

4367

82M/7W
GEOPHYSICAL REPORT

on
A COMBINED
AIRBORNE MAGNETIC and
VLF-EM SURVEY
for

GREAT NORTHERN PETROLEUMS and MINES Ltd
GN and SHUSWAP CLAIMS
GRACE MOUNTAIN Area, KAMLOOPS MD BC

May - 1973

GN and SHUSWAP Claims: 16 miles N15°E of north tip
of Seymour Arm

: 51° 118° SE Department of
Mines and Petroleum Resources
N T S : 82M/7W

ASSESSMENT REPORT
NO. 4367

Written for : Great Northern Petroleum
and Mines Ltd
1110 One Bentall Centre
505 Burrard Street
Vancouver BC

by : Howard A. Larson, Geophysicist
GEOTRONICS SURVEYS Ltd
514 - 602 West Hastings Street
Vancouver BC

May 21, 1973

Geotronics Surveys Ltd.

Vancouver, Canada

COMBINED AIRBORNE MAGNETIC
AND VLF-EM SURVEY
GN AND SHUSWAP CLAIMS

TABLE OF CONTENTS

SUMMARY

CONCLUSIONS

RECOMMENDATIONS

INTRODUCTION AND GENERAL REMARKS	1
LOCATION AND ACCESS	2
PROPERTY AND OWNERSHIP	2
HISTORY OF PREVIOUS WORK	3
PHYSIOGRAPHY	3
GEOLOGY	4
INSTRUMENTATION AND THEORY	5
SURVEY PROCEDURE	8
COMPILATION OF DATA	9
DISCUSSION OF RESULTS	10
SELECTED BIBLIOGRAPHY	
GEOPHYSICIST'S CERTIFICATE	
ENGINEER'S CERTIFICATE	

COMBINED AIRBORNE MAGNETIC
AND VLF-EM SURVEY
GN AND SHUSWAP CLAIMS

TABLE OF CONTENTS

GRAPHS and MAPS - at end of report	Scale
Location Map - Figure 1	1" = 134 miles
Property and Geology Map - Fig 2	1" = 3000 feet
MAPS - in pocket	
Magnetometer survey	
Flight Lines and Data - Sheet 1	1" = 1000 feet
Magnetometer and VLF-EM survey	
Compilation Map - Sheet 2	1" = 1000 feet

SUMMARY

A combined airborne magnetometer and VLF-EM survey was carried out over the Shuswap and GN claims of Great Northern Petroleum and Mines Ltd during May, 1973. Its object was to map geology and to outline exploration targets for copper-lead-zinc mineralization.

The property is located on Grace Mountain to the south of Blais Creek. Access to the property for the survey was by helicopter from Kamloops.

The property is underlain by rocks of the Shuswap Metamorphic Complex. No mineralization is known so far to exist on the property. However, there is extensive galena, tetrahedrite and molybdenite mineralization on the adjacent Cottonbelt property.

The survey was carried out using an Elsec proton precession magnetometer and a Sabre Electronic VLF-EM instrument.

Due to the rugged terrain and extensive low shifting clouds at the time of the survey, the survey flight lines had to be adjusted to cover certain areas as they cleared. Unfortunately, the cloud cover did not permit extensive coverage of the old Cottonbelt Property.

The magnetic data was corrected for diurnal drift, plotted and contoured at a 20-gamma interval. Only VLF-EM anomalous

zones that could be separated from the effects of turbulence and terrain were plotted.

The magnetic data shows a distinct lineation of magnetic highs striking towards the northwest through the central part of the property. Also two zones of VLF-EM highs were found to correlate somewhat with these magnetic highs. These zones may be reflecting shear zones and/or possibly mineralization.

- 1) The GN and Shuswap claims have good proximity to the lead-zinc-copper mineralization on the Cottonbelt property.
- 2) The known mineralization in the area is associated with magnetite and pyrrhotite
- 3) There is a distinct lineation of magnetic highs running through the property
- 4) A magnetic high (anomaly A) is immediately adjacent to a VLF-EM conductive zone, (anomaly E). Anomaly E may, in fact extend over magnetic anomaly A, but the effects of turbulence and terrain prevented the accurate mapping of VLF-EM anomalous zones in the region. These anomalies probably outline the area of greatest interest.
- 5) Magnetic anomaly B and the adjacent VLF-EM anomalous zone are smaller than anomalies A and E. However, this area may also be of economic interest.

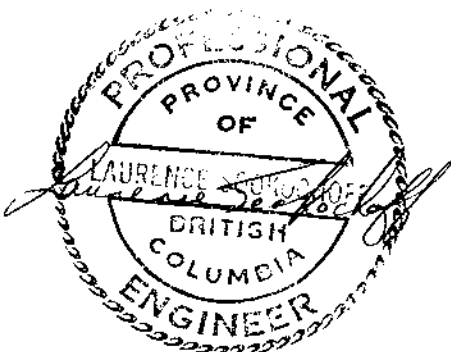
- 6) VLF-EM anomalous zone D is generally found in a region of relative magnetic lows. However, because of its size and proximity to the known mineralization this area also warrants additional exploration.
- 7) The cause of the magnetic and VLF-EM anomalies can only be theorized and therefore ground work must be carried out in order to ascertain whether mineralization of economic interest is related to these features.
- 8) The combined survey can be considered to be successful in meeting its objective of isolating areas of the claim group which warrant additional exploration. Unfortunately, weather conditions did not permit detailed coverage of the known zones of mineralization. Thus no comparison can be made between the known areas of mineralization and the anomalous zones found on the property.

RECOMMENDATIONS

From the above it is felt that the property warrants further exploration and that the following exploration program should be carried out.

1. It is strongly recommended to map the geology of the property in greater detail than is available on the GSC map. This is important for correlating with any geophysical or geochemical work.

2. Ground magnetometer and VLF-EM surveys should be run to locate and more clearly define anomalous zones A, E, B, and D. These anomalies should be examined in the above sequence. The survey lines should strike towards the northeast. A line separation of 400 feet and a station separation of 100 feet is recommended for the initial ground work.
3. Any anomalous zones outlined by the above should be soil sampled. Analysis should be made for lead, zinc, copper and molybdenum.
4. An induced polarization survey should be carried out over any areas of interest as defined by the above survey.
5. Based upon the results from the above work, a trenching and/or drilling program may be warranted. It is felt that a hammer seismic refraction survey would be useful in determining optimum trench and/or drill locations.



May 21, 1973

Respectfully submitted
GEOTRONICS SURVEYS Ltd

Howard A. Larson

Howard A. Larson
Geophysicist

GEOPHYSICAL REPORT
ON A COMBINED
AIRBORNE MAGNETIC AND VLF-EM SURVEY
SHUSWAP and GN CLAIMS
GRACE MOUNTAIN Area, KAMLOOPS MD BC

INTRODUCTION and GENERAL REMARKS

This report discusses the procedure, compilation and interpretation of a combined airborne magnetometer and low frequency electromagnetic (VLF-EM) survey carried out over the Shuswap and GN claims during May, 1973. The field work was carried out by the writer as operator-navigator, and one assistant.

