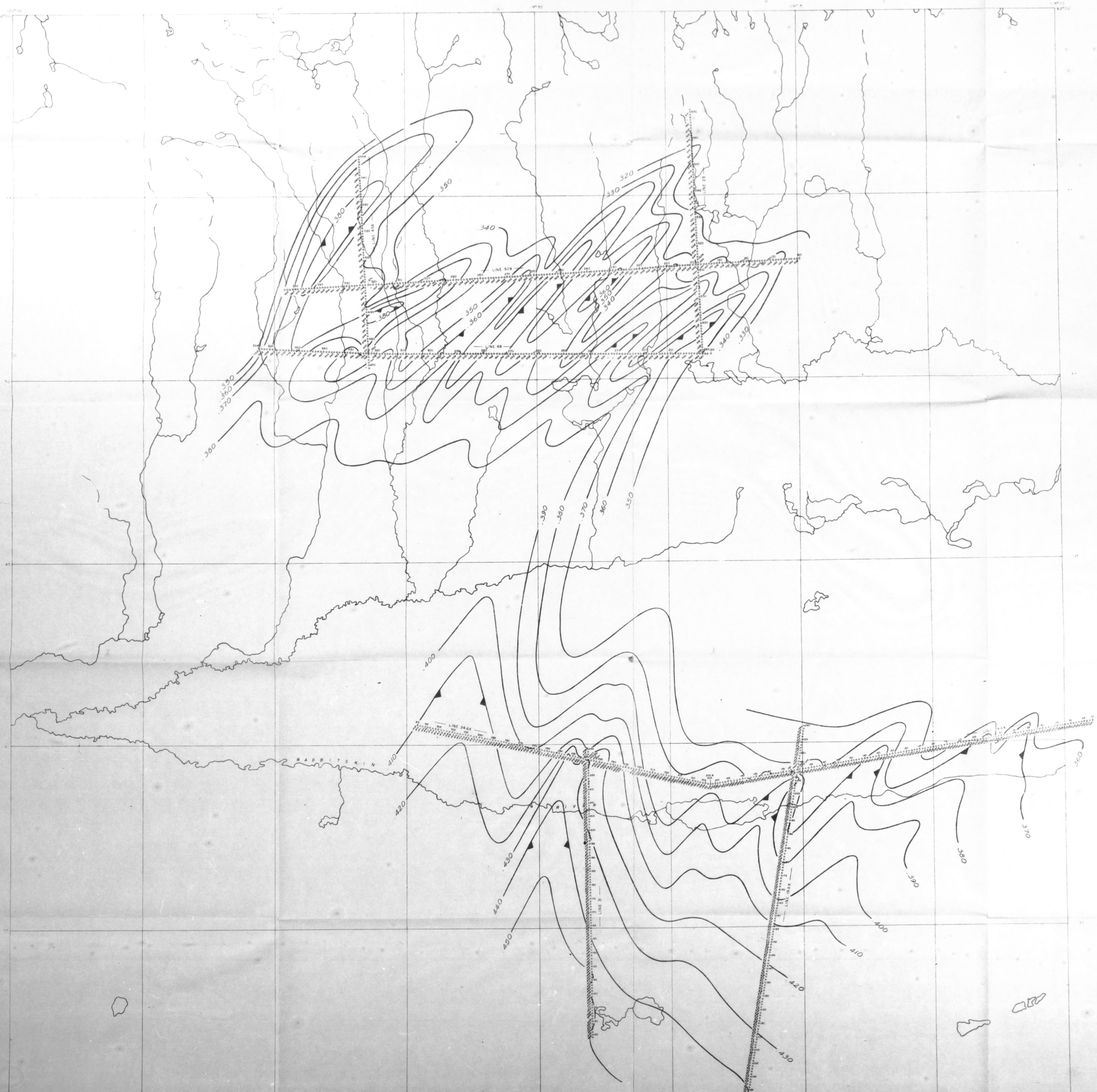


1 OF 2

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

REVISIONS
WELLS DEC 67
WELLS MAR. 69

CHEVRON STANDARD LIMITED

85 - E - N.W.

HORN PLATEAU AREA

TIME SEISMIC CONTOURS ON

TOP OF NAHANNI

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

REVISIONS
WELLS DEC 67
WELLS MAR 69

CHEVRON STANDARD LIMITED

85 - E - N.W.

HORN PLATEAU AREA

TIME SEISMIC CONTOURS ON

TOP OF NAHANNI

E = 1000'   V = 10,000'/sec.   V: Computed

By
J.R. MUIR

C.I. = .010 sec.   Oct. 1969

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	DEW	F-9877-8

SEISMIC

2 of 2

45-6-4-77

CONFIDENTIAL

AREA: RABBITSKIN RIVER AND DAVIDSON CREEK, N.W.T.

GOVERNMENT PROJECT: 45-6-4-68-3

GROUP: 301

FINAL REPORT ON SEISMIC SURVEY CONDUCTED BY

CHEVRON STANDARD LIMITED

MARCH - APRIL 1968

MAPS IN ATTACHED FOLDER

AUTHOR: E. W. JONES

Wm J McCormack

W. J. McCORMACK - 1970
District Geophysicist

CONTRACTOR:	DIGICON EXPLORATION LIMITED
GOVERNMENT PROJECT:	45-6-4-68-3
GROUP:	301
AREA:	RABBITSKIN RIVER AND DAVIDSON CREEK, N.W.T.
MAPS:	1. HORN PLATEAU — TIME SEISMIC CONTOURS ON TOP OF NAHANNI
	2. WILLOW LAKE — TIME STRUCTURE CONTOURS ON NAHANNI
	3. HORN PLATEAU — SURFACE ELEVATIONS
	4. WILLOW LAKE — SURFACE ELEVATIONS

GEOPHYSICAL DATA FOR SEISMIC SURVEY

LOCATION

Area and Province	RABBITSKIN RIVER, Northwest Territories
Longitude and Latitude	119 30 Long. 61 30 Lat.
Permit Numbers and Government Project Number	Permit No. 374 Project 45-6-4-68-3

TYPE OF SURVEY

Analog or Digital	Digital
Type of Source	Dynamite

FIELD RECORDING EQUIPMENT

Seismometer Model	HSJ Model L-2
Seismometer Frequency	14 cps
Seismometer Damping	280 ohm coil, 680 ohm damping resister
Seismometer Base	3" spike
Amplifier Model	TI 10000
Camera Model	SEI VR 06
Type of Magnetic Tape	3M 1", 21 Track
Digital System Model and Number	TI 10000, DFS 2
Land Survey Instrument and Method	Transit, Hor. angles to compute Lat. & Dep.
Cables	4-group portable

FIELD PROCEDURE AND OPERATIONS

Refraction Inline or Broadside	Inline
Reflection % of Subsurface Coverage	400%

Spread Configuration	
Number Groups Recorded	24
Group Interval	150'
Number Seismometers/Group	6
Seismometer Interval	20'
Array Pattern	Inline
Source Configuration	
Number of Holes and Depth	1 hole, 40' deep
Spacing	450'
Pattern	Inline (on Group 13)
Inline or Offset to Spread	Inline
Charge Size and Type	5 lb. HV Dynamite
Transportation	
Type of Vehicles	Wheeled trucks
Fixed Wing Aircraft	DC3 and piston Beaver
Helicopter Support	None
Terrain Conditions	
General Terrain Description	Flat with a few lakes and some muskeg hummocks.

RECORDING FACTORS

Monitor Record	
Filter	25(12)-120
AVC	
Gain	Ganged AGC, 80 db/sec.
Magnetic Tape	
Filter	25(12)-120
AVC	
Gain	Ganged AGC, 80 db/sec.

