

2930

SUMMIT OILS LTD.

REDTOP CREEK PROPERTY

GEOPHYSICAL REPORT

on a

GROUND MAGNETOMETER SURVEY

by

TRI-CON EXPLORATION SURVEYS LTD.

July 1970

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 2930 ..... MAP .....

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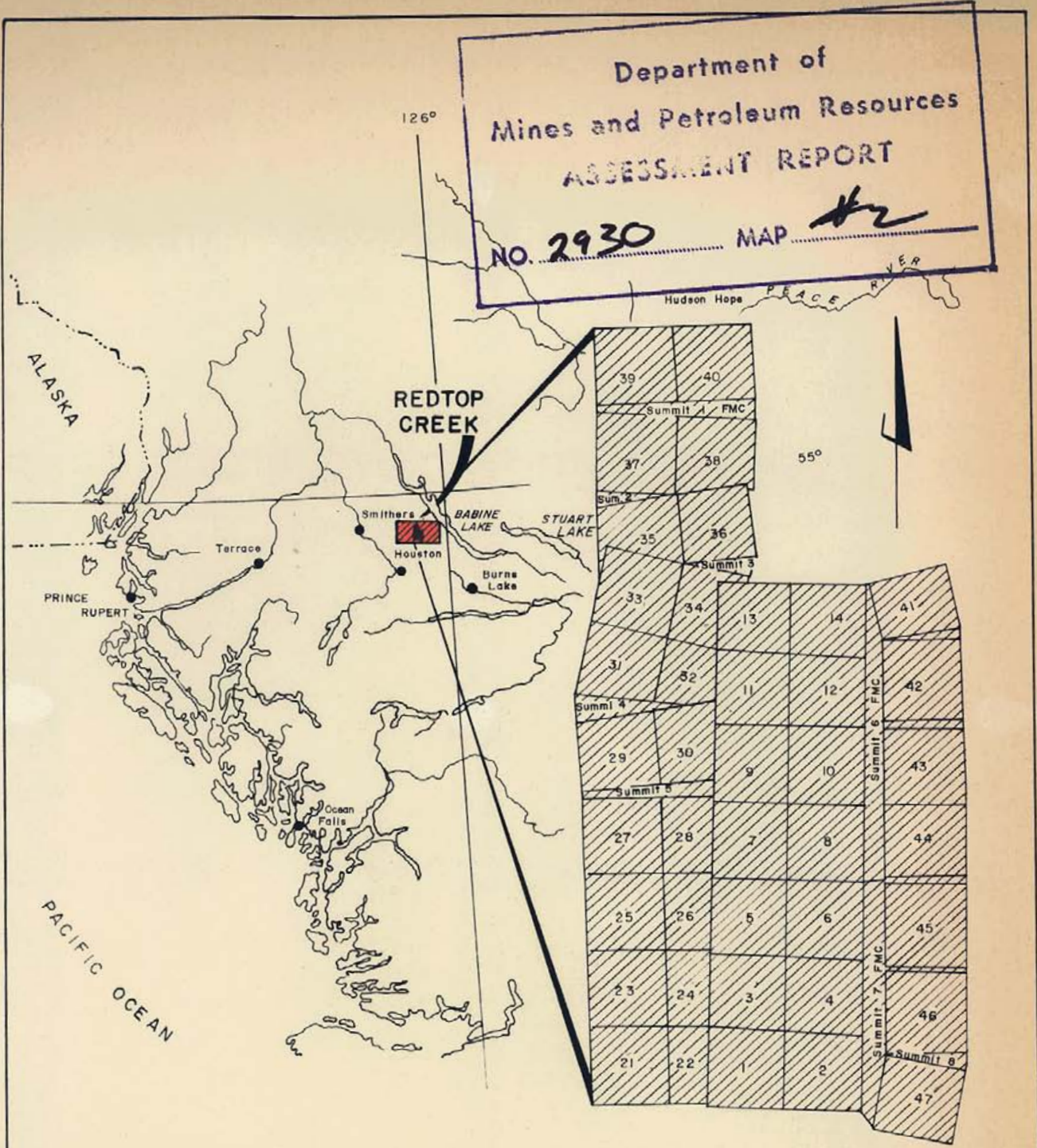
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#2 Figure 2	Magnetic Intensity Contour Map
#3 Figure 3	Interpretation Map

