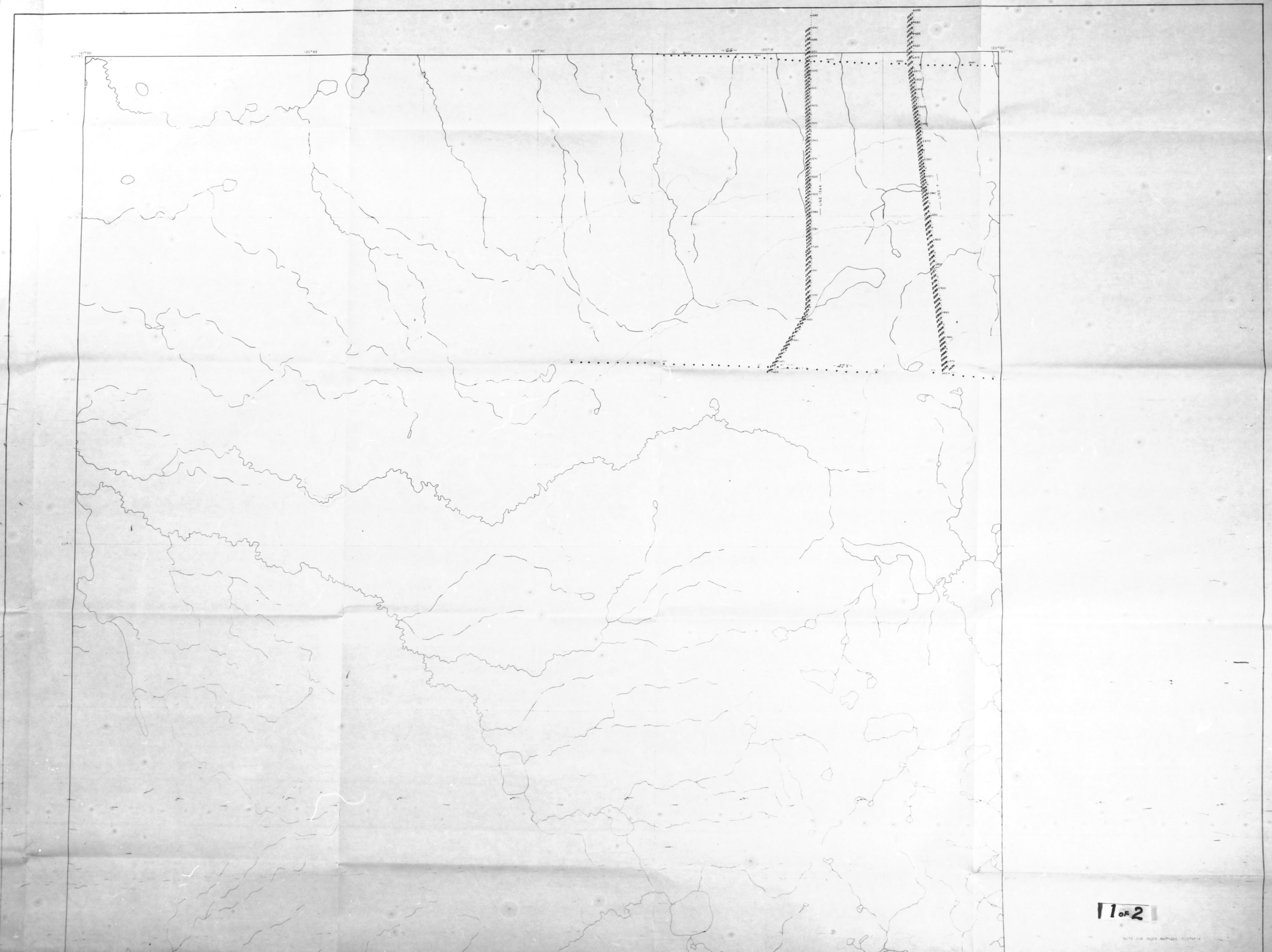
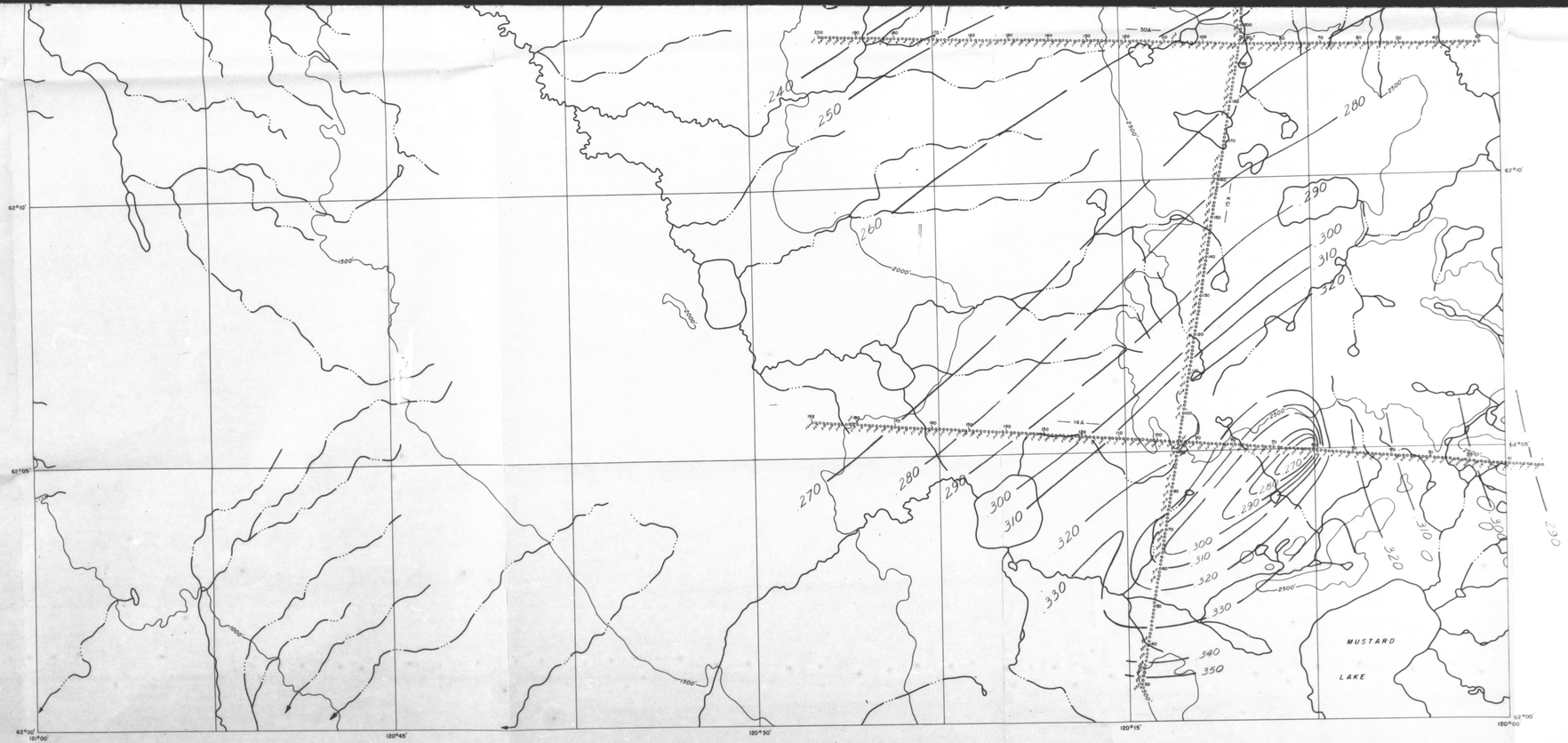