Field Playbacks

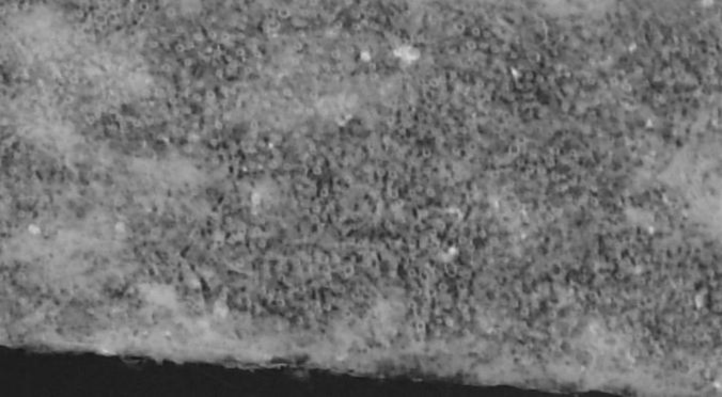
Filter	30(12)-90
AVC	
Gain	Straight
Mixing	None

PERSONNEL

Field	14
Office	2
Titleholders	4
Individual Responsibility	
Contractors	Chinchaga Construction
	Elgin Exploration
	Seisform Drilling
	Crown Caterers
	Lowther Trucking
	G. H. Ward Drilling
	Worthing Transport
	Christianson Enterprises

OFFICE TECHNIQUES

Datum Computation	Refraction breaks
Weathering Sections	Sections including Vel. plots, Computations and surface elevations



Record Sections	Yes
Type of Display	VA/WT 400% CDP
Maps	Attached folder

STATISTICS SUMMARY

Number of Working Days	10 (recording crew)
Number of Profiles	
Reflection	489
Refraction	64
Total Production	553
Miles of Surface Coverage	44.3
Miles of Subsurface Coverage	42.8
Number of Shot Holes Drilled	534
Total Footage Drilled	21,400

TRANSMITTAL OF RECORDED DATA

GEOPHYSICAL DATA FOR SEISMIC SURVEY

LOCATION

Area and Province	Davidson Creek, Northwest Territories
Longitude and Latitude	119 00 Long., 62 00 Lat.
Permit Numbers and Government Project Number	Permit No. 374 Project 45-6-4-68-3

TYPE OF SURVEY

Analog or Digital	Digital
Type of Source	Dynamite

FIELD RECORDING EQUIPMENT

Seismometer Model	HSJ Model L-2
Seismometer Frequency	14 cps
Seismometer Damping	280 ohm coil, 680 ohm damping res.
Seismometer Base	3" spike
Amplifier Model	TI 10000
Camera Model	SIE VR 06
Type of Magnetic Tape	3M 1", 21 Track
Digital System Model and Number	TI 10000, DFS 2
Land Survey Instrument and Method	Transit and Theodolite, Hor. Angles to compute Lat. & Dep.
Cables	4-group portable

FIELD PROCEDURE AND OPERATIONS

<u>Refraction</u>

Inline or Broadside	Inline

<u>Reflection</u>

% of Subsurface Coverage	400%

Spread Configuration	
Number Groups Recorded	24
Group Interval	150'
Number Seismometers/Group	6
Seismometer Interval	20'
Array Pattern	Inline
Source Configuration	
Number of Holes and Depth	1 hole, 40' deep
Spacing	450'
Pattern	Inline (on group 13)
Inline or Offset to Spread	Inline
Charge Size and Type	5 lb. H.V. Dynamite
Transportation	
Type of Vehicles	Wheeled trucks
Fixed Wing Aircraft	DC3 and piston Beaver
Helicopter Support	None
Terrain Conditions	
General Terrain Description	Flat with numerous lakes and small gullies

RECORDING FACTORS

Monitor Record	
Filter	25(12)-120
AVC	
Gain	Ganged AGC, 80 db/sec.
Magnetic Tape	
Filter	25(12)-120
AVC	
Gain	Ganged AGC, 80 db/sec.

Field Playbacks	
Filter	30(12)-90
AVC	
Gain	Straight
Mixing	None

PERSONNEL

Field	15
Office	2
Titleholders	4
Individual Responsibility	
Contractors	Chinchaga Construction
	Elgin Exploration
	Seisform Drilling
	Crown Caterers
	Lowther Trucking
	G. H. Ward Drilling
	Worthing Transport
	Christianson Enterprises

OFFICE TECHNIQUES

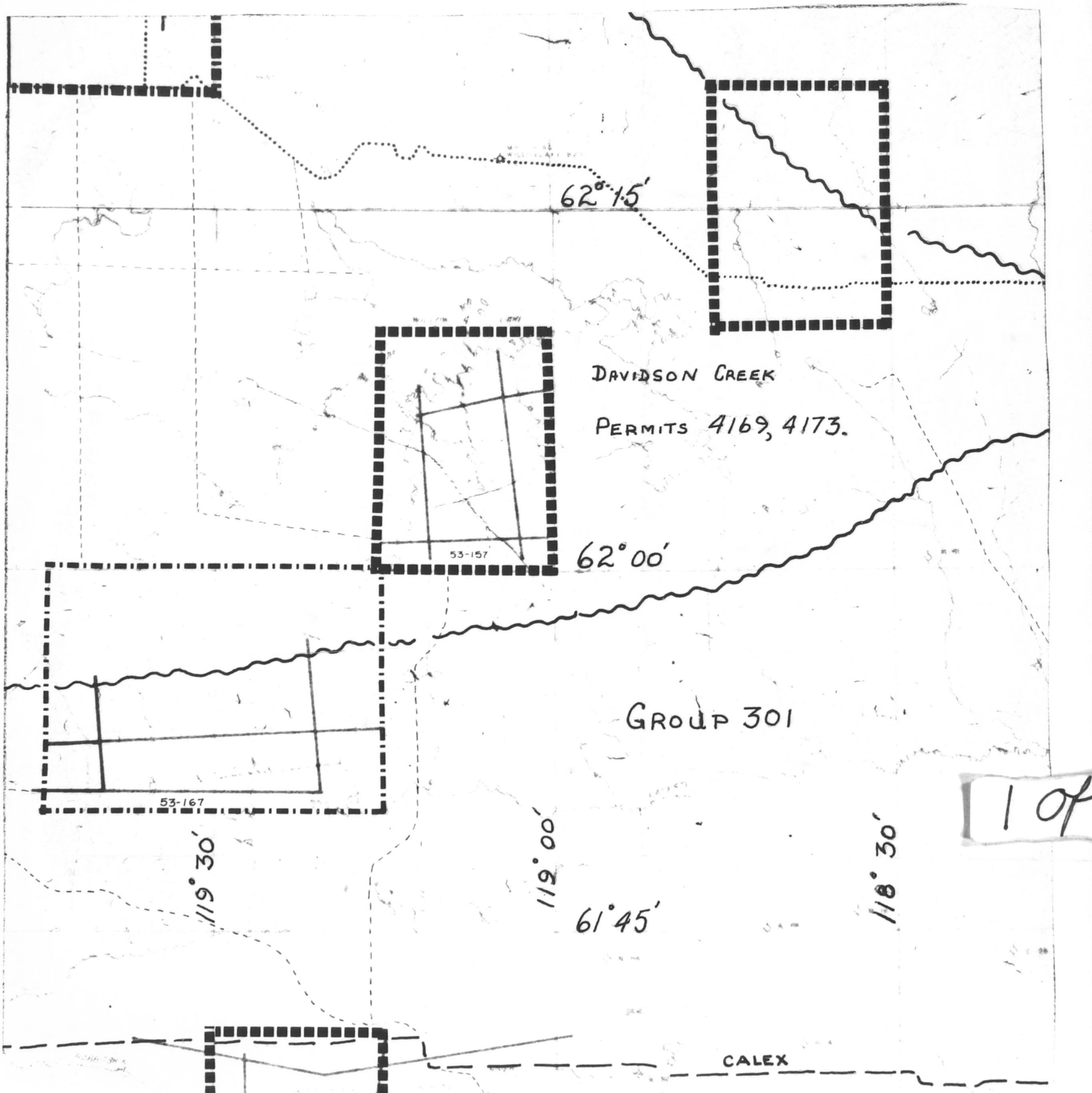
Datum Computation	Refraction breaks
Weathering Sections	Sections including Vel. plots, computations, surface elevations, etc.

