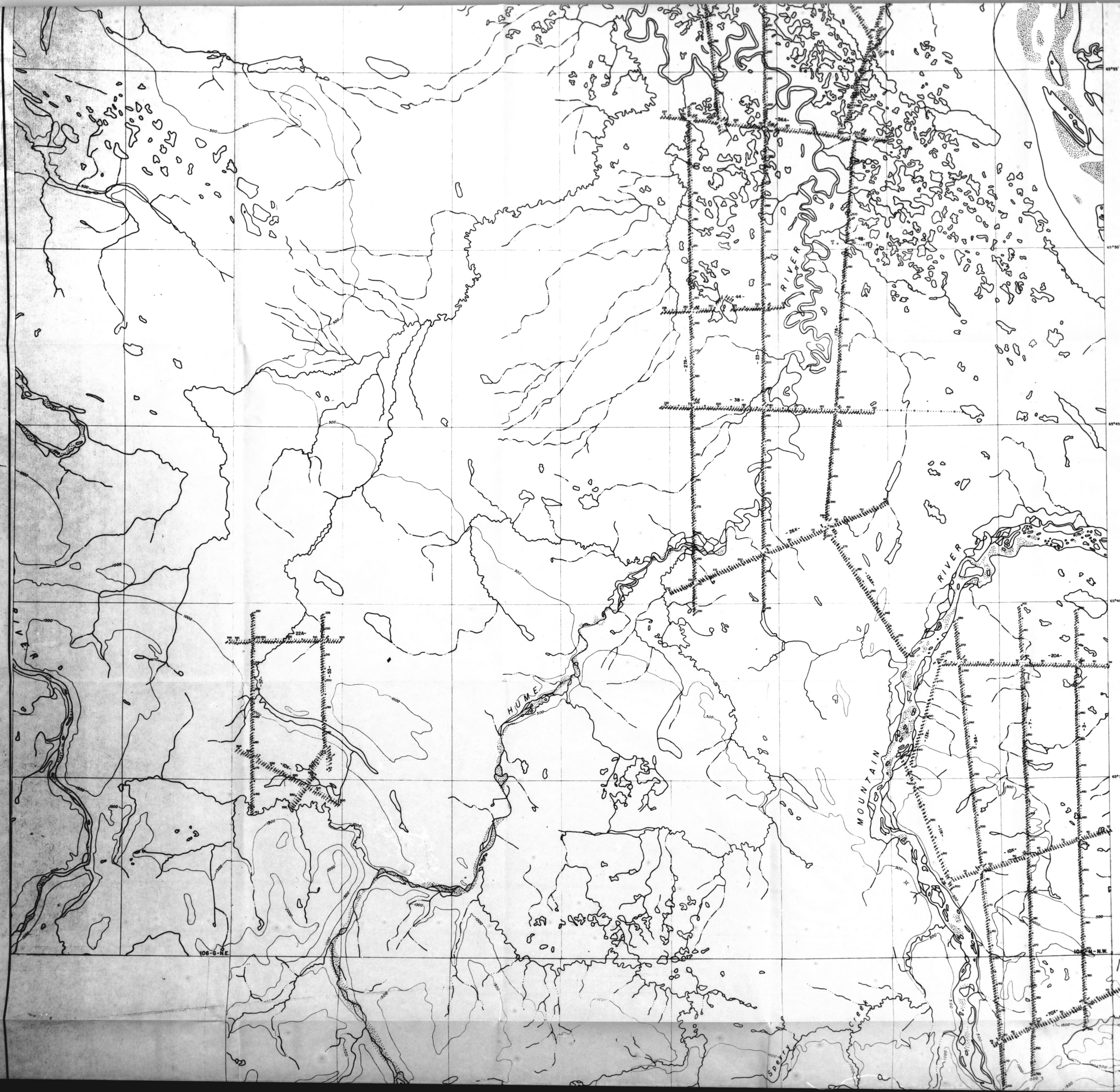