121°00'
120°45'
120°30'
120°15'
120°00'
62°30'
62°15'
62°10'
-66-
-42X-
LINE 1 TRAX
LINE 1

1 of 2



NOTE FOR INDEX MAP SEE F-6797-E-1

X

REVISIONS WELLS SEC 67	CHEVRON STANDARD LIMITED
	95-I-S.E.
	MUSTARD LAKE AREA
	TIME STRUCTURE CONTOURS ON **NAHANNI**
	BY T. WEBB
	2 of 2
	Ex = 1000 Vt = 10,000 C.I. = .010 sec
	FEB. 1970

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	R. L. S.	F-9880-8

SEISMIC
008744 IBM

CHEVRON STANDARD LIMITED

95 I - SE

MUSTARD LAKE AREA

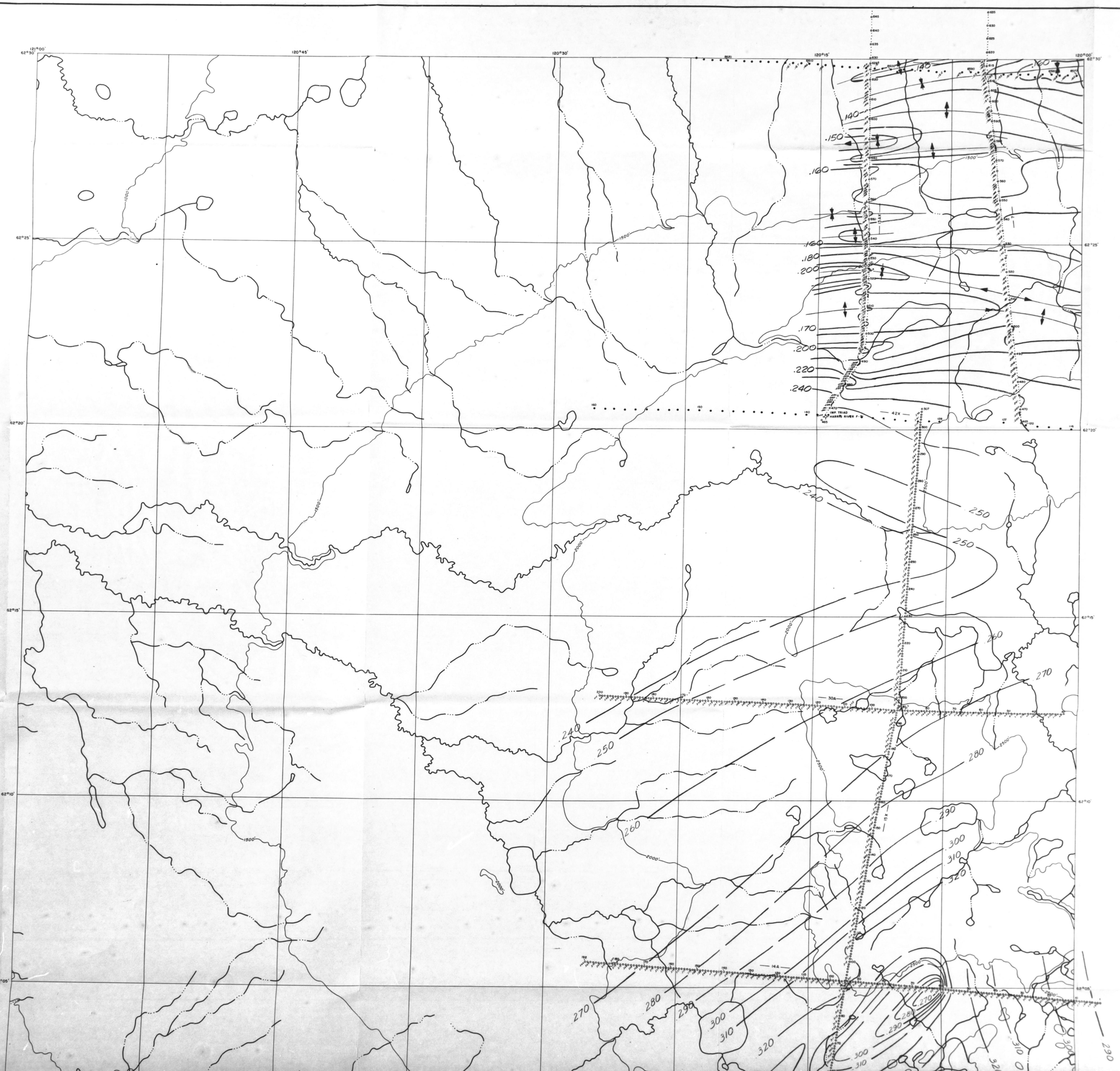
SURFACE ELEVATIONS

2 of 2

H. HEEREMA

MAY 1968

F-9880-3



11 OF 2

NOTE FOR INDEX MAP SEE F-6797-E-1

45-6-4-84

CONFIDENTIAL

Final Report on Seismic Survey
Conducted By Chevron Standard Limited
Jan.-Apr. 1969 Mustard Lake Area
Group 203 = 45-6-4-68-13
Group 388 = 45-6-4-68-14

CONFIDENTIAL

Area: Mustard Lake - N.W.T.