Record Sections	Yes
Type of Display	VA/WT 400% C.D.P.
Maps	Attached folder

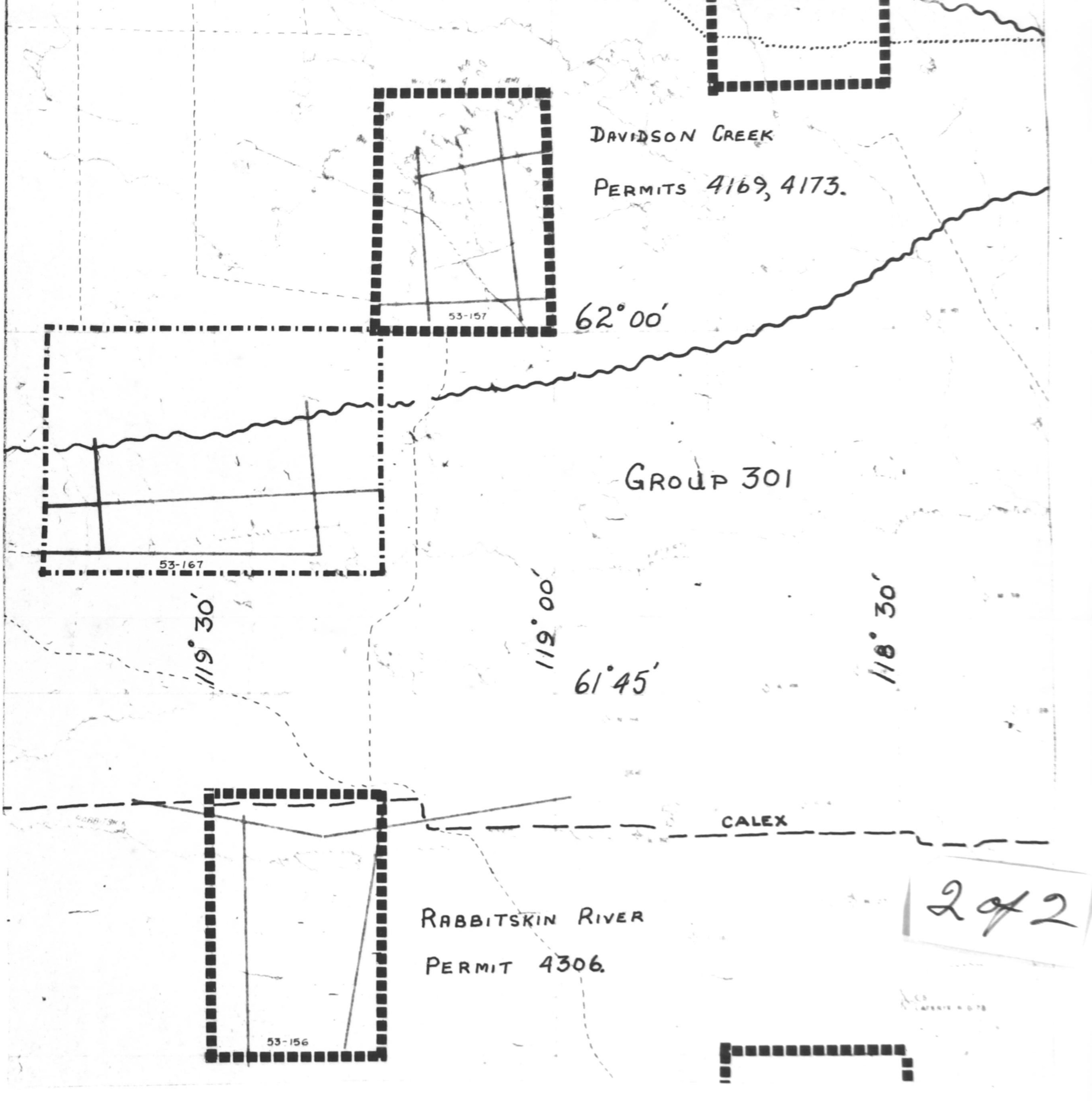
STATISTICS SUMMARY

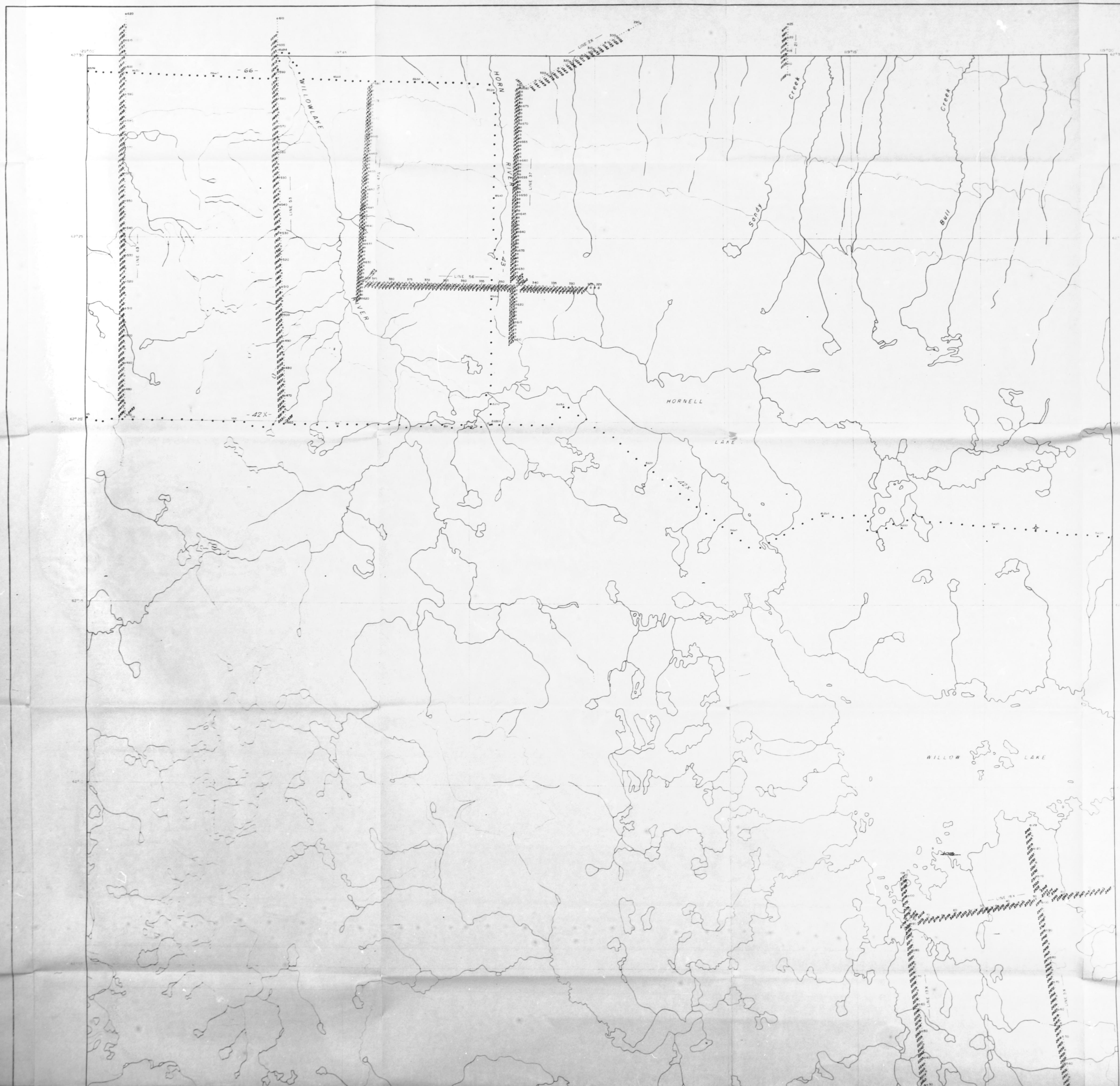
Number of Working Days	10 (recording crew)
Number of Profiles Reflection	387
Refraction	87 refraction
Total Production	474
Miles of Surface Coverage	36.0
Miles of Subsurface Coverage	34.3 miles
Number of Shot Holes Drilled	406
Total Footage Drilled	17,300

TRANSMITTAL OF RECORDED DATA



62° 15'
DAVIDSON CREEK
PERMITS 4169, 4173.
53-157
62° 00'
GROUP 301
53-167
119° 30'
119° 00'
118° 30'
61° 45'
CALEX
1 of


DAVIDSON CREEK
PERMITS 4169, 4173.
53-157
62°00'
53-167
GROUP 301
119°30'
119°00'
118°30'
61°45'
CALEX
RABBITSKIN RIVER
PERMIT 4306.
53-156



1 of 2

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

REVISIONS

CHEVRON STANDARD LIMITED

LINE 24AX
LINE 24AX
RABBITSKIN
RIVER
LINE 3
THE CALIFORNIA STANDARD COMPANY
85-E-NW
HORN PLATEAU AREA
SURFACE ELEVATIONS
H. HEEREMA
MAY 1968
SCALE
DATE
DRAWN
1 INCH = 1 MILE
JUNE, 1965
DEW
F-9877-3
SEISMIC

