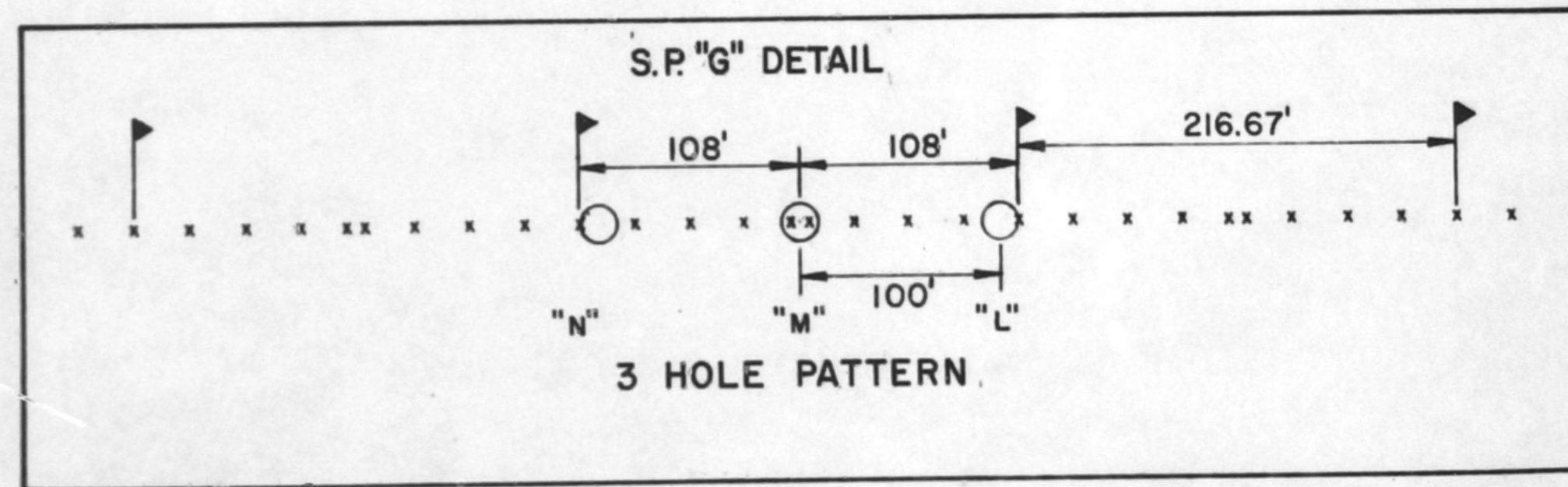
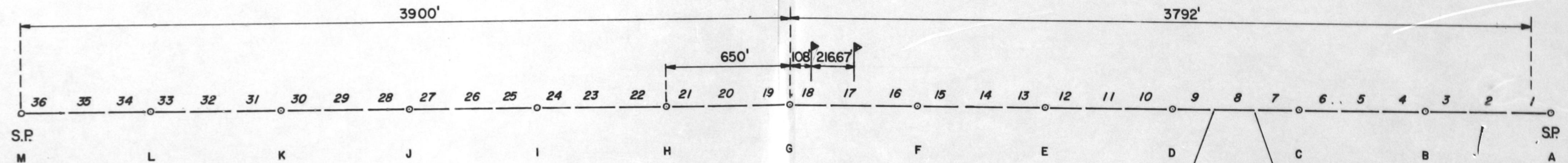
PAN AMERICAN PETROLEUM CORPORATION