Government Project: 45-6-4-68-13
45-6-4-68-14

Groups: 203 and 388

Final Report on Seismic Survey Conducted By:

Chevron Standard Limited

January - April 1969

Maps in Attached Folder

Author: E. W. Jones

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
NOV 3 1970
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

W. J. McCormack - 1970
District Geophysicist

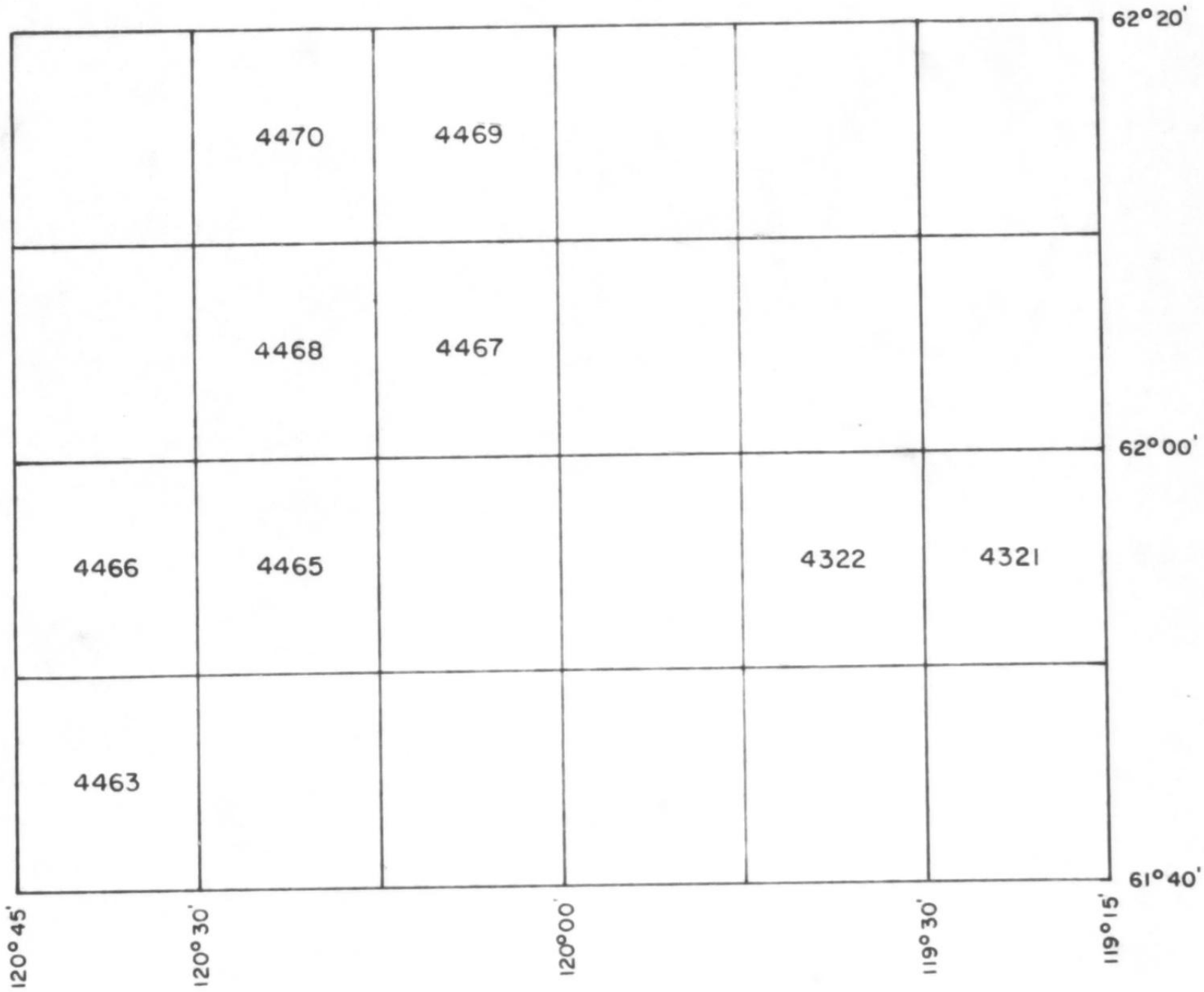
Contractor:	Digicon Exploration Limited
Government Projects:	45-6-4-68-13 = Group 203 45-6-4-68-14 = Group 388
Area:	Mustard Lake - N.W.T.
Maps:	Mustard Lake - Time structure on the Nahanni
	Green Island - Time structure on the Nahanni
	Horn Plateau - Time structure on the Nahanni
	Mustard Lake - S.P. location and elevations
	Green Island - S.P. location and elevations
	Horn Plateau - S.P. location and elevations