Department of  
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ASSESSMENT REPORT

NO. 2930

MAP

*[Handwritten signature]*



# SUMMIT OILS LIMITED

## REDTOP CREEK

### LOCATION AND CLAIMS MAP

SCALE LOCATION MAP 1" = 40 MILES - CLAIMS MAP 1" = 3000 FEET approx.



EXPLORATION SURVEYS LTD.

Fig. 1

INTRODUCTION

During the period June 10 - 18, 1970 TRI-CON EXPLORATION SURVEYS LTD. of North Vancouver, British Columbia, conducted a program of line cutting and ground magnetometer surveying, over a group of claims known as the Redtop Creek Property, Omenica Mining Division, Province of British Columbia. The survey was conducted on behalf of Summit Oils Ltd.

The purpose of the ground magnetometer survey was to try and locate any magnetic patterns which would aid in determining the significance of previously located reconnaissance copper geochemical anomalies.

LOCATION AND ACCESS

The group of claims covered by this report is centered at latitude  $54^{\circ} 36'$  N and longitude  $126^{\circ} 19'$  W some eight miles north of Topley B.C. N.T.S. 93L/9

Access is by all weather road from Topley B.C.

THE PROPERTY

The Redtop Property consists of 41 full-sized mining claims and 8 Fractions listed as follows:

Summit Fraction 1-4	77572 - 77575
Summit Fraction 5-8	77576 - 77579
Summit 1-8	68553 - 68560
Summit 9-14	68561 - 68566
Summit 21-28	68567 - 68574
Summit 29-40	68575 - 68586
Summit 41-47	68587 - 68593

## SURVEY SPECIFICATIONS

### Survey Grid

A chain and compass survey grid was established previous to the ground magnetometer survey. East-west traverse lines were turned off every 500 feet from a north-south baseline and flagged at 100 foot intervals.

### The Magnetometer Survey

The magnetometer survey was conducted using a Geotronics G-110 Fluxgate magnetometer. This instrument measures the absolute value of the vertical component of the earth's magnetic field to an accuracy of 20 gammas. Corrections for diurnal variation were made by tying into previously established base stations at intervals not exceeding two hours. Readings were taken at 100 foot intervals along the traverse lines.

### Data Presentation

Some 20.5 line miles of magnetometer surveying were conducted. The results are presented in contour form (Figure 2) at a contour interval of 200 gammas. The interpretation map (Figure 3) illustrates the general magnetic features to be discussed. Both figures 2 and 3 are at a scale of 1 inch = 500 feet.

## DISCUSSION OF RESULTS.

The magnetic intensity data showed considerable variation from a minimum of some 4100 gammas to a maximum of some 8100 gammas. The principle feature, as illustrated on Figure 3, is the strong north-south trending slightly bowed magnetic ridge. The magnetic ridge bows outwards to the west and is flanked on the west by deep magnetic lows causing a pronounced dipole effect. The magnetic lows in turn form a north-south trending magnetic trough running parallel to the magnetic ridge.

Several magnetic linears are depicted on figure 3 as inferred faults. They appear to reflect a system of northeast-southwest and northwest-southeast faults which have displaced the magnetic ridge causing the bowed effect.

In general the magnetic ridge is approximately 1,200 gammas above a general background of some 5,800 gammas indicative of high magnetic susceptibility material. The magnetic peaks (Figure 3) are some 2,100 gammas above the local background and would appear to be caused by more massive concentrations of high magnetic susceptibility material, probably magnetite.

