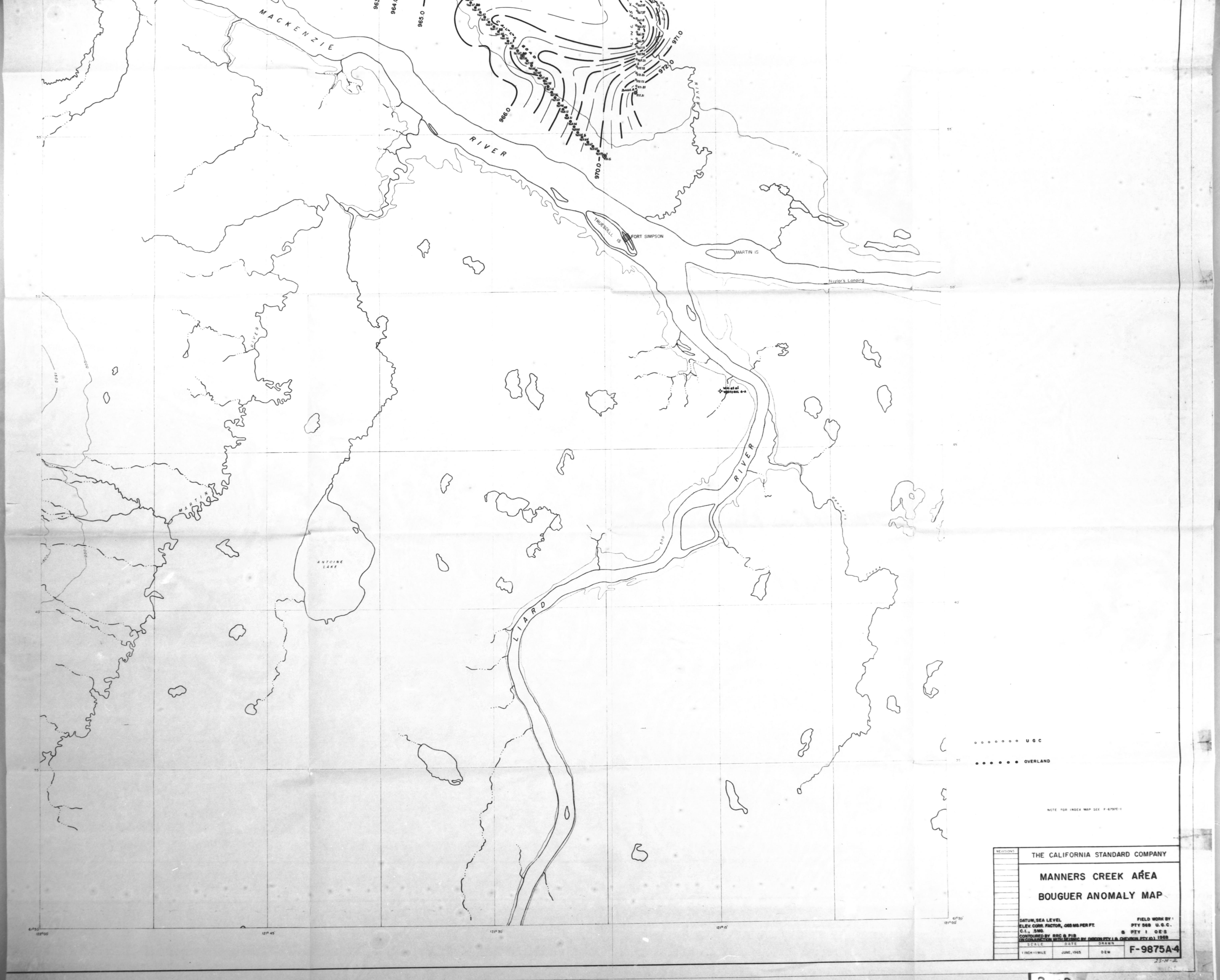

MACKENZIE
RIVER
FORT SIMPSON
MARTIN IS.
Naylor's Landing
LIARD
RIVER
ANTOINE LAKE
963.0
964.0
965.0
966.0
970.0
971.0
972.0
UGC
OVERLAND
1 OF 2
NOTE FOR INDEX MAP SEE F-6797E-1
REVISIONS
THE CALIFORNIA STANDARD COMPANY


MACKENZIE
RIVER
965.0
966.0
970.0
971.0
972.0
TRUESDELL IS
FORT SIMPSON
MARTIN IS
Taylor's Landing
RIVER
MARTIN
ANTOINE LAKE
LIARD
RIVER
USC
OVERLAND
NOTE FOR INDEX MAP SEE F-6797E-1
REVISIONS
THE CALIFORNIA STANDARD COMPANY
MANNERS CREEK AREA
BOUGUER ANOMALY MAP
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, .065 MG PER FT.
C.I., .5MG.
CONTOURED BY RRC & PIB
(IN CONJUNCTION WITH SEISMIC BY DIGICON PTY I & CHEVRON PTY 10) 1968
FIELD WORK BY:
PTY 568 U.G.C.
& PTY I OES
SCALE
1 INCH = 1 MILE
DATE
JUNE, 1965
DRAWN
DEW
F-9875A-4
23-H-2

2 of 2

CONFIDENTIAL

Area: Harris River - Mustard Lake, N.W.T.

Government Project: 45-8-4-67-2

Group: 203

Final Report on Gravity Survey Conducted By:

Chevron Standard Limited

January - April 1968

Maps in attached folder

Author: R. Clawson

W. J. McCormack

W. J. McCormack - 1970
District Geophysicist

Contractors: United Geophysical Limited
Overland Exploration Service

Government Project: 45-8-4-67-2

Group: 203

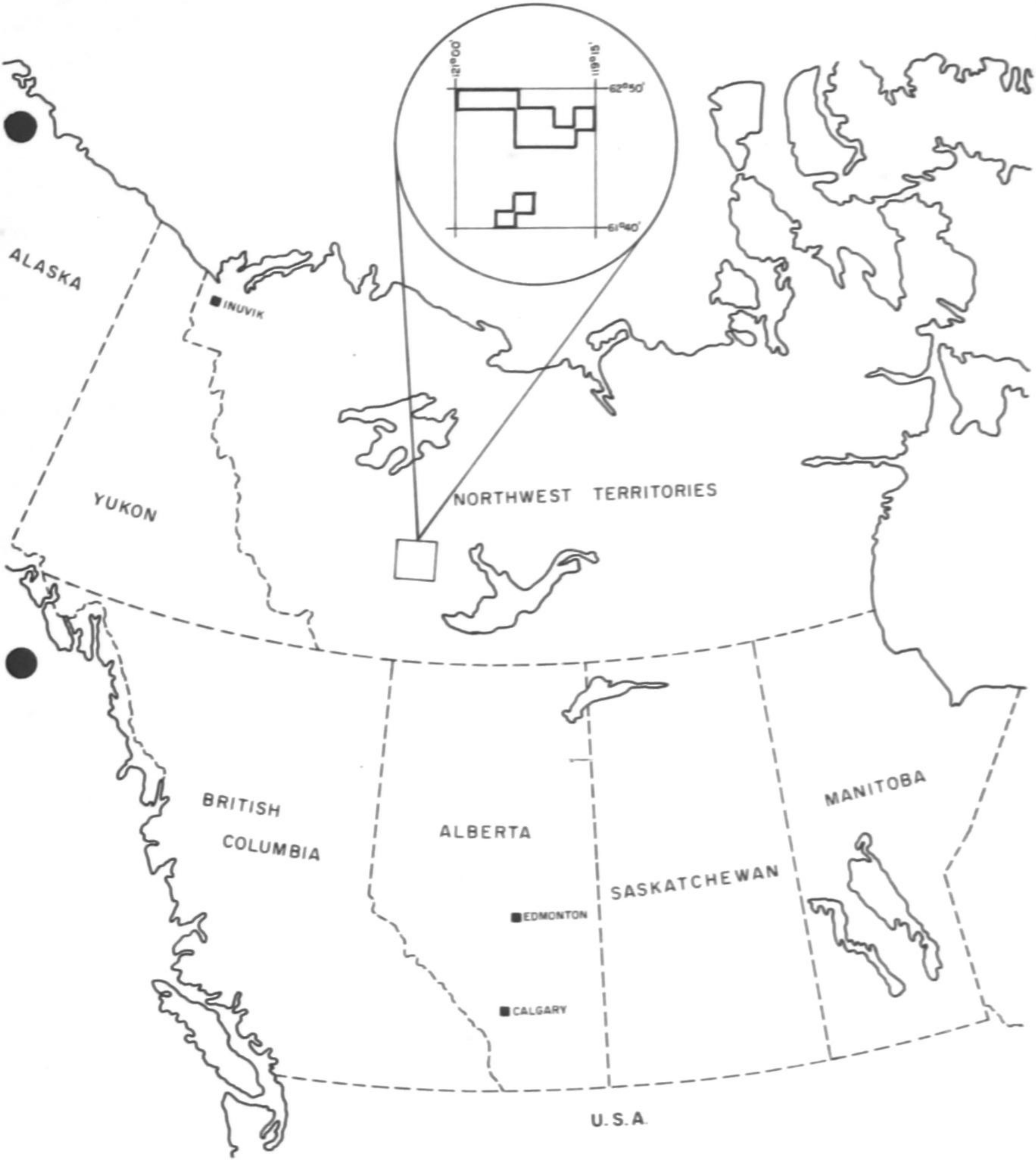
Area: Harris River - Mustard Lake, N.W.T.