The object of the magnetic survey was to isolate areas within the claim boundaries most worthy of additional exploration and to determine any possible extensions of the Cottonbelt and Complex mineralized zones from the Cottonbelt property to the immediate south. The VLF-EM survey was run to supplement the interpretation of the magnetic data and to locate any conductive zones which could be associated with mineralization in the area.

LOCATION AND ACCESS

The property is located on Grace Mountain, approximately 16 miles N 15° E of the northern tip of Seymour Arm.

The geographical coordinates are 51° 28 N latitude and 118° 49 W longitude.

Access to the property for this survey was by helicopter from Kamloops, BC. J. O. Wheeler, however, reports (1964) that there is a series of roads and trails which run from the north end of Seymour Arm to the Cottonbelt deposits on Grace Mountain. Due to adverse weather and snow conditions at the time of the survey, it was not possible to verify the condition of these roads.

PROPERTY AND OWNERSHIP

The property consists of 32 contiguous claims which are held by location by Great Northern Petroleum and Mines Ltd. These claims are listed below and plotted on Figure 2.

CLAIM NAME	RECORD NUMBER	EXPIRY DATE
GN 11	60710	Sept 26, 1973
GN 13	60712	Sept 26, 1973
SHUSWAP 1 - 30	64257-64286	May 26, 1973

HISTORY OF PREVIOUS WORK

Apparently work has previously been done on the property since the staking of the claims in 1966 and 67. The results, however, were not available to the writer. There has been extensive work performed on the Cottonbelt and Complex mineral zones to the south of the property.

PHYSIOGRAPHY

The property is found on the northwest slope of Grace Mountain which is located in the Monashee Mountain range. The terrain is very rugged. The elevation range varies from 4,000 feet along Blais Creek to about 6,300 feet in the southeast portion of the property.

Blais Creek is the major creek on the property and flows westerly through the northern claims into the Seymour River. Mountain peaks below 8,000 feet within the Monashee Mountain range were generally covered by the Pleistocene ice sheet and were subsequently sculptured by cirque and valley glaciers to sharp peaks and sawtooth ridges. On the retreat of the ice, a mantle of drift was left. This drift is deeper in the valley bottoms than on the sides. The property lies within the Momich Provincial forest. The lower elevations are covered by a thick coniferous forest. This vegetation thins, however, at the higher elevations.

GEOLOGY

The geology of the property is as shown on Figure 2 and was taken from the GSC geology map of the area. It is immediately apparent on looking at Figure 2 that the property is entirely underlain by rocks of the Shuswap Metamorphic Complex.

In the vicinity of the property the rocks of the Complex are primarily as follows: a quartz biotite - feldspar schist and paragneiss (commonly containing garnet, sayonite and sillimanite), amphibolite, hornblendic gneiss, quartzite, marble, calc-silicate rocks; and minor pegmatite.

Pleistocene and recent glacial drift, silt and alluvium have filled in and covered the Seymour River valley.

There are no major faults or shear zones shown by the GSC map to exist within the survey area. The major mineralization known in the area is that of the Cottonbelt and Complex zones on Grace Mountain to the immediate southeast of the property. The following is an excerpt from Wheeler:

COTTONBELT (3) property lies between elevations of 5,000 and 6,000 feet on the hills south of Blais Creek. The property, which has remained relatively unexplored since the 1920's, is accessible by 18 miles of road and rail from the head of Seymour Arm. The mineralization zone consists of galena, sphalerite, pyrrhotite, and magnetite. Some grey copper and

molybdenite has also been reported. It lies about 100 feet east of the southwesternmost of two prominent beds of marble which can be traced intermittently from Blais Creek to Ratchford Creek. The mineralization zone dips about 35° SW, parallel with the bedding in the host schists and gneisses, and has been traced for a distance of more than 2,000 feet on the surface with widths of up to 12 feet. Underground the zone was followed by a tunnel for 800 feet, the width averaging between 18 and 24 inches.

A second zone, the COMPLEX, lies 3,000 feet to the northeast of the COTTONBELT vein. The COMPLEX has been traced for about 1,000 feet by open-cuts. A tunnel driven on the vein revealed 7 feet of mineralized rock, largely of magnetite but containing values of lead, zinc, and copper.

Selected samples from varying locations in these zones have shown assay values ranging up to the following:

Ag	11.4	oz per ton
Pb	59%	
Zn	18%	
Cu	2%	

INSTRUMENTATION AND THEORY

1) Magnetometer Survey

The magnetic data was detected using an ELSEC nuclear free precession magnetometer, type 592. This measures the absolute value of the earth's magnetic field intensity. The sensitivity is 1 gamma and the absolute calibration is governed by a crystal-controlled oscillator so that it cannot drift.

Only two commonly occurring minerals are strongly magnetic; magnetite and pyrrhotite. Hence, magnetic surveys, both ground and airborne, are used to detect the presence of these minerals in varying concentrations. Magnetic data are also useful as a reconnaissance tool for mapping geologic lithology and the structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

2) VLF-EM A VLF-EM receiver manufactured by Sabre Electronics of Vancouver, B. C. and an Esterline Angus Port-a-graph T171B recorder were used for the VLF-EM survey. This instrument is designed to measure the current induced, in a vertical coil, by the primary and secondary fields of the very low frequency electromagnetic field (VLF-EM) transmitted at 18.6KHz from Seattle, Washington.

In the absence of any conductors the magnetic component of the primary field is nearly horizontal and thus the current induced in a vertical coil would be negligible.

However, in the presence of a conductor a current is induced in the conductor which in turn induces a secondary magnetic field around it.

The dipping magnetic field around a conductor will induce a current in the receiving coil which will be a function of the primary field strength, the proximity of the coil to the conductor and its conductivity.

In all electromagnetic prospecting, a transmitter produces an alternating magnetic field (primary) by a strong alternating current usually through a coil of wire. If a conductive mass such as a sulphide body is within this magnetic field, a secondary alternating current is induced within it which in turn induces a secondary magnetic field that distorts the primary magnetic field. It is this distortion that the EM receiver measures. The VLF-EM uses a frequency range from 16 to 24 KHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of a much lower conductivity and therefore is more susceptible to clay beds, electrolyte-filling fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up. Consequently, the VLF-EM has additional uses in mapping structure and in picking up sulphide bodies of too low conductivity for conventional EM methods and too small for induced polarization (in places it can be used instead of IP). However, its susceptibility to lower conductive bodies results in a number of anomalies, many of them difficult to explain and, thus, VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

SURVEY PROCEDURE

A Jet Ranger helicopter was used to fly the survey. The magnetometer head was towed in a bird at the end of a 30-foot cable. The VLF-EM head was mounted on a boom protruding from the front of the helicopter. The survey flight lines were as shown on Sheet 1. There was a considerable number of creeks and ridges to serve as visual tie points so that except for an area noted, the flight lines can be considered to be plotted fairly accurately.