By: *D. E. Birnie*
for D. E. Birnie
Exploration Group Supervisor

TRAINOR LAKE

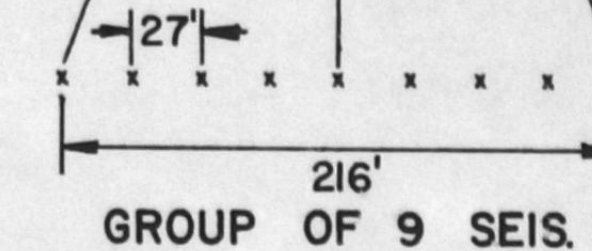
KIMEA BASIN
W-50
JAN. - MAR. 1968

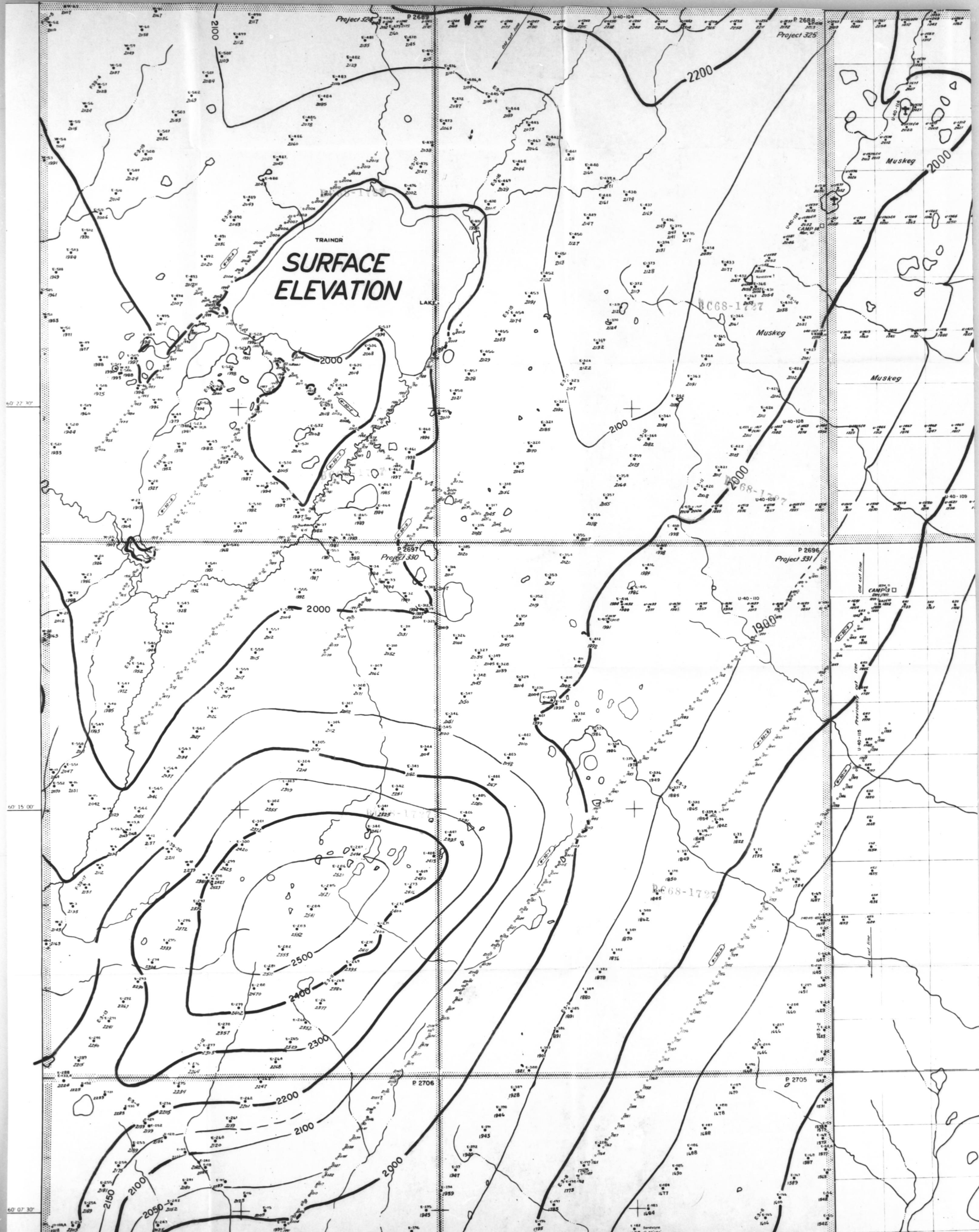
ISLAND RIVER

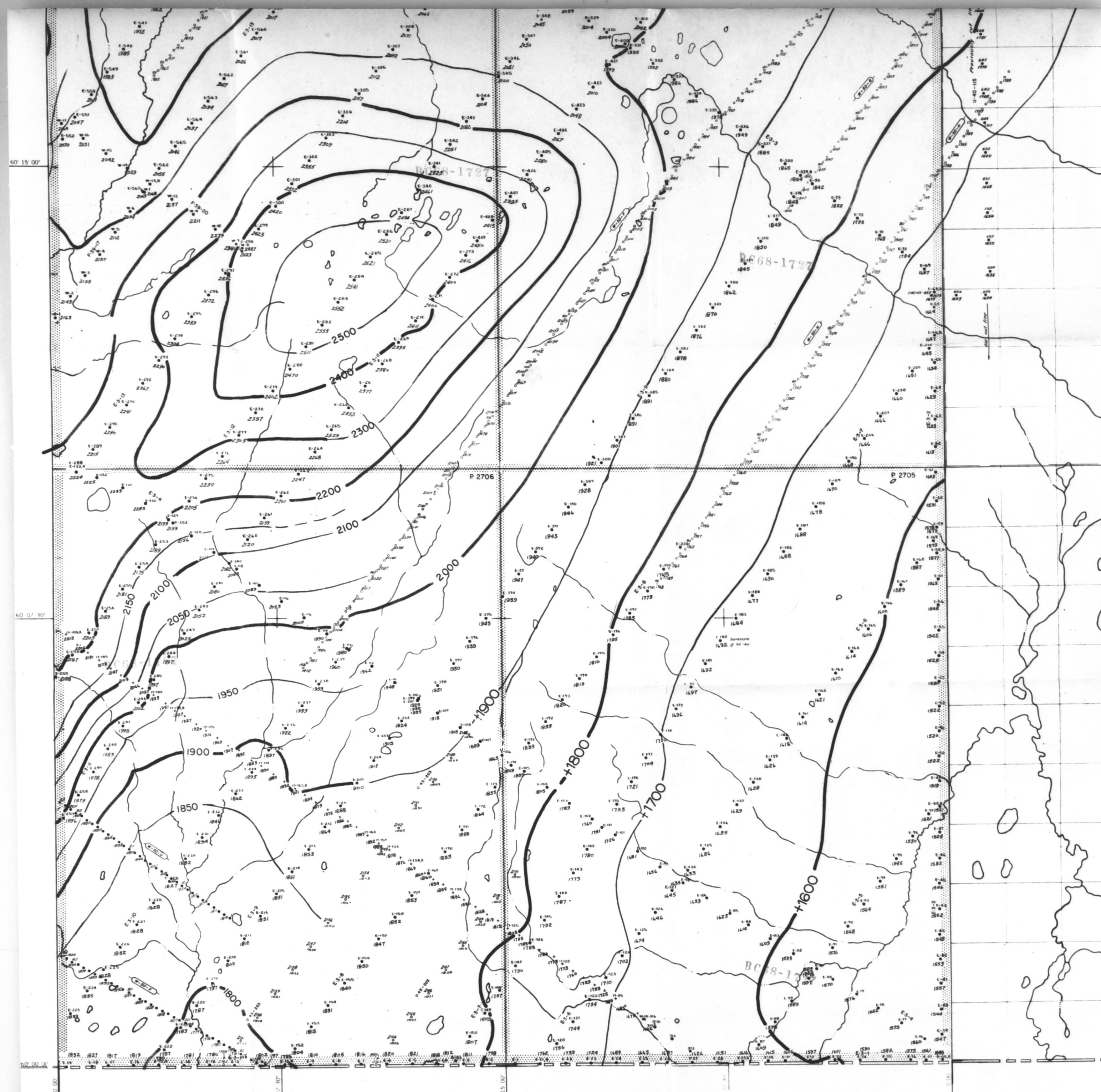


600 % SYMETRICAL

SCALE 1" = 400'







MAP EVALUATION

Qualification considers type of map or data, amount of information, and quality of data and density of detail (topographic or geologic).

Legend:
 --- Contour interval 100'
 --- Contour interval 200'
 --- Contour interval 500'
 --- Contour interval 1000'

SHOOTING HISTORY (Not in detail)

DATE	SHOT BY	SHOT TYPE	SHOT LOCATION	SHOT RESULT
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS
JAN 1954	OFFICIAL	OFFICIAL	POINT 1000-1000	MISS

INTERPRETIVE HISTORY

DATE	INTERPRETER	INTERPRETATION	APPROVAL ON MAP
FEB. 23, 1955	W. H. ROLLANS	W.S.C. P-53	SW QUAD
FEB. 23, 1955	W. H. UCHLEN	PAN AM	SW QUAD
APRIL 15, 1960	V. S. FITZT	E.C.I. 3	WHOLE GRID
APRIL 15, 1960	R. H. WHITT	W.S.C. P-28	NW QUAD
OCT. 30, 1960	R. H. WHITT	W.S.C. P-29	WHOLE GRID
OCT. 30, 1960	V. S. FITZT	E.C.I. 3	SW QUAD
MAY 10, 1961	J. G. JONES	PAN AM	SE QUAD
MAY 17, 1962	J. G. JONES	PAN AM	SW QUAD
MARCH 27, '67	R. E. VAN	PAN AM	SW QUAD

3/4" HRL - MD DEV CARB D-4 STRUCTURE (GOVT REPORT) SURFACE

This map is based on the 3/4" HRL - MD DEV CARB D-4 STRUCTURE (GOVT REPORT) SURFACE. It is a geologic map showing the distribution of the D-4 structure in the area. The map is based on the 3/4" HRL - MD DEV CARB D-4 STRUCTURE (GOVT REPORT) SURFACE. It is a geologic map showing the distribution of the D-4 structure in the area.

