

Geophysical Report

on the

BAY 1 CLAIM

Located at Coordinates: 55 deg. 35.5 min. N, 125 deg. ^{54'} min. W

Omineca Mining Division, B.C.

FILMED

by: Gordon Maxwell

Owner/Operator: NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

N.T.S. 93 N/12W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT** February 1986

14,842

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SUMMARY:

The Bay 1 claim is situated approximately 12 kilometers north/northeast of the village of Takla Landing in central B.C. The property is underlain by volcanic stratigraphy of the Sitlika Assemblage which is Upper Triassic-Lower Jurassic in age.

In September of 1984, 2.85 kilometers of SE-88 and Magnetometer surveys were run over the Bay claim to test an airborne EM anomaly under the supervision of R. Swire and G. Maxwell.

INTRODUCTION:

The Bay 1 claim was staked by Stan Buziak, an employee of Noranda Exploration Company, Limited in April of 1985. The ground was acquired to cover previously outlined anomalous soil geochemical results encountered by Shell Canada Resources in 1980. The geophysical work described within was performed by Norex crews in September of 1985.

LOCATION AND ACCESS:

The property is situated in a subalpine area approximately 12 kilometers north/northeast of the village of Takla Landing. Access to the area is via helicopter or the property can be reached on foot from a logging road which is 4 kilometers from the center of the claim.

CLAIM STATISTICS:

The claim was staked using the modified grid system. It is located in the Omineca Mining Division.

<u>Claim Name</u>	<u># Units</u>	<u>Record #</u>	<u>Record Date</u>
BAY 1	9	7028	May 16/85

REGIONAL GEOLOGY:

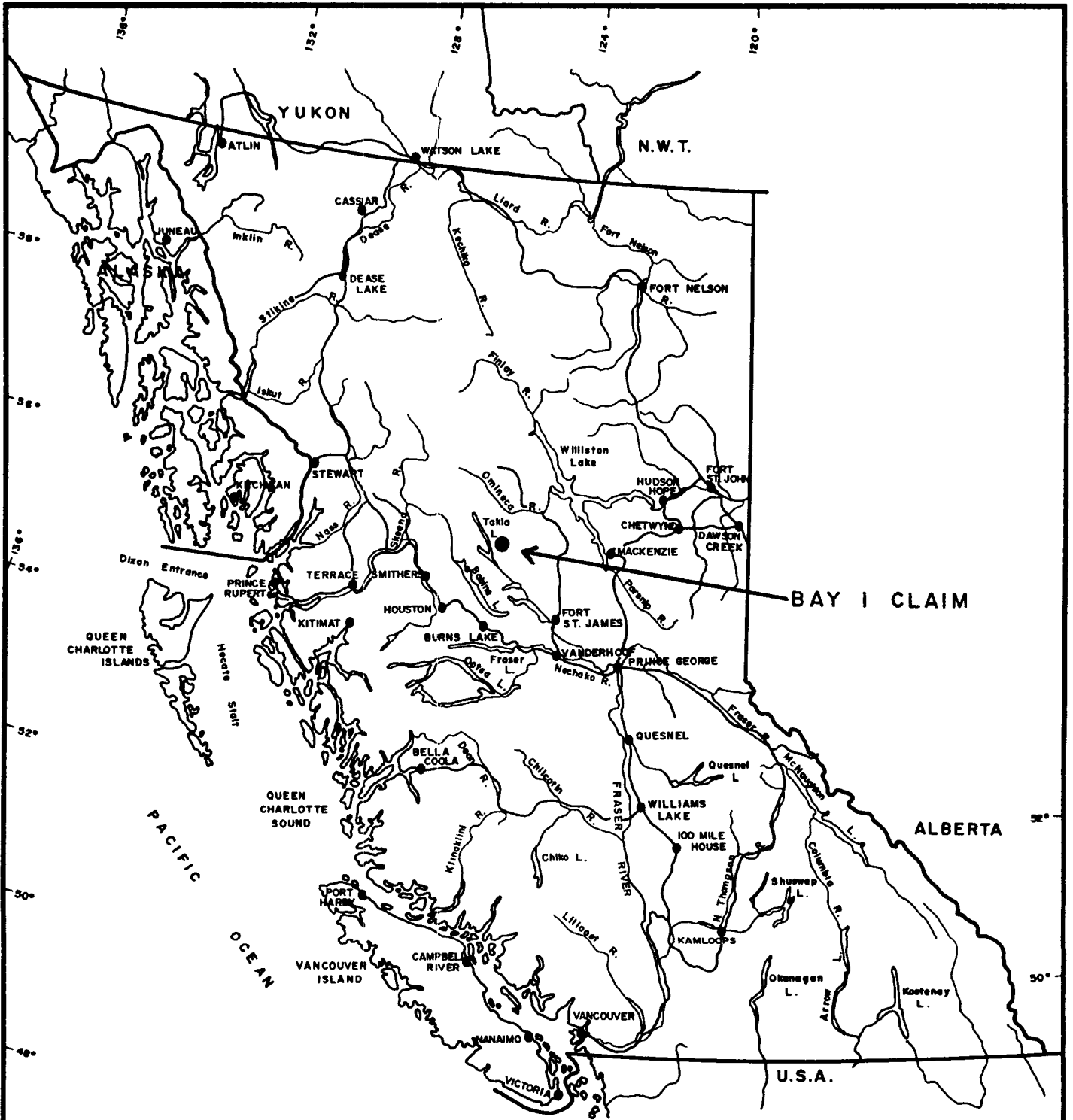
The area is underlain by Upper Triassic to Lower Jurassic volcanic and sedimentary rocks of the Sitlika Assemblage which have been regionally metamorphosed to greenschist facies (Paterson, 1974). This assemblage is composed mainly of well foliated andesitic to rhyolitic pyroclastics and flows with lesser amounts of greywacke, siltstone and phyllite. The Sitlika volcanics are characterized by local development of sericite, quartz-sericite and chlorite schists. The Takla Fault separates the Sitlika rocks from the Tertiary Sustat Group to the west. The Permian Cache Creek rocks to the east are separated from the Sitlika by the Vital Fault and a serpentinite melange. The Cache Creek Group is bounded to the east by the Pinchi Fault and the Jurassic Hogen Batholith (Figure 3).