2 of 2

CHEVRON STANDARD LIMITED

WILLOW LAKE AREA

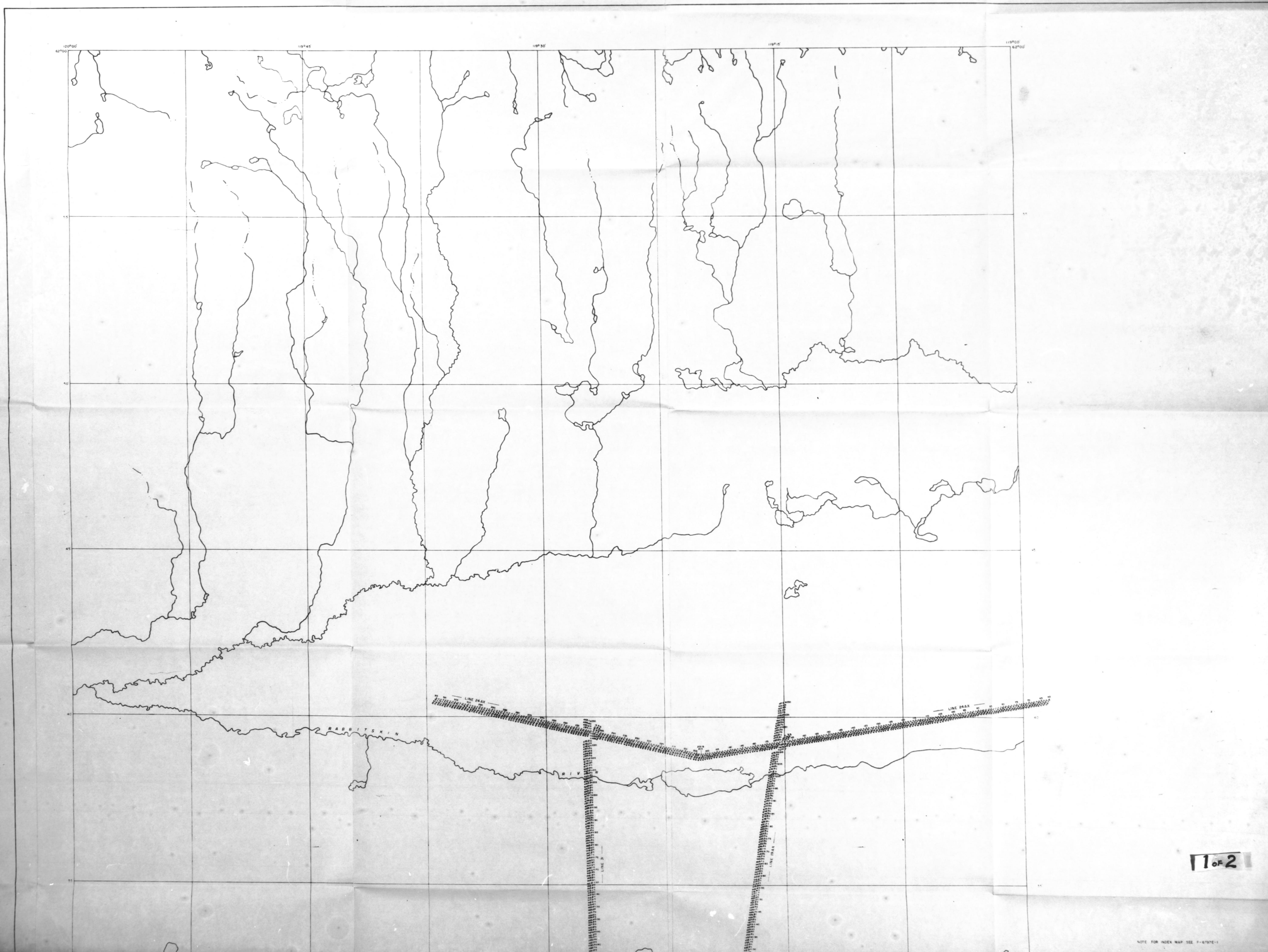
SURFACE ELEVATIONS

H. HEEREMA

MAY 1968

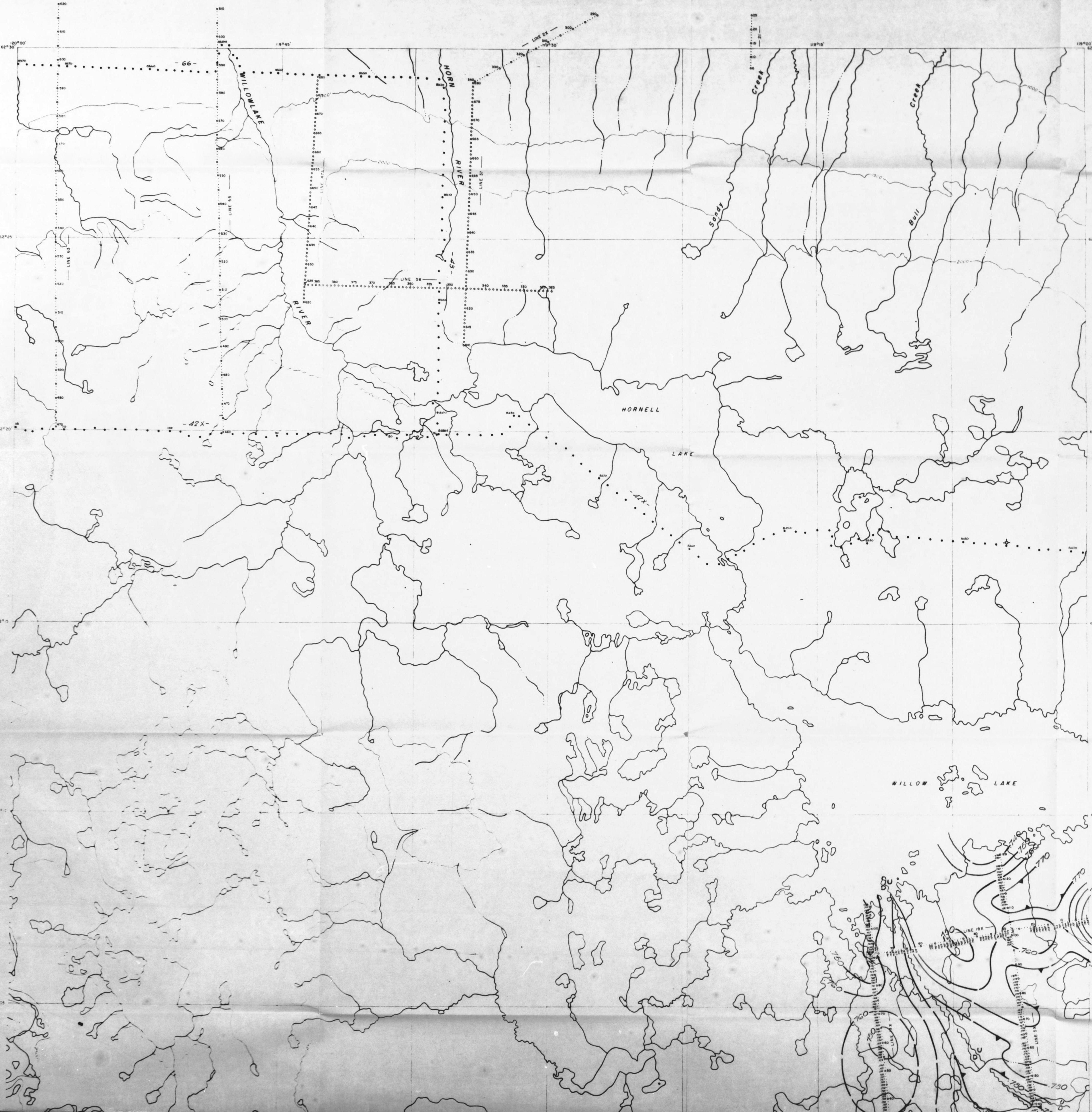
SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	R.L.S.	F-9881-3

49-D-2



1 OF 2

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



CORRECTION FOR TOP OF DEVONIAN

IF TOP DEVONIAN IS ABOVE (LESS THAN) .500
NAHANNI = NAHANNI (row) + [(.500 − T. DEV.)(1.34) − (.500 − T. DEV.)]

IF TOP DEVONIAN IS BELOW (MORE THAN) .500
NAHANNI = NAHANNI (row) − [(T. DEV. −.500) − (T. DEV. −.500)(.750)]