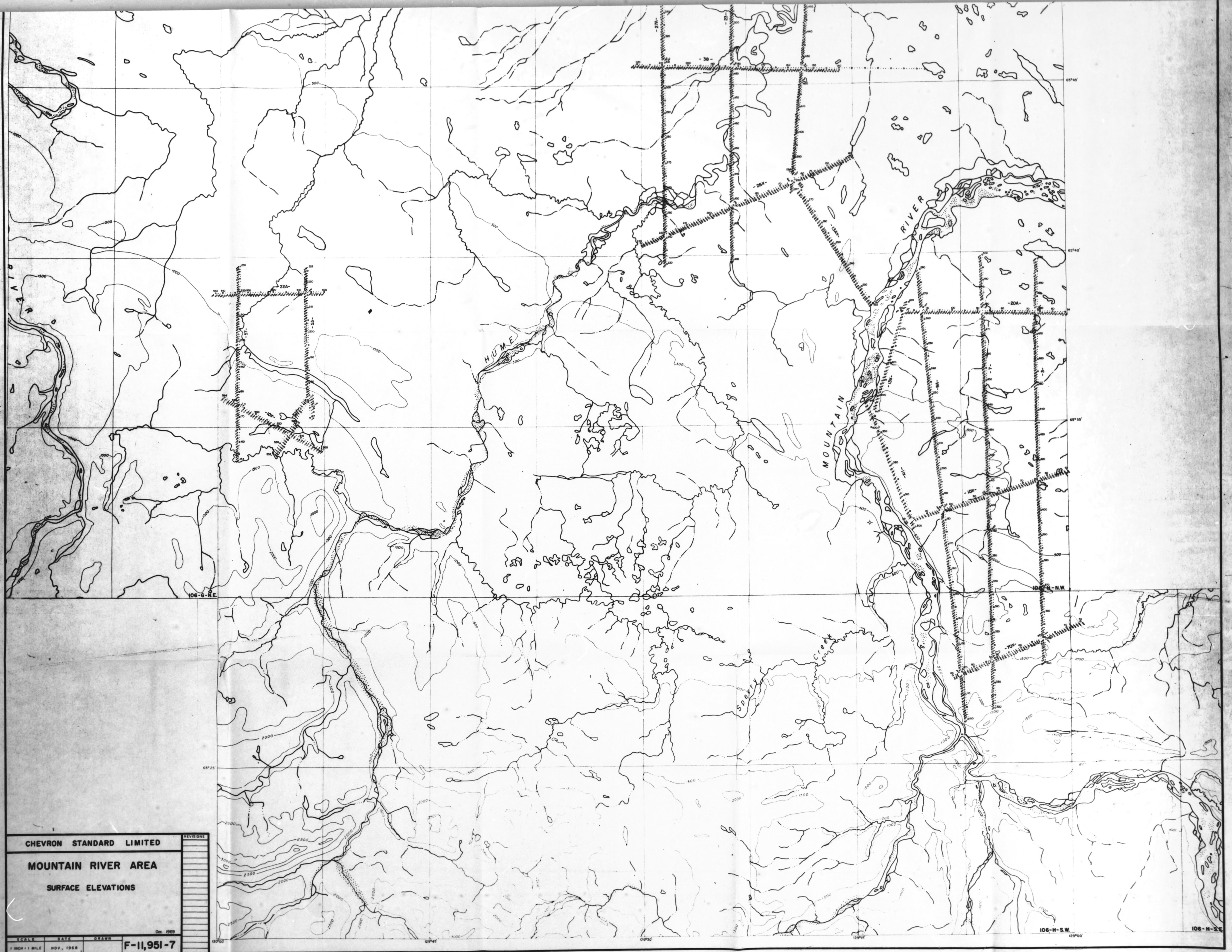