Correlation of the ground magnetometer data and previously obtained copper geochemistry soil sampling data shows a halo of anomalous copper values around the large magnetic peak. In general anomalous geochemical values appear to be associated with areas of high magnetic intensity and the inferred fault zones.

#### CONCLUSION

In conclusion the ground magnetometer survey located a strong north-south magnetic trend which appears to be offset and dissected by northwest-southeast and northeast-southwest fault zones. Correlation with reconnaissance geochemical data indicates that copper bearing mineralization may be associated with these features.

#### RECOMMENDATIONS

1. Carry out an induced polarization program over the magnetic trend and areas of intersecting fault zones.
2. Undertake a seismic survey over anomalous areas indicated by the induced polarization survey to determine the overburden depth.

3. Based on interpretation of the magnetometer, geochemical, induced polarization and seismic data, organize a trenching or diamond drilling program.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Glen E. White". The signature is written in a cursive style and is positioned above the typed name.

Glen E. White, B.Sc.  
Chief Geophysicist

Read and Checked  
By W. G. Stevenson  
P. Engineer

INSTRUMENT SPECIFICATIONS

MAGNETOMETER

A. Instrument

- (a) Type - neutralized Fluxgate
- (b) Make - Geotronics
- (c) Model G-110

B. Specifications

- (a) Measurement - Vertical Magnetic Field
- (b) Range - 100,000 gammas
- (c) Temperature coefficient less than 2 gammas per degree Centigrade
- (d) Sensitivity - 20 gammas per dial division
- (e) Levelling systems oil damped gimbol
- (f) Size - magnetometer 6" x 3½" x 8" weight 2½ lbs.  
battery case 4½" x 4½" x 1½" weight 1½ lbs.

C. Survey Procedures

- (a) Method - Two hour loops
- (b) Corrections - (i) Base  
(ii) Diurnal
- (c) Station relationship - each station read for intensity of vertical magnetic field

D. Presentation

- (i) Contour maps of values in gammas


C E R T I F I C A T I O N

TO WHOM IT MAY CONCERN:

I, GLEN ELMO WHITE, of the City of Richmond  
in the Province of British Columbia, hereby certify:

1. That I am a Geophysicist and reside at 112 - 641 Gilbert Road,  
Richmond B.C.
2. That I studied Geophysics and Geology and graduated  
from the University of British Columbia with the  
degree of Bachelor of Science.
3. That I have been engaged in Mining Exploration for  
eight years.
4. That I do not have, nor do I expect to receive, either  
directly or indirectly, any interest in the property,  
or in the securities of SUMMIT OILS LTD.
5. That this report is based on information derived from a  
ground magnetometer and a reconnaissance geochemical survey  
carried out by TRI-CON EXPLORATION SURVEYS LTD.

Dated this 9th day of July 1970

  
G. E. White, B.Sc.  
Geophysicist

STATEMENT OF QUALIFICATIONS

Name: WHITE, Glen E.

Profession: Geophysicist

Education: B.Sc. Geophysics - Geology  
University of British Columbia.

Professional Associations: Associate member of Society of Exploration Geophysicists.  
Active member B.C. Society of Mining Geophysicists

Experience: Pre-Graduate experience in Geology-Geochemistry-Geophysics with Anaconda American Brass.

Two years Mining Geophysicist with Sulmac Explorations Ltd. and Airborne Geophysics with Spartan Air Services Ltd.

One Year Mining Geophysicist and technical Sales Manager in the Pacific north-west for W. P. McGill and Associates.

Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions, with Geo - X Surveys Ltd.

Presently Chief Geophysicist Tri-Con Exploration Surveys Ltd.

Active experience in all Geologic provinces of Canada.

STATEMENT OF OPERATOR'S QUALIFICATIONS

Name: HOMENUKE, Alexander M.

Profession: Field Manager

Education: Two years; Graduate of the British Columbia  
Institute of Technology in Mining Technology.

Experience: Four summers as a helper for Canadian Longyear  
Ltd. diamond drilling.