PAN AMERICAN PETROLEUM CORPORATION

Trainer Lake
 NW 1/4, Northwest Territories
 SURFACE
 1/4" HRL - MD DEV CARB D-4 STRUCTURE (GOVT REPORT) SURFACE
 INCLUDES: FEB - MAR, 1958
 BY: R. S. RYAN
 DATE: 1958

BC68-1727

GEOL. DEPT. INT. P. SMIT
 FIELD DEPT. REPORT NO. 13
 ST. MARKS

CLASS I

E01241

MAP EVALUATION

Qualification considers type of map or data, amount of information, and quality of data and density of detail (topographic or geologic).

Legend:
 --- Contour interval 100'
 --- Contour interval 200'
 --- Contour interval 500'
 --- Contour interval 1000'

60-6-4-71

Abstracted for
Geo-Science Data Index

Date _____

REPORT OF GEOPHYSICAL AND SEISMOGRAPHIC
REFLECTION SURVEY

On and off Northwest Territories Permits
No. 2689, 2696, 2697, 2705 and 2706,
Trainor Lake area, during February, 1968.

Prepared By: C. W. Allison
Exploration Group Supervisor

June 20, 1968

Ottawa *copy*

REPORT OF SEISMOGRAPH REFLECTION SURVEY

**Abstracted for
Geo-Science Data Index**

Date _____

GEOLOGICAL & EVALUATION
 Oil and Mineral Division
 NOV 20 1968
 Dept. of Indian Affairs & Northern Development
 OTTAWA, CANADA

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D-1 Structure Contour Map.....	In Pocket

T E X T

INTRODUCTION

During the period of February 11 to February 23, 1968 a seismograph reflection survey was conducted on and off Trainor Lake N.W.T. Permit Nos. 2689, 2696, 2697, 2705 and 2706 by Western Geophysical Company of Canada for Pan American Petroleum Corporation.

Western Geophysical Company of Canada Party #50 spent 14 calender days working on seismic lines cut and cleared at the same time as the seismic work was being done. The crew was under the supervision of W. J. Cherniak, Party Manager.

Pan American's interpretative staff located in Calgary spent a total of 60 days on the project. The interpretation was carried on simultaneously with the field work and was completed June 20, 1968.

No personnel other than those on the field crew and on the interpretative staff worked directly on this project.

Conventional wheel mounted recording and drilling equipment was used on this operation. The camp consisted of four expandable trailer units mounted on two "highboys" and a power-work shop trailer.

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Respectfully submitted,

PAN AMERICAN PETROLEUM CORPORATION

By: 
C. W. Allison
Exploration Group Supervisor

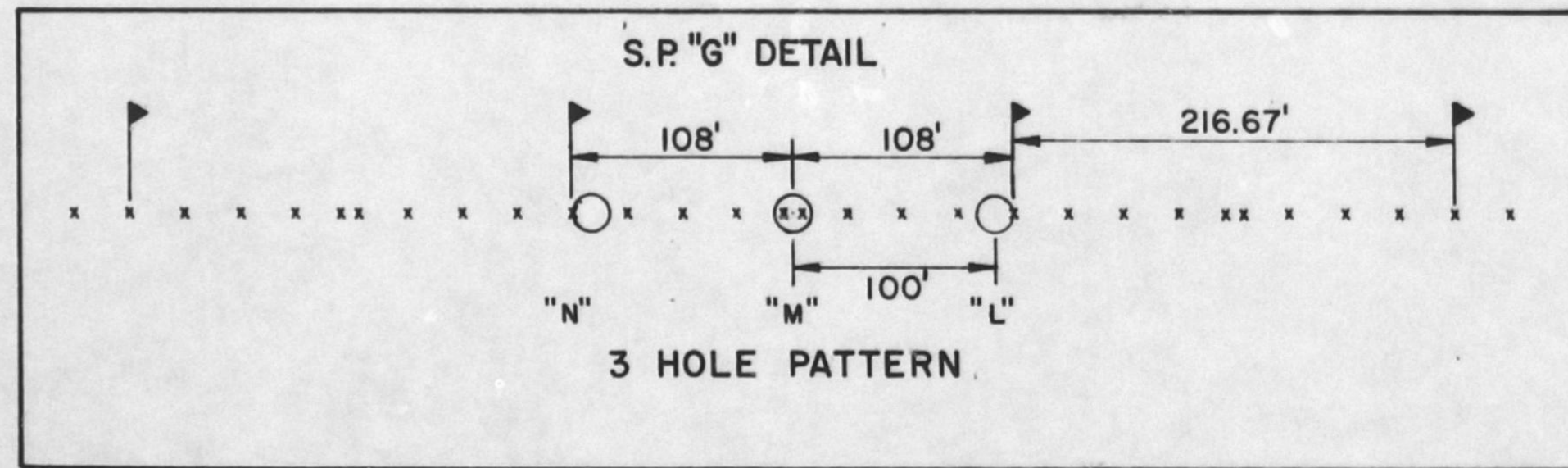
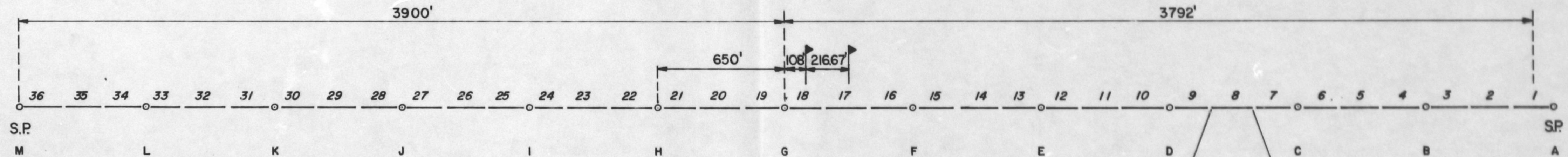
TRAINOR LAKE