Maps:

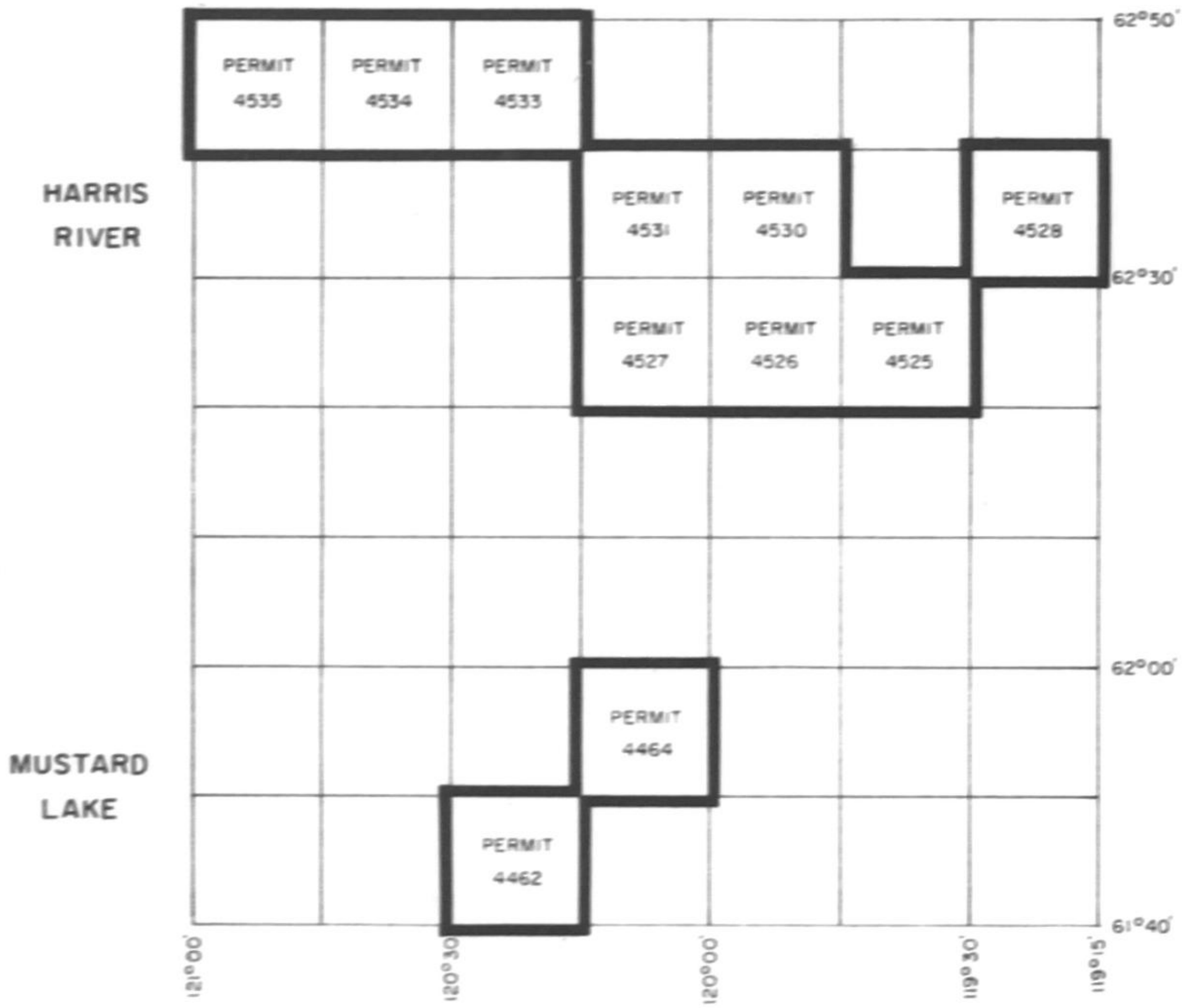
Harris River	-	Bouguer Anomaly
Mustard Lake	-	Bouguer Anomaly
Willow Lake	-	Bouguer Anomaly
Bulmer Lake	-	Bouguer Anomaly
Pine Creek	-	Bouguer Anomaly
Horn Plateau	-	Bouguer Anomaly
Green Island	-	Bouguer Anomaly
Manners Creek	-	Bouguer Anomaly

Surface elevation maps with seismic report in same area.

Government Report 45-6-4-67-1



WESTERN CANADA



PERMIT 4535
PERMIT 4534
PERMIT 4533
HARRIS RIVER
PERMIT 4531
PERMIT 4530
PERMIT 4528
PERMIT 4527
PERMIT 4526
PERMIT 4525
MUSTARD LAKE
PERMIT 4464
PERMIT 4462
62°50'
62°30'
62°00'
61°40'
121°00'
120°30'
120°00'
119°30'
119°15'

GEOPHYSICAL DATA

DATA REQUIRED FOR A GRAVITY SURVEY

OWNER OF DATA - Name Chevron Standard Limited

Address 400 Fifth Avenue S.W., Calgary 1, Alberta

LOCATION OF SURVEY (approx. boundary) Long. 120° to 121° Lat. 61° 30' to 62° 30'

TYPE OF SURVEY - Traverse lines X Direction Various
of Systematic areal coverage

AVERAGE STATION SPACING 1/4 Mile

NUMBER OF OBSERVATIONS IN SURVEY 879

YEAR OF OBSERVATION 1968 OBSERVER'S NAME United Geophysical and Overland Exploration Services

FORM OF DATA

1. ORIGINAL TRAVERSE DATA

Gravimeters used:

Type	Serial Number	Calibration constant (mgal/div)
Lacoste-Romberg	G-52	.104505
Worden	149	.104915

Method of calibration Factory Tested

Estimated accuracy of reading in divisions Lacoste 0.1 Div.
Worden 0.1 Div.

2. VALUES OF OBSERVED GRAVITY

Units in which observed gravity value is given Miligals
Average time interval drift checks 120 Min., Max

3. VALUES OF BOUGUER ANOMALY

Formula used for calculation of theoretical gravity (International Formula, or, if other, specify)
International, plus 1 gal.

Elevation datum used in calculation of Bouguer anomaly Sea Level

Density used in making elevation corrections (gm/cc) 2.3
Terrain corrections made? Yes

ELEVATIONS

Unit (feet or meters) Feet

Elevations determined by (Tick one):

- Spirit Level ______
- Stadia X
- APR ______
- Other (specify) ______

Elevations referred to benchmark (Specify whether Dominion, Provincial, or other) Dominion

Estimated accuracy of elevations relative to datum ± 0.5 ft. per mile

POSITION COORDINATES

1. SCALED FROM MAPS of scale (Tick one):

   1" = 1 Mile

   - 1:25,000 or less ______
   - 1:50,000 ______
   - 1:125,000 ______
   - 1:250,000 ______
   - 1:500,000 ______

2. SURVEYED

   Method of Survey (e.g., plane table, triangulation, or other) Stadia Board plus Transit

   Units of Distance Feet

   Position of origin of survey Ft. Simpson

3. COMPUTED FROM DECCA COORDINATES (Yes or No.) No

4. REFERENCED TO U.T.M. GRID SYSTEM (Yes or No) No

5. REFERENCED TO WESTERN D.L.S. SYSTEM (Yes or No) No

   Estimated accuracy of coordinates ± 20 ft. per mile

GRAVITY CONTROL

1. TIED TO DOMINION OBSERVATORY STATION(S)

Number	Location
9044-67	Ft. Simpson

2. TIED TO LOCAL SYSTEM

   Give location and gravity value of main reference station(s)

   Lat. 61° 51.8' Long. 121° 21.5'

   982.01185 Gals

APPENDIX 7A

GEOPHYSICAL DATA

DATA REQUIRED FOR A GRAVITY SURVEY

OWNER OF DATA - Name Chevron Standard Limited

Address 400 Fifth Avenue S.W., Calgary 1, Alberta

LOCATION OF SURVEY (approx. boundary) Long. 120° to 121° Lat. 62° 30' to 63°

TYPE OF SURVEY - Traverse lines X Direction Various
of Systematic areal coverage

AVERAGE STATION SPACING 1/4 mile

NUMBER OF OBSERVATIONS IN SURVEY 828

YEAR OF OBSERVATION 1968 OBSERVER'S NAME United Geophysical and Overland Exploration Service

FORM OF DATA

1. ORIGINAL TRAVERSE DATA

Gravimeters used:

Type	Serial Number	Calibration constant (mgal/div)
Lacoste-Romberg	G-52	.104505
Worden	149	.104915

Method of calibration Factory Tested

Estimated accuracy of reading in divisions Lacoste 0.1

2. VALUES OF OBSERVED GRAVITY

Units in which observed gravity value is given Milligals
Average time interval drift checks 120 Min., Max.

3. VALUES OF BOUGUER ANOMALY

Formula used for calculation of theoretical gravity (International Formula, or, if other, specify)

International, plus 1 gal.

Elevation datum used in calculation of Bouguer anomaly Sea Level

Density used in making elevation corrections (gm/cc) 2.3
Terrain corrections made? Yes

ELEVATIONS

Unit (feet or meters) Feet

Elevations determined by (Tick one):

Spirit Level	
Stadia	X
APR	
Other (specify)	

Elevations referred to benchmark (Specify whether Dominion, Provincial, or other) Dominion