MUSTARD LAKE - HORN PLATEAU PERMITS

0 250 500 750 1000
MILES

MUSTARD LAKE - HORN PLATEAU
PERMITS

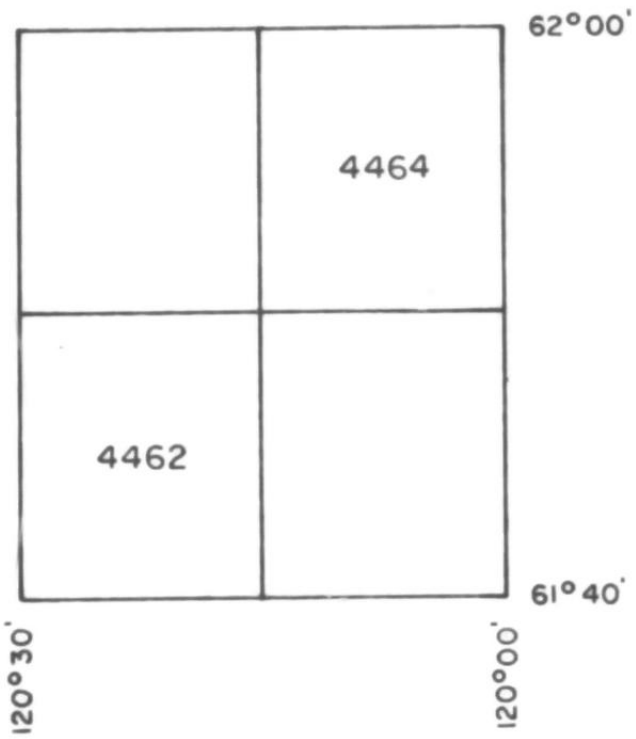
GROUP 388



MUSTARD LAKE PERMITS

MUSTARD LAKE
PERMITS

GROUP 203



GEOPHYSICAL DATA FOR SEISMIC SURVEY

LOCATION

Area and Province	Horn Plateau, N.W.T.
Longitude and Latitude	120° 30' and 61° 55' Approx. Centre
Permit Numbers and Government Project Number	Permit No. 374 Govt. Project Nos. 45-6-4-68-13 45-6-4-68-14

TYPE OF SURVEY

Analog or Digital	Digital
Type of Source	Dynamite

FIELD RECORDING EQUIPMENT

Seismometer Model	HSJ
Seismometer Frequency	18 cps.
Seismometer Damping	
Seismometer Base	S-6 spikes
Amplifier Model	T.I. 10000
Camera Model	SIE VR06-D
Type of Magnetic Tape	1" x 2500' on precision reels - from Dalcan
Digital System Model and Number	T.I. DFS II
Land Survey Instrument and Method	Transit for vert. & horizontal with plate angles to compute lat. & dep.
Cables	Vector 4 group roll-a-long cables supplied by Chevron Standard

FIELD PROCEDURE AND OPERATIONS

Refraction	
Inline or Broadside	Inline
Reflection	
% of Subsurface Coverage	100%

Spread Configuration

Number Groups Recorded	24 split S.P. on 13
Group Interval	220
Number Seismometers/Group	6
Seismometer Interval	20
Array Pattern	Inline

Source Configuration

Number of Holes and Depth	1' @ 44'
Spacing	N/A Single holes
Pattern	N/A
Inline or Offset to Spread	Inline
Charge Size and Type	5 lbs. Geogel

Transportation

Type of Vehicles	Wheeled trucks
Fixed Wing Aircraft	Turbo Beaver - Chev. Std.
Helicopter Support	None

Terrain Conditions

General Terrain Description	Low relief except for Horn Plateau scarp. moderate to heavy timber below scarp. Light to moderate timber on Plateau

RECORDING FACTORS

Monitor Record

Filter	17/12 - 120/24
AVC	--
Gain	Ganged AGC

Magnetic Tape

Filter	17/12 - 120/24
AVC	--
Gain	Ganged AGC - Recorded on tape

Field Playbacks	
Filter	Direct playback
AVC	
Gain	Same as recorded
Mixing	None

PERSONNEL

Field	35 men
Office	1 clerk in field, Supervisor & Computer in Calgary
Titleholders	P.W. Bilyeu, P. Geoph., Manager
Individual Responsibility	Party Manager
Contractors	Elgin (2 rigs) Augers
	Two Way (1 rig) Conventional
	Double R (1 rig) Auger
	Century (1 rig) Conventional
	Chinchaga (3 cats.)
	Worthing Transport
	Crown Caterers
	Independent Expediters

