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A GEOLOGICAL-GEOPHYSICAL REPORT

ON

TOM, DICK AND HARRY CLAIMS

Swakum Mountain Area

Merritt Area

92I/7E, 2E

Co-ordinates

50°15'3" North Latitude
120°42'30" West Longitude

Owner

John Georgilas
960-789 West Pender Street
Vancouver, B.C.

Operator

John Georgilas

Consultant

Harold M. Jones, P.Eng.

Date: 26 July 1984

HAROLD M. JONES
CONSULTING ENGINEER
VANCOUVER



A GEOLOGICAL-GEOPHYSICAL REPORT

ON

TOM, DICK AND HARRY CLAIMS

NICOLA M.D.
Swakum Mountain Area
Merritt Area
92I/7E, 2E

Co-ordinates

50°15'3" North Latitude
120°42'30" West Longitude

Owner

John Georgilas
960-789 West Pender Street
Vancouver, B.C.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Operator

John Georgilas

12,598

Consultant

Harold M. Jones, P.Eng.

Date: 26 July 1984

**HAROLD M. JONES, P.ENG.
CONSULTING GEOLOGIST**

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SUMMARY

Between July 18-21, 1984, a geological-geophysical survey was conducted on the Tom claim, a part of a 20 unit group which includes the Tom, Dick and Harry claims. They are located in the Nicola Mining Division, 19 km north-northeast of Merritt.

The work was conducted by the writer, a consulting geologist, who first laid out a grid, then ran a magnetometer survey over it. Geology was mapped in a reconnaissance manner during the survey. A total of 10 line kms were surveyed.

The results of the survey indicate a north-northwest striking magnetic anomaly which trends across the Tom claim into the Harry claim. This anomaly may be due to a higher magnetic background of a particular volcanic flow or a mineralized structure, i.e., a mineralized andesite-limestone contact similar to that on the Thelma claim which lies immediately north of the subject property. A limited tonnage of 80 oz. silver ore was mined from the Thelma property in the early 1930's.

It is concluded that the remainder of the claim group should be covered by a magnetometer survey, geology mapped in detail, and anomalous areas tested by geochemical soil sampling.

INTRODUCTION

The Tom, Dick and Harry claims are located in the Merritt area of southwestern British Columbia. They cover an aeromagnetic anomaly which, from a study by Trenholme (1984), was hypothesized as representing a favourable andesite-limestone contact in the Nicola Group rocks. He hypothesizes that the contact swings south, near Thelma, to the west, then northwest, thus outlining the nose of a south-plunging anticline.

The limestone-volcanic contact just north of the claims contains several silver-lead-zinc deposits - the old Thelma, Almeda and Lucky Mike - from which small shipments were made in the early 1930's. If Trenholme's hypothesis is correct, then the magnetic low on the Tom, Dick and Harry claims could contain other silver-bearing deposits. For this reason, a geological-magnetometer survey was conducted to explore for the inferred limestone-volcanic contact and indications of mineralization associated with it.

This report describes the work performed and the results obtained.

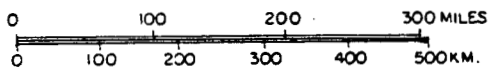
Location and Access

The Tom, Dick and Harry claims are located in the Nicola Mining Division, 3 km due south of Swakum Mountain and 19 km north-northeast of Merritt.