Tie points were made over streams and prominent topographic features. They were numbered, recorded, and plotted on the flight-line and data sheets.

Initially, attempts were made to fly the survey in an east - west direction. However, low shifting clouds at the time of survey obscured the visual tie points in certain locations in such a manner as to make it more practical to fly the survey in the pattern shown on Sheet 1.

Certain areas were obscured by clouds continuously, thus prohibiting accurate navigation and in some areas preventing flying, altogether. The survey lines which could not be accurately plotted are indicated by dashed lines on Sheet 1.

The magnetic readings were taken with the magnetometer set on a 1.7 - second recycling period which, allowing for variations in helicopter speed, corresponds to readings taken at intervals varying between 50 and 200 feet.

Magnetic diurnals and any possible instrument drift were monitored by closing loops over a constant location (station 1).

The VLF-EM equipment provided for a continuous plotting of the induced current. This system proved to be very susceptible to turbulence, ground clearance, and terrain variations. For this reason, the writer constantly monitored the VLF-EM record and noted the responses which could be attributed to the above causes.

COMPILATION OF DATA

The magnetic data was picked off the strip charts at equal time intervals and at a frequency large enough to accurately reproduce the major features of the data curve. In some instances, variations were made in this sampling interval to more accurately define isolated areas of change. A cumulative frequency curve was computed for the magnetic data and plotted on Figure 3. These values were then plotted on Sheet 1 and contoured at a 20-gamma interval.

Contours below 58,520 were drawn in dashed, while the higher values were drawn in solid. Regions of strong VLF-EM responses which could be separated from the effects of turbulence and terrain were plotted on Sheet 2.

DISCUSSION OF RESULTS

A) Magnetic The magnetic variation over the property, as can be immediately seen on Figure 3, is relatively small. The total range of these values is approximately 110-gammas. Such a small range is to be expected over the metamorphic rocks of the area. The cumulative frequency curve shows a distinct break at approximately 58,520-gammas. This would suggest that there are two separate groupings of the magnetic values. In this particular instance it is felt that the higher values (above 58,520-gammas) probably reflect magnetite mineralization and/or pyrrhotite. Since the mineralization on the adjacent Cottonbelt property is known to be associated with magnetite and pyrrhotite, the following discussion deals primarily with regions of magnetic highs.

There are several magnetic anomalous highs on the property which are worthy of further discussion. These are clearly seen on Sheet 2. For ease of identity and not necessarily in order of economic interest they are labeled A to C respectively. Their limits are defined by the 58,520-gamma contour.

Most of these anomalous highs form a lineation which strikes towards the northwest through the central part of the property.

Anomaly A is the largest of these. It is approximately 8,000 feet long and 1,000 feet wide. The magnetic values range up to 58,578. This anomaly could, in part be caused by the terrain effect of the ridge, although the writer considers this unlikely to be the major cause.

Anomaly B is smaller in size. However, it has values of the same magnetic intensities as those of anomaly A. This anomaly is particularly interesting because it suggests that some of the mineralization may strike towards the northeast. It should also be noted that a portion of this anomaly strikes on line with one of the smaller creeks. This suggests that some of the mineralization may be along a fracture feature which may also control the creek.

Anomaly C is of lower intensity than either A or B. However its limits were not fully defined as it extends off the survey area.

The remainder of the magnetic highs are composed of isolated values. They are of interest primarily because they help to define the lineation of magnetic highs to the northwest. They are probably related to the same

source as anomalies A, B, and C. Their small size and relatively low intensity could reflect either a lower concentration of magnetite and/or pyrrhotite, or a greater degree of metamorphism.

B) VLF-EM Survey

As mentioned under Compilation of Data, Sheet 2 shows only those VLF-EM highs (or conductive zones) that could not be directly attributed to the effects of terrain and turbulence.

As a result some of the anomalous zones shown on Sheet 2 were reduced, and therefore may be reflecting conductive zones that are much larger.

Anomalous zone D is of interest primarily because of its large size, the fact that it occurs over the relatively flat ground near the peak of Grace Mountain, and its proximity to the known mineralization.

Anomalous zone E strikes along the crest of the ridge and could possibly be a reflection of the terrain. Unfortunately any anomalous response to the northeast of this zone would have to be discounted because of air turbulence, and the rugged terrain. Thus, this zone could be much larger than indicated on Sheet 2. Verification with a ground

survey would be required in this area.

The other areas showing strong VLF-EM responses were relatively small and do not show good cross-line correlation. For these reasons they are probably not of economic interest at this stage of exploration.

It should be stated that the existing records listed in the bibliography differ slightly as to the exact location of the Cottonbelt and Complex mineralized zones. In this report highs are taken to be located on the Crown Grants outlined on Sheets 1 and 2. The portion of these Crown Grants that were able to be flown were in areas of magnetic lows. It is felt that, since the known mineralization is associated with magnetite, one of the following explanations should apply:

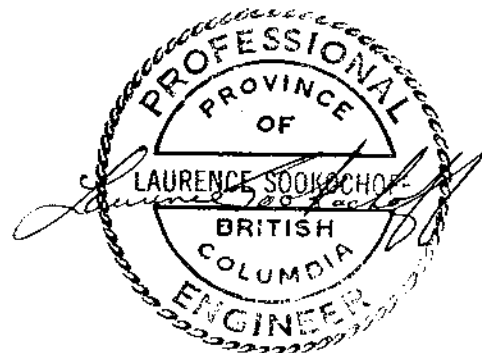
- 1) That the survey lines did not extend over the actual areas of mineralization
- 2) That this area was not flown in sufficient detail to detect the mineralization
- 3) Though the writer considers this to be unlikely, the possibility should be considered

that the mineralization either does not occur on these Crown Grants or they are not accurately plotted on the claims map.

Respectfully submitted
GEOTRONICS SURVEYS Ltd

Howard A. Larson

Howard A. Larson
Geophysicist



May 21, 1973

SELECTED BIBLIOGRAPHY

Wheeler, J. O.; Big Bend Map Area British Columbia
paper 64-32. Geol. Surv. of Can, 1965

Whittles, A. B. L.; Prospecting with Radio Frequency
EM-16 in Mountainous Regions,
Western Miner, February, 1969

Holland, Stuart S.,; Land Forms of British Columbia,
a Physiographic Outline, Bulletin
No 48, B C Dept pf Mines and Pet
Res., 1964

BC Minister of Mines Ann Repts, 1922	p 182, 200
" " " " " " , 1925	p 150
" " " " " " , 1926	p 188
" " " " " " , 1927	p 195
" " " " " " , 1928	p 209

GEOPHYSICIST'S CERTIFICATE

I, Howard A. LARSON, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of GEOTRONICS SURVEYS Ltd., with offices at 514-602 West Hastings Street, Vancouver 2, B. C.