45-6-5-74

**off**

Mountain River - Ft. Good Hope  
Permits: 3291-3293, 5661, 6279, 4959,  
4960

Group 216 Final Report on Geophysical  
Survey Conducted By Chevron Standard  
Limited. January 1969 to April 1969

Approved for  
Release Date 1999  
Date \_\_\_\_\_



Date \_\_\_\_\_

C O N F I D E N T I A L

AREA: Mountain River - Ft. Good Hope  
106 NE & SE  
PERMITS: 3291 - 3293, 5661, 6279, 4959, 4960  
Group 216

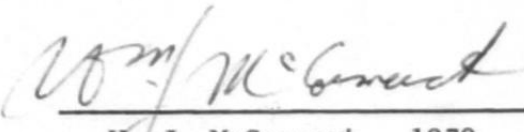


Final Report on Geophysical Survey Conducted By:

CHEVRON STANDARD LIMITED

From January 1969 to April 1969

Maps in attached folder

  
W. J. McCormack - 1970



CONTRACTOR: Ray Geophysical Limited, Party 115

GEOPHYSICAL  
LICENSE NO.: 2504 - 1968, A-2616 - 1969

CAMPS: 65°50'N, 129°17'W

66°02'N, 130°06'W

65°39'N, 129°55'W

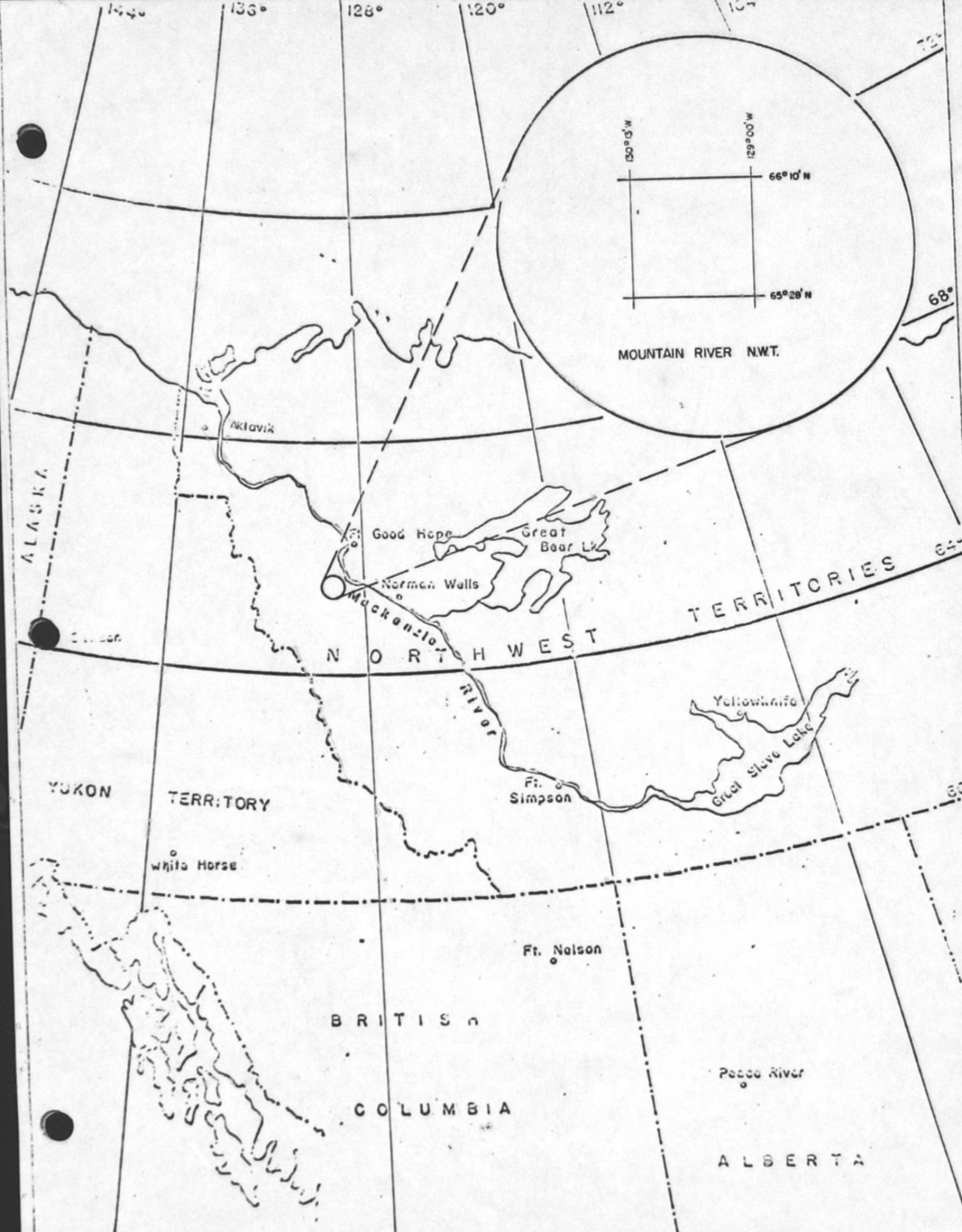
65°36'N, 129°05'W

GOVERNMENT  
PROJECT NO.: 45-6-5-68-11

DATA PROCESSED  
BY: CHEVRON OIL LIMITED

MAPS: 1. Shot-Point Location & Elevation  
2. Time Structure on Nahanni







APPENDIXPERSONNEL LIST

|                 |                   |
|-----------------|-------------------|
| @ B.J. Stephens | Party Chief       |
| J.S. Fife       | Party Chief       |
| * H. Gude       | Field Computer    |
| @ P. Boyle      | Computer          |
| * R. Irving     | Party Manager     |
| * S. Dove       | Observer          |
| * T. Stephan    | Junior Observer   |
| * H. Schimanski | Shooter           |
| * H. Schimanski | Line Truck Driver |
| * J. Shae       | Line Truck Driver |
| * E. Cotchilly  | Recorder's Helper |
| * J. Cotchilly  | Recorder's Helper |
| * J. Grandjambe | Recorder's Helper |
| * G. Touro      | Recorder's Helper |
| G. Barnaby      | Recorder's Helper |
| E. Kakewi       | Recorder's Helper |
| * E. Rosser     | Surveyor          |
| F. Auty         | Surveyor          |
| D. Solonenko    | Surveyor          |
| * D. Wolariski  | Survey Helper     |
| P. Poelman      | Survey Helper     |
| M. Caron        | Mechanic          |
| M. Beaupre      | Mechanic's Helper |