OFFICE TECHNIQUES

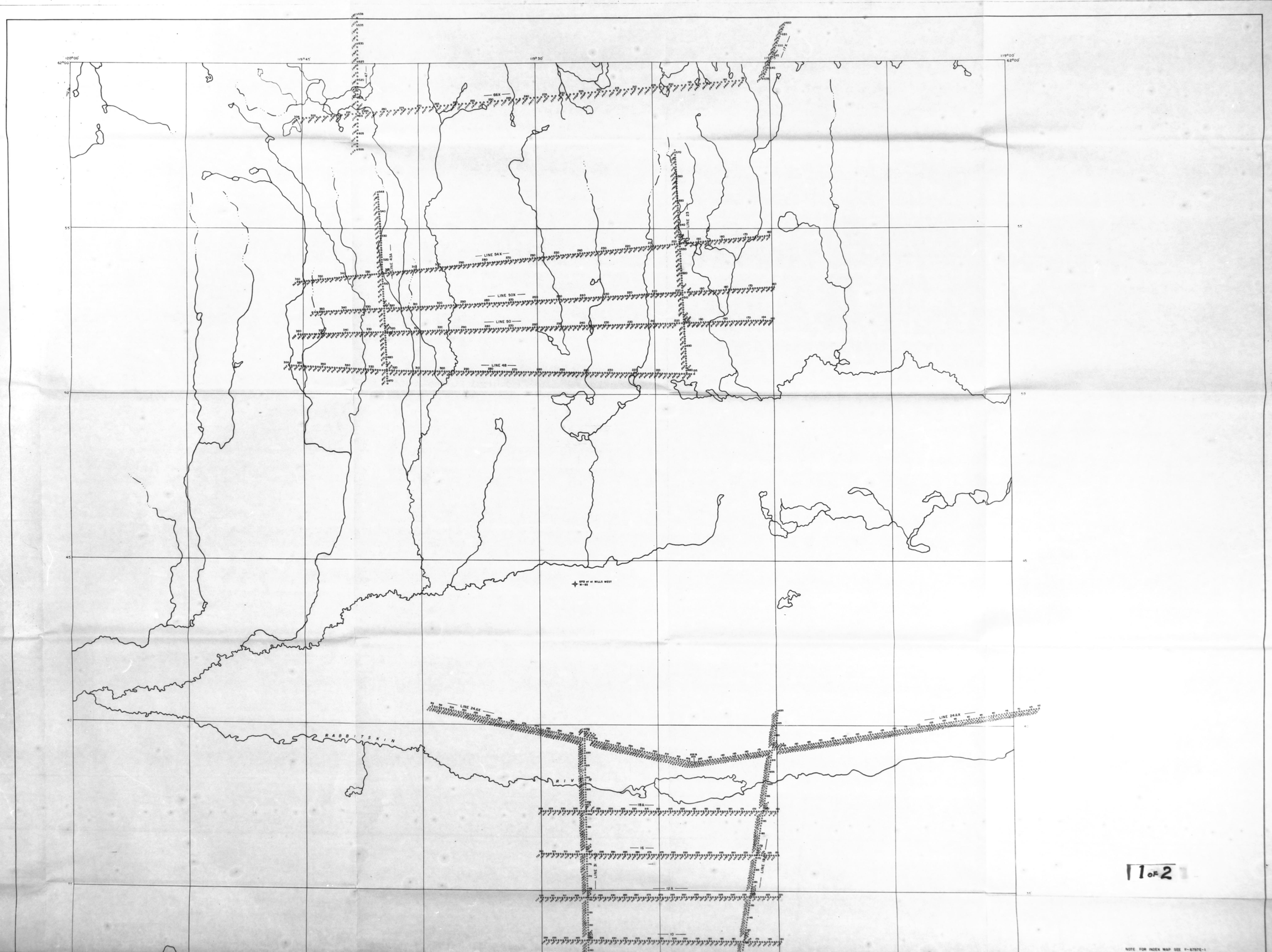
Datum Computation	1000 Ft.
Weathering Sections	N/A

Record Sections	N/A
Type of Display	N/A
Maps	In attached folder

STATISTICS SUMMARY

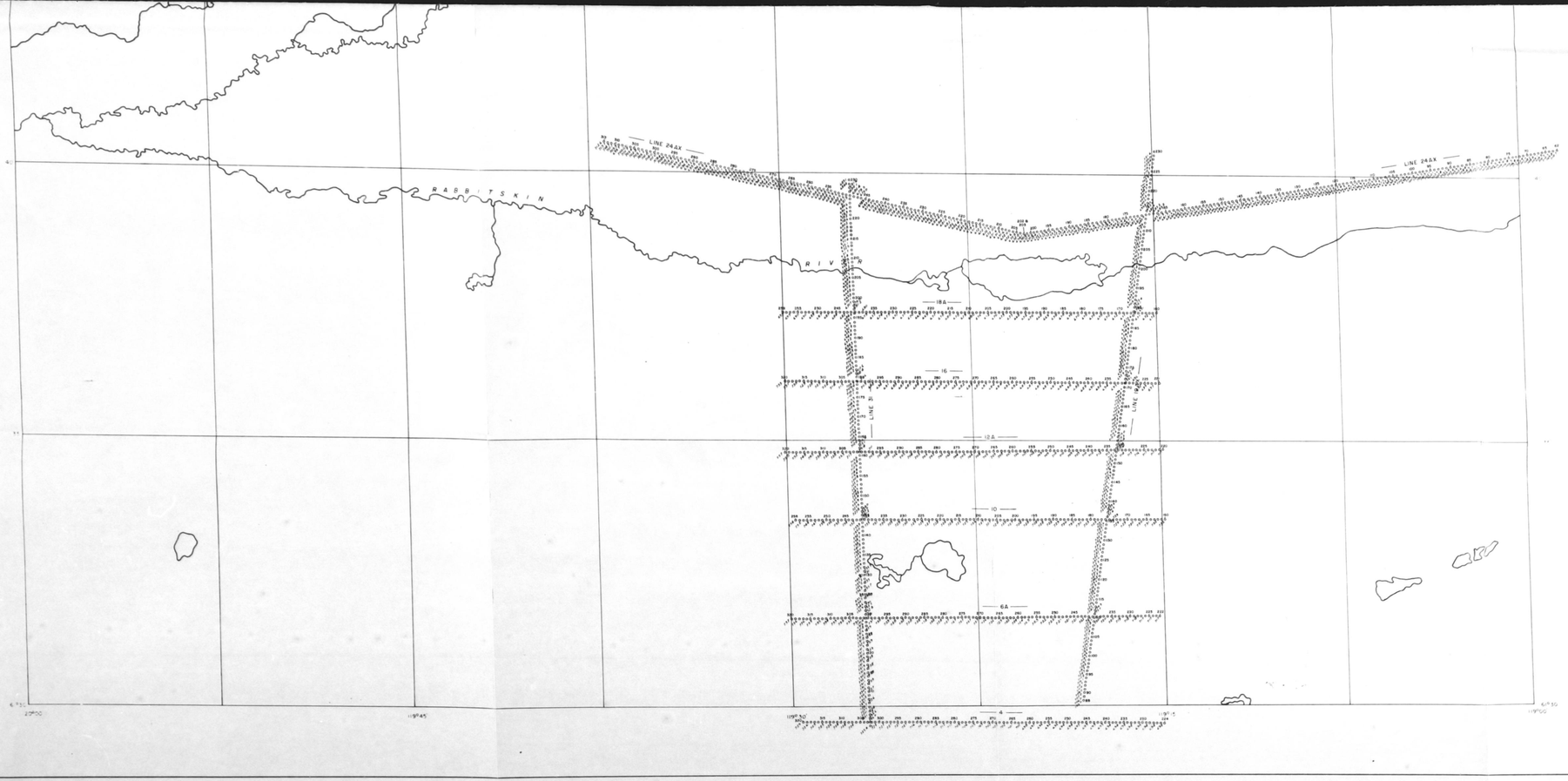
Number of Working Days	76
Number of Profiles	
Reflection	3,347
Refraction	483
Total Production	3,830
Miles of Surface Coverage	280.5
Miles of Subsurface Coverage	280.5
Number of Shot Holes Drilled	3,864
Total Footage Drilled	160,903