KIMEA BASIN

ISLAND RIVER

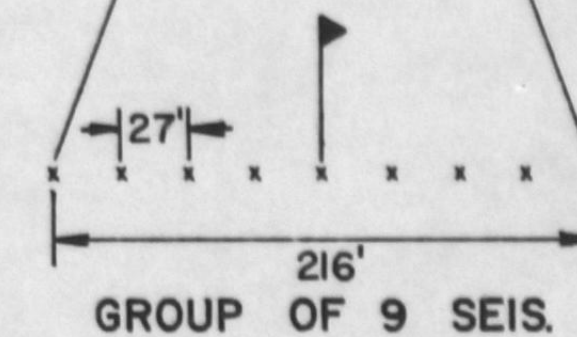
W-50

JAN. - MAR. 1968

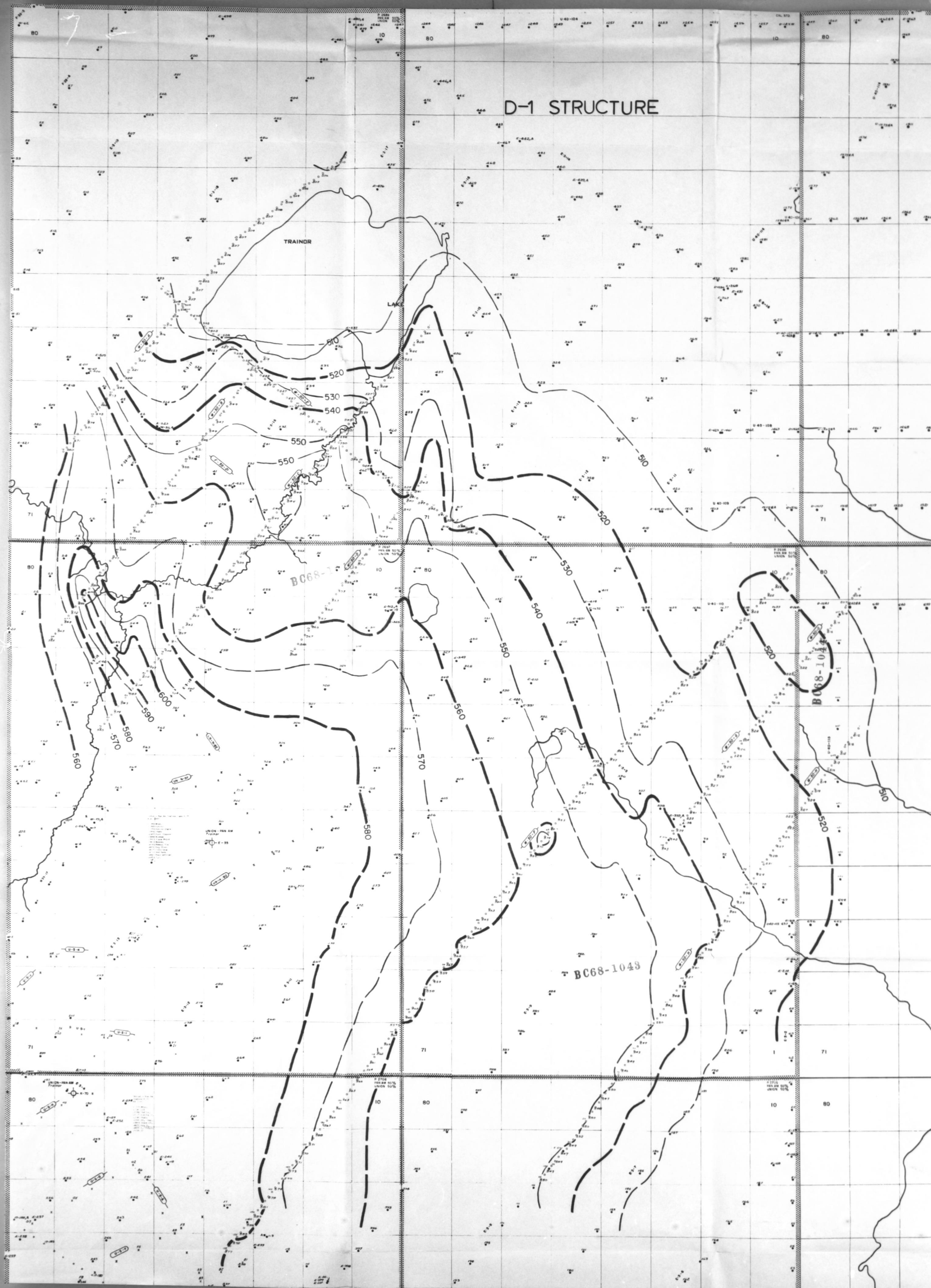


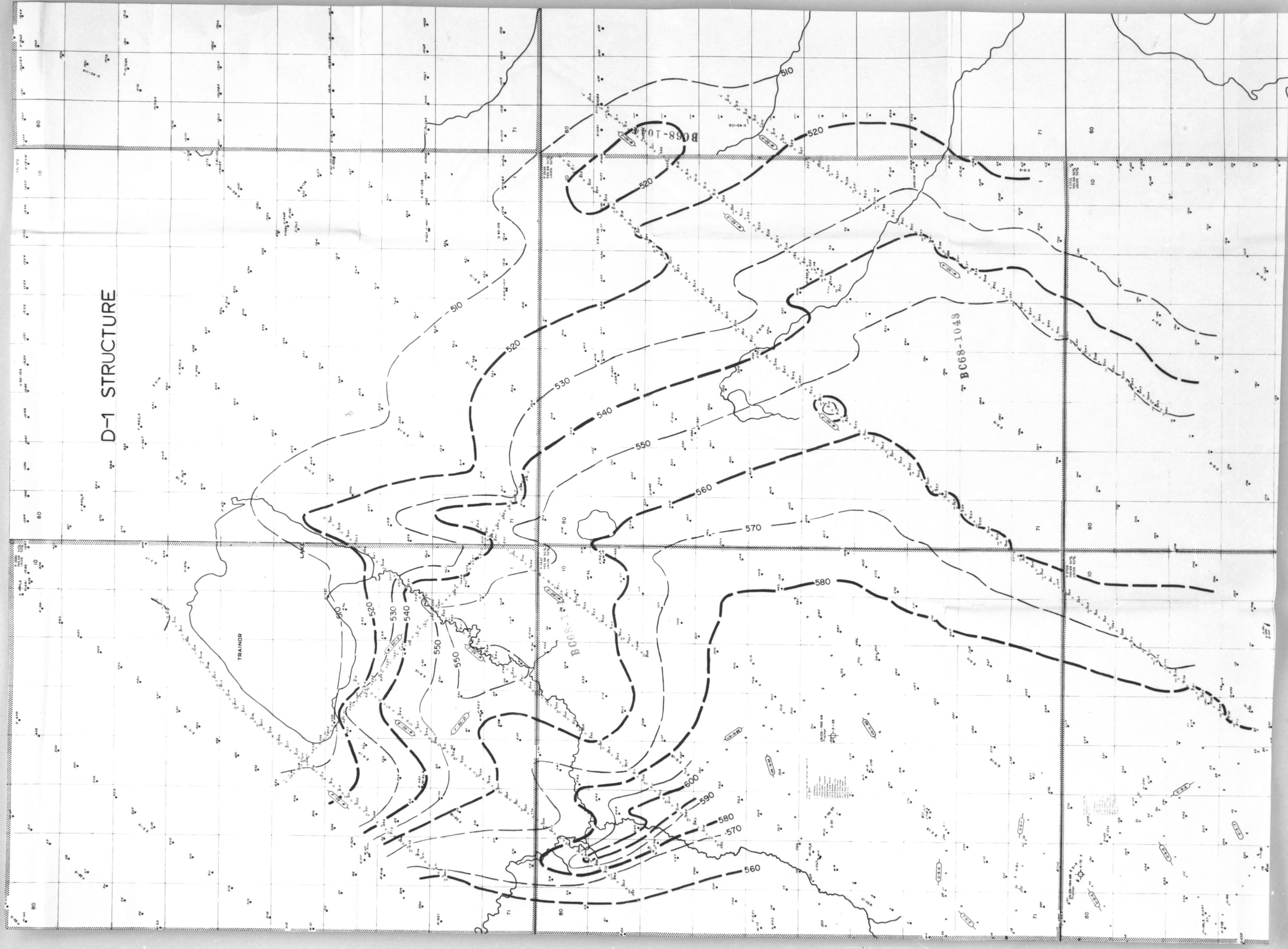