Estimated accuracy of elevations relative to datum ± 0.5 ft. per mile

POSITION COORDINATES

1. SCALED FROM MAPS of scale (Tick one):

1" = 1 mile

1:25,000 or less	
1:50,000	
1:125,000	X
1:250,000	
1:500,000	

2. SURVEYED

   Method of Survey (e.g., plane table, triangulation, or other) Stadia & Transit

   Units of Distance Feet

   Position of origin of survey Fort Simpson

3. COMPUTED FROM DECCA COORDINATES (Yes or No.) No

4. REFERENCED TO U.T.M. GRID SYSTEM (Yes or No) No

5. REFERENCED TO WESTERN D.L.S. SYSTEM (Yes or No) No

   Estimated accuracy of coordinates ± 20' per mile

GRAVITY CONTROL

1. TIED TO DOMINION OBSERVATORY STATION(S)

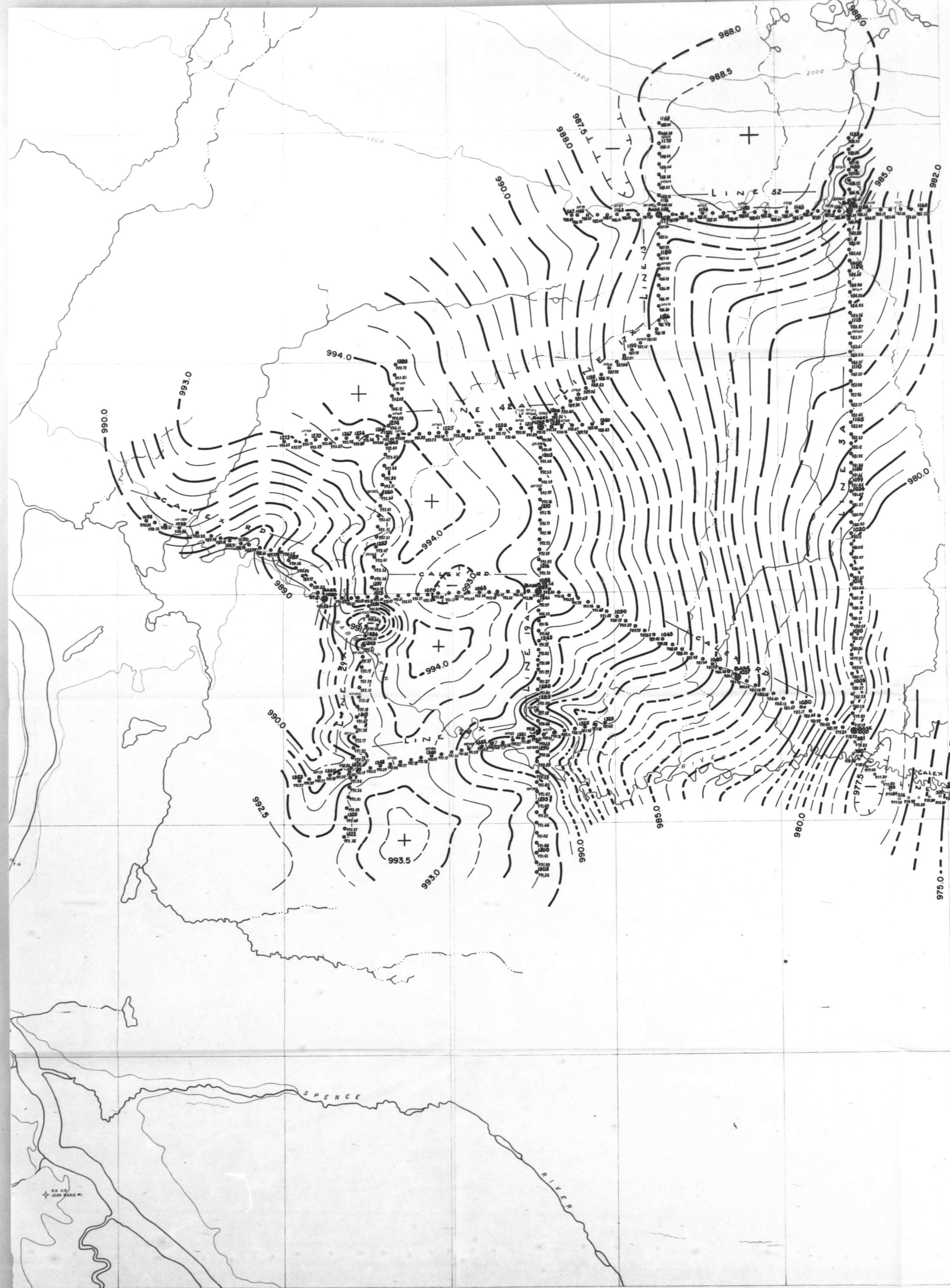
Number	Location
9044-67	Ft. Simpson

2. TIED TO LOCAL SYSTEM

   Give location and gravity value of main reference station(s)

   Lat. 61° 51.8' Long. 121° 21.5'

   982.01185 Gals



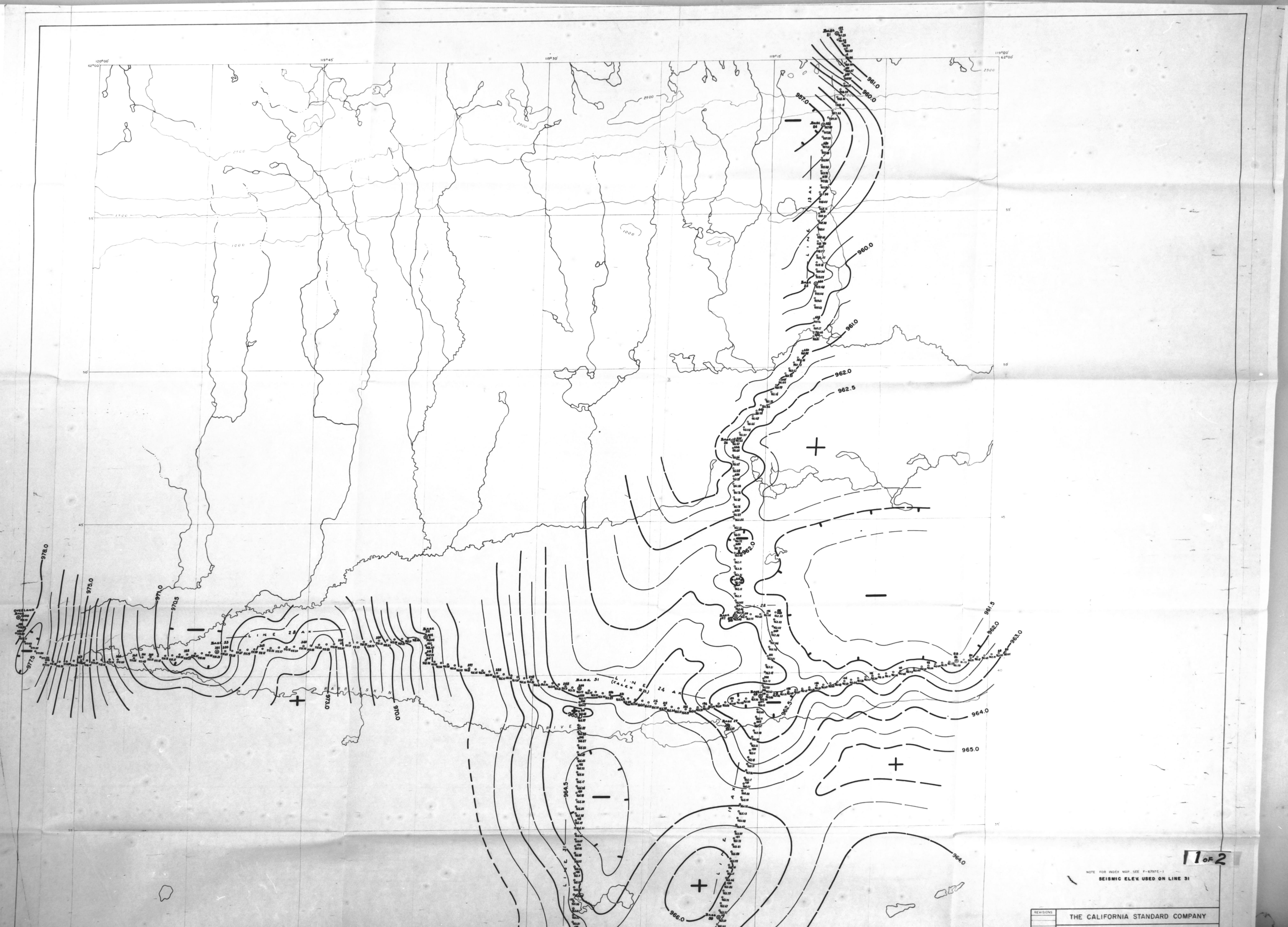
UNITED GEOPHYSICAL CO 1968

OVERLAND EXPL. SERV. LTD. 1968
(IN CONJUNCTION WITH SEISMIC BY CHEVRON PTY. IO)

NOTE FOR INDEX MAP SEE F-6797E-I

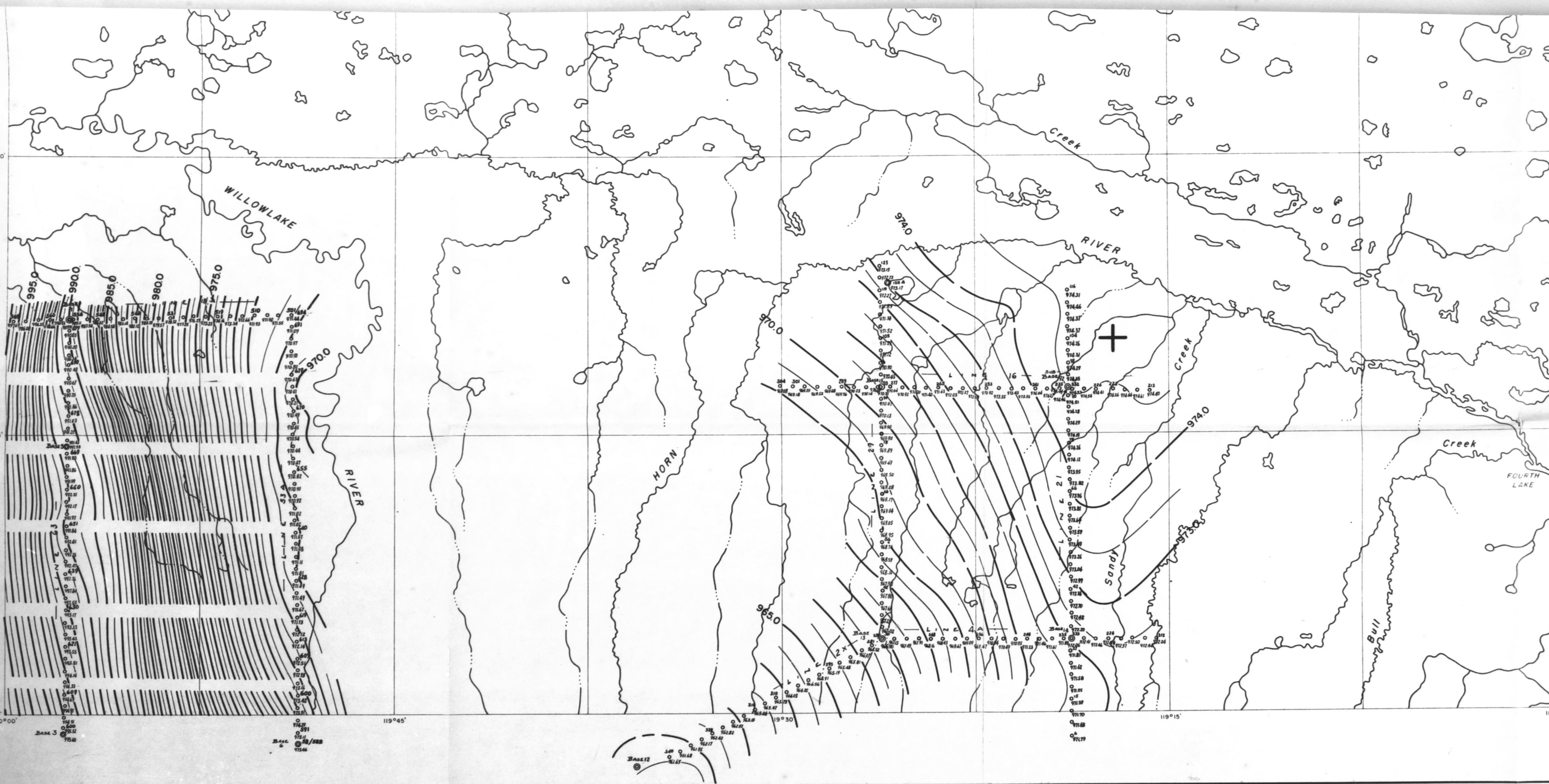
REVISIONS	THE CALIFORNIA STANDARD COMPANY			
WELLS DEC 67	95-H-N.E. GREEN ISLAND AREA BOUGUER ANOMALY MAP DATUM, SEA LEVEL ELEV. CORR. FACTOR, .065 MG. PER FT. C.I., .5 MG CONTOUR BY P.I.B.			
	SCALE	DATE	DRAWN	F-9876A-5
	1 INCH 1 MILE	JUNE, 1965	DEW	

23-D-2


961.0
960.0
957.0
962.0
962.5
978.0
975.0
971.0
970.5
977.5
973.0
970.0
961.5
963.0
964.0
965.0
964.5
966.0
1 OF 2
NOTE FOR INDEX MAP SEE F-6797E-1
SEISMIC ELEV. USED ON LINE 31
REVISIONS
THE CALIFORNIA STANDARD COMPANY

NOTE FOR INDEX MAP SEE F-6797E-1
SEISMIC ELEV. USED ON LINE 31
THE CALIFORNIA STANDARD COMPANY
HORN PLATEAU AREA
BOUGUER ANOMALY MAP
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, .065MG. PER FT.
C.I. .5MG.
CONTOUR BY P.I.B.
FIELD CREW, PTY568 UGC
(IN CONJUNCTION WITH SEISMIC BY PTY 201 DIGICON) 1968
SCALE
1 INCH = 1 MILE
DATE
JUNE, 1965
DRAWN
DEW
F-9877A-6
23-F-2
LINE 24 AX
LINE 13 AX
LINE 31
978.0
975.0
971.0
970.5
973.0
970.0
967.0
966.0
965.0
964.5
964.0
963.0
962.5
962.0
961.5
961.0
960.0
957.0

2 of 2



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

REVISIONS	
WELLS DEC 67	

CHEVRON STANDARD LIMITED

85 - L - N.W.

