

2668

TAURUS EXPLORATION CORPORATION

"I" PROJECT

GEOCHEMICAL SURVEY

FRASER LAKE AREA, B. C.

By J.G. Simpson, B.Sc., Ph.D., P.Eng.

SEPTEMBER 22nd, 1970

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
No. 2668

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(i) TIME AND COST DISTRIBUTION

(ii) CERTIFICATION

MAPS (in rear pocket)

TITLE	Scale
#1 "I" CLAIM AND TRENCH LOCATION	1" = 1,500'
#2 "I" CLAIMS GEOCHEMICAL SURVEY 1970	1" = 500'

INTRODUCTION

A geochemical soil survey was carried out in July and August of 1970, over parts of Groups H, I, J, K, L and M of the "I" claims, situated approximately 3 miles south of Fraser Lake Township, in Central B.C.

LOCATION AND ACCESS

The area under investigation covers the whole of the M group and parts of the other groups named on the south-western and western margins of the "I" claim block, flanking the south-east slopes of Nithi Mountain. Access to the area is via logging roads turning off from Highway 16 at Fraser Lake Township.

CLAIMS

The "I" claims are held by Taurus Exploration Corporation; the survey in question covering the following claims:-

<u>Group</u>	<u>Claim Name</u>	<u>Record Number</u>
H	"I" 297	70489
H	"I" 299	70491
H	"I" 301	70493
I	"I" 298 & "I" 300	70490 & 70492
J	"I" 303 & "I" 305	70495 & 70497
K	"I" 304, "I" 306	70496, 70498
K	"I" 625 & "I" FR #3	81498 and 81494
L	"I" 309 - 313 incl.	70501 - 70505 inc.
L	"I" 626 and "I" FR #4	81499 & 81495
M	"I" 601 - 624 incl.	80426 - 80449 incl.

The work to be applied to the following claims in the above groups as indicated on the accompanying B forms:-

<u>Group</u>	<u>Claim Name</u>	<u>Record Number</u>	<u>Years</u>
K	"I" 625 & "I" FR #3	81498 & 81494	1 yr. each
L	"I" 626	81499	1 yr.
L	"I" FR #4	81495	1 yr.
M	"I" 601-624 incl.	80426-80449 inc.	2 yrs. each

GEOLOGICAL SETTING

The area surveyed is largely underlain by a unit of the Topley Intrusive complex (Carr 1965) subdivided by Stephens (1969) on the basis of field appearance and named the Casey Quartz Monzonite. It is considered to be somewhat younger than the Nithi quartz Monzonite (Stephens 1969) underlying

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GEOLOGICAL SETTING cont'd

areas to the east and north. The Casey Quartz Monzonite is described as an unfoliated, medium grained, equigranular, tannish-pink quartz monzonite, with a modal composition:- quartz 35%, orthoclase 30%, plagioclase 30%, biotite and moscovite 2-3%.

In the northern section of the M group of claims a hornblende granodiorite outcrops sporadically, and further to the south more basic, dioritic rocks occur which are probably related to the Joseph Lake Quartz Diorite unit mapped by Stephens (1969) some miles to the east.

The Casey Quartz Monzonite is host to molybdenum-bearing quartz veins, occurrences of which have been known to exist on Nithi Mountain for many years.

GEOCHEMICAL SURVEY METHODS AND PROCEDURE

A grid was laid out as shown on the accompanying map with north-south base lines and cross lines at 800' intervals. Samples were taken at 200' intervals along the cross lines and base lines from the "B" soil horizon with mattocks. Picketed Base-line cuts totalled 15,000 ft; tie lines 14,000 ft. and flagged cross lines 100,000 ft.

The samples were placed in wet strength paper bags and partially dried at room temperature, and transported to Barringer Research laboratories in Vancouver. The samples were further dried in an air oven at 70°C and sieved to <80 mesh on nylon screens from which two 0.2 gram samples were taken for further treatment.