600 % SYMETRICAL

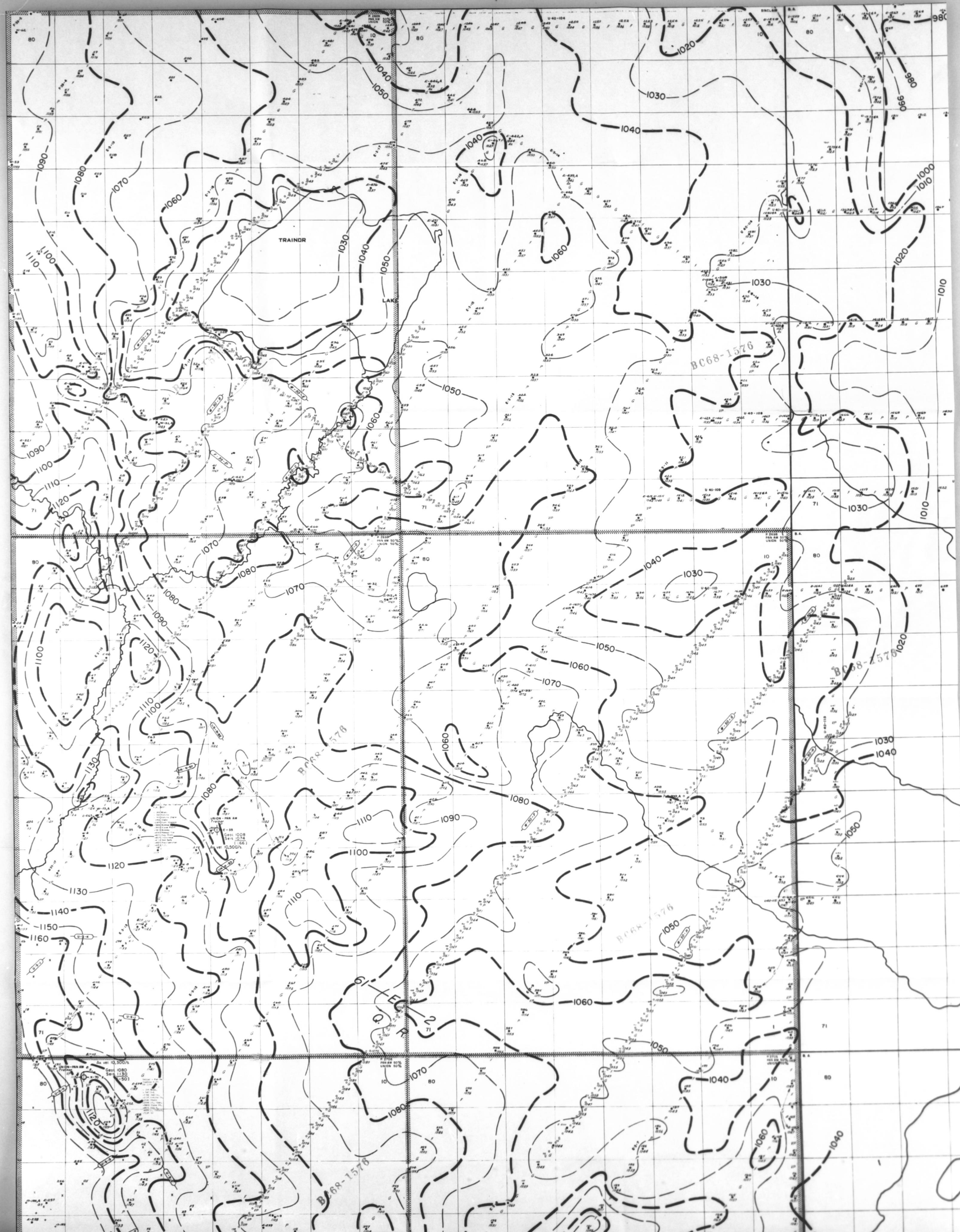
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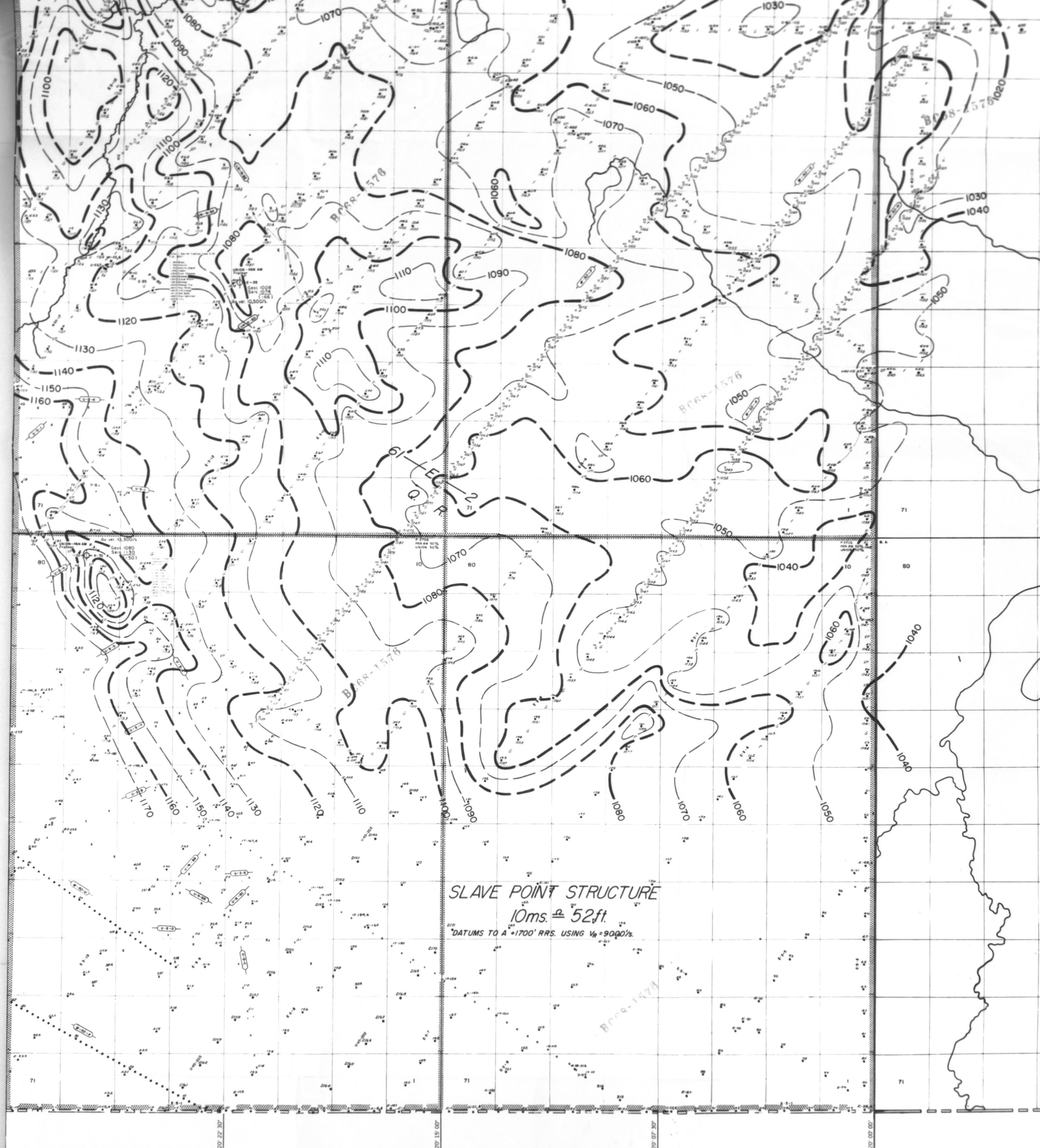