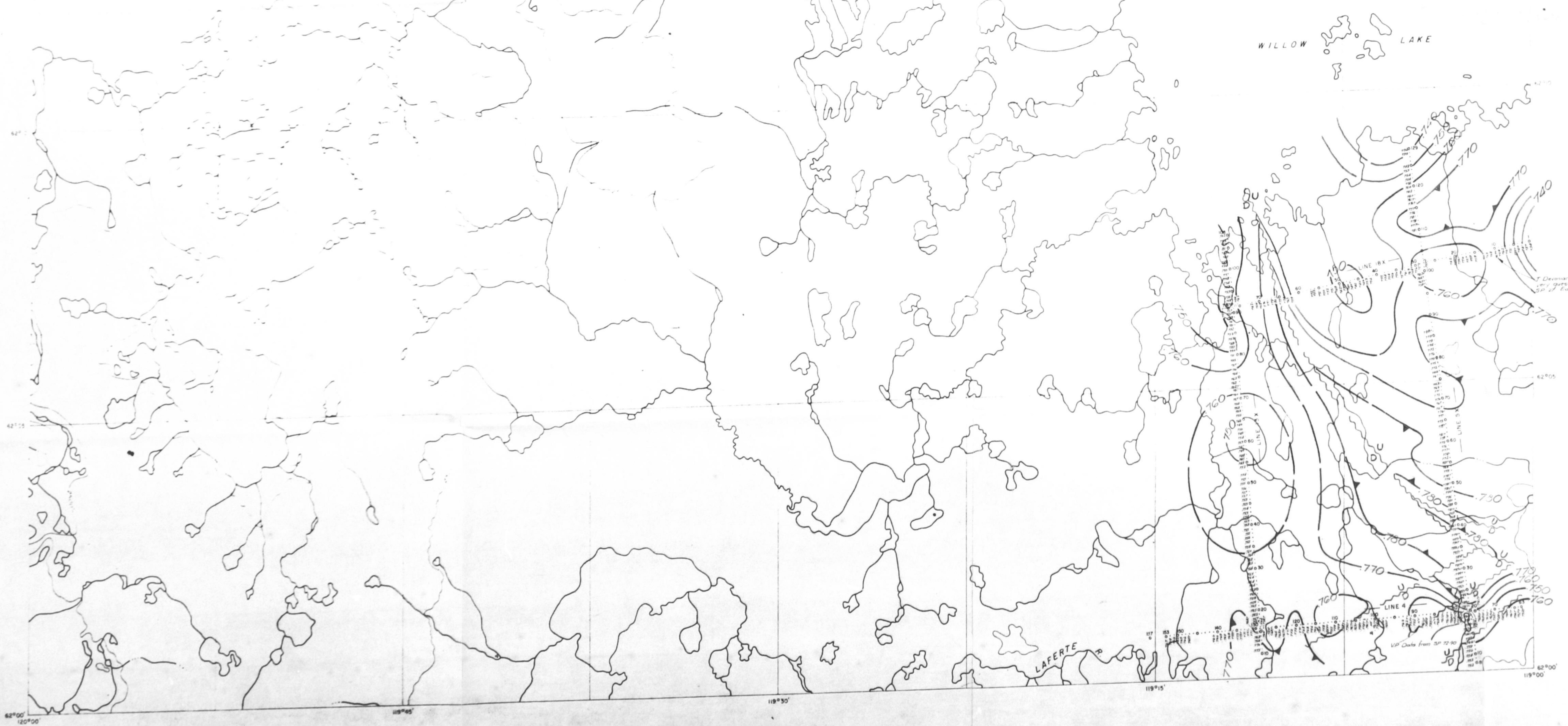
USED DEVONIAN $\bar{V}$ = 10,000 '/s
POST DEVONIAN $\bar{V}$ = 7500 '/s

1 OF 2

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

REVISIONS

CHEVRON STANDARD LIMITED



CORRECTION FOR TOP OF DEVONIAN

IF TOP DEVONIAN IS ABOVE (LESS THAN) .500

NAHANNI = NAHANNI (raw) + [(.500 − T DEV)(1.34) − (.500 − T.DEV)]

IF TOP DEVONIAN IS BELOW (MORE THAN) .500

NAHANNI = NAHANNI (raw) − [(T DEV − .500) − (T DEV − .500)(.750)]

USED DEVONIAN $\bar{V}$ = 10,000'/s

POST DEVONIAN $\bar{V}$ = 7500'/s

2 of 2

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

REVISIONS	CHEVRON STANDARD LIMITED			
	WILLOW LAKE AREA TIME STRUCTURE CONTOURS ON NAHANNI (A.R.D. "DMn" HORIZON) Er = 1000' Vr = 9000'/s Vi Computed By H.G. Vore C.I. = .010 sec. Aug. 1968			
	SCALE	DATE	DRAWN	F-9881-7
	1 INCH = 1 MILE	JUNE, 1965	R. L. S.	

21-A-2
21-E-8

AREA - CAMSELL BEND 95-J-SE, 95-J-NE, NWT
PERMITS - 4401 to 4406; 4418 to 4423
PROJECT - GROUP 265 - FINAL REPORT ON GEOPHYSICAL SURVEY CONDUCTED BY CHEVRON STANDARD LIMITED FROM FEBRUARY 4 TO MARCH 5 AND MARCH 22 TO MARCH 29, 1968
BY - E. W. JONES 1968

CONFIDENTIAL

AREA - CAMSELL BEND 95-J-SE, 95-J-NE, N.W.T.

PERMITS - 4401 to 4406; 4418 to 4423

PROJECT - GROUP 265

FINAL REPORT ON GEOPHYSICAL SURVEY CONDUCTED BY CHEVRON STANDARD LIMITED FROM FEBRUARY 4 TO MARCH 5 AND MARCH 22 TO MARCH 29, 1968

MAPS IN ATTACHED FOLDER

BY - E. W. JONES 1968

GEOPHYSICAL DATA FOR SEISMIC SURVEY

LOCATION

Area and Province	95-J-SE, 95-J-NE, N.W.T.
Longitude and Latitude	62° 10' to 63° 00'; 122° 00' to 123° 00'
Permit Numbers and Government Project Number	4401 to 4406; 4418 to 4423

TYPE OF SURVEY

Analog or Digital	Digital
Type of Source	Powder & Caps

FIELD RECORDING EQUIPMENT

Seismometer Model	H.S.J.
Seismometer Frequency	
Seismometer Damping	
Seismometer Base	
Amplifier Model	T.I. 10,000
Camera Model	
Type of Magnetic Tape	
Digital System Model and Number	T.I. 10,000 D.F.S.
Land Survey Instrument and Method	Transit, Chain and Traverse Tie
Cables	1800 ft., 24 conductor cables

FIELD PROCEDURE AND OPERATIONS

<u>Refraction</u>

Inline or Broadside	In-line, End-on

<u>Reflection</u>

% of Subsurface Coverage	400%, 600%

Spread Configuration	
Number Groups Recorded	24
Group Interval	150 ft.
Number Seismometers/Group	6
Seismometer Interval	20 ft.
Array Pattern	100 ft.-in-line
Source Configuration	
Number of Holes and Depth	One at 40 ft.
Spacing	
Pattern	
Inline or Offset to Spread	
Charge Size and Type	5 lbs.
Transportation	
Type of Vehicles	4 Wheel Drive
Fixed Wing Aircraft	Beaver
Helicopter Support	
Terrain Conditions	
General Terrain Description	Hilly, Incised Streams, Some Muskeg

RECORDING FACTORS

Monitor Record	
Filter	17 - 120
AVC	80 db/sec.
Gain	55 - 120
Magnetic Tape	
Filter	
AVC	
Gain	

Field Playbacks

Filter	Direct
AVC	
Gain	
Mixing	

PERSONNEL

Field	35
Office	5
Titleholders	Cities Service
Individual Responsibility	E. W. Jones, Chevron Standard
Contractors	Chevron Oil Company, Party #10
	Kuntz & Associates
	M. L. McMillan
	K. W. Lowther Trucking
	Hirtz Bros.

OFFICE TECHNIQUES

Datum Computation	E.D. + 1000' V.C. 1100'/s
Weathering Sections	V_1 5000 - 8000'/s V_2 12000'/s