PINE CREEK AREA

BOUGUER ANOMALY MAP

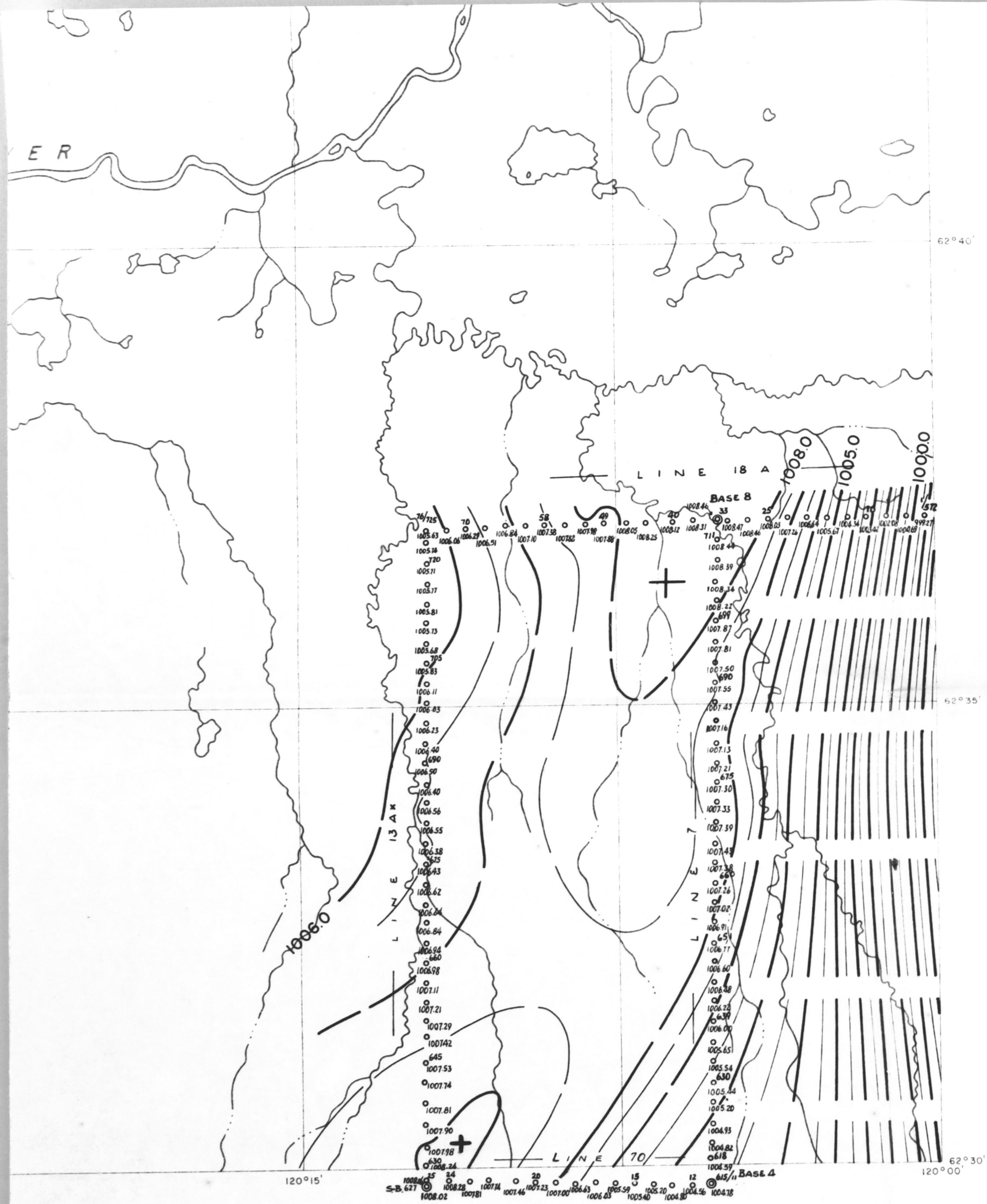
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, .065 MG PER FT.
CONTOUR INTERVAL, .5 MG

FIELD WORK BY PTY 568 U.G.C.
IN CONJUNCTION WITH
SEISMIC BY PTY 201 DIGICON
1968

CONTOURED BY RRC & PIB

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	NOV., 1967	R. L. S.	F-11,636-5

23-I-2



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

REVISIONS
WELLS DEC. 67

CHEVRON STANDARD LIMITED

95 · I · N.E.

BULMER LAKE AREA

BOUGUER ANOMALY MAP

DATUM, SEA LEVEL
ELEV. FACTOR, .065 MG. PER FT.
C. I., .5 MG.
CONTOURED BY RRC & PIB

FIELD CREW, PTY 568 U. G. C. 1968
(IN CONJUNCTION WITH SEISMIC BY PARTY 201 DIGICON)

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	NOV, 1967	R. L. S.	F-11,635-5