PREVIOUS WORK:

1977: McIntyre Mines Ltd. -- helicopter-borne EM and Mag survey over Takla area. Geologic mapping, soil geochemistry, linecutting and vertical loop EM and Mag surveys.

1978: Shell Canada Resources Ltd. -- geologic mapping and soil geochemistry on SKYE 9 claim.

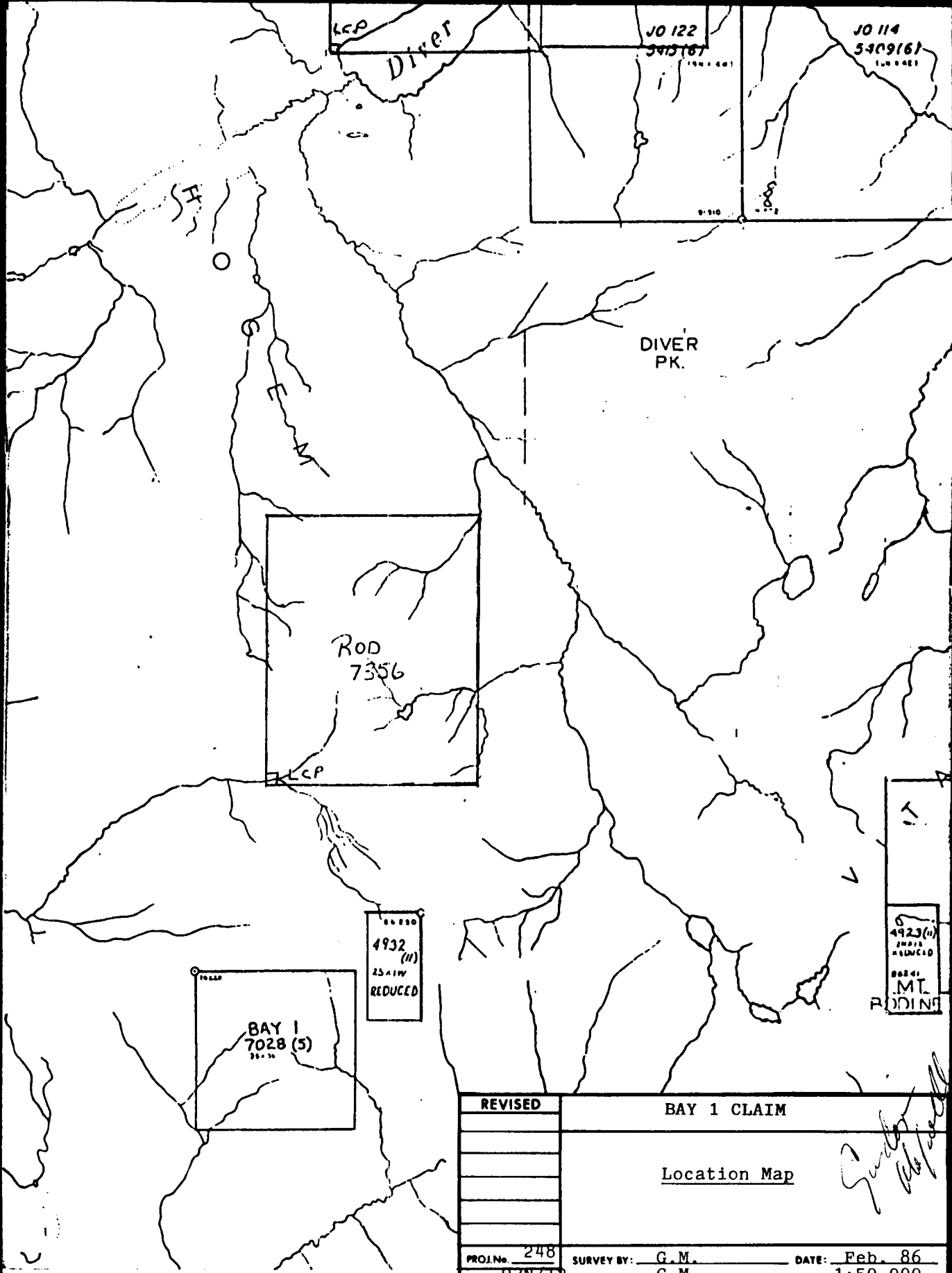
1982: Chris Graf -- stake Sitlika 11 claim.