I further certify that:

1. I am a graduate of the Univeristy of British Columbia (1971) and hold a B Sc, degree in Geophysics.
2. I have been practising in my profession for the past two years and have been active in the mining industry for the past five years.
3. This report is compiled from data obtained from combined airborne magnetometer and VLF-EM survey conducted by myself during May, 1973 over the GN and Shuswap claims, and from pertinent data from published maps and reports as listed under Selected Bibliography.
4. I have no direct or indirect interest in the properties or securities of Great Northern Petroleum and Mines Ltd, nor do I expect to receive any interest therein.

Howard A. Larson

Howard A. Larson
Geophysicist

May 21, 1973
Vancouver B. C.

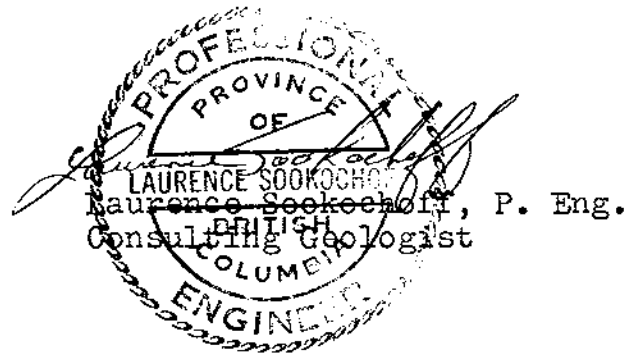
ENGINEER'S CERTIFICATE

I, LAURENCE SOOKOCHOFF, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and an associate with T R TOUGH & ASSOCIATES Ltd, with offices at 519-602 West Hastings Street, Vancouver 2, B. C.

I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B Sc degree in Geology.
2. I have been practising in my profession for the past six years.
3. I am registered with the Association of Professional Engineers of British Columbia
4. I have studied the accompanying report dated May 21, 1973 on a combined airborne magnetic and VLF-EM survey submitted by GEOTRONICS SURVEYS Ltd, written by Howard A. LARSON, Geophysicist, and concur with findings therein.
5. I have no direct or indirect interest whatsoever in the property described herein, nor in the securities of GREAT NORTHERN PETROLEUMS and MINES Ltd, and do not expect to receive any interest therein.



May 21, 1973

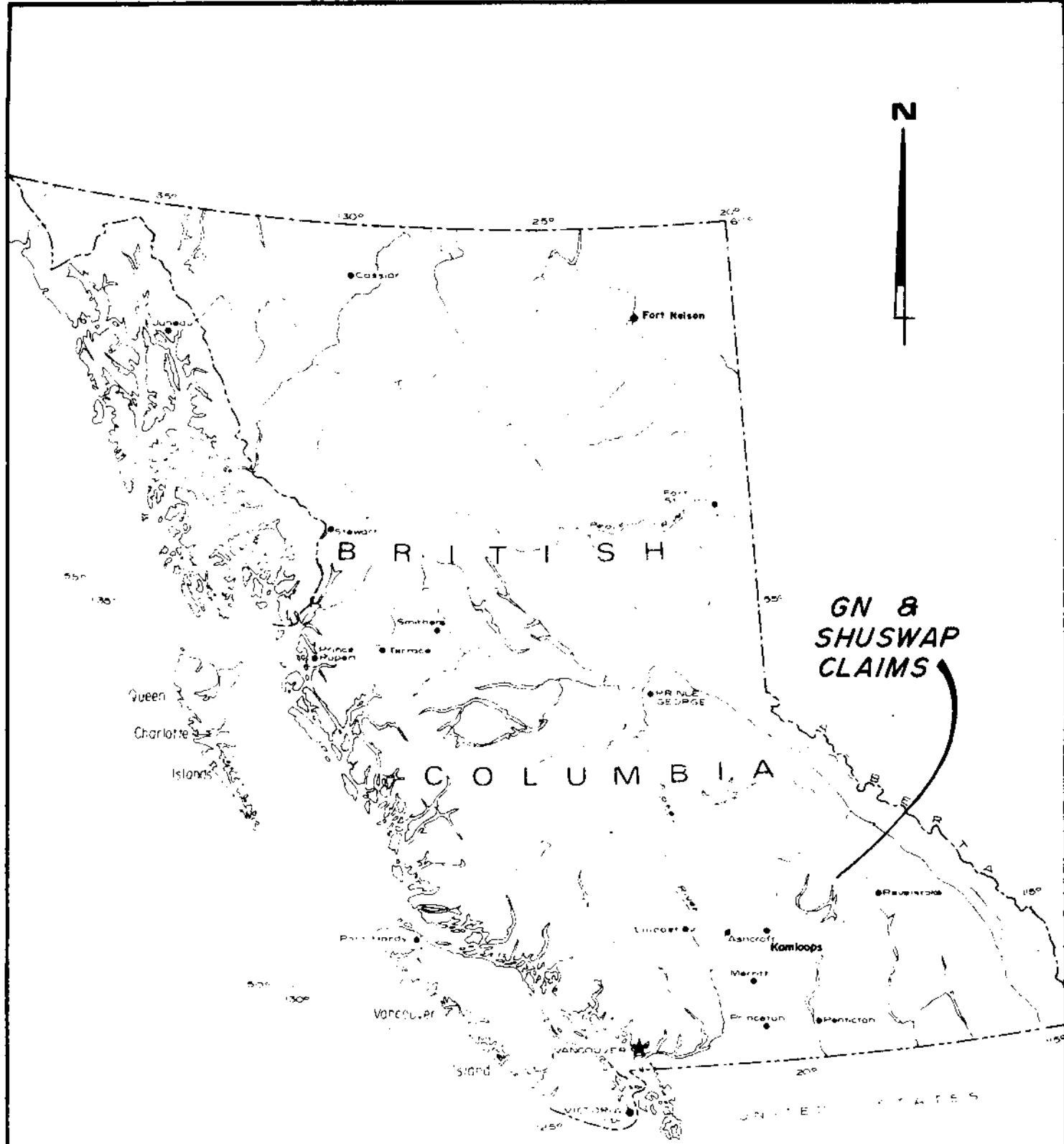
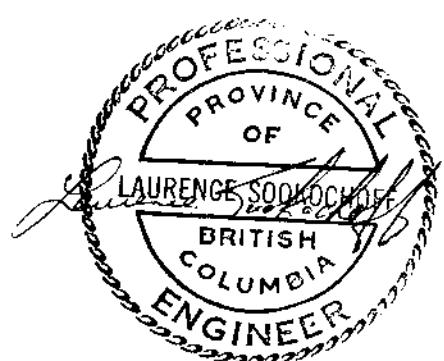