12-A-1
23-A-3

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

REFER TO F-9881A-9 FOR ADDITIONAL DATA

REVISIONS	CHEVRON STANDARD LIMITED

WILLOW LAKE AREA

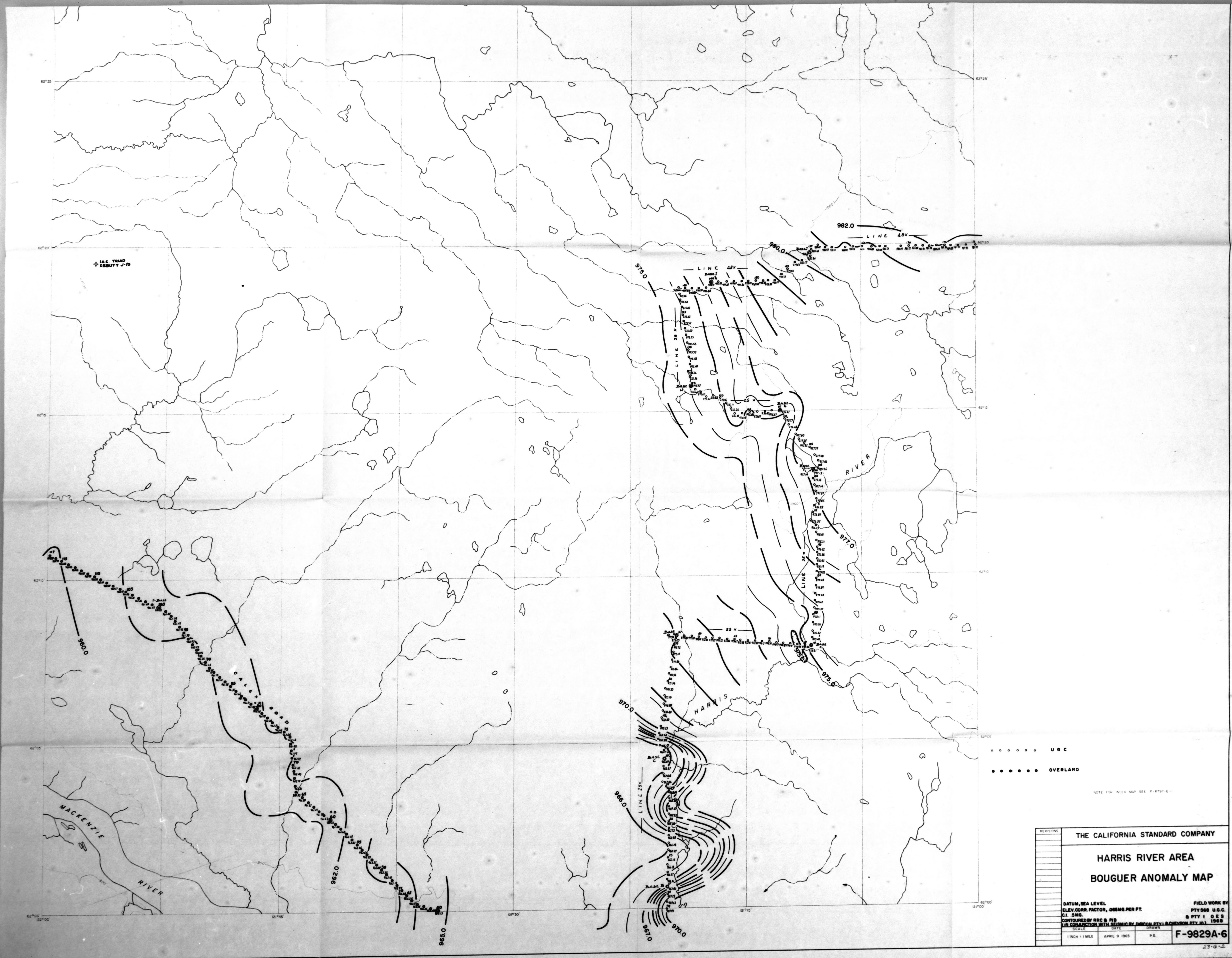
BOUGUER ANOMALY MAP

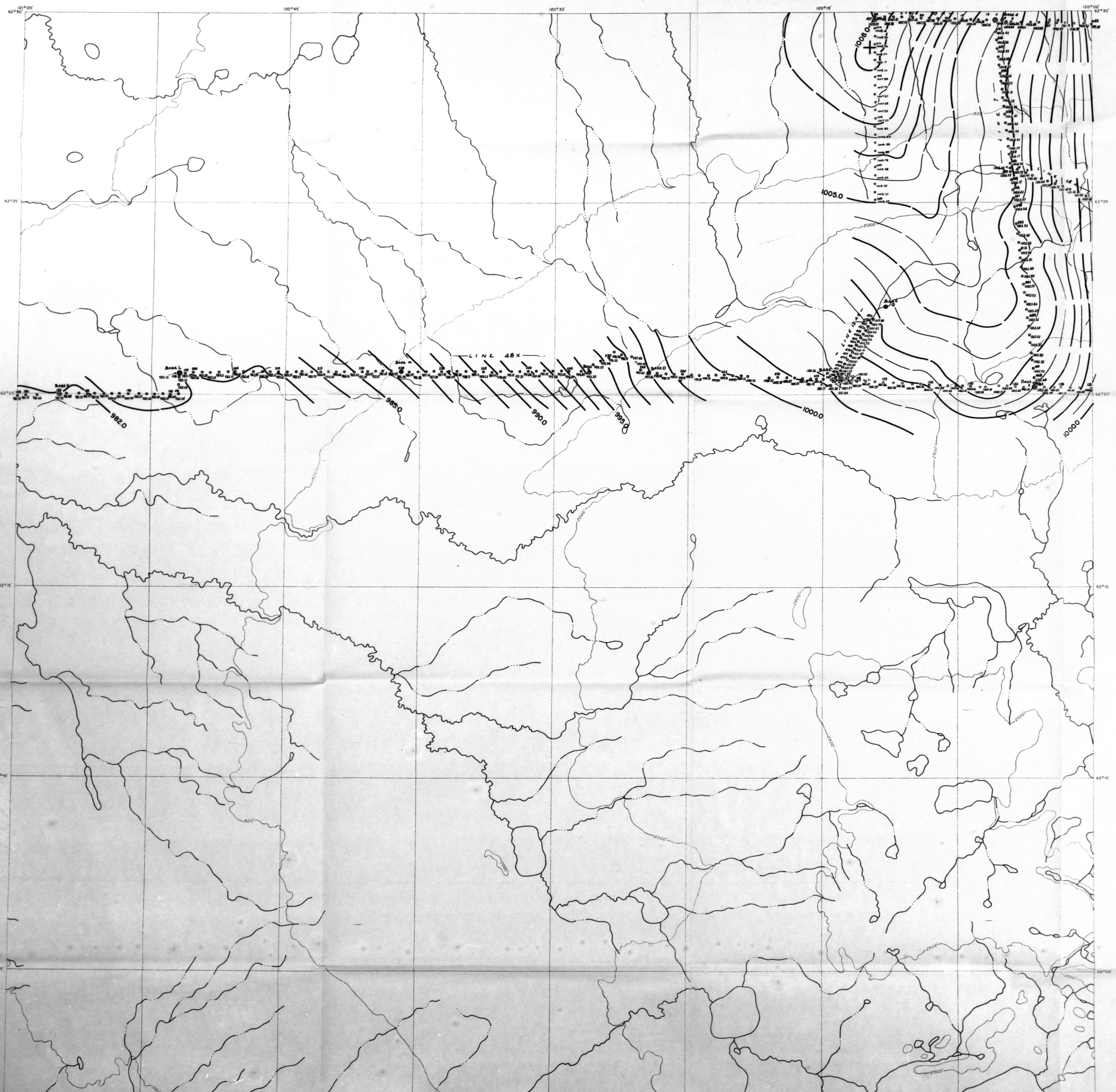
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, .065MG. PER FT.
C.I., .5MG.
CONTOURED BY RRC& PIB

1968 FIELD CREW BY U.G.C., PTY568 (IN CONJUNCTION WITH SEISMIC BY PTY 201 DIGICON)

SCALE	DATE	DRAWN	
1 INCH = 1 MILE	JUNE, 1965	R. L. S.	F-9881A-6

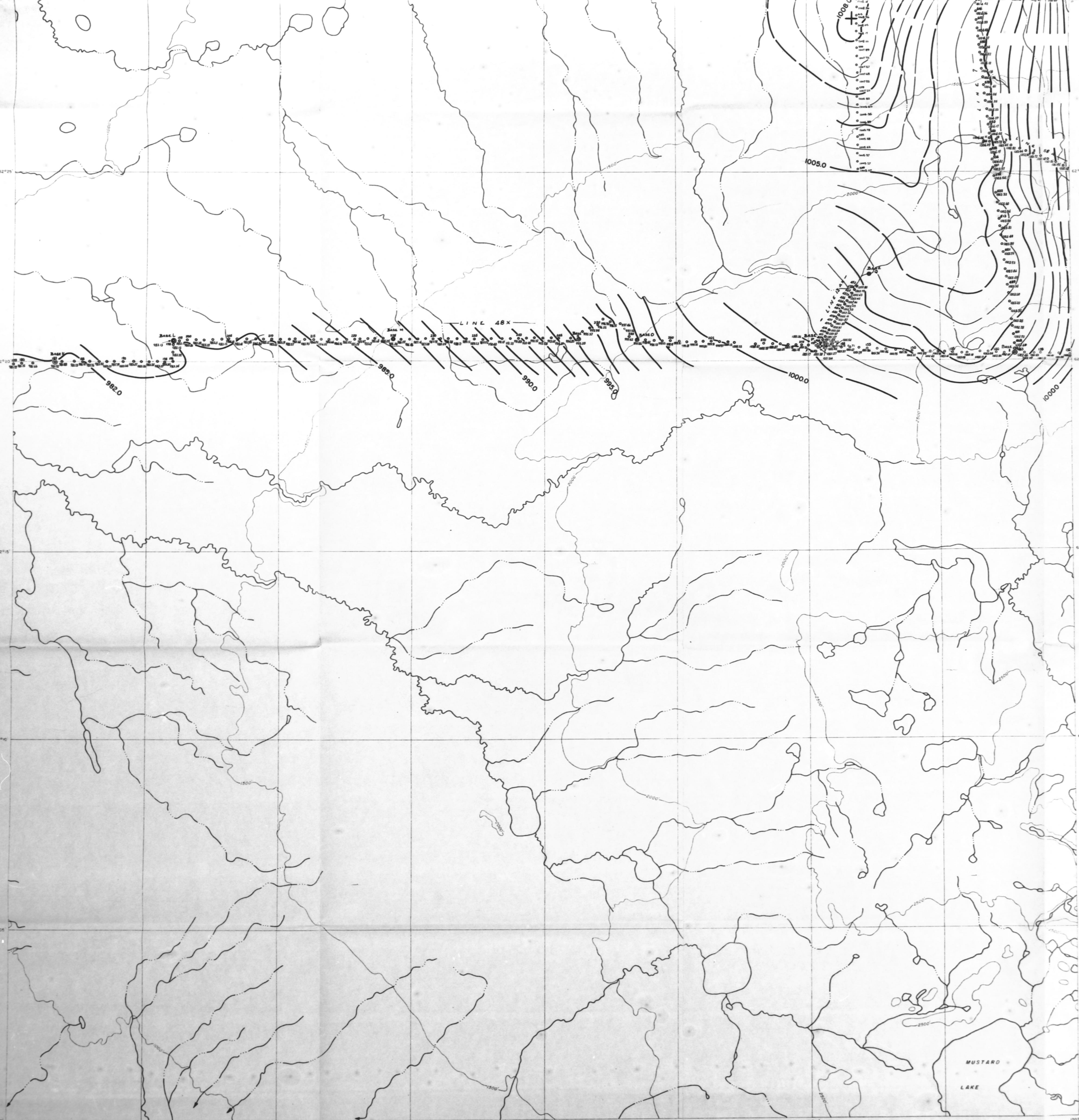
23-B-3


982.0
980.0
975.0
977.0
970.0
965.0
967.0
960.0
962.0
LINE 48 K
LINE 25 K
25 K
HARRIS
RIVER
MACKENZIE
RIVER
U.G.C.
OVERLAND
NOTE FOR INDEX MAP SEE F-6797-E-1
REVISIONS
THE CALIFORNIA STANDARD COMPANY
HARRIS RIVER AREA
BOUGUER ANOMALY MAP
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, .065MG. PER FT.
C.I. .5MG.
CONTOURED BY RRC & PIB
(IN CONJUNCTION WITH SEISMIC BY DIGICON PTY I & CHEVRON PTY 10)
FIELD WORK BY
PTY 568 U.G.C.
& PTY I OES
1968
SCALE
1 INCH = 1 MILE
DATE
APRIL 9 1965
DRAWN
P.G.
F-9829A-6
23-G-2