Record Sections	Yes
Type of Display	VA/WT
Maps	Yes

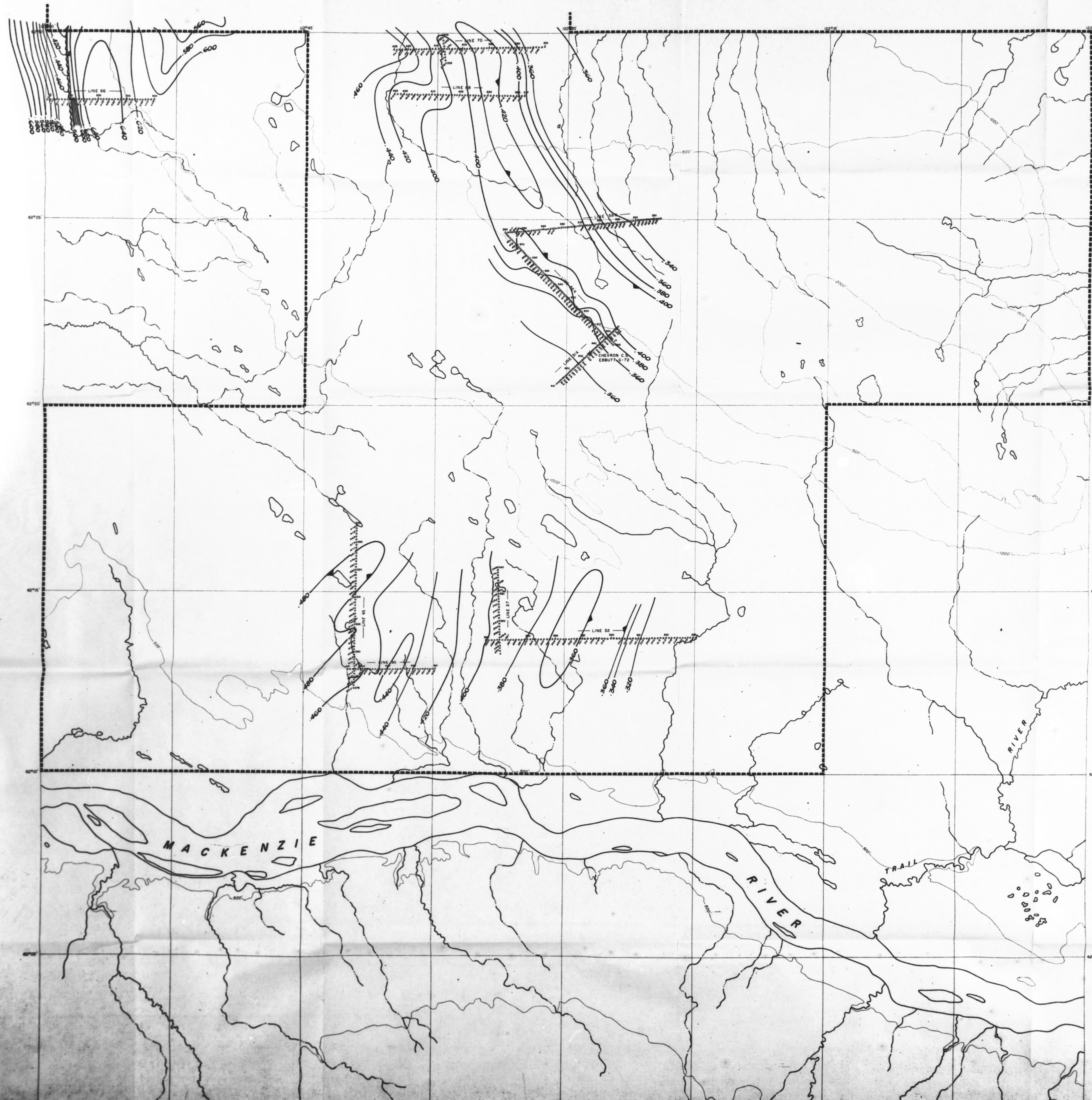
STATISTICS SUMMARY

Number of Working Days	37
Number of Profiles	
Reflection	1162
Refraction	278
Total Production	
Miles of Surface Coverage	
Miles of Subsurface Coverage	89.9
Number of Shot Holes Drilled	
Total Footage Drilled	51,232'

TRANSMITTAL OF RECORDED DATA

1. Shot Point Location and Elevation Map

2. Time Structure - Top of Nahanni

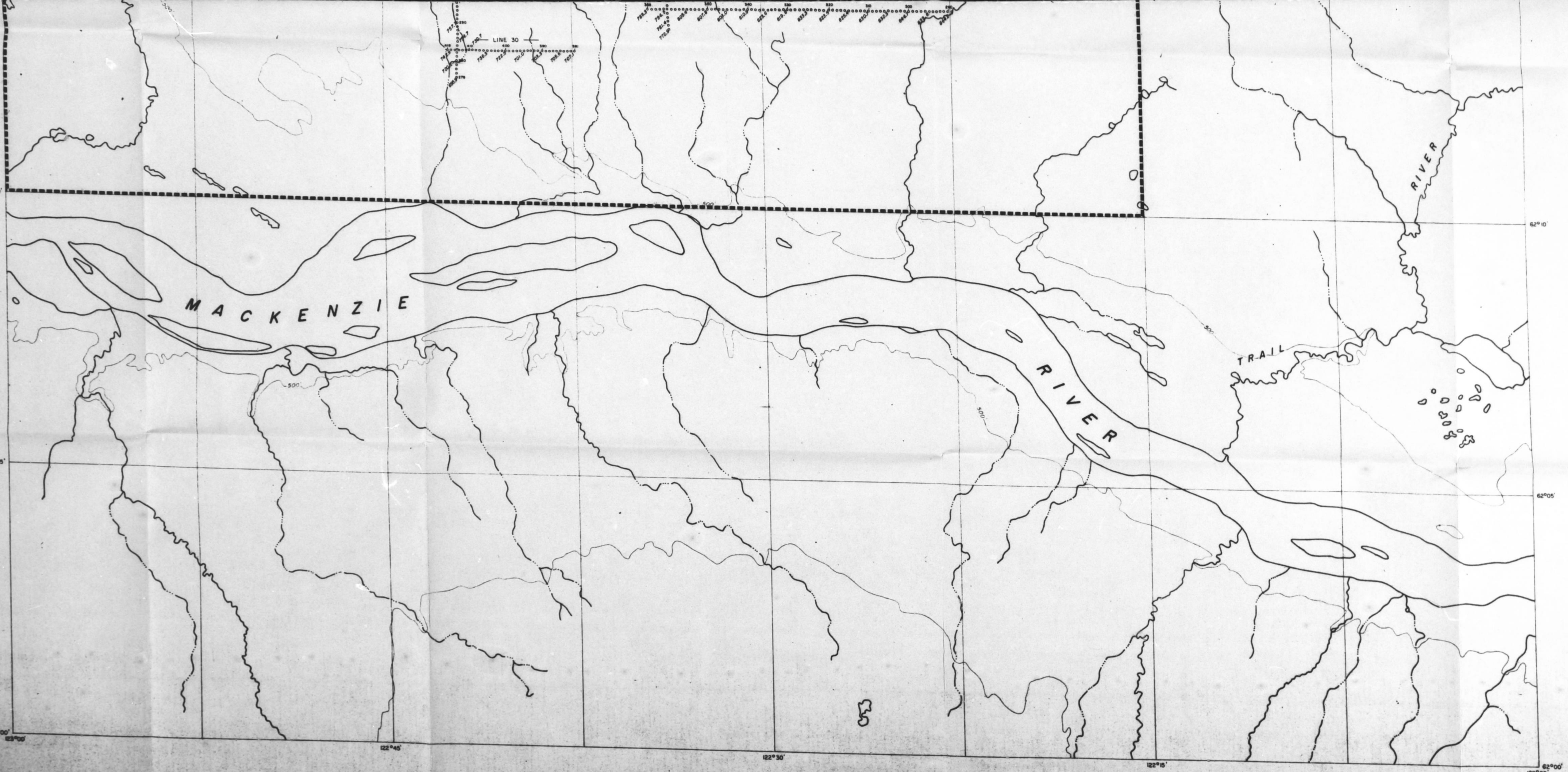


1 OF 2

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

TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1

REVISIONS	CHEVRON STANDARD LIMITED
	TRAIL RIVER AREA



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

TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK – GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1

REVISIONS	CHEVRON STANDARD LIMITED			
	TRAIL RIVER AREA SURFACE ELEVATION MAP			JUNE 1969
	SCALE	DATE	DRAWN	
	1 INCH = 1 MILE	APRIL 9 1965	P.G.	F-9830A-12