D-1 STRUCTURE









MAP EVALUATION

Qualification considers type of map or plot, amount of relief considered critical, quality of data and density of control, (geophysical or geological).

Geophysical data
Reliable Geophysical Data
Quadrately Reliable Geophysical Data
Unreliable Geophysical Data

QUAL RELIABLE

SHOOTING HISTORY (Not in detail)

INCL DATES	SHOT BY	SHOT FOR	SP AND/OR LINE NO.
JAN 1954	IMPERIAL	IMPERIAL	SP-100-100-100
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10
JAN 1954	W.S. 1-10	W.S. 1-10	W.S. 1-10

INTERPRETIVE HISTORY

FINAL REPORT NO.	DATE	INTERP.	CO AFFIL.	APPROVAL ON MAP
1	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
2	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
3	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
4	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
5	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
6	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
7	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
8	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
9	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
10	FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000

This map represents the interpretation of the geophysical data and is not a geological map. It is not a geological map and should not be used as such. It is a geological map and should not be used as such.

DATE	INTERP.	CO AFFIL.	APPROVAL ON MAP
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000
FEB 22/54	W.H. RICHARDS	W.S. 1-10	SW. 1000

PAN AMERICAN PETROLEUM CORPORATION

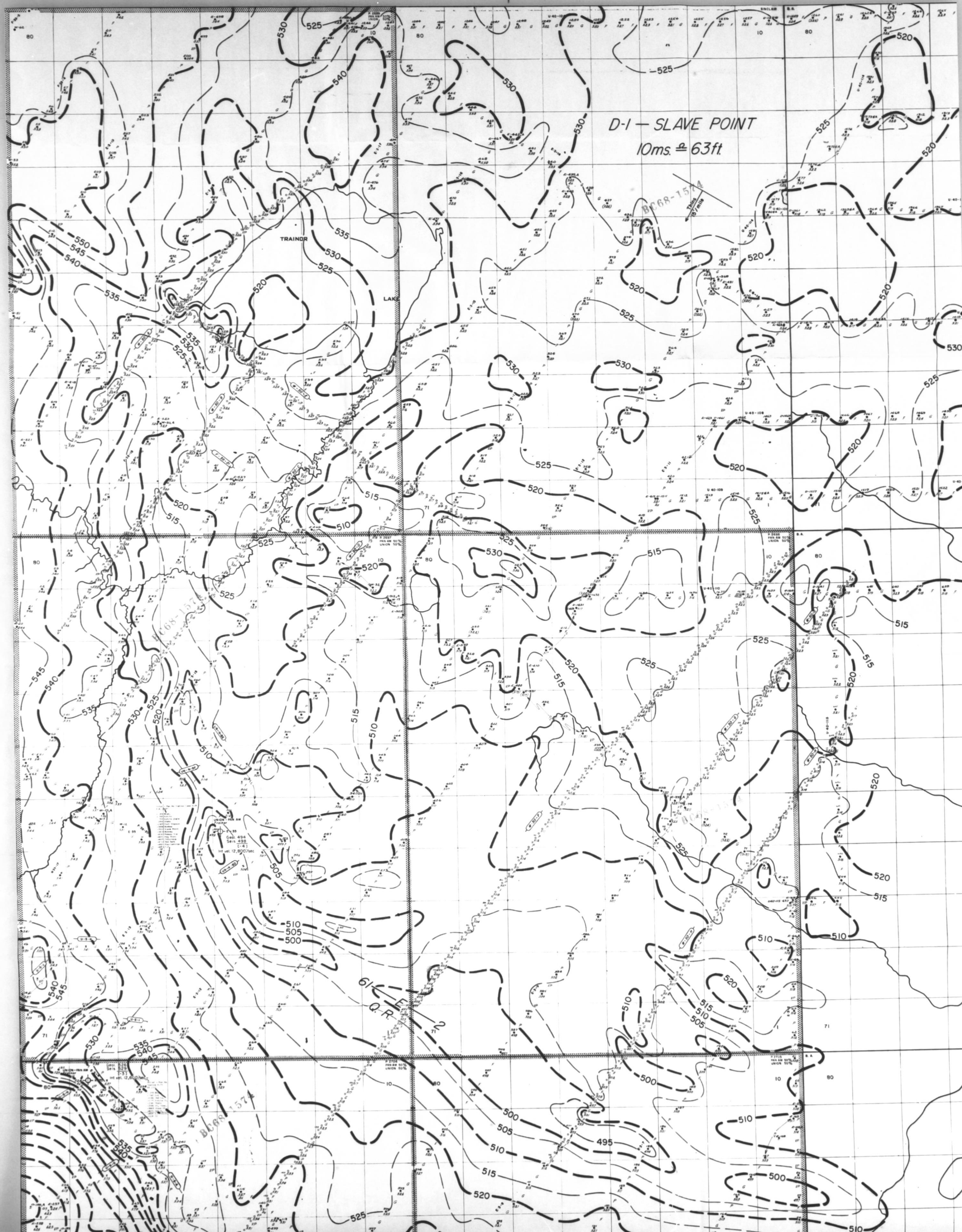
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PROVINCE: Northwest Territories	SCALE: 1"=4000'
HORIZON: SLAVE POINT	CONTOUR INT: 10ms
TYPE OF MAP: TIME STRUCTURE	FOR: PAN AM
SHOT BY: W-50	DATE: FEB 1958
INTERP BY: R.S. RYAN	CO AFFIL: PAN AM
REPORT NO: 6872	DATE: OCT 23, 1968
REMARKS:	
BC68-1576	
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FROM: GEOPHYSICAL REPORT No. 153	DATED:
REMARKS:	
CLASS I	