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

REVISIONS	CHEVRON STANDARD LIMITED
WELLS DEC 67	

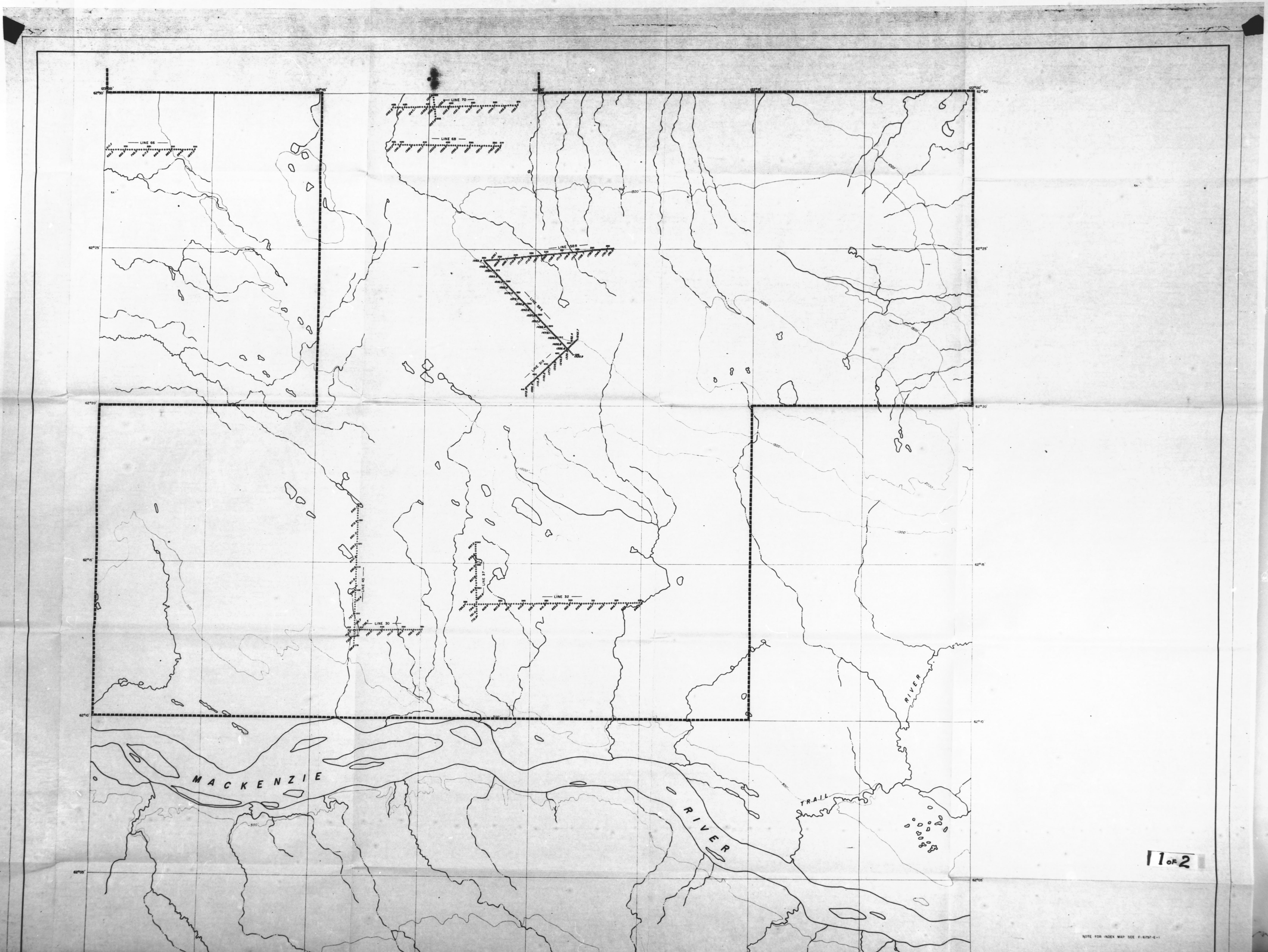


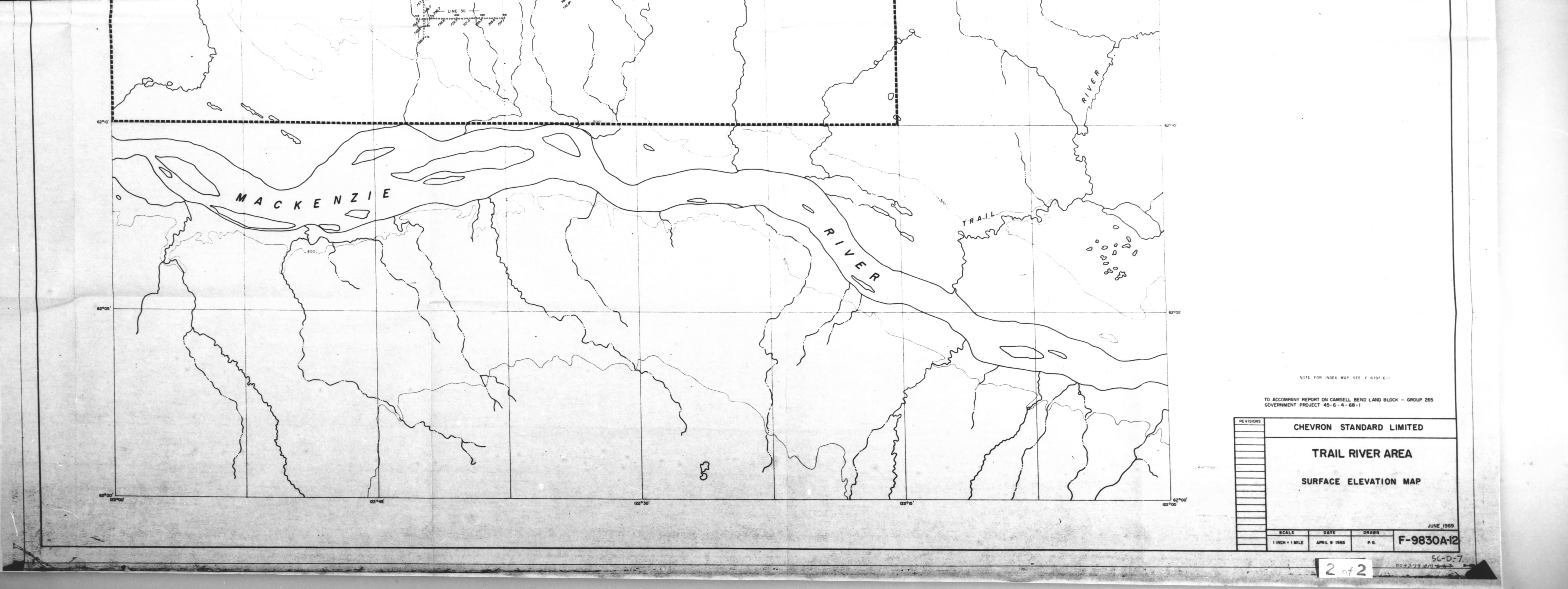
NOTE FOR INDEX MAP SEE F-6797-E-1

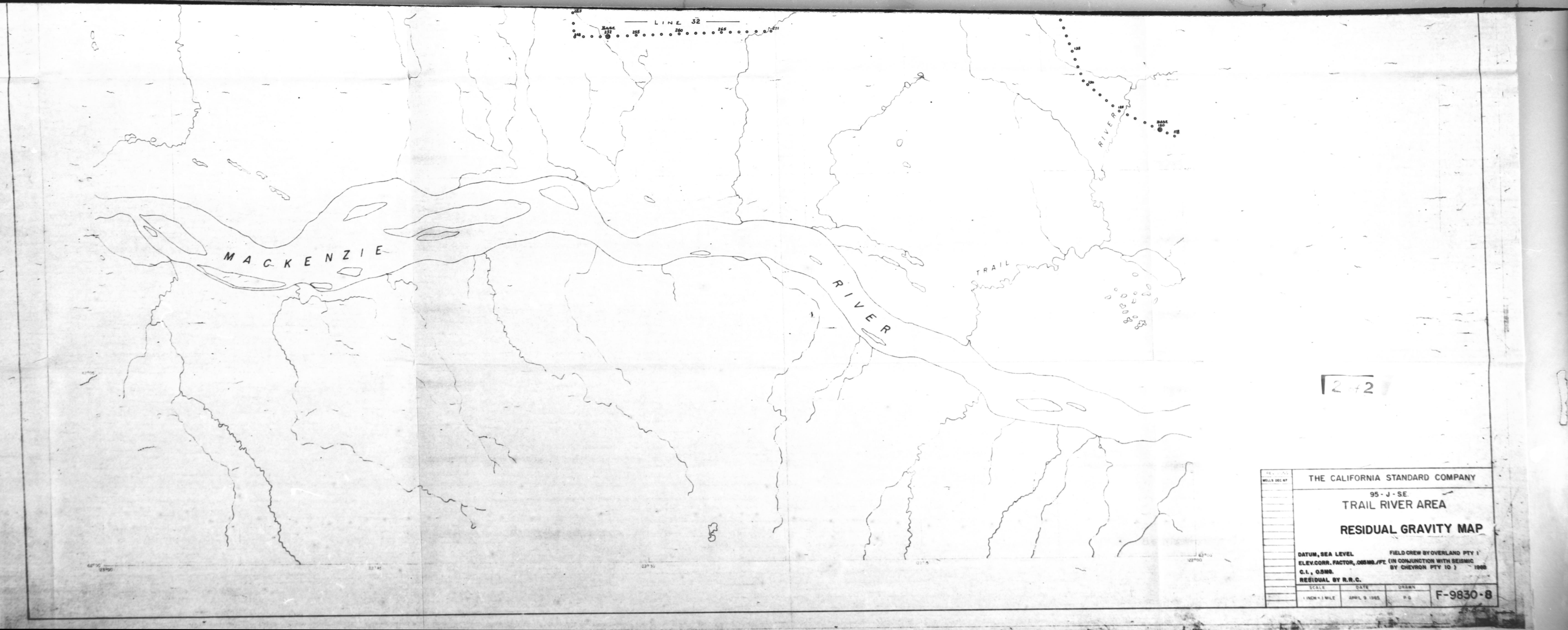
REVISIONS	CHEVRON STANDARD LIMITED			
WELLS DEC 67	95-I-SE **MUSTARD LAKE AREA** **BOUGUER ANOMALY MAP**			
	DATUM, SEA LEVEL ELEV. CORR. FACTOR, .065 MG. PER FT. C.I., .5 MG. CONTOURED BY RRC&PIB		FIELD WORK BY PTY 568 U.G.C. 1960 (IN CONNECTION WITH SEISMIC BY DIGICON PTY 10)	
	SCALE	DATE	DRAWN	F-9880A 6
	1 INCH = 1 MILE	JUNE, 1965	R.L.S.	