TRANSMITTAL OF RECORDED DATA



1 OF 2

NOTE FOR INDEX MAP SEE 1-67977E-1



NOTE: FOR INDEX MAP SEE F-6797E-1

REVISIONS	
WELLS SEC 27	
WELLS MAR 69	

CHEVRON STANDARD LIMITED

85-E-N.W.

HORN PLATEAU AREA

SURFACE ELEVATIONS

2 of 2

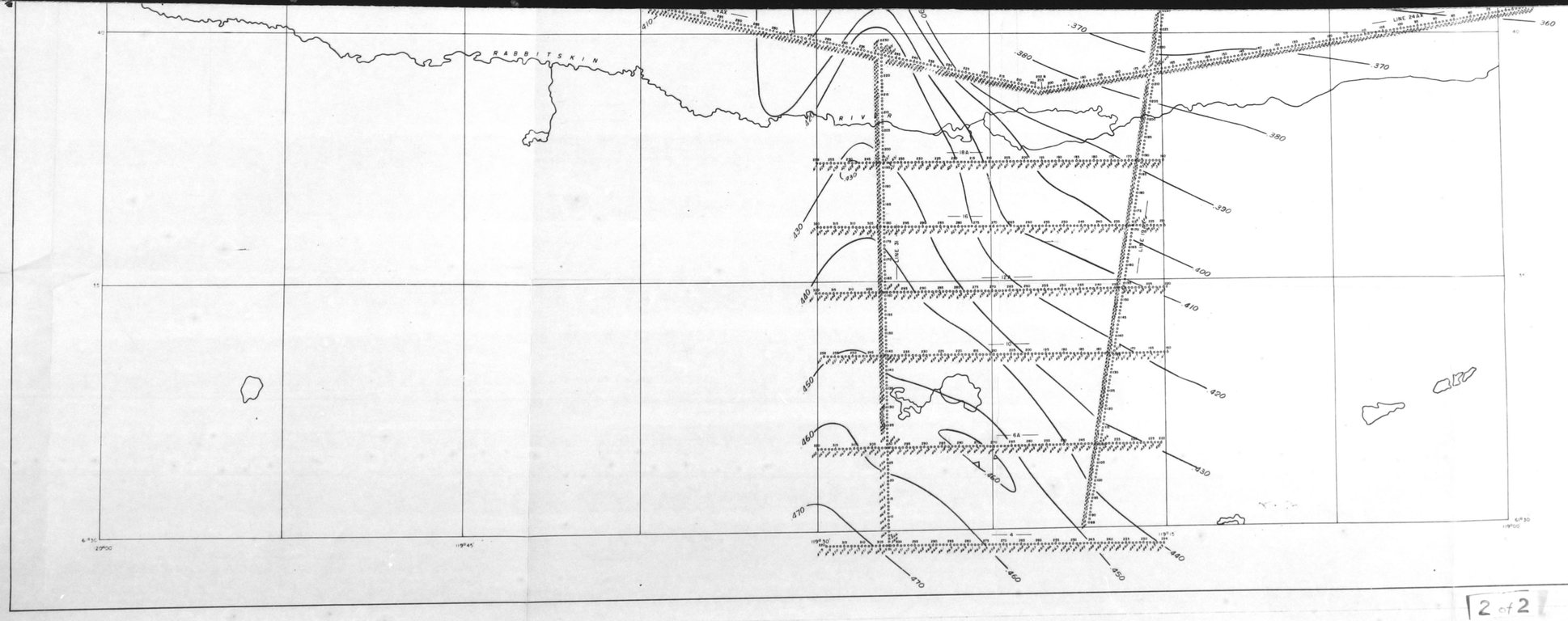
SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	D.E.W.	F-9877-3

SEISMIC

49-B-2

008209 ibm

21-E-5



NOTE FOR INDEX MAP SEE F-6797E-1

REVISIONS	
WELLS DEC 67	
WELLS MAR 69	
CONT JUNE 71	

CHEVRON STANDARD LIMITED

85-E-N.W.