56-D-7

2 of 2

2 of 2

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

TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1

REVISIONS

CHEVRON STANDARD LIMITED

TRAIL RIVER AREA

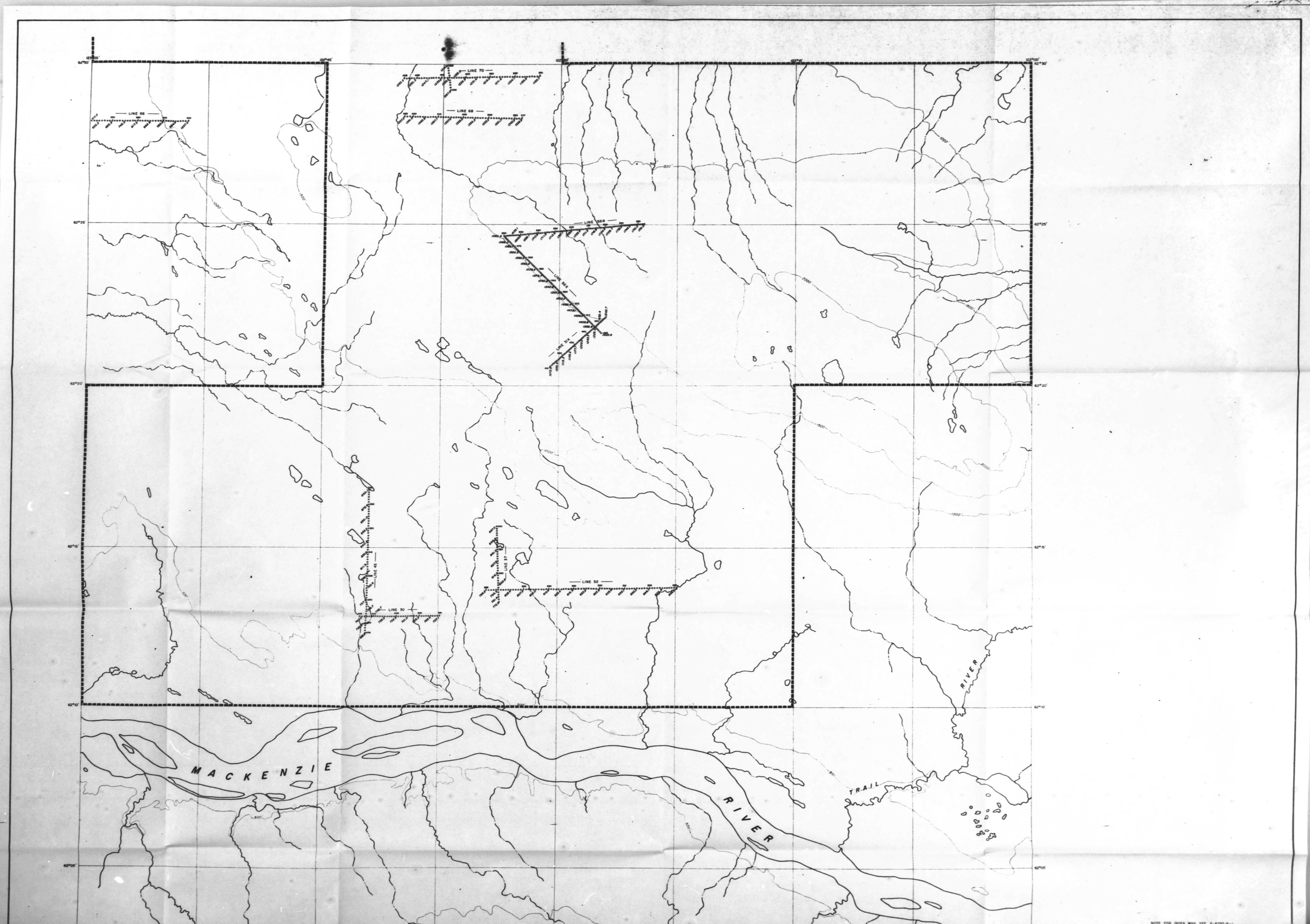
TIME SEISMIC CONTOURS ON TOP OF NAHANNI

CONTOUR INTERVAL = 20 mls.

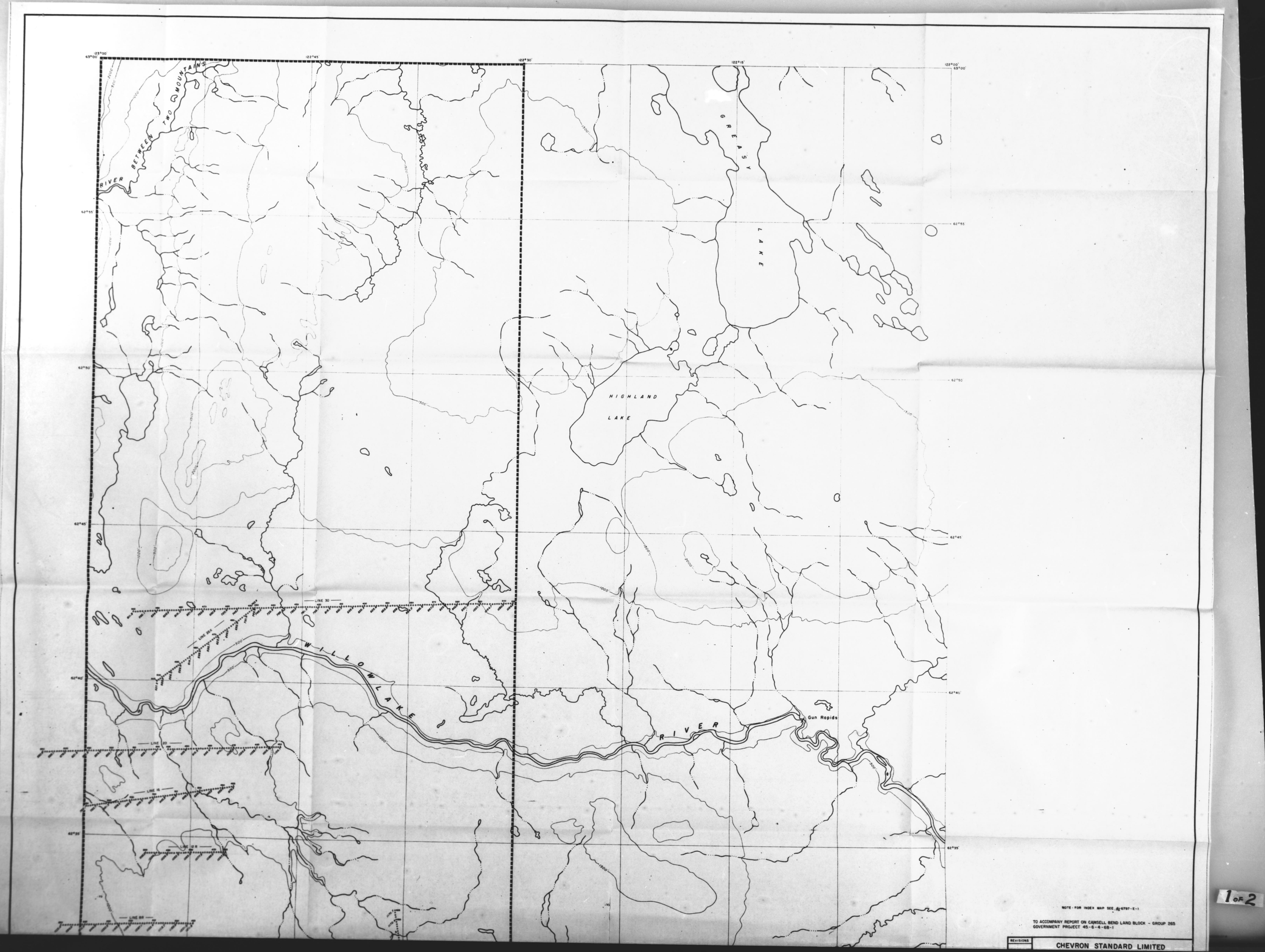
ER + 1000'
VR 11,000'/s

Contoured by John Griffith JUNE 1969

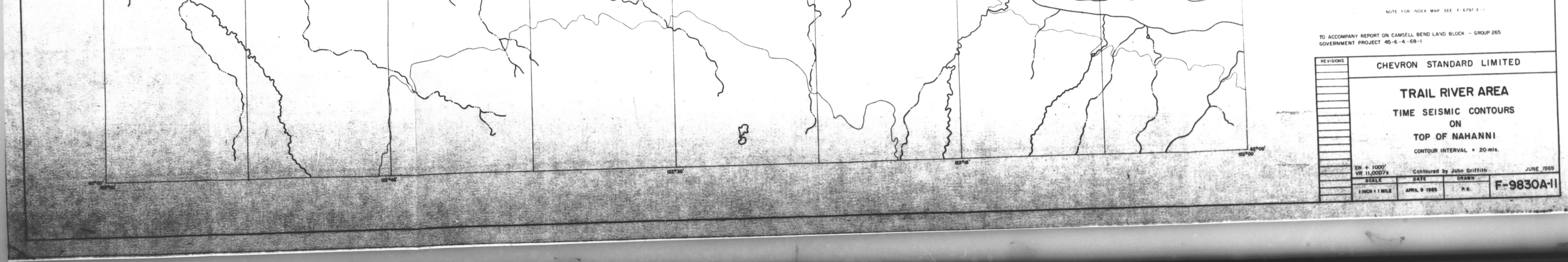
SCALE	DATE	DRAWN	
1 INCH = 1 MILE	APRIL 9 1965	P.G.	F-9830A-11