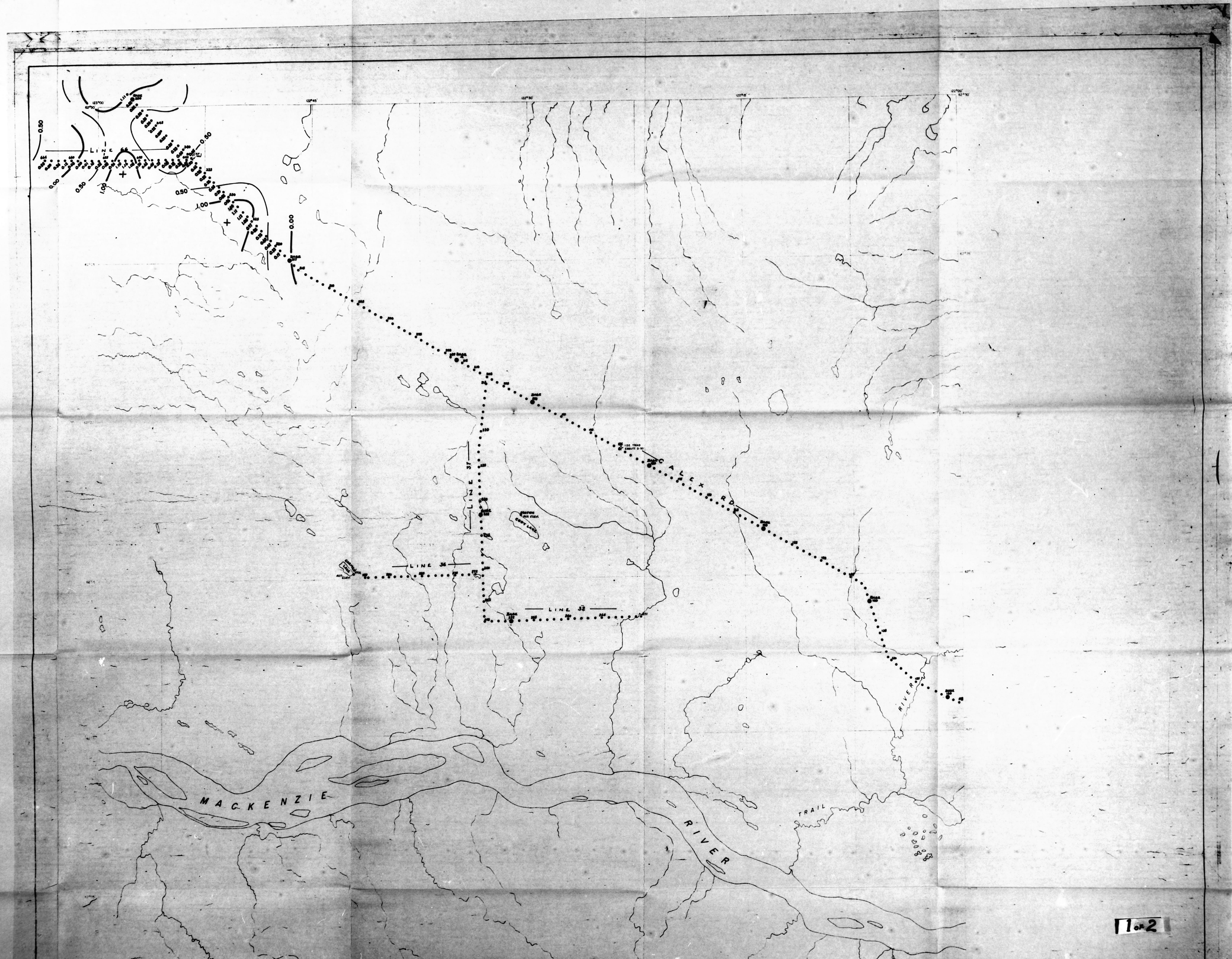
25-E-2

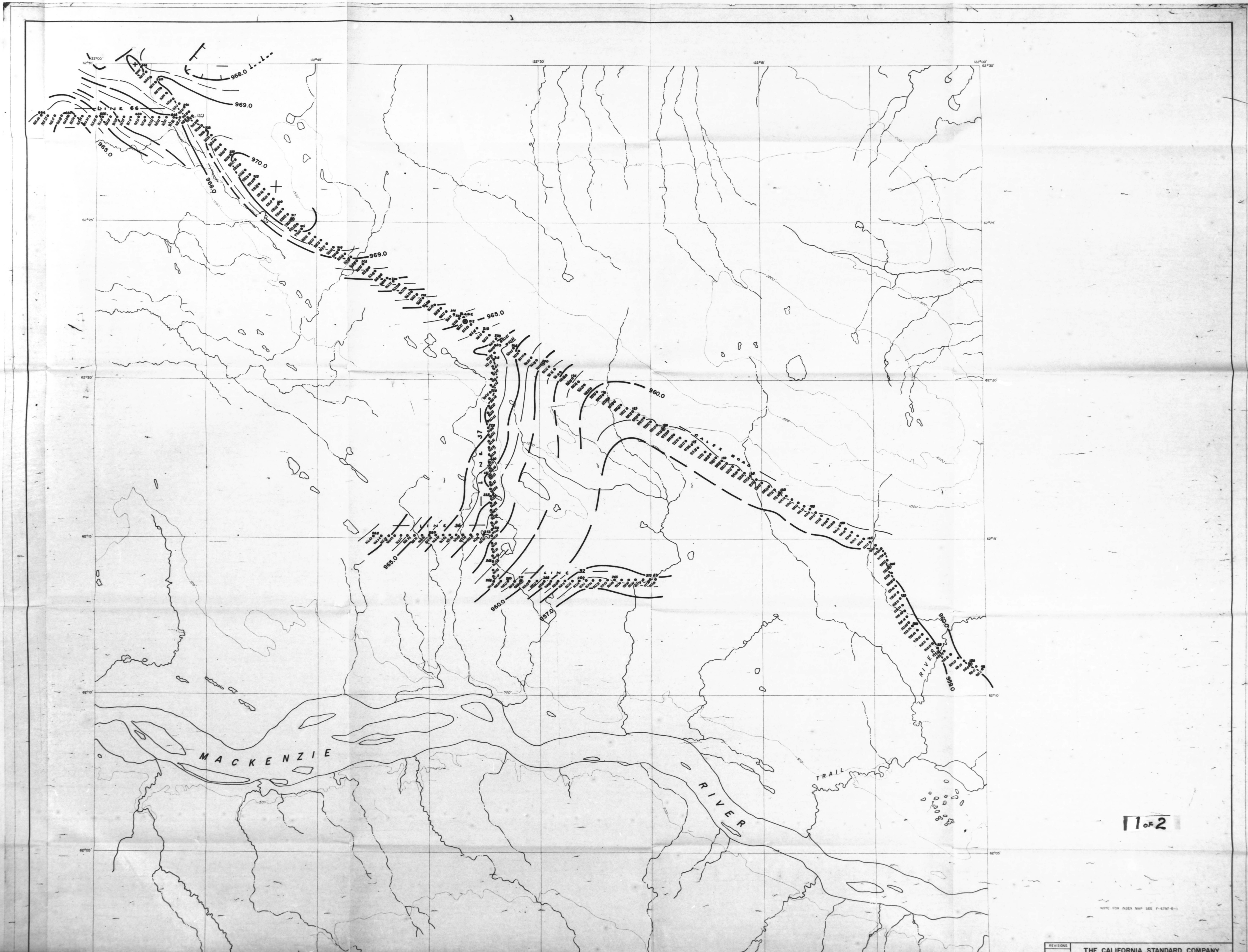
2 of 2


LINE 70
LINE 68
LINE 66
LINE 32
LINE 30
MACKENZIE
RIVER
TRAIL
RIVER
NOTE FOR INDEX MAP SEE F-6797-E-1


LINE 30
MACKENZIE
RIVER
TRAIL
RIVER
62°10'
62°05'
62°00'
123°00'
122°45'
122°30'
122°15'
122°00'
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
1 INCH = 1 MILE
DATE
APRIL 9 1965
DRAWN
P.G.
F-9830A-12
56-D-7
2 of 2


LINE 32
BASE
MACKENZIE
RIVER
TRAIL
RIVER
2 of 2
THE CALIFORNIA STANDARD COMPANY
WELLS DEC 67
95-J-S.E.
TRAIL RIVER AREA
RESIDUAL GRAVITY MAP
DATUM, SEA LEVEL
ELEV.CORR. FACTOR, .065MG./FT.
C.I., 0.5MG.
RESIDUAL BY R.R.C.
FIELD CREW BY OVERLAND PTY 1
(IN CONJUNCTION WITH SEISMIC
BY CHEVRON PTY 10) 1965
SCALE
1 INCH = 1 MILE
DATE
APRIL 9 1965
DRAWN
P.G.
F-9830-8


LINE 36
LINE 37
LINE 32
CALEX RD
MACKENZIE
RIVER
RIVER
TRAIL
BODY LAKE
0.50
0.00
1.00
1 of 2



122°45'
122°30'
122°15'
122°00'
62°30'
62°25'
62°20'
62°15'
62°10'
62°05'
LINE 66
LINE 37
LINE 34
LINE 32
970.0
969.0
968.0
965.0
960.0
957.0
MACKENZIE
RIVER
TRAIL
1 of 2
NOTE FOR INDEX MAP SEE F-6797-E-1
REVISIONS
THE CALIFORNIA STANDARD COMPANY

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

REVISIONS	THE CALIFORNIA STANDARD COMPANY			
	TRAIL RIVER AREA BOUGUER ANOMALY MAP			
	DATUM, SEA LEVEL ELEV. FACTOR, .065 MG. PER FT. C.I., .5 MG. CONTOURED BY RRC & PIB 1968 FIELD CREW, PTY 1 OVERLAND (IN CONJUNCTION WITH SEISMIC BY PTY 10 CHEVRON)			
	SCALE	DATE	DRAWN	F-9830A-7
	1 INCH = 1 MILE	APRIL 9 1965	P.G.	

2 of 2

23-B-2
od8250 16M

CONFIDENTIAL

CAMSELL BEND NTS 95 SE and 95 NE

PROJECT 45-8-4-67-2

FINAL REPORT ON GRAVITY SURVEY CONDUCTED BY CHEVRON STANDARD LIMITED DURING 1968

BY J. R. MUIR

JUNE 24, 1969

CONFIDENTIAL

CAMSELL BEND NTS 95 SE and 95 NE

PROJECT 45-8-4-67-2

FINAL REPORT ON GRAVITY SURVEY CONDUCTED BY

CHEVRON STANDARD LIMITED

DURING 1968

BY
J. R. MUIR

JUNE 24, 1969

Maps in attached folder -

1 - Station Location and Elevation Map

GEOPHYSICAL DATA

DATA REQUIRED FOR A GRAVITY SURVEY

OWNER OF DATA - Name Chevron Standard Limited

Address 400 Fifth Avenue S.W., Calgary 1, Alberta

LOCATION OF SURVEY (approx. boundary) Long. 121° to 123° Lat. 61° 30' to 63°

TYPE OF SURVEY - Traverse lines X Direction various
of Systematic areal coverage

AVERAGE STATION SPACING 1/4 mile

NUMBER OF OBSERVATIONS IN SURVEY 849

YEAR OF OBSERVATION 1968 OBSERVER'S NAME United Geophysical and Overland Exploration Services

FORM OF DATA

1. ORIGINAL TRAVERSE DATA

Gravimeters used:

Type	Serial Number	Calibration constant (mgal/div)
Lacoste-Romberg	G-52	.104505
Worden	149	.104915

Method of calibration Factory Tested

Estimated accuracy of reading in divisions Lacoste 0.1 Div.
Worden 0.1 Div.

2. VALUES OF OBSERVED GRAVITY

Units in which observed gravity value is given milligals
Average time interval drift checks 120 min. max.