\* Denotes Basic Crew Covered In Contract

@ Denotes Field Office Covered In Contract



## GEOPHYSICAL DATA FOR SEISMIC SURVEY

### LOCATION

|                                                 |                                                                  |
|-------------------------------------------------|------------------------------------------------------------------|
| Area and Province                               | <u>Mountain River, Northwest Territories</u>                     |
| Longitude and Latitude                          | <u>65° 28' N to 66° 10' N</u><br><u>129° 00' W to 130° 13' W</u> |
| Permit Numbers and<br>Government Project Number | <u>#337 (Ray Geophysical)</u><br><u>45-6-5-68-11</u>             |

### TYPE OF SURVEY

|                   |                   |
|-------------------|-------------------|
| Analog or Digital | <u>DIGITAL</u>    |
| Type of Source    | <u>2½" GEOGEL</u> |

### FIELD RECORDING EQUIPMENT

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Seismometer Model                    | <u>EVS-2</u>                     |
| Seismometer Frequency                | <u>14 CPS</u>                    |
| Seismometer Damping                  | <u>N/A</u>                       |
| Seismometer Base                     | <u>FLAT</u>                      |
| Amplifier Model                      | <u></u>                          |
| Camera Model                         | <u>SDW 1001 ELECTROTECH</u>      |
| Type of Magnetic Tape                | <u>1" FOR TI 10,000 21 TRACK</u> |
| Digital System Model and<br>Number   | <u>TI 10,000</u>                 |
| Land Survey Instrument and<br>Method | <u>WILD TIA</u>                  |
| Cables                               | <u>52 CONDUCTOR TESCO</u>        |

### FIELD PROCEDURE AND OPERATIONS

|                                               |             |
|-----------------------------------------------|-------------|
| <u>Refraction</u><br>Inline or Broadside      | <u></u>     |
| <u>Reflection</u><br>% of Subsurface Coverage | <u>400%</u> |