In the case of assays for copper, one of the samples was digested in perchloric acid and diluted to 10 mls., the resultant being submitted to an Atomic Adsorption unit and values read.

For a molybdenum assay the second 0.2 gram sample was fused with sodium bicarbonate, the resultant being read colourometrically using zinc dithyol as a reagent.

The analyses were performed by Miss Yvonne Hazeldine, Senior Analyst for Barringer Research Limited, in their North Vancouver Laboratory.

RESULTS

The results obtained are plotted on the accompanying map. As the grid division covered two clearly defined areas, the values obtained have been scrutinized with a view to this areal distribution and geology rather than as a single statistical unit. The pattern of results itself justifies this

RESULTS cont'd

approach and would tend to confirm the presence of a different rock type underlying most of the M claims. A deepening of overburden in this area as compared to the low slopes of Nithi Mountain may also have had some effect on the distribution of metals in the "B" horizon.

In the case of copper, an overall low response is evident in both areas, indicating a low threshold value. It was considered that a contour treatment of these results was unwarranted.

From the available data, the following threshold and anomalous values have been chosen for the main grid sub-divisions:-

	<u>Mo Ppm.</u>	
	<u>N. area</u>	<u>S. area</u>
Background	0 -10	0 - 5
Threshold	10	5
3rd order anomaly	10 - 20	5 - 10
2nd order anomaly	20 - 30	10 - 15
3rd order anomaly	> 30	>15

The 10 ppm Mo contour was chosen as being the most significant; individual values within this line being easy to read and generally too scattered to allow further meaningful contours to be drawn.

CONCLUSIONS AND RECOMMENDATIONS

In the case of copper, it is abundantly clear that the areas surveyed provide a picture of low overall copper values, indicating that the underlying rocks are most unlikely to contain significant amounts of this element. Occasional spotty values of apparent anomalous character are invariably associated with local swampy conditions in which low background values are generally enhanced by chemical concentration.

The results for molybdenum are more meaningful and clearly show a difference in pattern for the two grid sub-divisions. In the south, except for one localized area in excess of 10 ppm which is associated with swampy conditions, the results are uniformly low. In the northern area there is a steady increase in values to the northwest, i.e., towards the slopes of Nithi Mountain and known areas of molybdenum occurrence. It was noted that isolated erratic highs are invariably associated with an enhanced copper value and swampy conditions, which elsewhere result in 4 to 5 times increase in metal content due to local chemical conditions.

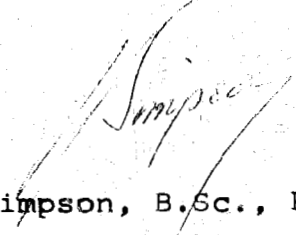
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CONCLUSIONS AND RECOMMENDATIONS cont'd

While no large area of significantly high values was outlined, the trend of increased values to the northwest is clearly significant. It is recommended that tractor trenches be cut at selected points within the north-western anomalous zones, wherever possible to bedrock. Inspection and sampling of the bedrock thus exposed, should be combined with profile sampling for comparison of "B" horizon values relative to thickness and type of overburden. Should this work result in observed mineralization and an intensive quartz veining and hydrothermal alteration in the country rock, a closer spaced grid should be cut over the areas indicated in order to carry out more detailed soil and profile sampling to delineate further targets for physical exploration either by trenching or diamond drilling.

The overall lack of sulphide minerals in observed outcrops suggests that geophysical methods would not be readily applicable.

Respectfully submitted,



J.G. Simpson, B.Sc., Ph.D., P.Eng.