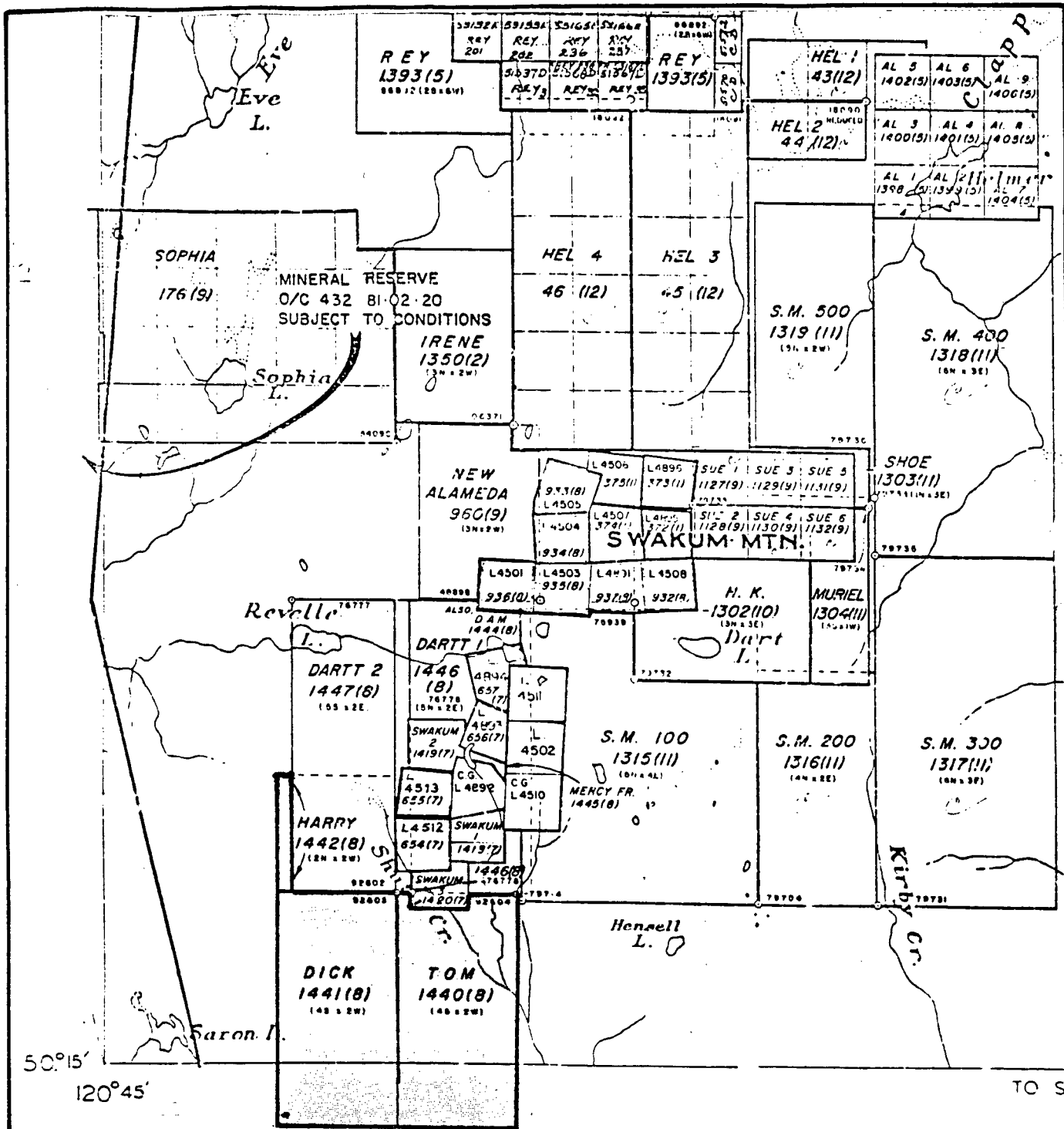
The claims are very accessible by the Swakum Mountain logging road. At about 22 km on this road it passes through the southeast corner of the Tom claim. At 22.5 km this road crosses the old Swakum Mountain access road. This latter road passes along the eastern boundry of the Tom claim (see Figure 2).



**PROPERTY
LOCATION**



J. GEORGILAS		
G. A. NOEL & ASSOCIATES INC.		VANCOUVER, B.C.
TOM, DICK & HARRY CLAIMS		
LOCATION MAP		
MERRITT AREA		
N.T.S. 92 I - 7E		NICOLA M.D., B.C.
SCALE AS SHOWN	JULY 1984	FIG. 1
H. M. JONES		



50°15'
120°45'

For up to date information on claims in any area you should apply to the Mining Registrar, Vancouver, B.C.

DEPARTMENT OF MINES

FROM 92I-7E CLAIM MAP, JULY 13, 1984.