Two months with Silver Standard Mines Ltd.

One summer with Amax Explorations Ltd. as a  
field assistant on reconnaissance.

Presently employed by Tri-Con Exploration  
Surveys Ltd. in the capacity of Field Manager  
since June, 1969.

CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY:

- That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.

- That I am a graduate of the University of Utah, 1946, with a B.Sc.Degree.

- That I am a registered Professional Engineer in the Association in British Columbia.

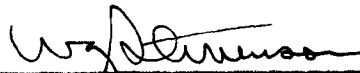
- That I have practised my profession for 22 years.

- That I have no direct, indirect or contingent interest in the Summit Mineral Claims or in the securities of Summit Oils Ltd., nor do I intend to receive any such interest.

- That I have reviewed a report dated July 9, 1970, based on work conducted by Tri-Con Exploration Surveys Ltd. under the supervision of Glen E. White, chief geophysicist.

DATED at Vancouver, British Columbia, this 16th. day of July, 1970.

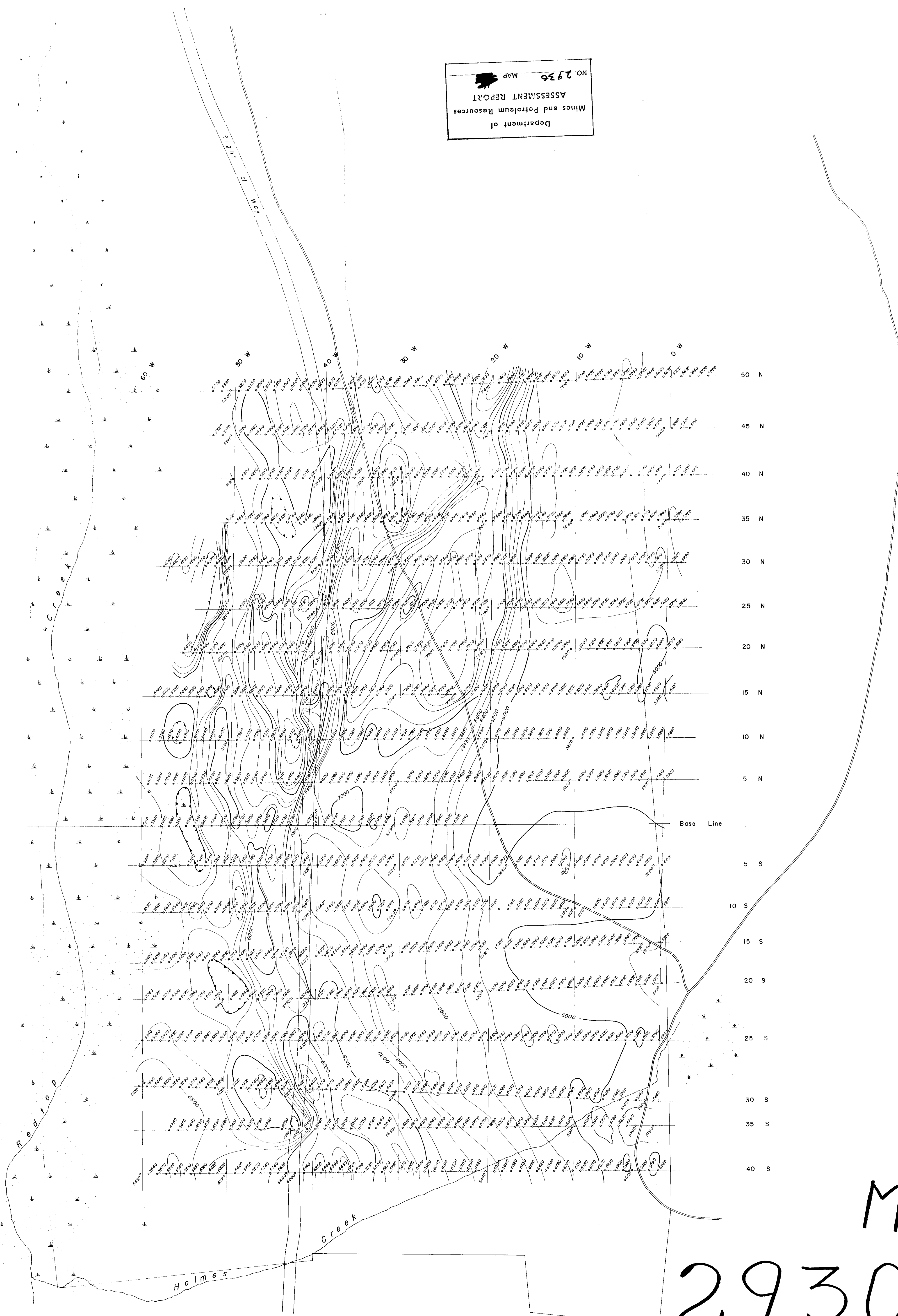
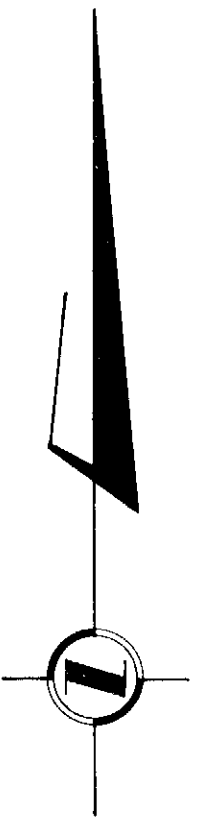
W.G.STEVENSON & ASSOCIATES LIMITED  
Consulting Geologists