APPENDIX (i)

TIME AND COST DISTRIBUTION

TIME AND COST DISTRIBUTION
TAURUS EXPLORATION CORPORATION
GEOCHEMICAL SURVEY "I" CLAIMS

<u>Personnel</u>	<u>Occupation</u>	<u>Dates</u>	<u>Days</u>	<u>Rate</u>	<u>Total</u>
J.G. Simpson	Field Supervisor	July 23-Aug 7	2	\$150	\$ 300.00
C.A. Langlois	Party Chief (Sampler)	July 21-Aug 15	26	\$ 40	1,040.00
J. Hartman	Line Cutter/Sampler	July 23-Aug 10	19	\$ 30	570.00
R. Casimer	Line Cutter	Aug 1-14	14	\$ 30	420.00
G. Casimer	Line Cutter	July 25-Aug 14	21	\$ 30	630.00
F. Quaw	Line Cutter	July 25-Aug 7	14	\$ 30	420.00
B. Cory	Draughtsman	10 hrs. at \$5.00/hr.			60.00
					\$3,440.00
Geochemical Analyses for Total MO and Total CU on 606 samples at \$3.70 per sample carried out by Barringer Research Ltd.					\$2,242.20
Ground transportation on claims 4 x 4					\$ 350.00
Equipment rental (2 chain saws)					
(1) 5 days @ \$5.00					
(2) 2 wks. @ \$25.00					\$ 75.00
Living Expenses - Hotel Bill for 5 men for 26 x days from July 21 to Aug 15					\$1,071.00
TOTAL					\$7,178.20

APPENDIX (ii)

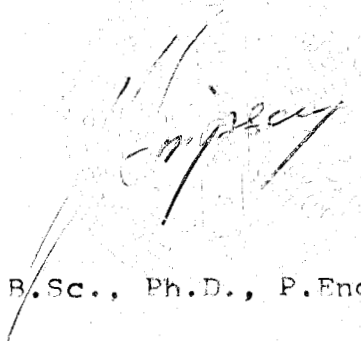
CERTIFICATE

I, John Glenn Simpson, of 720 Anderson Crescent, West Vancouver, British Columbia, do certify that

- 1) I graduated from King's College, London University with a B.Sc. (Hons) Geology in 1958, and was awarded a Ph.D (External) from London University in 1969.
- 2) I am a Fellow of the Geological Association of Canada and a registered Professional Engineer in the Province of British Columbia and have practiced my profession in Africa, Europe and Canada for the past 12 years.
- 3) As a salaried employee of Cyprus Exploration Corporation, Ltd., I have no direct or indirect interest in the property or securities of Taurus Exploration Corporation.

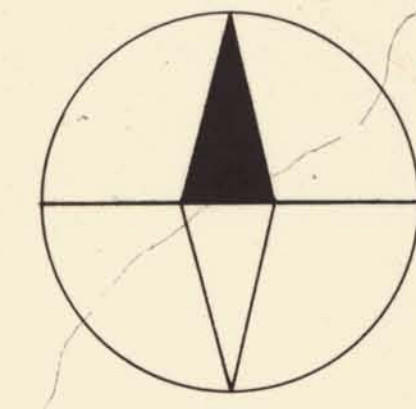
Dated at Vancouver

This 22nd day of September, 1970.