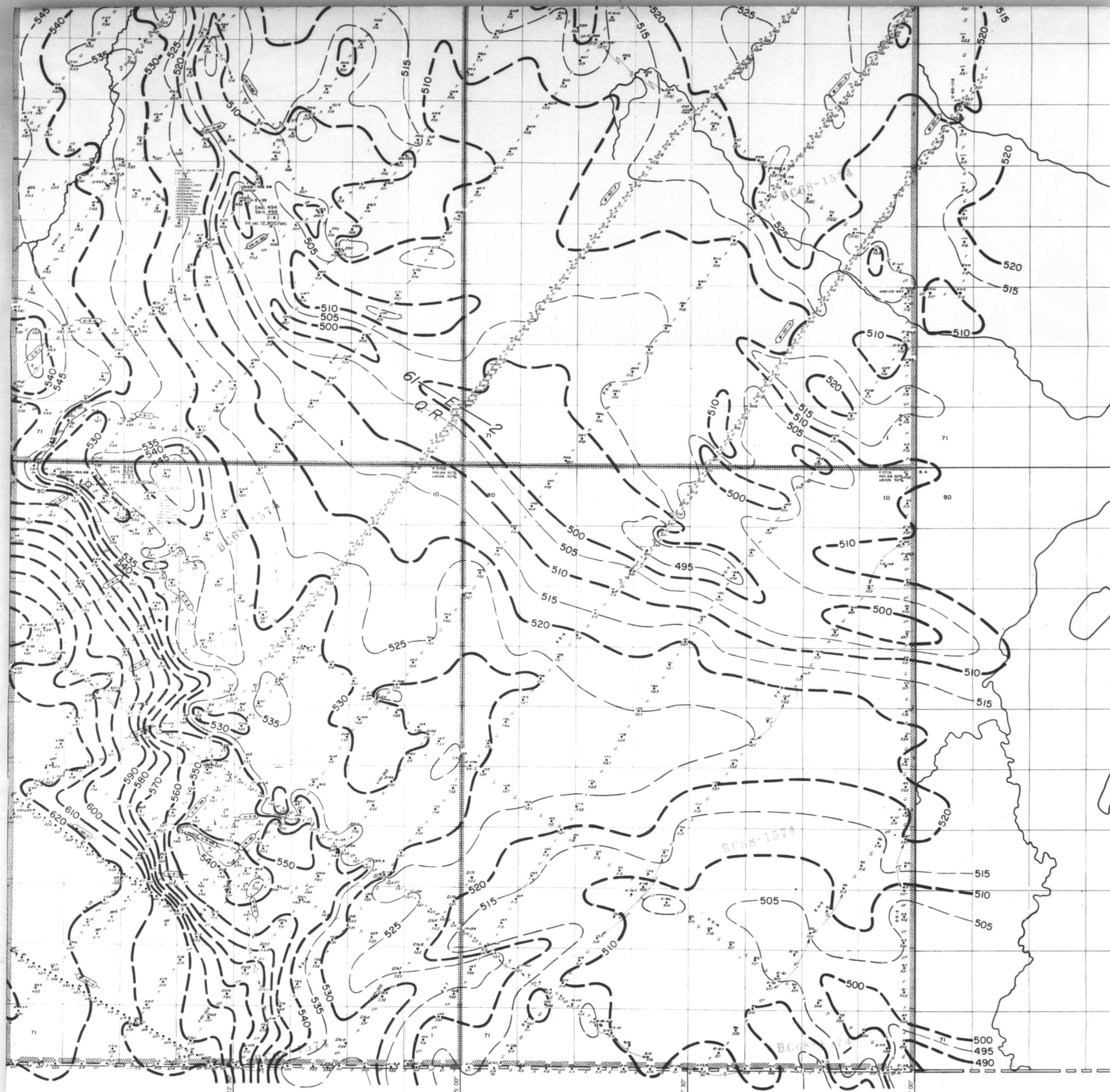
MAP EVALUATION

Qualification considers type of map or plot, amount of relief considered critical, quality of data and density of control, (geophysical or geological).