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W.G.Stevenson, P.Eng.

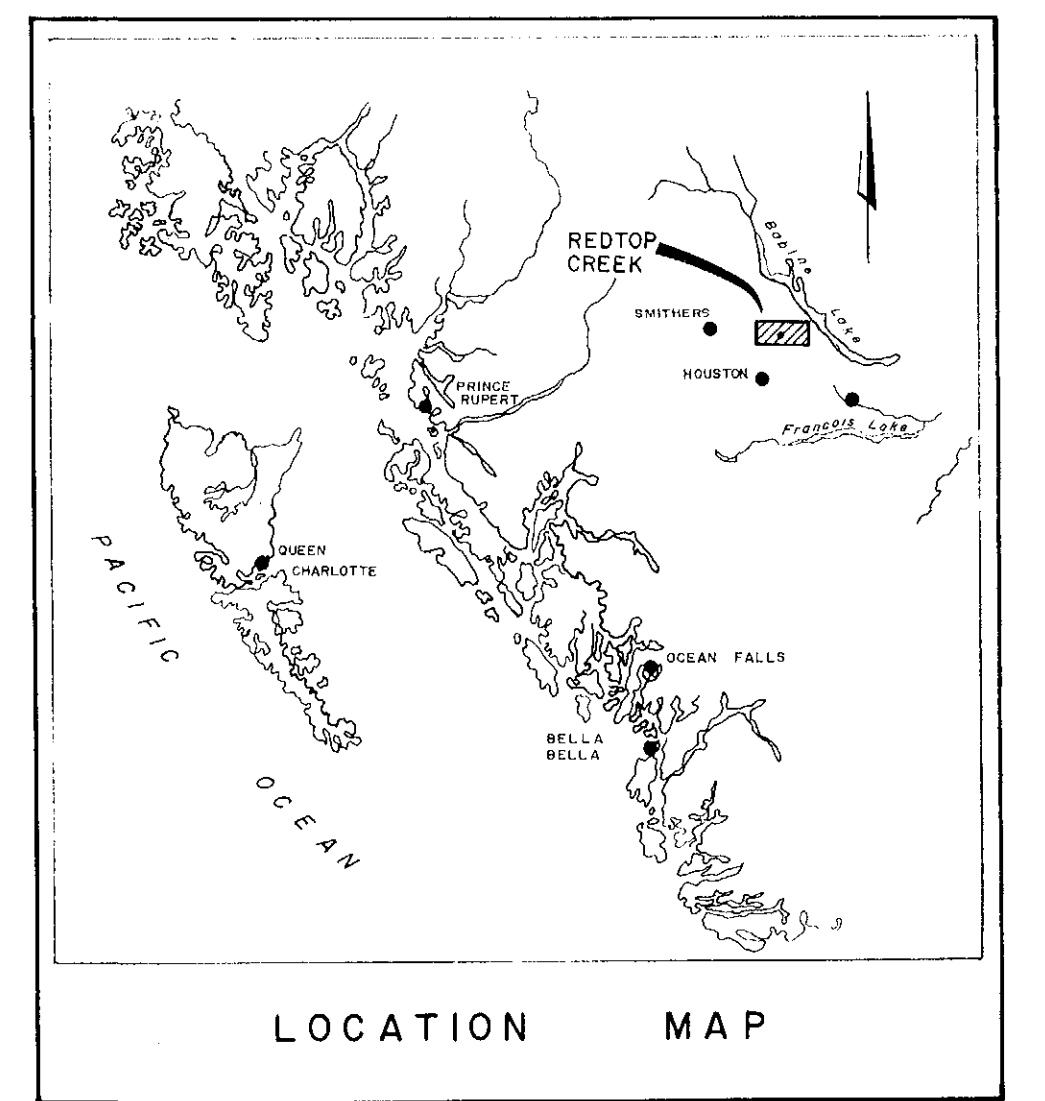
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MAP NO. 2930