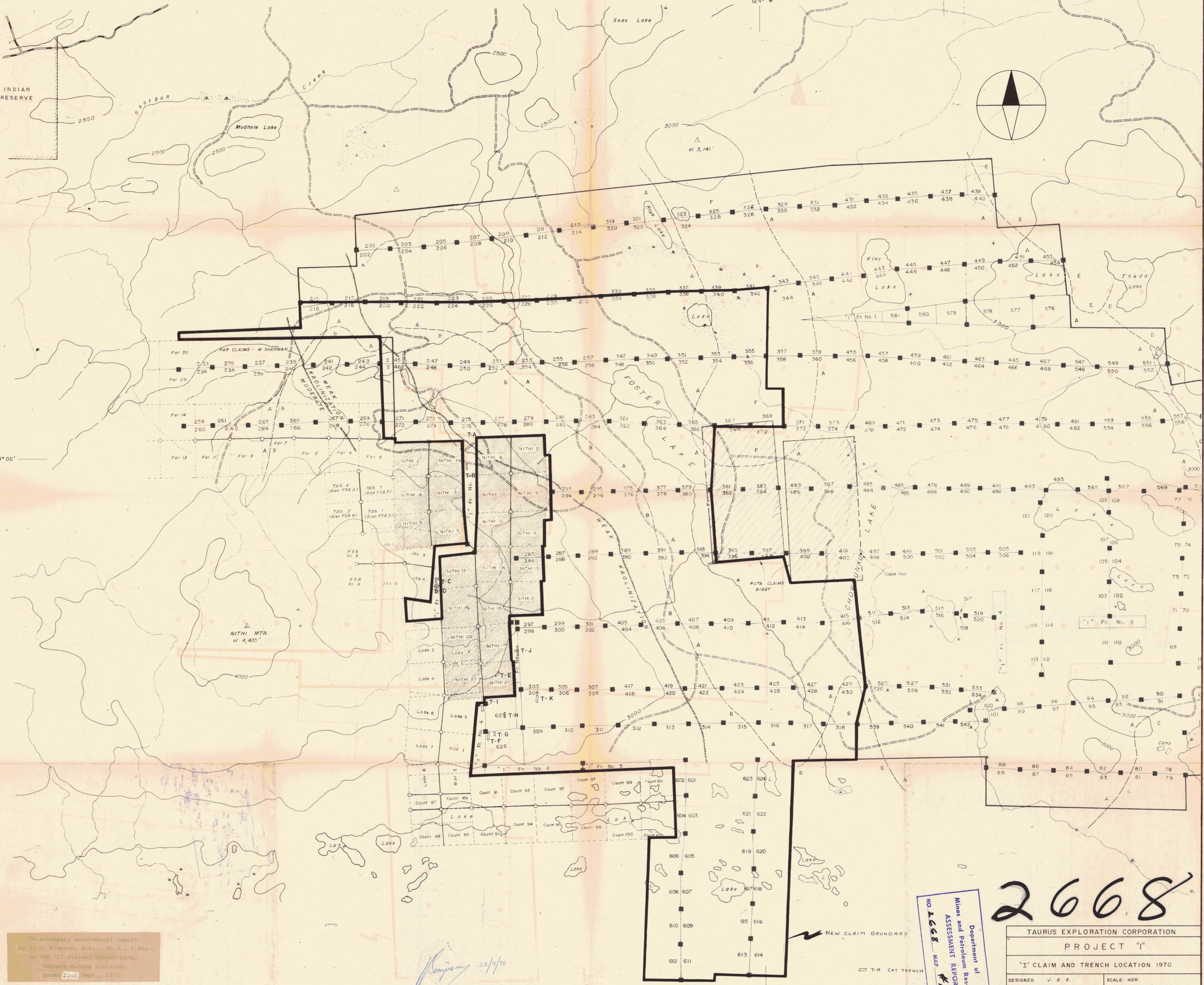

J.G. Simpson, B.Sc., Ph.D., P.Eng.

INDIAN RESERVE

124° W



54° 00'



To accompany geochemical report
by J. G. Simpson, B.Sc., Ph.D., P.Eng.,
on the "I" claims, Fraser Lake,
Omineca Mining Division,
dated 22nd Sept., 1970.

Simpson 22/9/70

NO 2668 MAP #1
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

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TAURUS EXPLORATION CORPORATION	
PROJECT "I"	
"I" CLAIM AND TRENCH LOCATION 1970	
DESIGNED J. G. S.	SCALE: HOR.
DRAWN C. L. C.	VERT. 1" = 1500'
CHECKED	DWG. No.
DATE Sept. 1970	



To accompany geochanical report
 by J. G. Simpson, S.E.C., Ph.D., P.Eng.,
 on the "M" claims, Foster Lake,
 Ontario Mining Division,
 dated 22nd Sept., 1970.

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"M" CLAIMS			
TAURUS EXPLORATION CORPORATION			
GEOCHEMICAL SURVEY SEPT. 1970			
COPPER / MOLYBDENUM			
DESIGNED J.G.S.	SCALE HOR. 1" = 500'		
DRAWN C.L.C.	VERT.		
CHECKED			
DATE SEPT. 1970	DWG. NO.		