Geophysical data
Reliable Geophysical Data
Quadrately Reliable Geophysical Data
Unreliable Geophysical Data

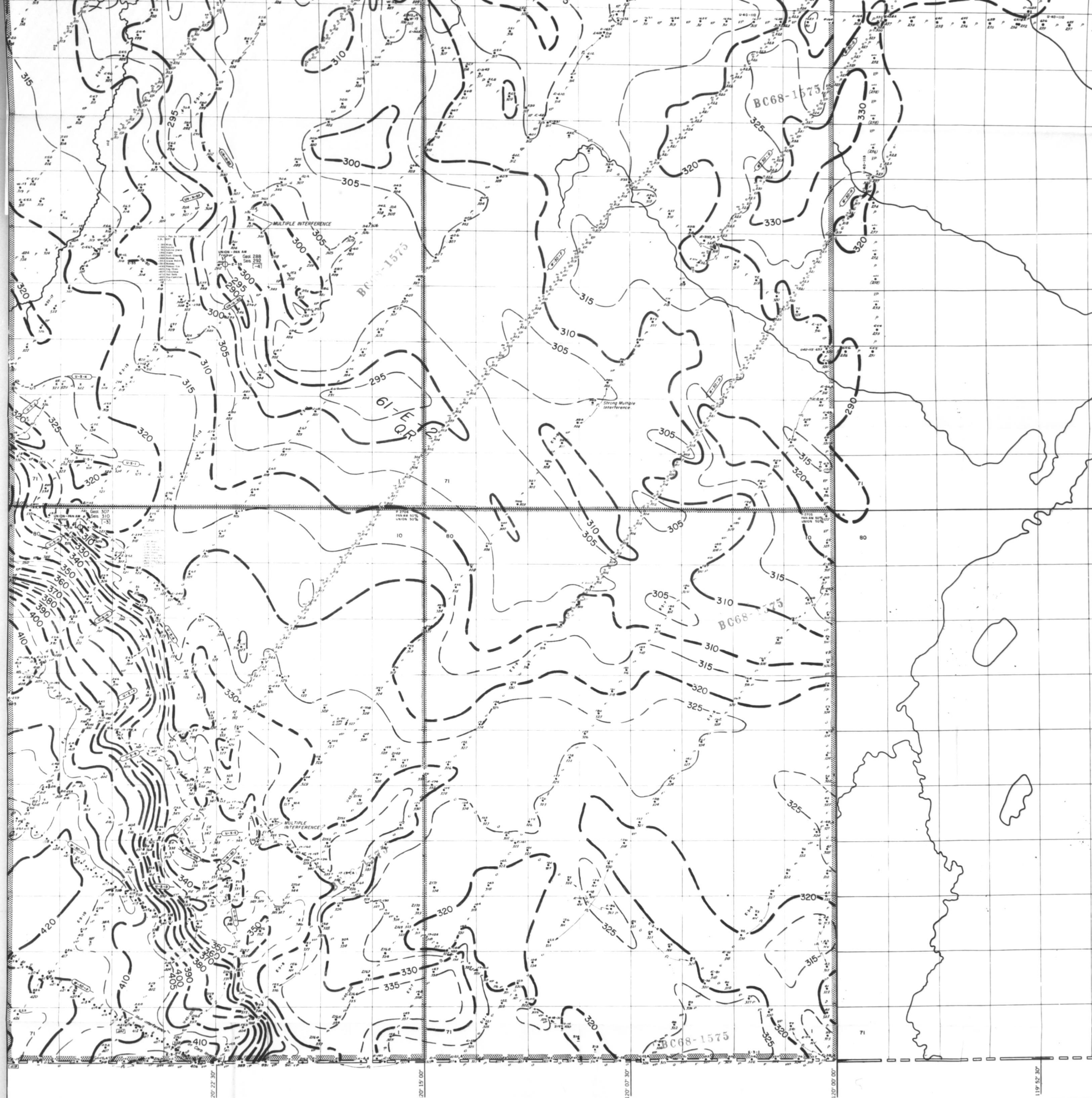
QUAL RELIABLE





MAP EVALUATION				SHOOTING HISTORY (Not in detail)				INTERPRETIVE HISTORY				This map requires/has been registered to _____ and is to be destroyed after _____ years.			
Qualification considers type of map or data, amount of relief incorporated or not, quality of data and density of control, (geophysical or geological):				INCIDENT DATES				FINAL REPORT NOS.				APPROX LOC ON MAP			
Geological data				SHOOT BY				SHOT FOR				DATE			
Require Geophysical Data				METHOD				S.P. AND/OR LINE NO'S				INTERVAL			
Qualitatively Reliable Geophysical Data				APPROX. POSITION (SHAFT/DEPTH)				1				2			
Unreliable Geophysical Data				JAN-MAR 1960				E.C.I. 1				JAN-MAR 1960			
Geological data				M.E.C. 1-20				PAN AM				E1-E4S, LINES 1-10 (1, 2, 3, 4)			
Require Geophysical Data				JAN-MAR 1960				M.E.C. 1-40				JAN-MAR 1960			
Qualitatively Reliable Geophysical Data				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
Unreliable Geophysical Data				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
Geological data				JAN-MAR 1960				M.E.C. 1-40				JAN-MAR 1960			
Require Geophysical Data				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
Unreliable Geophysical Data				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
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JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
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JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
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JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40-100-200			
JAN-MAR 1960				M.E.C. 1-40				PAN AM				LINES 1-40			

MAP EVALUATION	
<p>Qualification considers types of map or plot, amount of relief considered critical, quality of data and density of control, (geophysical or geological)</p> <p>_____ Geological data</p> <p>_____ Possible Geophysical Data</p> <p>----- Questionably Reliable Geophysical data</p> <p>----- Unreliable Geophysical Data</p>	<p>10</p> <p>9</p> <p>8</p> <p>7</p> <p>6</p> <p>5</p> <p>4</p> <p>3</p> <p>2</p> <p>1</p>
<p><i>QUAL. RELIABLE</i></p>	



MAP EVALUATION		SHOOTING HISTORY (Not in detail)		INTERPRETIVE HISTORY		PAN AMERICAN PETROLEUM CORPORATION	
Qualification considers type of map or plot, amount of relief considered critical, quality of data and density of control, (geophysical or geological)		INCL. DATES SHOT BY SHOT FOR		FINAL REPORT NO. DATE INTERP. CO AFFIL.		AREA: Tractor Lake GRID: CM-BI/SE	
Geological data		JAN-1954 IMPERIAL IMPERIAL 37-11-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		PROVINCE: Northwest Territories SCALE: 1:40000	
Reliable Geophysical Data		JAN-MAR 1950 E.C. 13 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		HORIZON: 3rd HAY RIVER LINE - SLAVE POINT	
Questionable Relative Geophysical Data		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		TYPE OF MAP: ISOCHRON CONTOUR INT. 5 MS	
Unreliable Geophysical Data		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		SHOT BY: W-52 FOR: PAN AM	
QUALITATIVELY RELIABLE		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		INCL. DATES: FEB 1958	
		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		INTERP. BY: R. S. RYAN CO AFFIL: PAN AM	
		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		REPORT NO: 6872 DATE: OCT 23, 1968	
		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		REMARKS: BC68-1575	
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		JAN-MAR 1950 W.C. F28 PAN AM 31-05-18 (187-10-00) 5		FEB 23/58 W. HOLLAND W.C. F28 S.W. Q240		REMARKS: CLASS I	