L E G E N D

- Survey Line, Station and Reading
- Contour Line - Magnetic Contour Interval 200 gammas
- Magnetic Depression
- Creek
- Swamp
- Trail
- Main Road
- Boundary of Summit Claims

NOTE:  
To Accompany Geophysical Report on REDTOP PROPERTY,  
Omineca Mining Division by: Glen E. White - Chief Geophysicist  
July 9, 1970



SCALE 500 0 500 1000 FEET  
1" = 500'



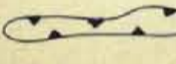
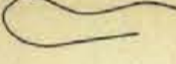
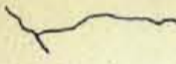

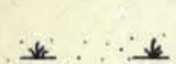



<b>SUMMIT OILS LIMITED</b>			
REDTOP CREEK AREA			
OMINECA MINING DIVISION - BRITISH COLUMBIA, CANADA			
GEOPHYSICAL MAP			
VERTICAL MAGNETIC INTENSITY			
TRI-SON		INTERPRETED by: G.E. White	
EXPLORATION SURVEYS LTD.		DRAFTED by: N. Grant-Brown	
July 9, 1970		PROJECT No: 101	
REVISED		FILE 84	

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*Glen E. White*

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ASSESSMENT REPORT  
Map No. 2930



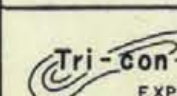
L E G E N D

-  Magnetic Trend
-  Magnetic Peak
-  Magnetic Depression
-  Contour Line
-  Creek
-  Trail
-  Swamp
-  Road
-  Boundary of Summit Claims
-  Fault

NOTE:  
To Accompany Geophysical Report on REDTOP PROPERTY,  
Omineca Mining Division by: Glen E. White - Chief Geophysicist  
July 9, 1970