0 100 200 KILOMETRES
SCALE : 1 : 6,000,000

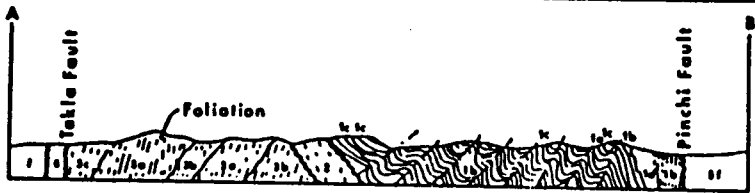
REVISED	BAY 1 CLAIM	
	Location Map	
PROJ.No. 248	SURVEY BY: G.M.	DATE: Feb. 86
N.T.S. 93N/12	DRAWN BY: S.K.B.	SCALE: 1 : 6,000,000
DWG.No. 1	NORANDA EXPLORATION	
	OFFICE: PRINCE GEORGE, B.C.	

VANCAL 11927



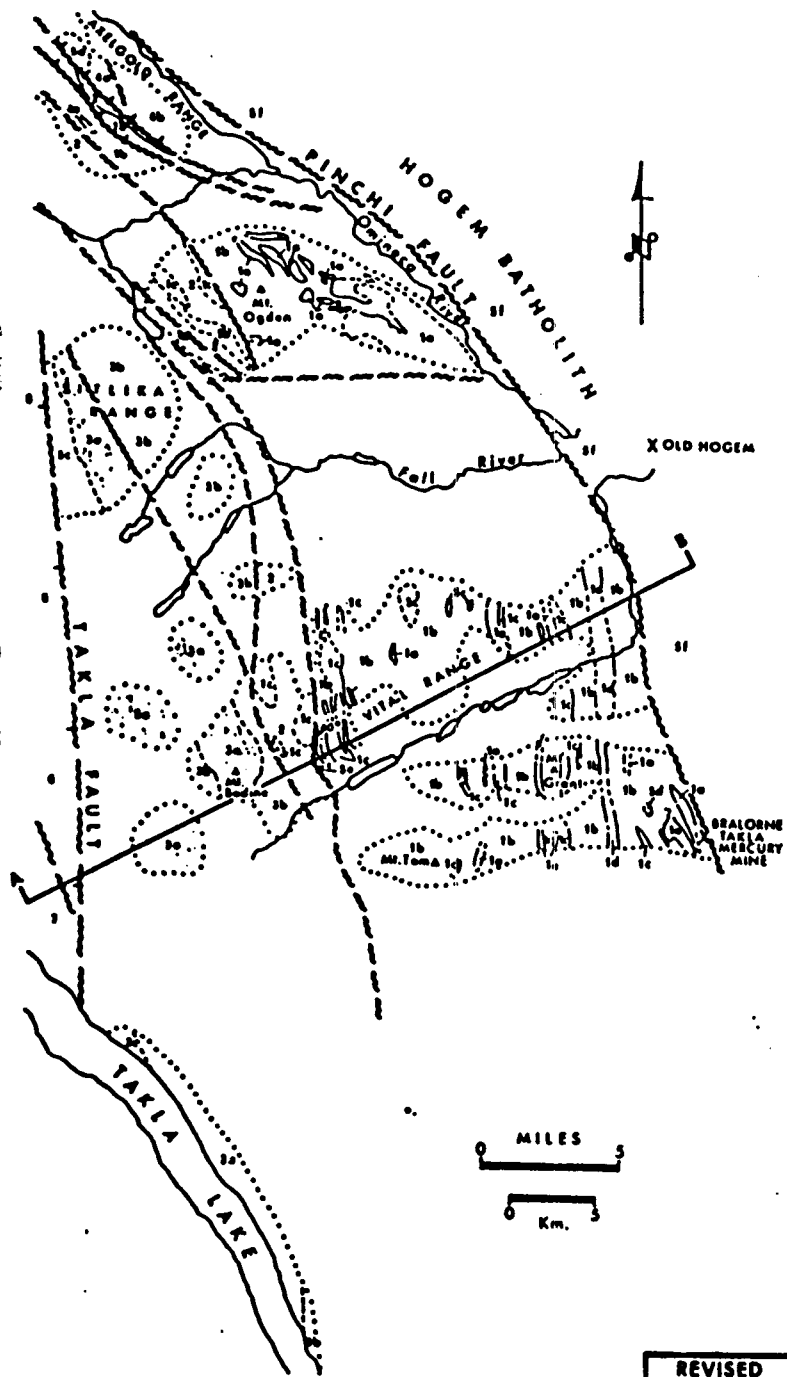
REVISED	BAY 1 CLAIM	
	Location Map	
PROJ. No. 248	SURVEY BY: G.M.	DATE: Feb. 86
N.T.S. 93N/1	DRAWN BY: G.M.	SCALE: 1:50,000
DWG. No. 2	NORANDA EXPLORATION	
	OFFICE: Prince George, B.C.	

Handwritten signature and initials



LEGEND

- UPPER CRETACEOUS and PALEOCENE**
SUSIUT GROUP
[7] conglomerate, shale, greywacke
- JURASSIC**
HAZELTON GROUP
[8] tuff, volcanic breccia
- UPPER TRIASSIC and JURASSIC**
TAKLA GROUP (?)
[4] (4a) chert pebble conglomerate;
(4b) greywacke, argillite
- UPPER TRIASSIC (?), JURASSIC (?)**
SITLIKA ASSEMBLAGE
[3] (3a) tuff, volcanic breccia, rhyolite, feldspar porphyry
(3b) greywacke, siltstone
(3c) black phyllite or argillite
- UPPER PALEOZOIC**
CACHE CREEK GROUP
[1] (1a) limestone; (1b) chert & phyllite;
(1c) greenstone; (1d) greywacke, laminated siltstone
- INTRUSIVES**
MESOZOIC or TERTIARY
[5] (5a) syenite; (5b) granite; (5c) biotite, hornblende feldspar porphyry; (5d) biotite, granodiorite; (5e) felsite
- JURASSIC (Mainly ?)**
[11] granodiorite (Hogem Batholith)
- PERMO-TRIASSIC**
[2] serpentinite, hornburgite
- FAULT** (defined, approximate, inferred).....
- THRUST or high angle REVERSE FAULT**.....
- CONTACT** (defined, approximate).....
- LIMIT of MAPPING**.....