Spread Configuration

|                           |         |
|---------------------------|---------|
| Number Groups Recorded    | 24      |
| Group Interval            | 150 FT. |
| Number Seismometers/Group | 9       |
| Seismometer Interval      | 15      |
| Array Pattern             | IN LINE |

Source Configuration

|                            |            |
|----------------------------|------------|
| Number of Holes and Depth  | SINGLE 45' |
| Spacing                    |            |
| Pattern                    |            |
| Inline or Offset to Spread |            |
| Charge Size and Type       | 5# GEOGEL  |

Transportation

|                     |                                           |
|---------------------|-------------------------------------------|
| Type of Vehicles    | TRUCKS (WHEELS)<br>CATS (TRACKS)<br>BARGE |
| Fixed Wing Aircraft | BEAVER, DC-3                              |
| Helicopter Support  |                                           |

Terrain Conditions

|                             |                                 |
|-----------------------------|---------------------------------|
| General Terrain Description | QUITE ROUGH IN<br>S.E. AND S.W. |
|-----------------------------|---------------------------------|

RECORDING FACTORS

Monitor Record

|        |       |        |
|--------|-------|--------|
| Filter | 21/12 | 120/24 |
| AVC    |       |        |
| Gain   |       |        |

Magnetic Tape

|        |          |
|--------|----------|
| Filter | AS ABOVE |
| AVC    |          |
| Gain   |          |



Field Playbacks

Filter

N/A

AVC

N/A

Gain

N/A

Mixing

N/A

PERSONNEL

Field

46

Office

4

Titleholders

CHEVRON STANDARD LIMITED

Individual Responsibility

E. W. JONES

Contractors

RAY GEOPHYSICAL LTD. PARTY #115

DRILLING  
(WHEELS)

SANDO 1 TOP DRIVE (GARDNER-DENVER)  
2 CONVENTIONAL (1 FAILING)  
(1 MAYHEW)

(1 NORTHERN HYDRAULIC AUGER)  
KENASTON (1 CONVENTIONAL FAILING)

DOZING

McMILLAN #126 D6  
#133 D6  
#139 D6  
#138 D6

WATER TRUCKS ETC.  
(WHEELS)