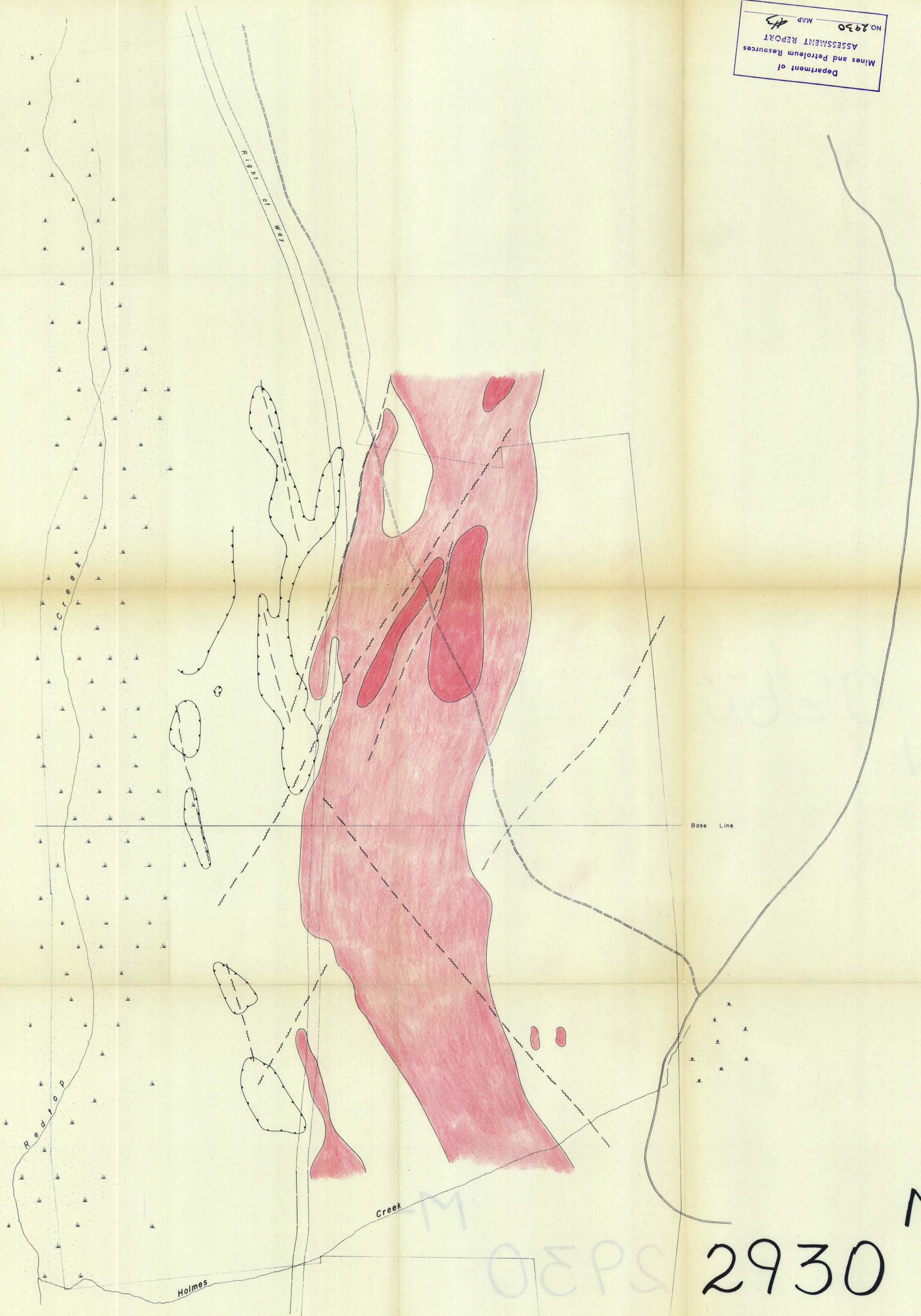


SCALE 0 500 1000 FEET

<b>SUMMIT OILS LIMITED</b>		
REDTOP CREEK AREA		
<small>OMINECA MINING DIVISION - BRITISH COLUMBIA, CANADA</small>		
<b>GEOPHYSICAL MAP</b>		
<b>INTERPRETATION MAP</b>		
	INTERPRETED by: G.E. White	Fig. 3
EXPLORATION SURVEYS LTD.	DRAFTED by: N. Searl-Brown	
July 9, 1970 REVISED	PROJECT No. 101	FILE 84

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SPS

*Glen E. White*