FIG. 1

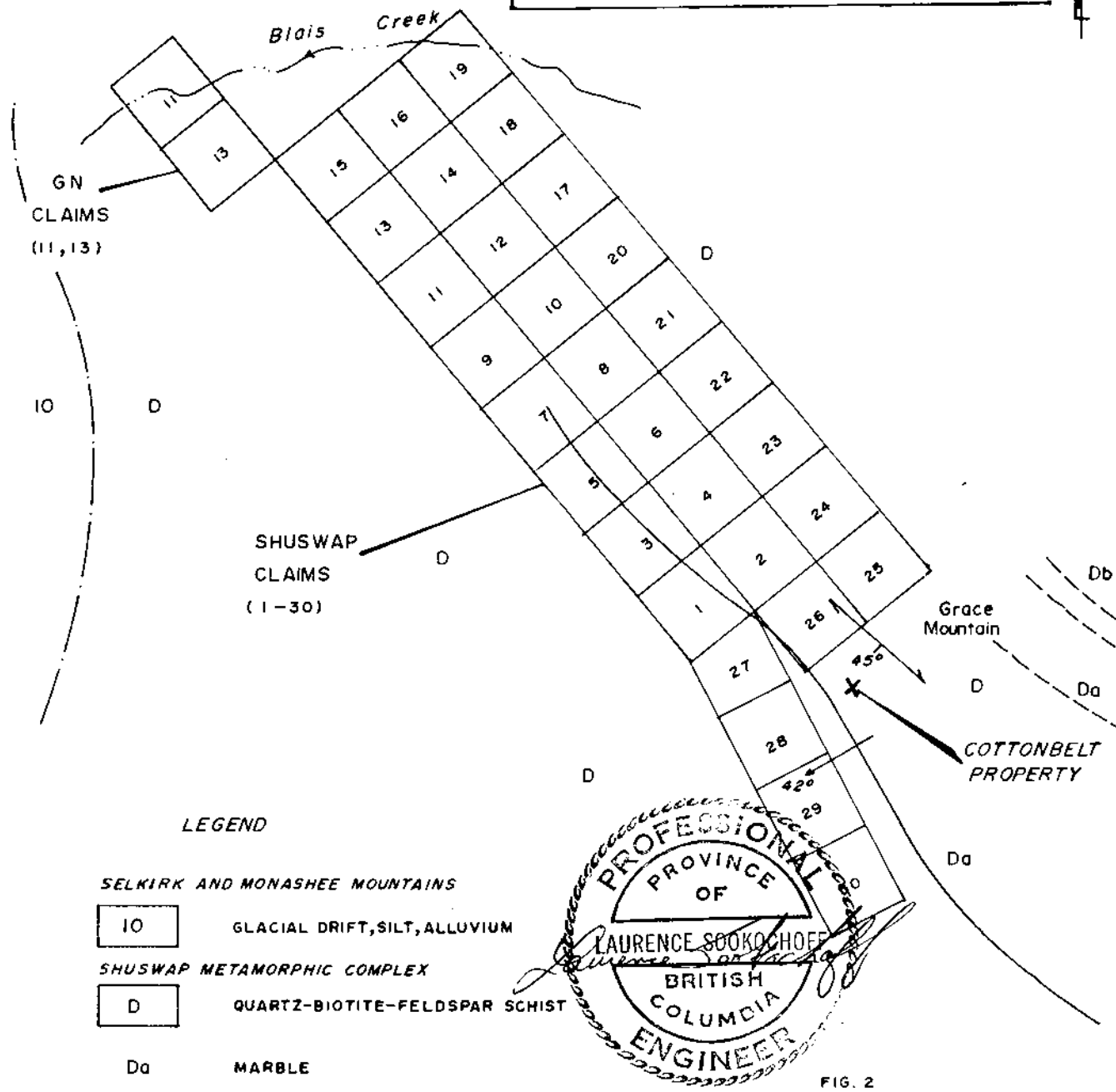


GEOTRONICS SURVEYS LTD.		
GREAT NORTHERN PETROLEUMS & MINES LTD.(N.P.L.)		
GN & SHUSWAP CLAIMS KAMLOOPS M.D., B.C.		
LOCATION MAP		
SCALE 1" = 134 mi		
DRAWN. PDT	CHECKED:	DATE MAY '73

Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. **4367** M.P. **#2**



LEGEND

SELKIRK AND MONASHEE MOUNTAINS

10 GLACIAL DRIFT, SILT, ALLUVIUM

SHUSWAP METAMORPHIC COMPLEX

D QUARTZ-BIOTITE-FELDSPAR SCHIST

Da MARBLE

Db QUARTZITE

GNEISS

ANTICLINE

GEOLOGY TAKEN FROM GSC MAP 82 ME

GEOTRONICS SURVEYS LTD.

GREAT NORTHERN PETROLEUMS & MINES LTD. (N.P.L.)
GN & SHUSWAP CLAIMS
KAMLOOPS M.D., B.C.