HORN PLATEAU AREA

TIME SEISMIC CONTOURS ON

TOP OF NAHANNI

Ex = 1000' Vr = 10,000 ft/sec. Vi: Computed

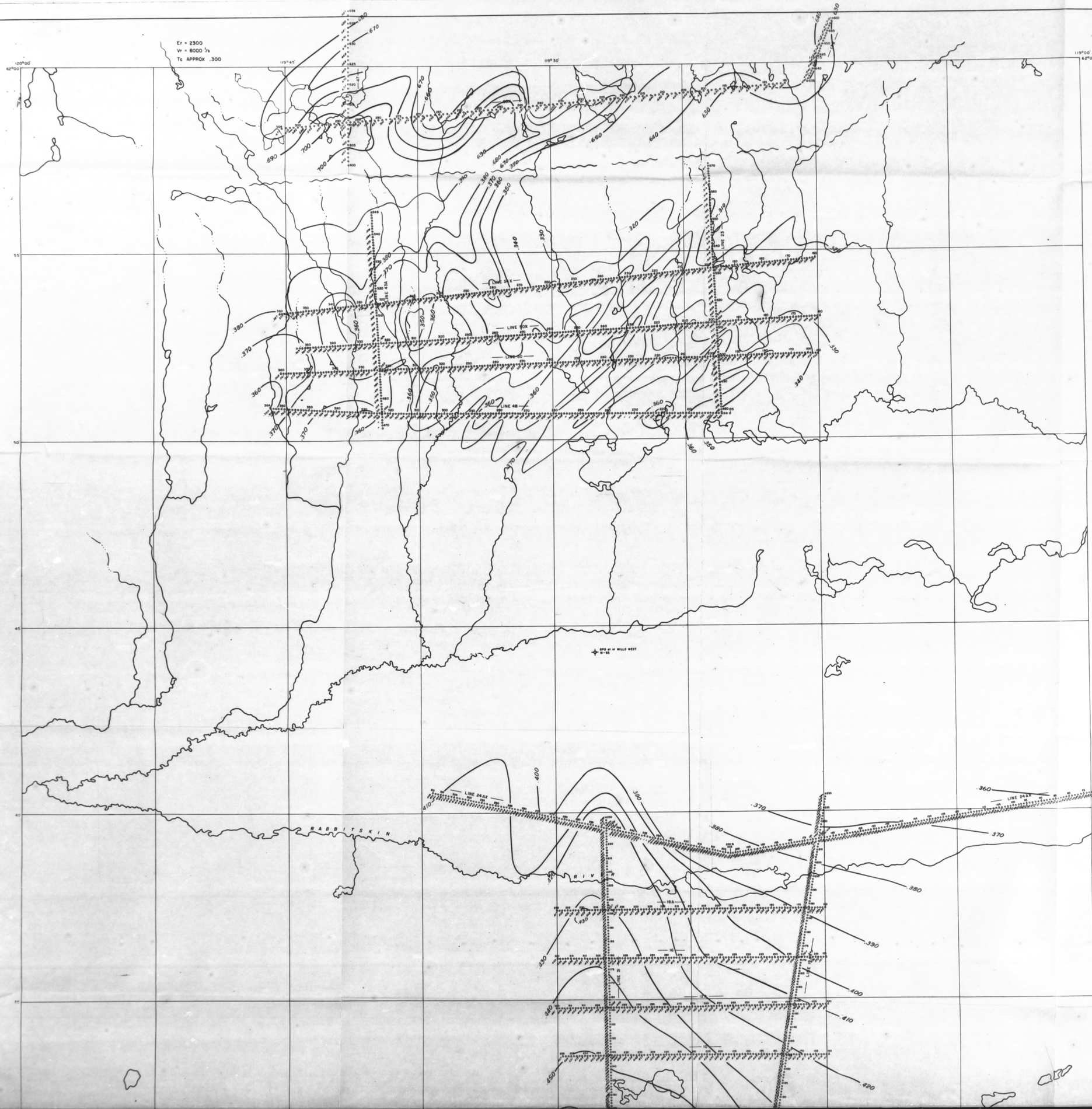
By J.R. MUIR

C.I. = 010 sec. Oct 1969

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	D.E.W.	F-9877-8

SEISMIC

2 of 2



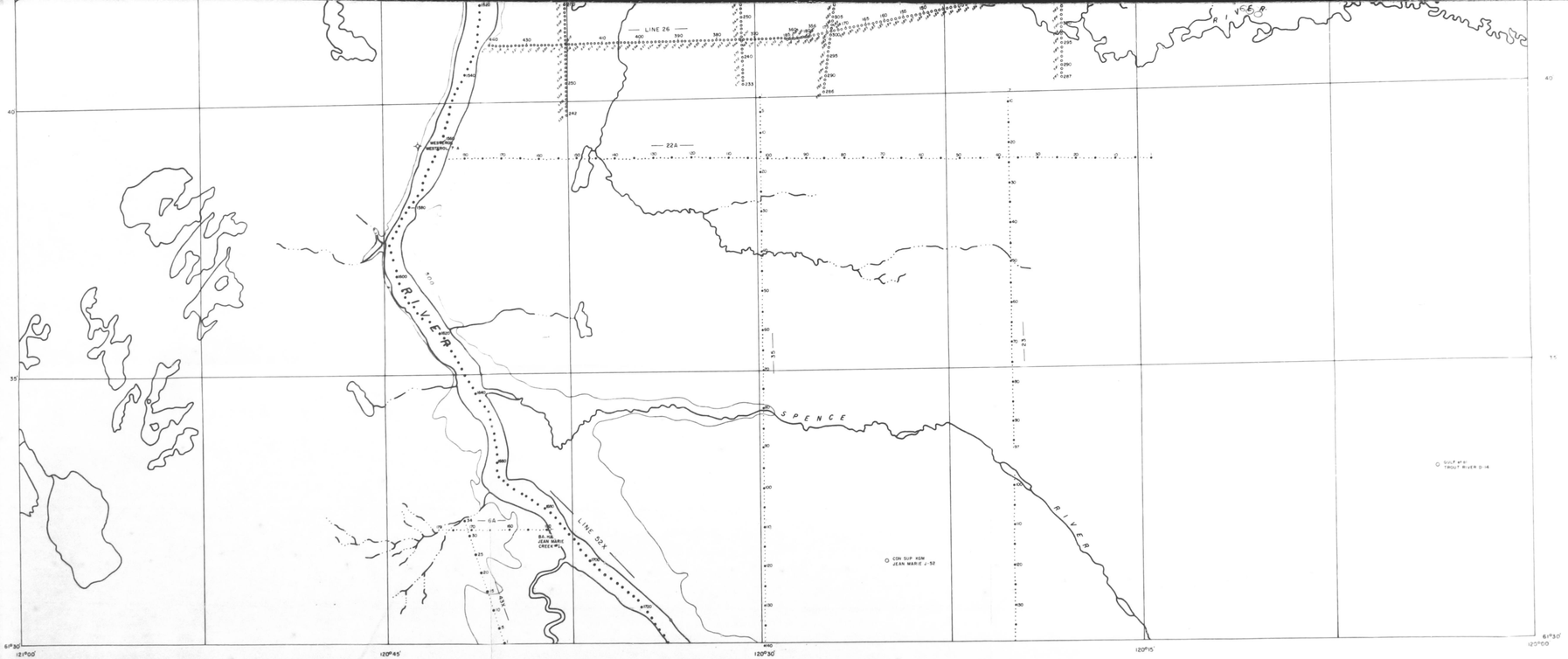
1 OF 2

NOTE FOR INDEX MAP SEE F-6797E-1

REVISIONS

1 OF 2

NOTE FOR INDEX MAP SEE F-6707E-1



NOTE FOR INDEX MAP SEE F-6797E-1

REVISIONS
WELLS DEC 67
WELLS APRIL 69

CHEVRON STANDARD LIMITED

95-H-NE