3. VALUES OF BOUGUER ANOMALY

Formula used for calculation of theoretical gravity (International Formula, or, if other, specify)
International Formula + 1 gal.
Elevation datum used in calculation of Bouguer anomaly sea level

Density used in making elevation corrections (gm/cc) 2.3
Terrain corrections made? Yes

ELEVATIONS

Unit (feet or meters) feet

Elevations determined by (Tick one):

Spirit Level	
Stadia	X
APR	
Other (specify)	

Elevations referred to benchmark (Specify whether Dominion, Provincial, or other) Dominion

Estimated accuracy of elevations relative to datum ± 0.5 ft. per mile

POSITION COORDINATES

1. SCALED FROM MAPS of scale (Tick one):

1:25,000 or less	
1:50,000	
1:125,000	
1:250,000	
1:500,000	

1" = 1 mile

2. SURVEYED

Method of Survey (e.g., plane table, triangulation, or other) Stadia Board and Transit

Units of Distance feet

Position of origin of survey Ft. Simpson

3. COMPUTED FROM DECCA COORDINATES (Yes or No.) No

4. REFERENCED TO U.T.M. GRID SYSTEM (Yes or No) No

5. REFERENCED TO WESTERN D.L.S. SYSTEM (Yes or No) No

Estimated accuracy of coordinates + 20' per mile

GRAVITY CONTROL

1. TIED TO DOMINION OBSERVATORY STATION(S)

Number	Location
9044-67	Ft. Simpson

2. TIED TO LOCAL SYSTEM

Give location and gravity value of main reference station(s)

Lat. 61° 51.8' Long. 121° 21.5'

982.01185 gals.

RIVER BETWEEN TWO MOUNTAINS
GREASY LAKE
HIGHLAND LAKE
WILLOWLAKE RIVER
Gun Rapids
123°00'
122°45'
122°30'
122°15'
122°00'
63°00'
62°55'
62°50'
62°45'
62°40'
62°35'
970.0
965.0
963.0
962.0
961.0
969.0
967.0
968.0
966.0
965.0
1 of 2
NOTE: FOR INDEX MAP SEE F-6797-E-1
REVISIONS
WELLS DEC 67
THE CALIFORNIA STANDARD COMPANY
95-J-NE

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

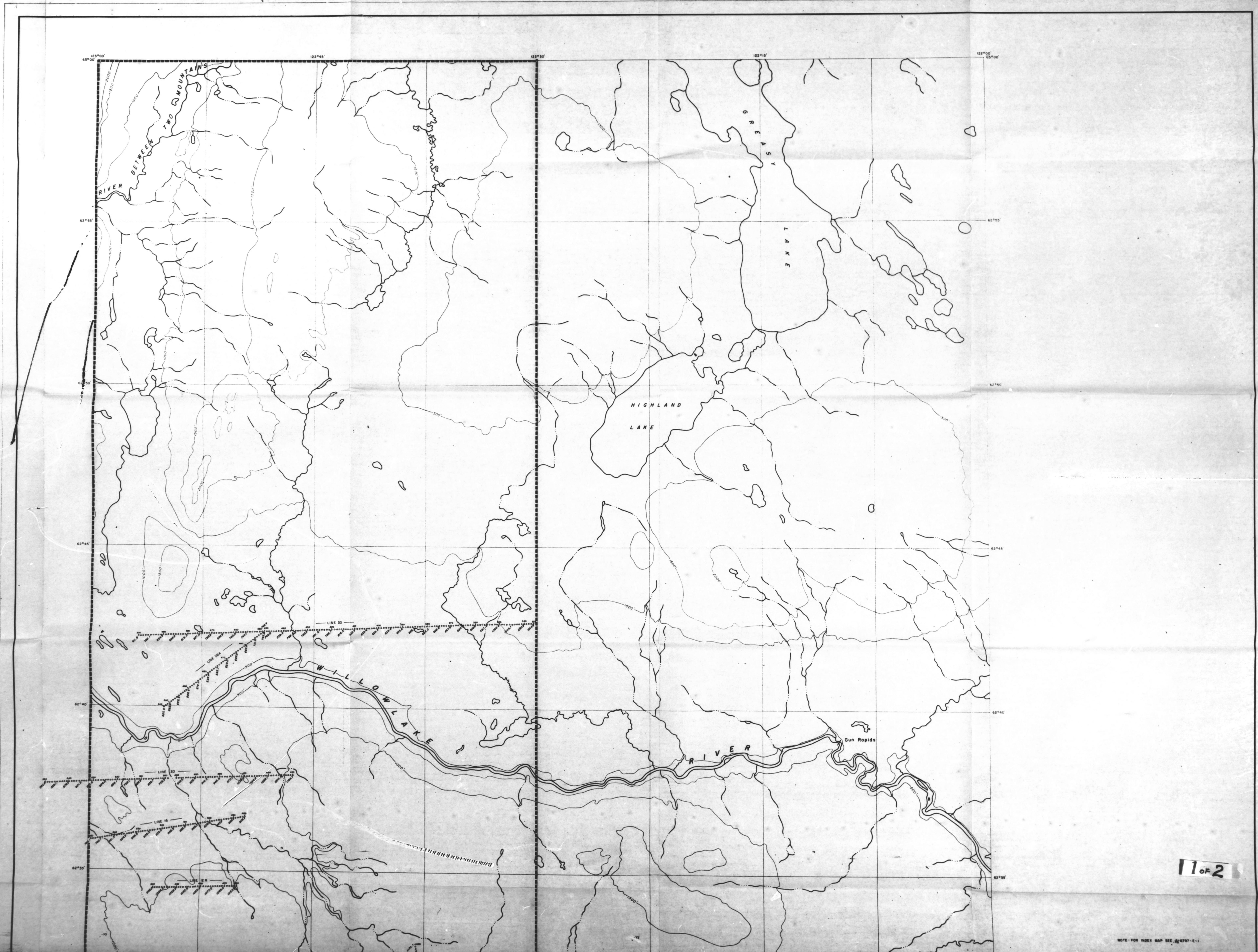
SURFACE ELEVATION MAP

JUNE 1969
95-J-NE

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

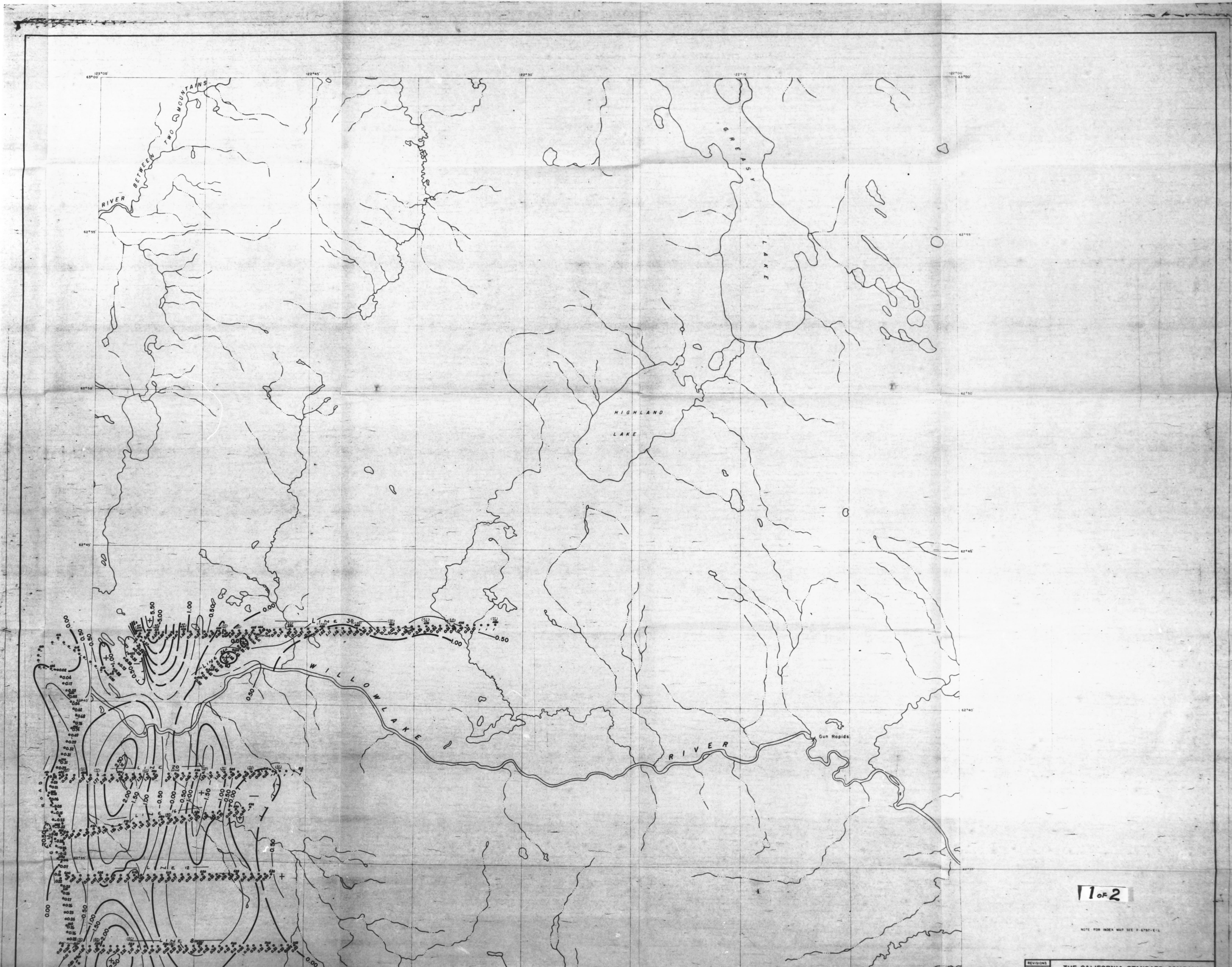
56-D-7
009877 IBM

2 of 2



1 of 2

NOTE: FOR INDEX MAP SEE 6-6797-E-1



RIVER BETWEEN TWO MOUNTAINS
GREASY LAKE
HIGHLAND LAKE
WILLOWLAKE RIVER
Gun Rapids
LINE 30
1 of 2
REVISIONS


WILLOWLAKE RIVER
Gun Rapids
LINE 30
LINE 20
LINE 12
LINE 8
LINE 4
ROAD
122°45'
122°30'
122°15'
122°00'
62°30'
123°00'
NOTE: STATION LOCATIONS ARE SLIGHTLY ADJUSTED & WILL SUPERIMPOSE OVER CORRESPONDING SHOT PTS TO A GREATER DEGREE THAN THE INITIAL LOCATIONS BY OVERLAND. — LAT. CORRⁿ., UNALTERED.
REVISIONS
WELLS DEC 67
THE CALIFORNIA STANDARD COMPANY
95-J-N.E.
HIGHLAND LAKE AREA
RESIDUAL GRAVITY MAP
DATUM, SEA LEVEL
ELEV. CORR. FACTOR, 0.065MG./FT.
C.I., 0.50MG.
RESIDUAL BY R.R.C.
FIELD CREW BY PTY I, OVERLAND, 1968
(IN CONJUNCTION WITH SEISMIC BY CHEVRON PTY 10)
SCALE
1 INCH = 1 MILE
DATE
OCT. 8, 1964
DRAWN
R. L. S.
F-9785-7
23-C-2