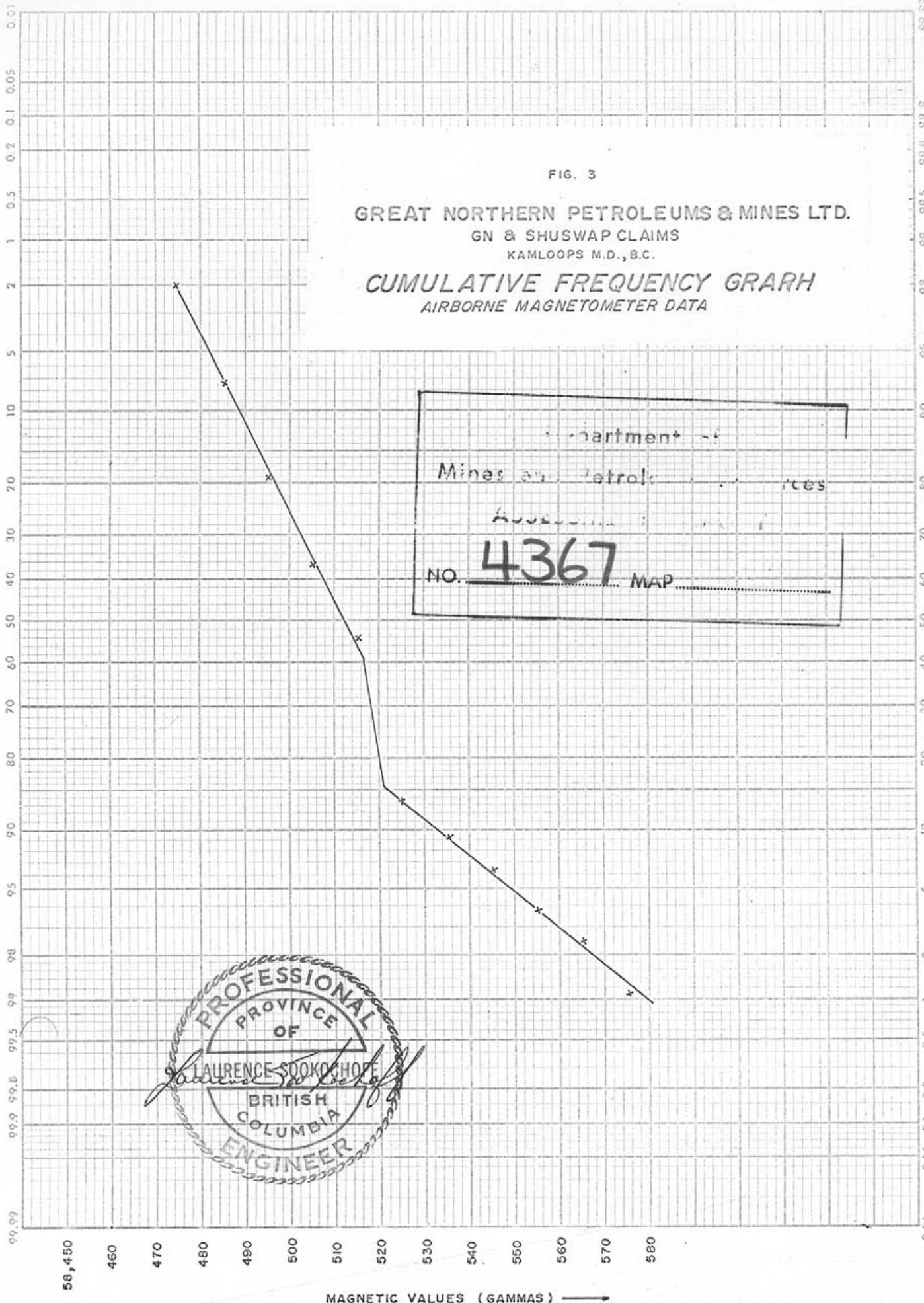
CLAIM MAP & GEOLOGY

DRAWN BY PDT DRAFTING SERVICES	SCALE 1" = 3000'	DATE MAY 1973
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FIG. 2

GCS-27B
Arithmetic Probability
MADE IN CANADA

GCS
MICROGRAPH

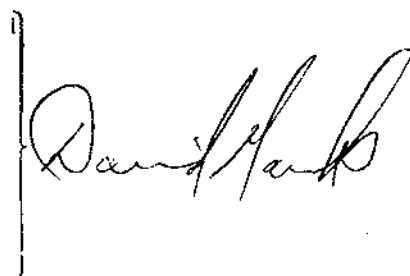


COST BREAKDOWN

Contract No 73-49
Airborne Magnetometer and VLF-EM Surveys
GN & SHUSWAP Claims
Grace Mountain Area, Kamloops MD B C

Helicopter		\$ 1,500.00
Equipment Rental		
1 Elsec Proton Precession Airborne System	750	
1 Sabre VLF-EM Airborne System	700	
Truck rental for 4 days	<u>250</u>	
	1,700	1,700.00
Personnel Costs		
1 geophysicist/instrument operator (H.A.Larson @125.00 per day for 4 days	500	
1 navigator (K.McCulloch) @ 100 per day for 4 days	<u>400</u>	900.00
	900	
Board and room for 2 men for 4 days @ 15.00 per day/man		120.00
Engineer's fees		300.00
Cost of report (compilation, data reduction and interpretation		<u>2,900.00</u>
	TOTAL	<u>\$ 7,420.00</u>

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *24th*
day of *May, 1973*, A.D.

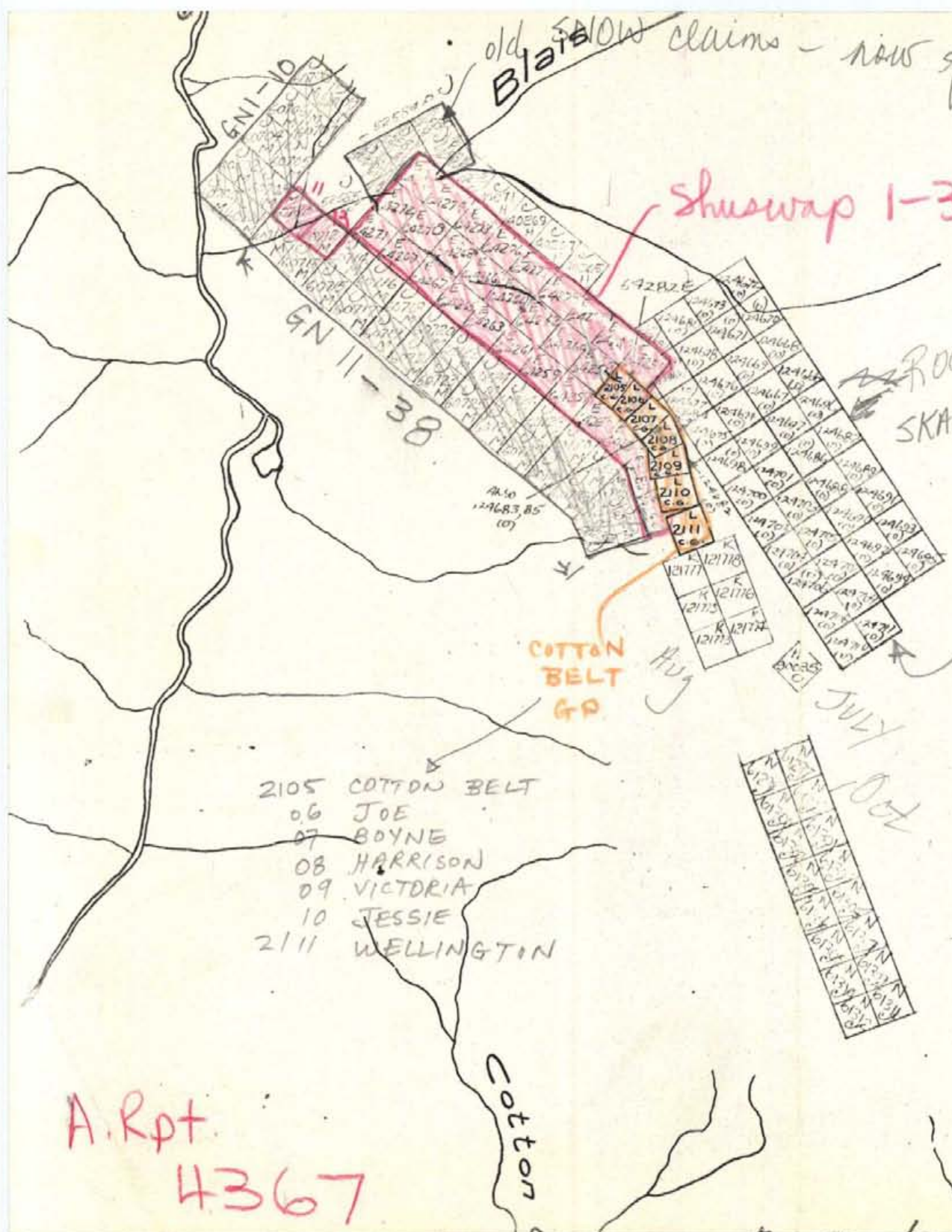


DGM: aw
5-24-73

Grant Paul SUB-MINING RECORDER
A Commissioner for taking Affidavits within British Columbia or
A Notary Public for the Province of British Columbia.