GREEN ISLAND AREA

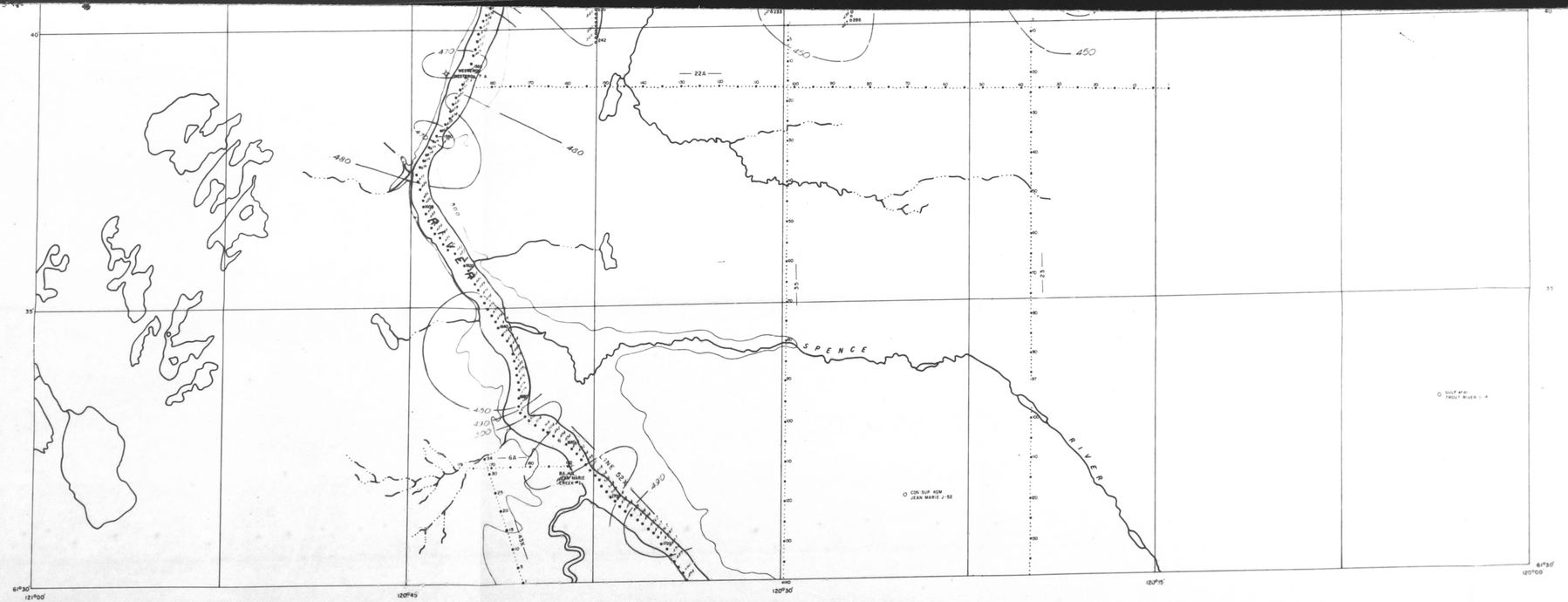
SURFACE ELEVATIONS

12-2

CS-1009 July 1970

SCALE	DATE	DRAWN	F-9876-12
1 INCH = 1 MILE	JUNE, 1965	DEW	

21-H-5 SEISMIC



NOTE FOR INDEX MAP SEE F-6797E-1

REVISIONS	CHEVRON STANDARD LIMITED
WELLS DEC 67	95-H-NE
WELLS APRIL 68	**GREEN ISLAND AREA**
	TIME SEISMIC CONTOURS ON TOP OF NAHANNI
	E=1000 V=10,000 ft/sec — T. WEBB — JAN. 1970
	SCALE: 1 INCH = 1 MILE — DATE: JUNE, 1965 — DRAWN: DEW
	F-9876-9 60-E-6
DRILLED FOR FEB. 69	SEISMIC

1 OF 2

NOTE FOR INDEX MAP SEE F-6787E-1