REVISED	BAY 1 CLAIM	
	Regional Geology	
PROJ. No. 248	SURVEY BY: G.M.	DATE: Feb. 86
N.T.S. 93N/12	DRAWN BY: G.M.	SCALE: 1:500,000
DWG. No. 1	NORANDA EXPLORATION OFFICE: Prince George, B.C.	

1984: Chris Graf - geologic mapping.

GEOPHYSICS:

INSTRUMENTATION

SE-88 EM System The SE-88 unit differs from the normal HLEM systems such as the MaxMin II above in that it measures without regard to phase, the ratio of signal amplitude between two frequencies which are transmitted and received simultaneously. A low frequency of 112 Hz is used as a reference frequency. The signal difference is integrated or averaged over a period of time in order to improve the signal to noise ratio.

The survey parameters employed on the follow-up programme are as follows:

Coil separation	: 100 meters
Frequencies	: 3037, 1012, 337 Hz
Reference frequency	: 112 Hz
Integration period	: 16 or 8 seconds
Reading interval	: 25 meters
Measurement	: ratio of amplitude between reference and signal frequencies (%).

MP-3 Magnetometer System Magnetometers manufactured by Scintrex Ltd. of Concord, Ontario were employed for these surveys. The MP-3 Total Field Magnetometer System consists of one or more field units and a base station. Diurnal and day to day variations are automatically corrected at the end of the survey by the built in microprocessor giving the data a usable accuracy of 1 gamma.

DISCUSSION OF RESULTS

The ground geophysics consisted of 2.850 kilometers of SE-88 EM and magnetometer survey. Five established lines were tested in the vicinity of the airborne anomaly and no response indicating a bedrock source was recorded. The magnetic survey defined a narrow response on the west side of the baseline.

CONCLUSIONS:

Five lines of SE-88 survey failed to outline the airborne EM anomaly in the area of the Bay 1 claim. The target is believed either mislocated or is at a greater depth than this instrument is capable of detecting. The target lies in an area of favourable geology and is enhanced by favourable soil geochem.

RECOMMENDATIONS:

Additional lines of SE-88 should be run to complete the coverage over the target area. If this fails to locate a target a couple of lines of inline pulse EM should be carried out over the most likely location of the airborne target.

REFERENCES:

- Crosly, R.O. Airborne Geophysical Surveys, Ruth Mineral Claims, TAKLA LAKE Area, B.C., Assessment Report for McIntyre Mines Limited, 1977.
- Francoer, D. Geological, Geophysical and Geochemical Report on TAKLA Project for McIntyre Mines Limited, 1977.
- MacLeod, W.A. Report on Geological and Geochemical Surveys SKYE 1, 3 through 17 Mineral Claims, Assessment Report for Shell Canada Resources Limited, 1979.
- Monger, J.W.H. Lower Mesozoic Rocks in McConnell Creek Map Area, (94E), British Columbia. Geological Survey of Canada, Paper 76-1A.
- Paterson, I.A. Geology of Cache Creek Group and Mesozoic Rocks at the Northern end of the Stuart Lake Belt, Central B.C., Geol. Survey of Canada, Paper 74-1, Part B, 1974.

APPENDIX I
STATEMENT OF COSTS

PROJECT: TAKLA-NAK 248, BAY 1 CLAIM

REPORT TYPE: Geophysical

a) **WAGES:**

6 mandays @ \$125.00/day \$ 750.00

b) **FOOD & ACCOMODATIONS:**

6 mandays @ \$ 50.00/day \$ 300.00

c) **TRANSPORTATION:** (206 Helicopter) \$ 400.00

d) **COST OF PREPARATION OF REPORT:**

Author \$ 130.00
Drafting \$ 125.00
Typing \$ 110.00

TOTAL: \$ 1,815.00

Cost Breakdown:

EM survey	2.850 kms.	\$ 1,185.00
Mag survey	2.850 kms.	\$ 630.00

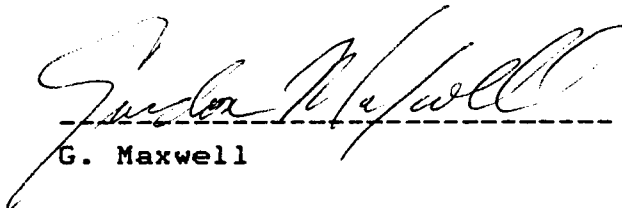
		\$ 1,815.00

APPENDIX II

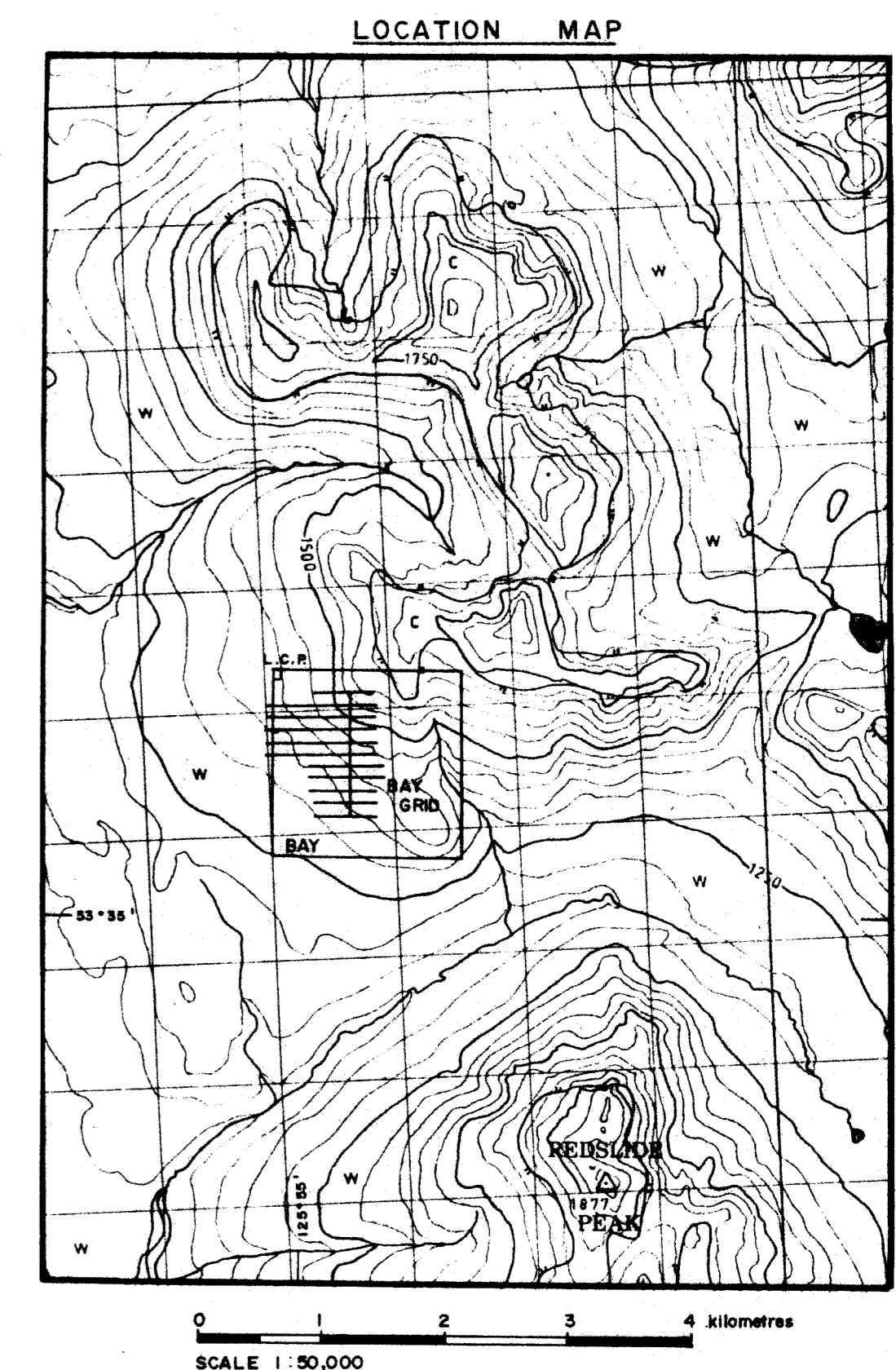
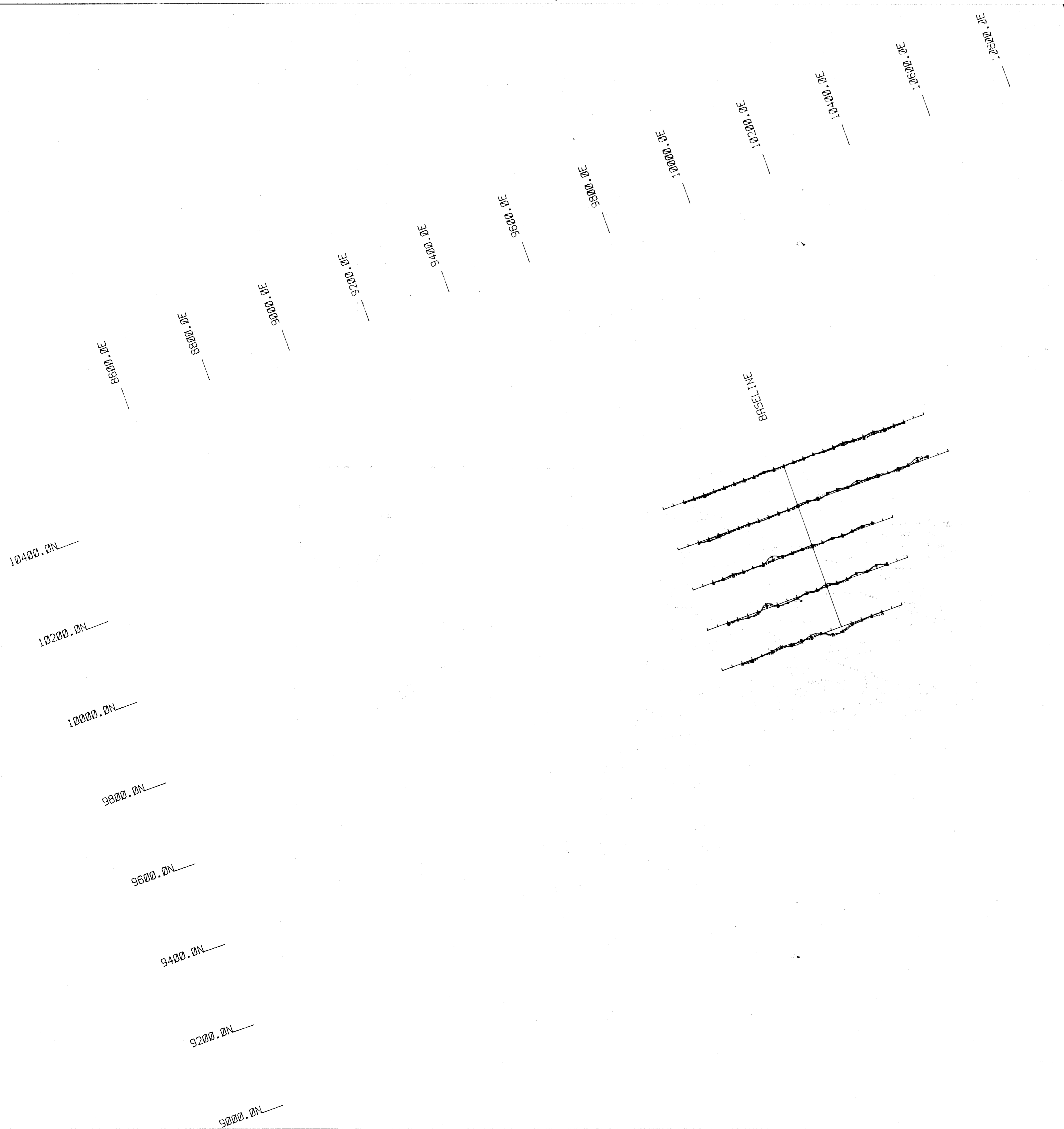
STATEMENT OF QUALIFICATIONS