old Blawie claims - now forfeited

52580-5
NOV. 1966



Shuswap 1-30

✓ Shuswap 1-30

64257-286

staked in ~~Oct~~ /67
May

ROCK 1-20
SKARN 1-26

GN 60700-737
Sept. 66

Mar. /73

Harold Adams

COTTON BELT GP

- 2105 COTTON BELT
- 06 JOE
- 07 BOYNE
- 08 HARRISON
- 09 VICTORIA
- 10 JESSIE
- 2111 WELLINGTON

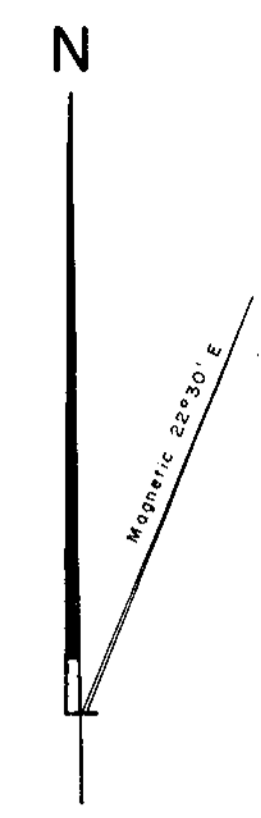
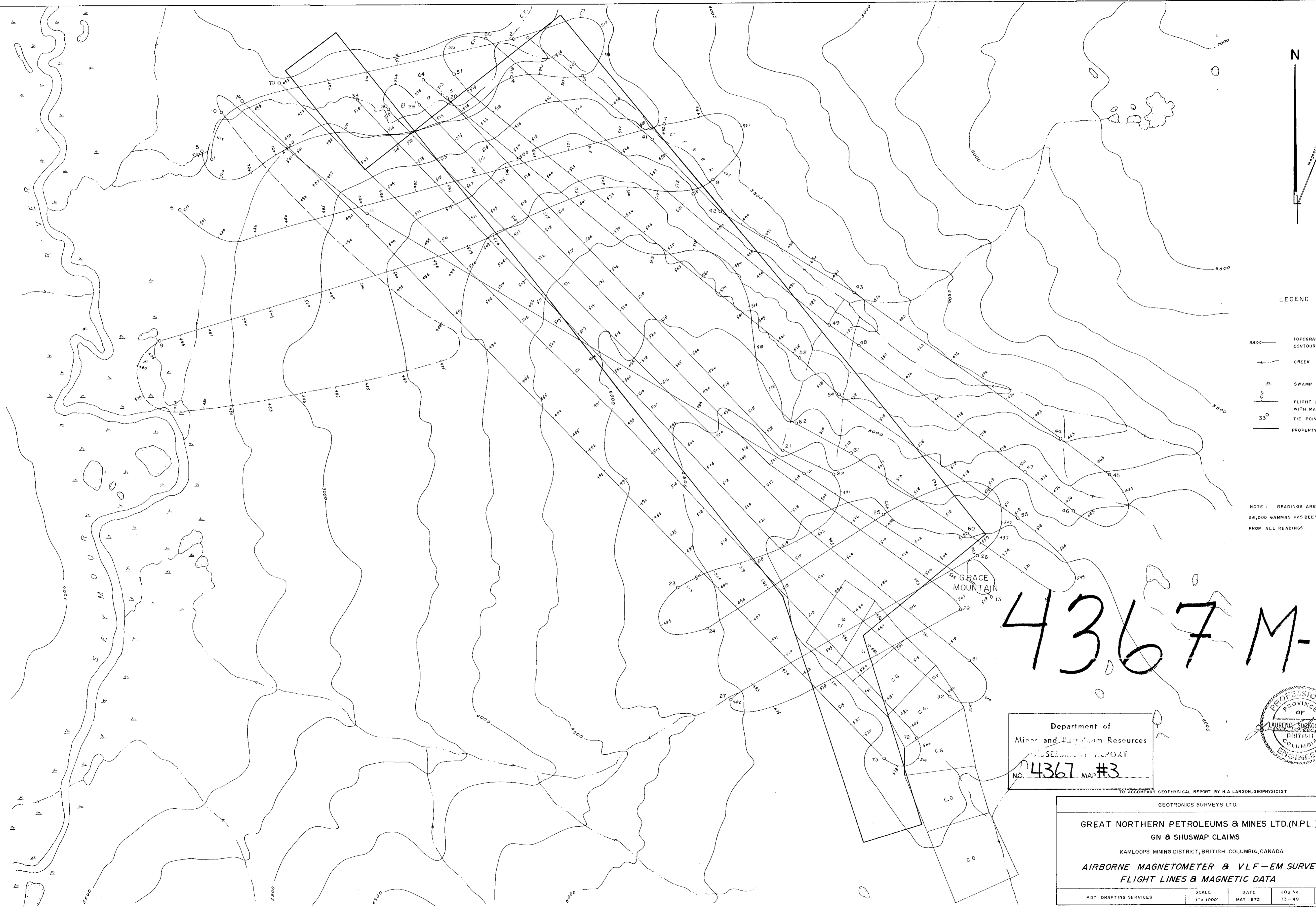


4367

A.Rpt.
4367

Cotton

ford



LEGEND

- 5500 ——— TOPOGRAPHICAL CONTOUR
- CREEK
- SWAMP
- FLIGHT LINE WITH MAGNETIC VALUE
- 33° — THE POINT
- PROPERTY OUTLINE

NOTE: READINGS ARE IN GAMMAS.
56,000 GAMMAS HAS BEEN SUBTRACTED FROM ALL READINGS.