( WORTHING TRANSPORT  
(  
( KENASTON SUPPLY

OFFICE TECHNIQUES

Datum Computation

Weathering Sections

YES



Record Sections

YES

Type of Display

VA/WT 400% CDP

Maps

- i) SHOT POINT LOCATION AND ELEVATIONS
- ii) TIME STRUCTURE ON NAHANNI

#### STATISTICS SUMMARY

Number of Working Days

66 RECORDING DAYS

Number of Profiles

Reflection

2803

Refraction

Total Production

Miles of Surface Coverage

250.78

Miles of Subsurface Coverage

Number of Shot Holes Drilled

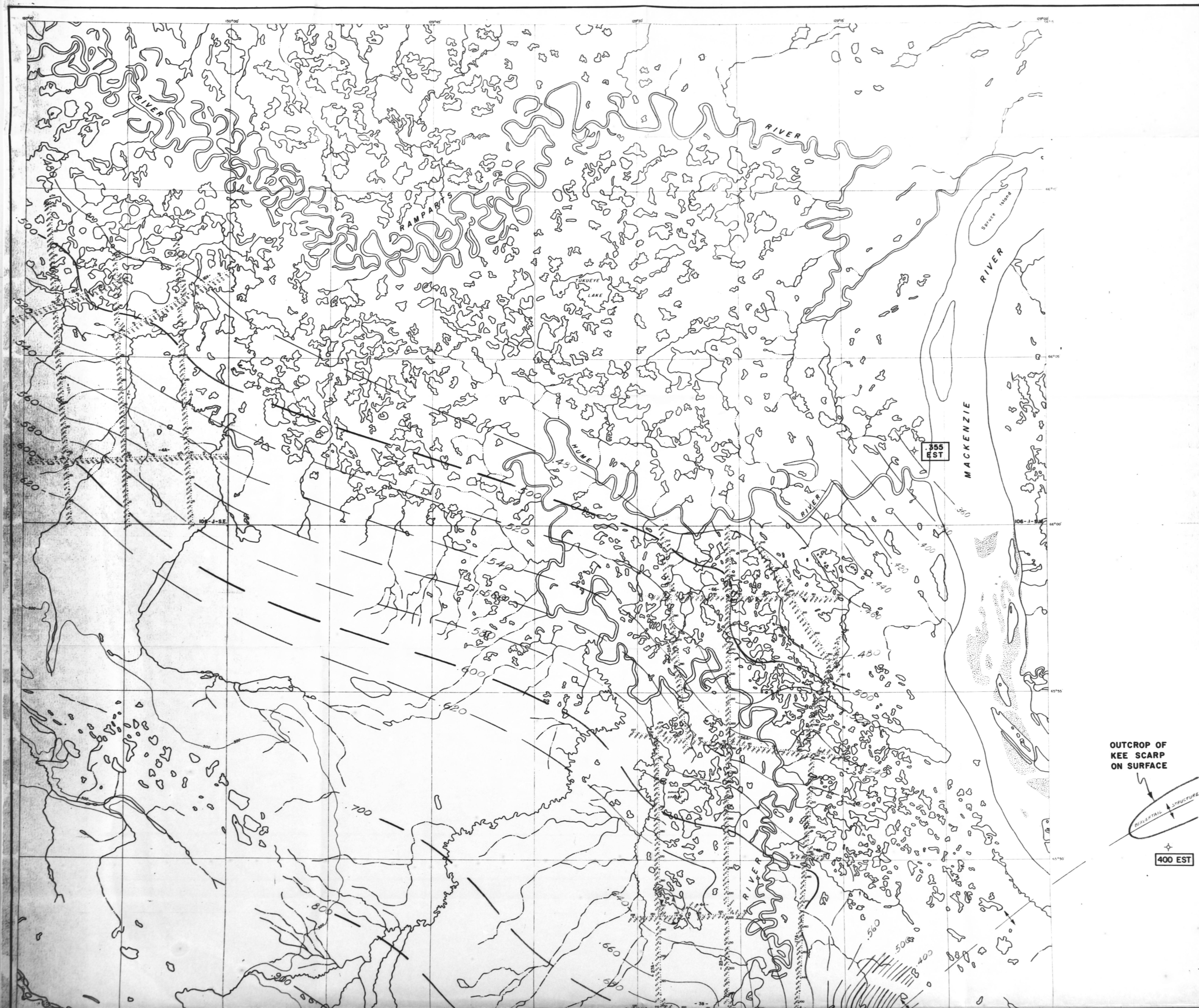
3157

Total Footage Drilled

137959

#### TRANSMITTAL OF RECORDED DATA



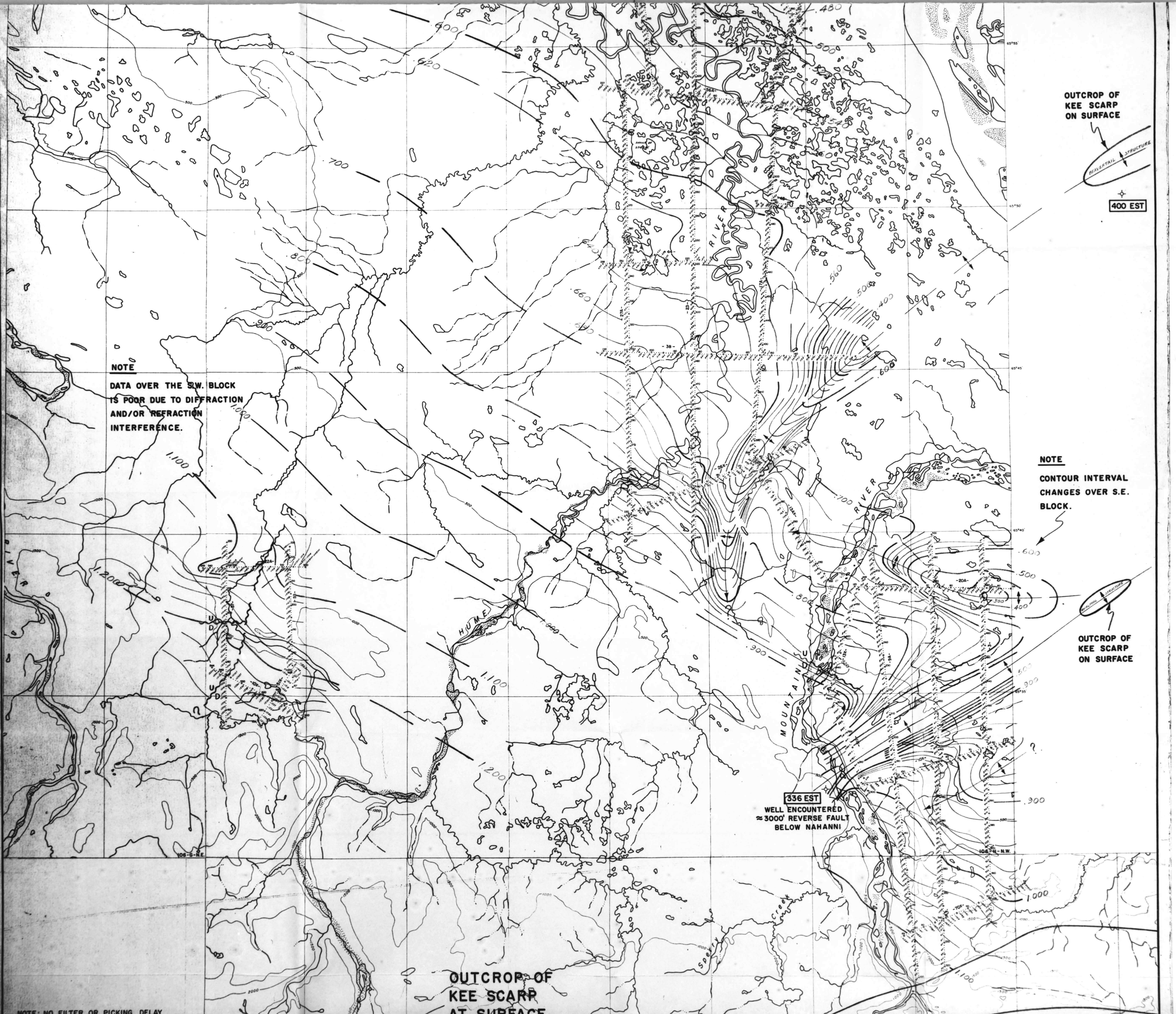


OUTCROP OF  
KEE SCARP  
ON SURFACE

REAL TAIL STRUCTURE

400 EST





**NOTE**

DATA OVER THE S.W. BLOCK  
IS POOR DUE TO DIFFRACTION  