I, Gordon Maxwell of Prince George, Province of British Columbia, do hereby certify that:

1. I am a Geologist residing at 6162 Caledonia Crescent, Prince George, British Columbia.
2. I am a graduate of the University of Manitoba with an Hons. B. Sc. (geology).
3. I am a member in good standing of the Canadian Institute of Mining and the Prospector's and Developer's Association.
4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.

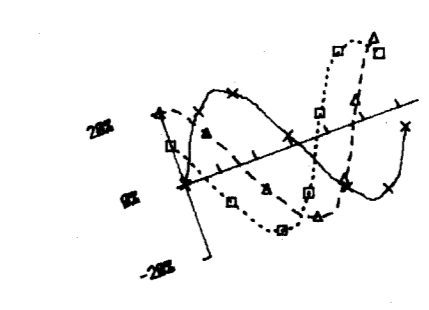


G. Maxwell



**GEOLOGICAL BRANCH
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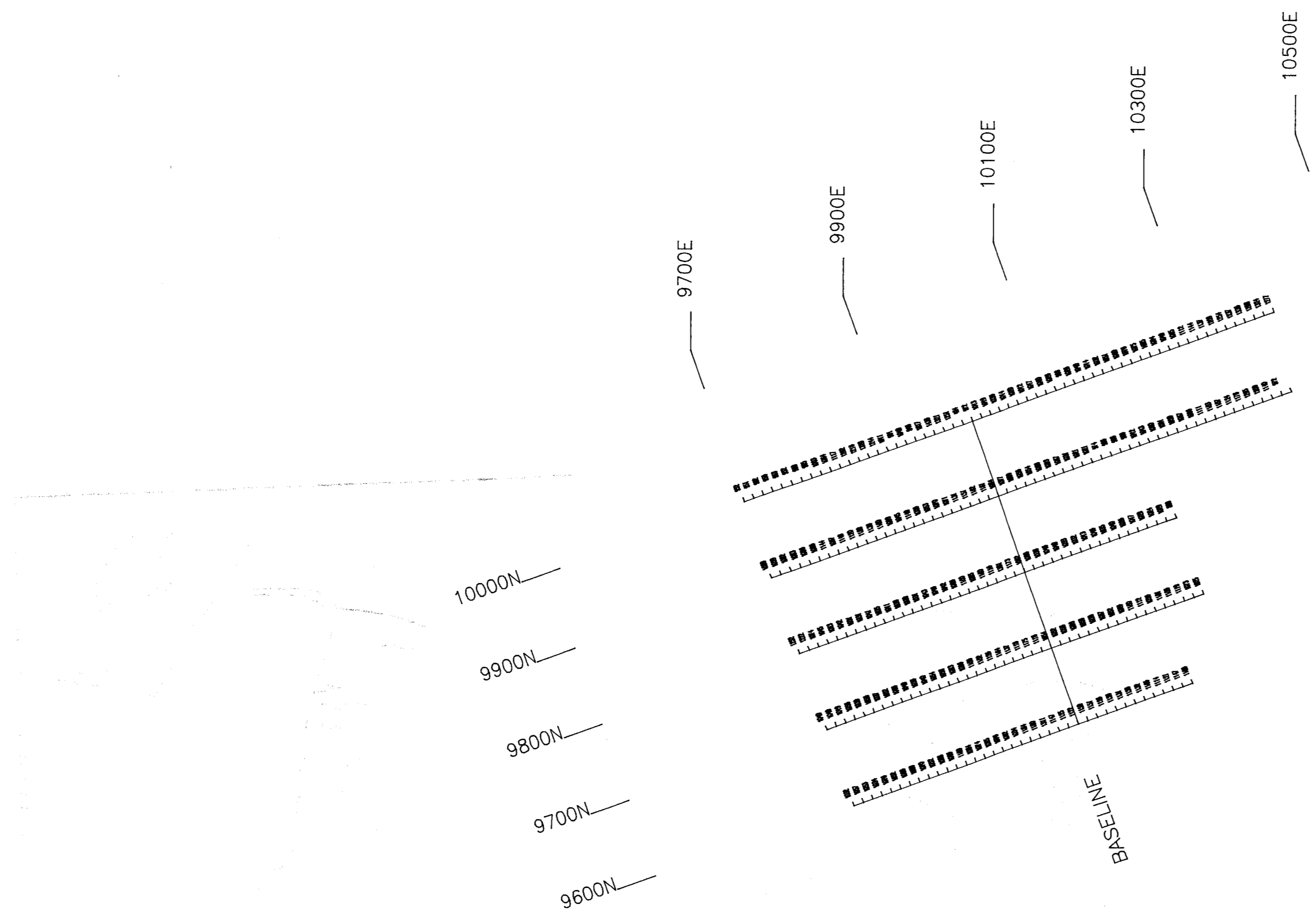
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Instrument	: SE-88 GENI
Coil Spacing	: 100m
Ref. Frequency	: 112 Hz
Vertical Scale	: 1 cm = 20%
Conductor Axis	:
337 Hz	-x-x-
1012 Hz	-o-o-
3037 Hz	-a-a-