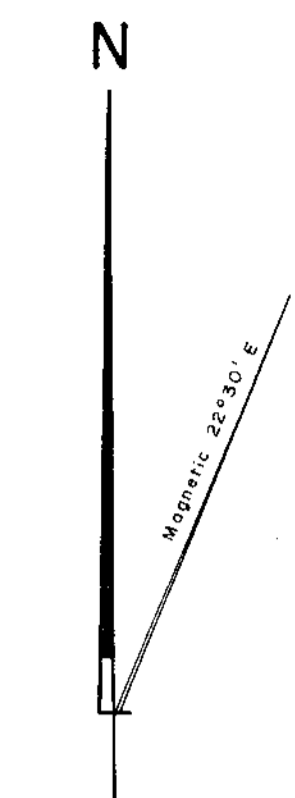
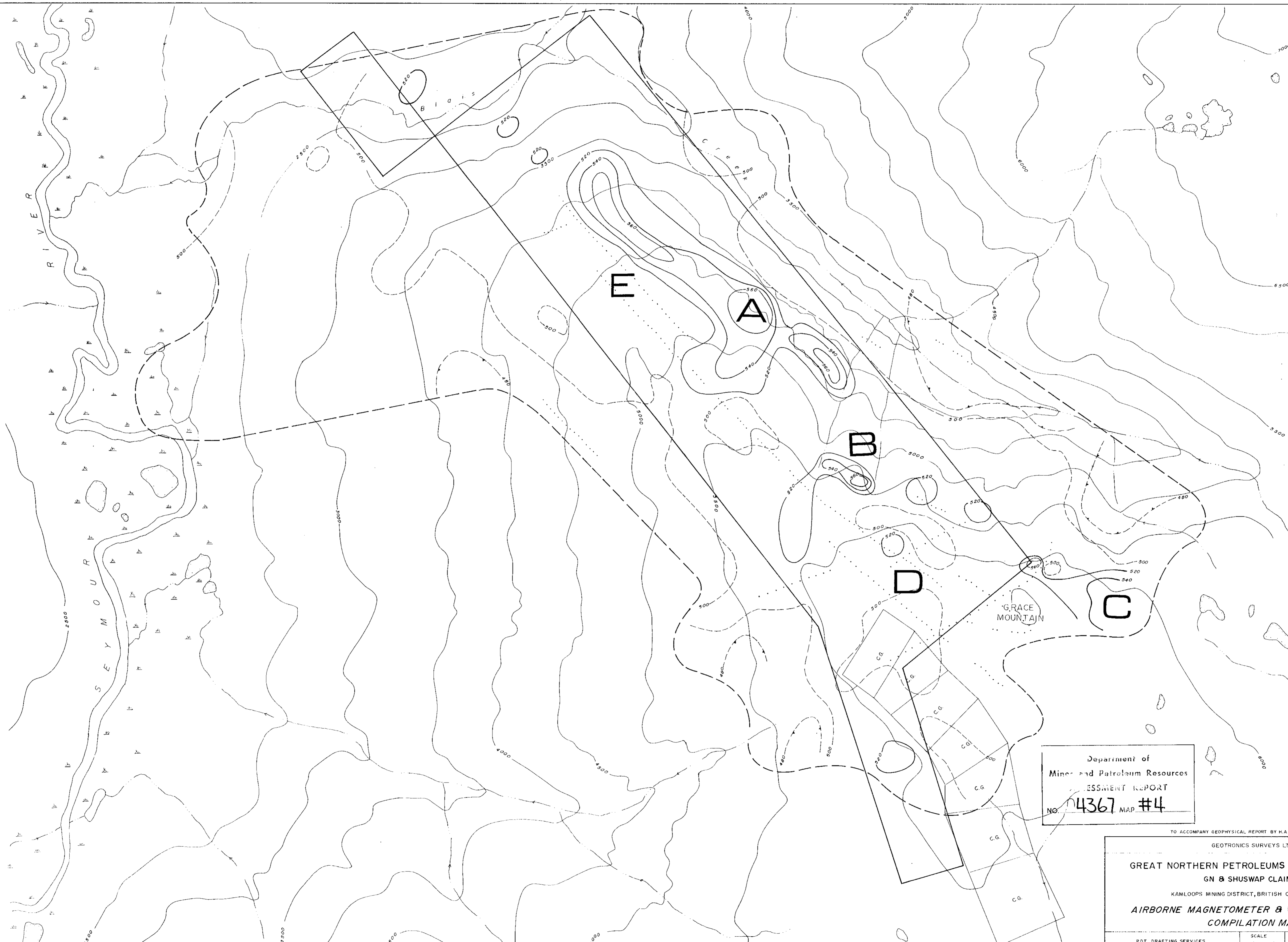
4367 M-3

Department of
 Mines and Technical Surveys
 RESUME REPORT
 NO. 4367 MAP #3



TO ACCOMPANY GEOPHYSICAL REPORT BY H.A. LARSON, GEOPHYSICIST
 GEOTRONICS SURVEYS LTD.
GREAT NORTHERN PETROLEUMS & MINES LTD. (N.P.L.)
 GN & SHUSWAP CLAIMS
 KAMLOOPS MINING DISTRICT, BRITISH COLUMBIA, CANADA
AIRBORNE MAGNETOMETER & VLF-EM SURVEY
FLIGHT LINES & MAGNETIC DATA

PDT DRAFTING SERVICES	SCALE 1" = 1000'	DATE MAY 1973	JOB No. 73-49	SHEET 1
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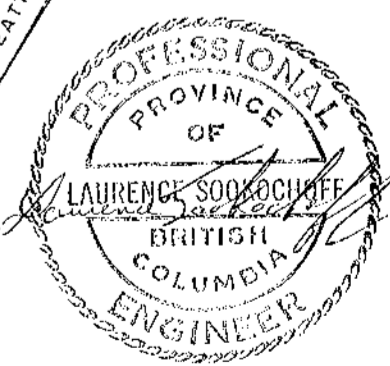
- 5500 — TOPOGRAPHICAL CONTOUR
- CREEK
- ≡ SWAMP
- PROPERTY OUTLINE
- - - SURVEY AREA

GEOPHYSICS

MAGNETIC VALUES ARE IN GAMMAS.
 CONTOUR INTERVAL IS 20 GAMMAS.
 58,000 GAMMAS HAS BEEN SUBTRACTED FROM ALL VALUES.

- - - MAGNETIC CONTOUR 500 AND LESS (LOW)
- MAGNETIC CONTOUR 520 AND ABOVE(HIGH)
- VLF-EM HIGH

SEATTLE TRANSMITTER 18.01MHz 5.300W



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 4367 MAP #4

TO ACCOMPANY GEOPHYSICAL REPORT BY H.A. LARSON, GEOPHYSICIST

GEOTRONICS SURVEYS LTD.

GREAT NORTHERN PETROLEUMS & MINES LTD.(N.PL)
 GN & SHUSWAP CLAIMS

KAMLOOPS MINING DISTRICT, BRITISH COLUMBIA, CANADA

**AIRBORNE MAGNETOMETER & VLF-EM SURVEY
 COMPILATION MAP**

PDT DRAFTING SERVICES	SCALE 1" = 1000'	DATE MAY 1973	JOB No. 73-49	SHEET 2
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