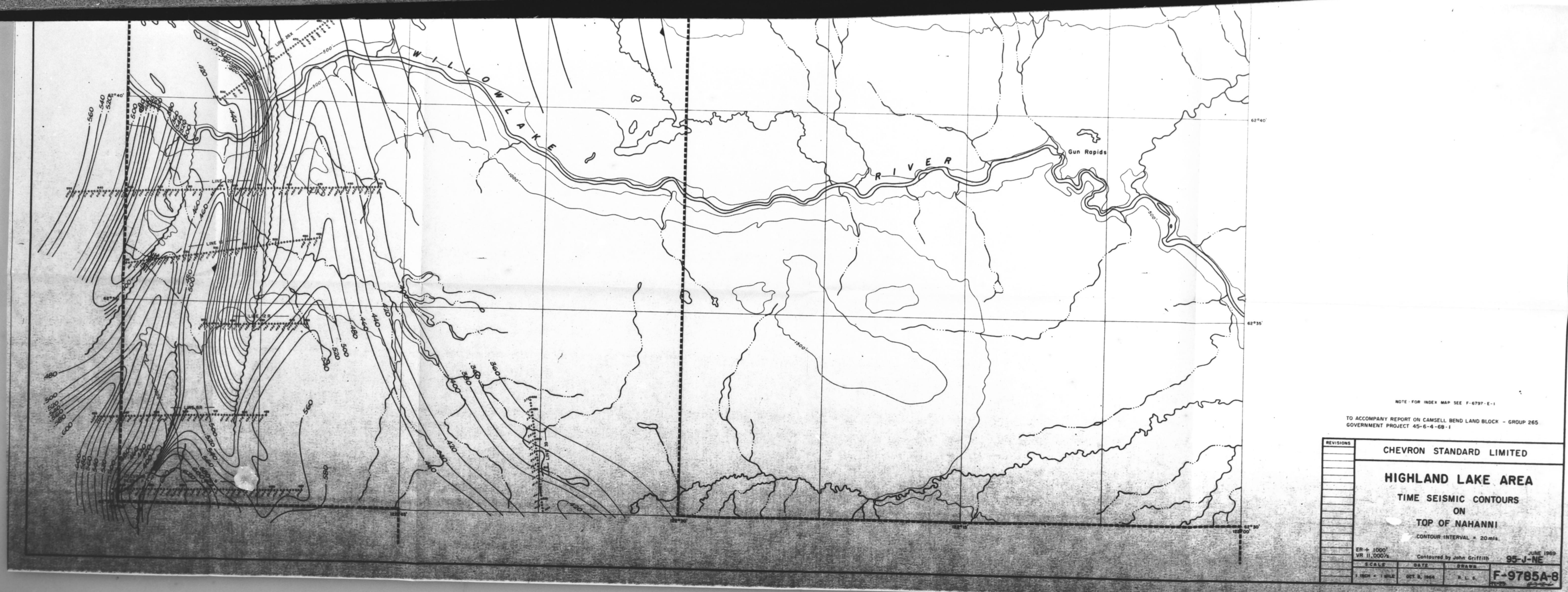

LINE 66
LINE 70
LINE 68
LINE 30
LINE 32
MACKENZIE
RIVER
TRAIL
RIVER

1 OF 2

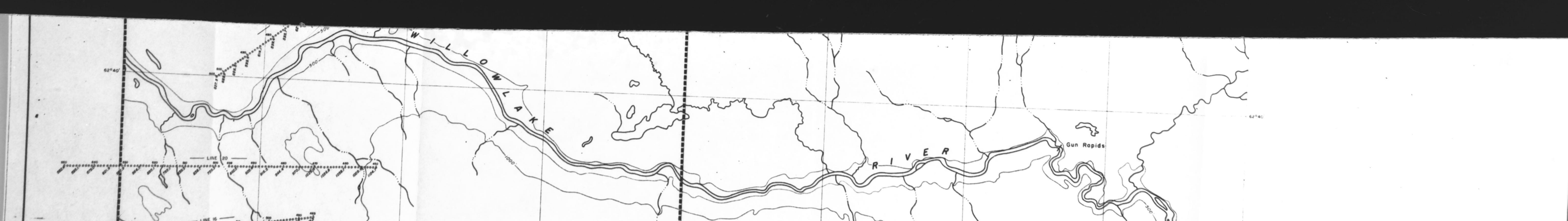


RIVER BETWEEN TWO MOUNTAINS
GREASY LAKE
HIGHLAND LAKE
WILLOWLAKE RIVER
Gun Rapids
NOTE: FOR INDEX MAP SEE 6797-E-1
TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1
REVISIONS
CHEVRON STANDARD LIMITED
1 of 2


NOTE FOR INDEX MAP SEE F-6797-E-1
TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1
REVISIONS
CHEVRON STANDARD LIMITED
TRAIL RIVER AREA
TIME SEISMIC CONTOURS
ON
TOP OF NAHANNI
CONTOUR INTERVAL = 20 mls.
ER + 1000'
VR 11,000'/s
Contoured by John Griffith
JUNE 1969
SCALE
1 INCH = 1 MILE
DATE
APRIL 9 1965
DRAWN
P.G.
F-9830A-11


WILLOW LAKE RIVER
Gun Rapids
NOTE FOR INDEX MAP SEE F-6797-E-1
TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1
REVISIONS
CHEVRON STANDARD LIMITED
HIGHLAND LAKE AREA
TIME SEISMIC CONTOURS
ON
TOP OF NAHANNI
CONTOUR INTERVAL = 20 mls.
ER + 1000'
VR 11,000'/s
Contoured by John Griffith
JUNE 1969
95-J-NE
SCALE
1 INCH = 1 MILE
DATE
OCT. 8, 1964
DRAWN
R.L.S.
F-9785A-8

2 of 2


WILLOW LAKE RIVER
Gun Rapids

NOTE FOR INDEX MAP SEE 95-6797-E-1

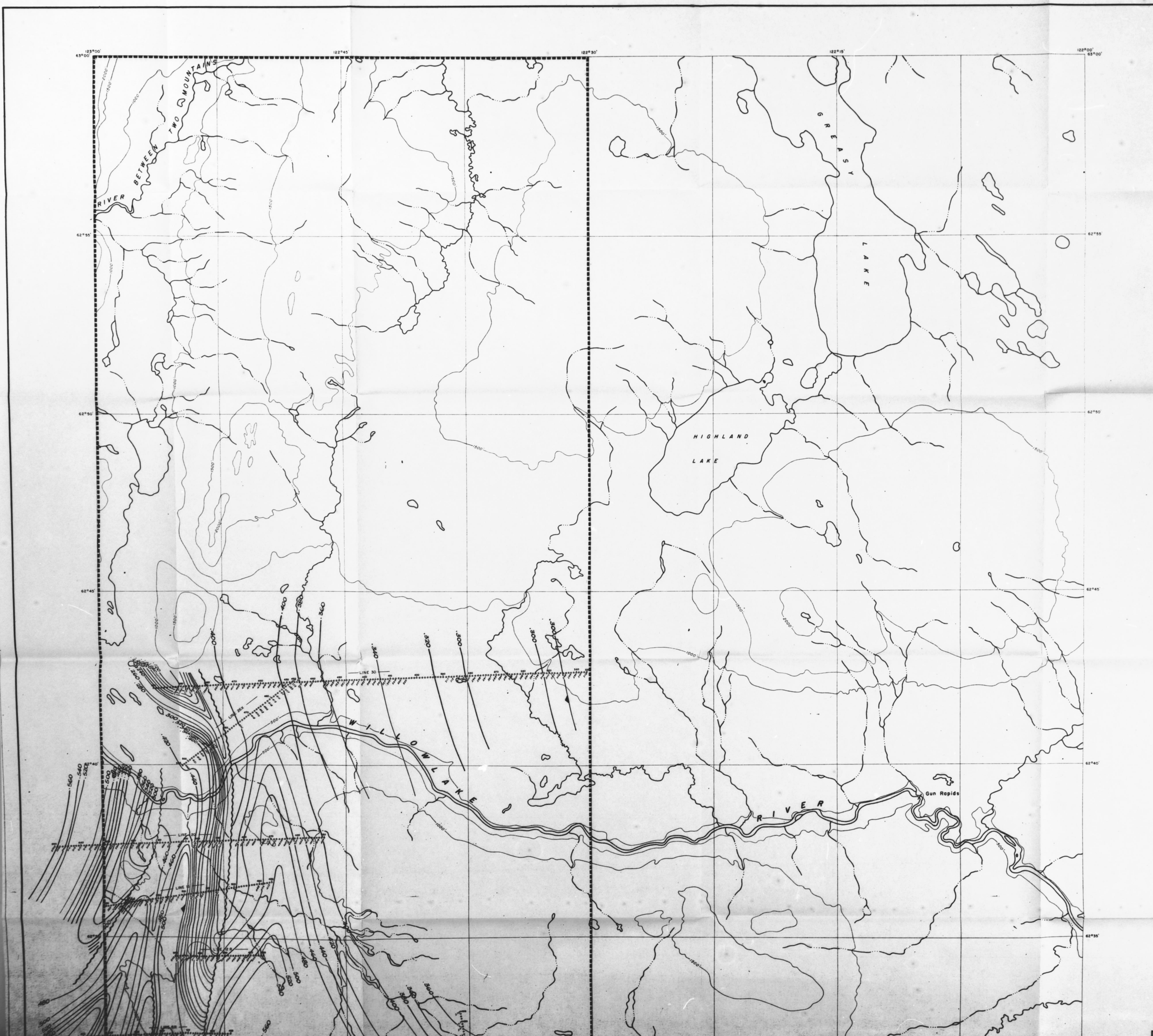
TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1

REVISIONS	
	CHEVRON STANDARD LIMITED
	HIGHLAND LAKE AREA
	SURFACE ELEVATION MAP
	JUNE 1969
	95-J-NE

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	OCT. 8, 1964	R. L. S.	F-9785A-9

56-D-7

2



1 of 2

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

TO ACCOMPANY REPORT ON CAMSELL BEND LAND BLOCK - GROUP 265
GOVERNMENT PROJECT 45-6-4-68-1

REVISIONS