100m 50m 0m 100m 200m

BAY	
SE-88 SURVEY	
PROJECT: TAKLA-NAK PROJECT # : 248	
BASELINE AZIMUTH : 160 Deg.	
SCALE = 1: 5000	DATE : 8/27/85
SURVEY BY: RS/BG NTS : 93/N/12	
FILE: SM248BAY.Zot	
MAP I	NORANDA EXPLORATION



GEOLOGICAL BRANCH
ASSESSMENT REPORT

MP-3 : MP-3
TOTAL : TOTAL
Datum : 57000.0 nT
Contour interval :
Conductivity :
14,842

100m 50m 0m 100m 200m

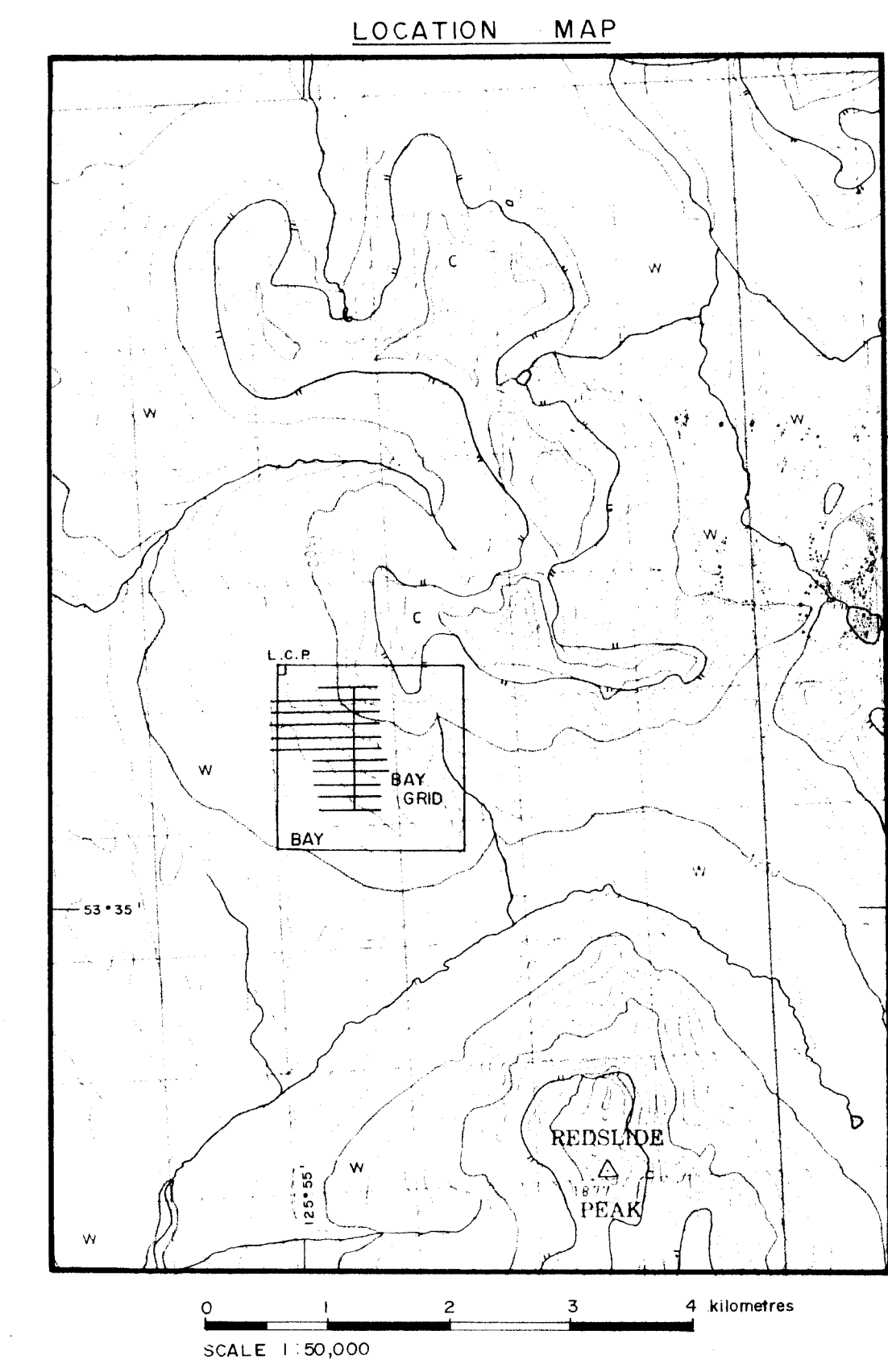
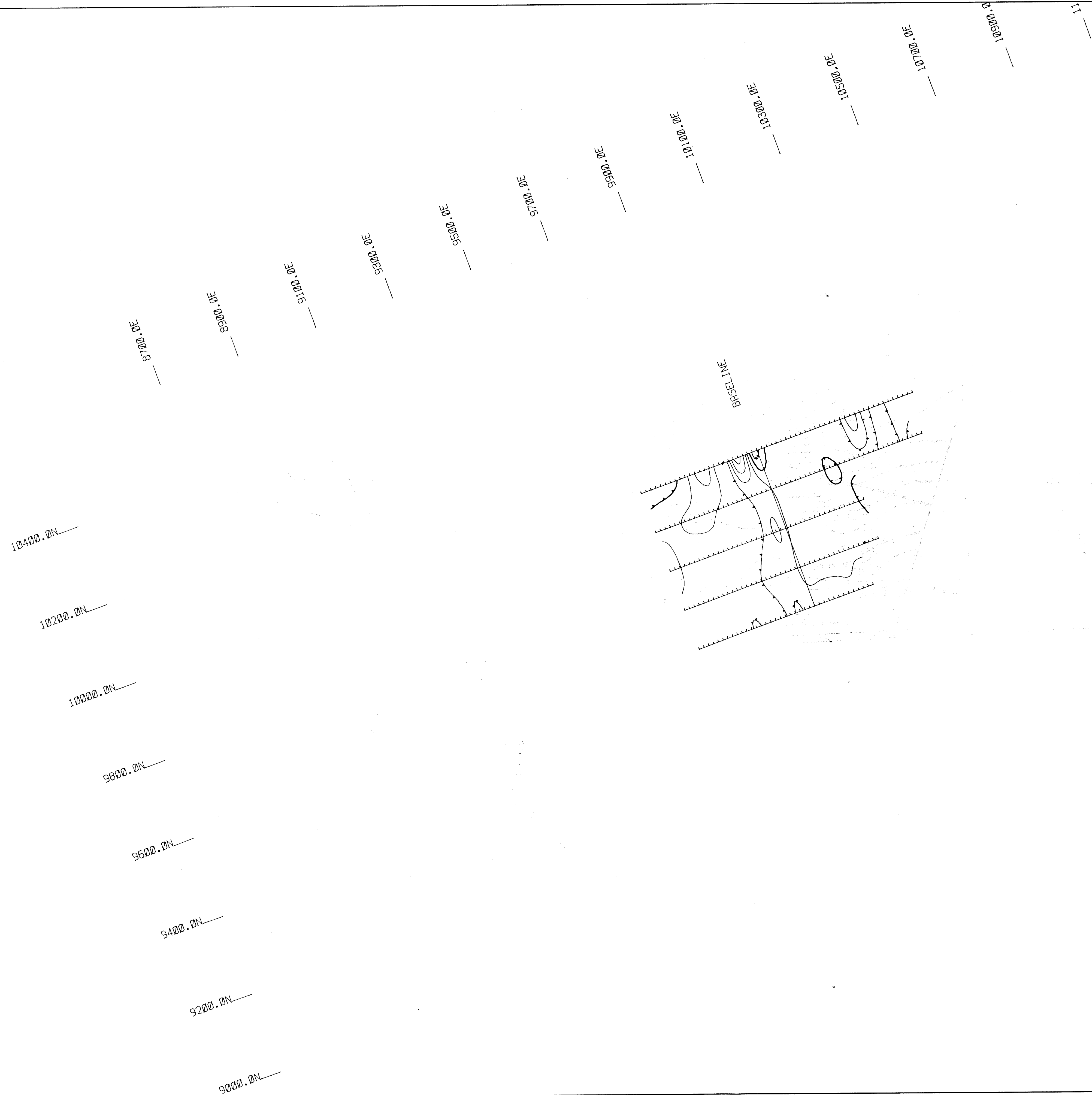
BAY

MAGNETOMETER SURVEY

PROJECT: TAKLA-NAK PROJECT # : 248
BASELINE AZIMUTH : 160 Deg.

SCALE = 1: 5000 DATE : 8/27/85
SURVEY BY : SH NTS : 93/N/12
FILE: MG248BAY

MAP 3 **NORANDA EXPLORATION**



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 GEOLOGICAL BRANCH
 ASSESSMENT REPORT

Instrument	: MP-3
Datum	: 57800.0 nT
Contour Interval	: 100 nT (2 passes through a 9 pt. Hanning Filter.)
Conductor Axis	:



BAY	
MAGNETOMETER SURVEY (FILTERED CONTOUR PRESENTATION)	
PROJECT: TAKLA-NAK PROJECT # : 248 BASELINE AZIMUTH : 160 Deg.	
SCALE = 1: 5000	DATE : 8/27/85
SURVEY BY: SH NTS : 93/N/12	
FILE: MG248BAY.ZAT	
MAP 2	NORANDA EXPLORATION