AND/OR REFRACTION  
INTERFERENCE.

**NOTE**

CONTOUR INTERVAL  
CHANGES OVER S.E.  
BLOCK.

OUTCROP OF  
KEE SCARP  
ON SURFACE

336 EST  
WELL ENCOUNTERED  
≈ 3000' REVERSE FAULT  
BELOW NAHANNI

OUTCROP OF  
KEE SCARP  
AT SURFACE



NOTE  
DATA OVER THE S.W. BLOCK  
IS POOR DUE TO DIFFRACTION  
AND/OR REFRACTION  
INTERFERENCE.

NOTE  
CONTOUR INTERVAL  
CHANGES OVER S.E.  
BLOCK.

OUTCROP OF  
KEE SCARP  
ON SURFACE

336 EST  
WELL ENCOUNTERED  
≈ 3000' REVERSE FAULT  
BELOW NAHANNI

OUTCROP OF  
KEE SCARP  
AT SURFACE

NOTE: NO FILTER OR PICKING DELAY  
HAS BEEN APPLIED TO ESTIMATED  
WELL VALUES

CHEVRON STANDARD LIMITED

MOUNTAIN RIVER AREA

TIME STRUCTURE  
ON  
NAHANNI

ER + 500  
VR + 11,000/5  
CI 020

H.S. VORE

AUG 1969

F-11,951-2