J. GEORGILAS		
G. A. NOEL & ASSOCIATES INC.		VANCOUVER B.C.
TOM, DICK & HARRY CLAIMS CLAIM MAP		
MERRITT AREA		
N.T.S. 92I-7E		NICOLA M.D., B.C.
SCALE 1:50,000		JULY 1984
H. M. JONES		FIG. 2

Topography and Vegetation

Topography of the claims area is one of gentle relief. Low rolling hills are separated by generally shallow draws. An exception to this is Shuta Creek, which is contained in a relatively deep, very steep sided gulley.

Vegetation is variable. A number of grassy meadows and small ridges are scattered throughout open to thickly forested areas. The latter contains many windfalls, making foot progress slow.

Local areas were logged in the past. Small stands of commercial grade spruce and fir are present within the claims.

Property

The property consists of three claims totalling 20 units. They may be described as follows:

Claim Name	No. of Units	Record Numbers	Date of Record
Tom	8	1440(8)	8 August/83
Dick	8	1441(8)	8 August/83
Harry	4	142(8)	8 August/83

The Tom and Harry claims are owned by Mr. J. Georgilas; the Dick claim by Decade International Development Ltd., both of 960-789 West Pender Street, Vancouver, B.C, V6C 1H2.

Claim Map 92I/7E shows that the Harry claim may be largely an overstaking of the Dartt 2 claim. Ground surveys are required to

confirm the claim boundaries.

History

A number of old mine workings are known on and south of Swakum Mountain. These were all located between 1900 and 1916. They include the Last Chance, Thelma Group, Alameda Group, Corona, and Gold Gossan Group. These deposits all occur in the greenstone and limestones of the Nicola Group. The limestones are interbedded with the greenstones and are thought to be a series of lenses rather than continuous beds (Cockfield, W.E., 1961).

The deposits consist of veins, disseminations and replacements carrying lead, zinc and copper minerals, and in one deposit, scheelite. Some of the deposits contain tetrahedrite. It is from the later deposits that limited shipments of selected ore was mined and shipped to the Trail Smelter. Reported production (Cockfield, W.D., 1961) was:

Mine	Tons	Ozs. Gold	Ozs. Silver	(Lbs.) Copper	(Lbs.) Lead	(Lbs.) Zinc
Last Chance	26	2.0	137	1,932	1,753	-
Alameda	3	1.0	52	-	576	-
Thelma	89	1.0	7,419	-	9,683	10,237

Of particular interest is the Thelma property, located immediately north of the Tom claim. While production was small, the ore shipped from this deposit averaged 83.35 oz/ton silver, 0.01 oz/ton gold, 5.40% lead and 5.72% zinc. The vein on this property occurs on a north-striking limestone-volcanic contact and trends toward the Tom claim.

In the early 1960's a considerable amount of exploration was conducted on Swakum Mountain on the Last Chance property and its vicinity by Torwest Resources Ltd. They conducted geophysical surveys and diamond drilling testing the known copper-tungsten skarn zone and a self-potential geophysical anomaly. Results were not encouraging. No recent work is known in the area.

GEOLOGY

General Geology

The Swakum Mountain area is located within a large area of Triassic-aged Nicola Group rocks which are bounded to the east and west by Jurassic and (?) Later Coast Intrusions.

The Nicola Group rocks are largely volcanic rocks, often referred to as greenstones. They vary from fine-grained to coarsely porphyritic types. They are predominantly green, but also occur in various shades of purple, red, brown, grey or black. The rocks are chiefly andesites but include basalts and feldspar porphyries. Much breccia and tuff is associated with the lavas. The latter are partly altered to chlorite, epidote and calcite. Minor amounts of sedimentary rocks are associated with the volcanic members. Limestone is the most abundant type with much lesser argillite and conglomerate. The limestone bands generally consist of a series of lenses rather than continuous beds.

The Coast Intrusions are mostly medium to coarse-grained granodiorites, or quartz diorites, but locally include more acidic or more basic types. None of the plutonic rocks are exposed in the Swakum Mountain area.

Local Geology

Nicola Group rocks are fairly well exposed on the Tom claim, usually on the higher, rounded ridges. They are best described as greenstones, consisting of dark green, brown and black fine-grained to coarsely porphyritic andesites, amygdaloidal flows and breccias. Most rocks are altered, with hornblendes strongly chloritized and feldspars epidotized. Several exposures were seen which were mostly altered to carbonate.

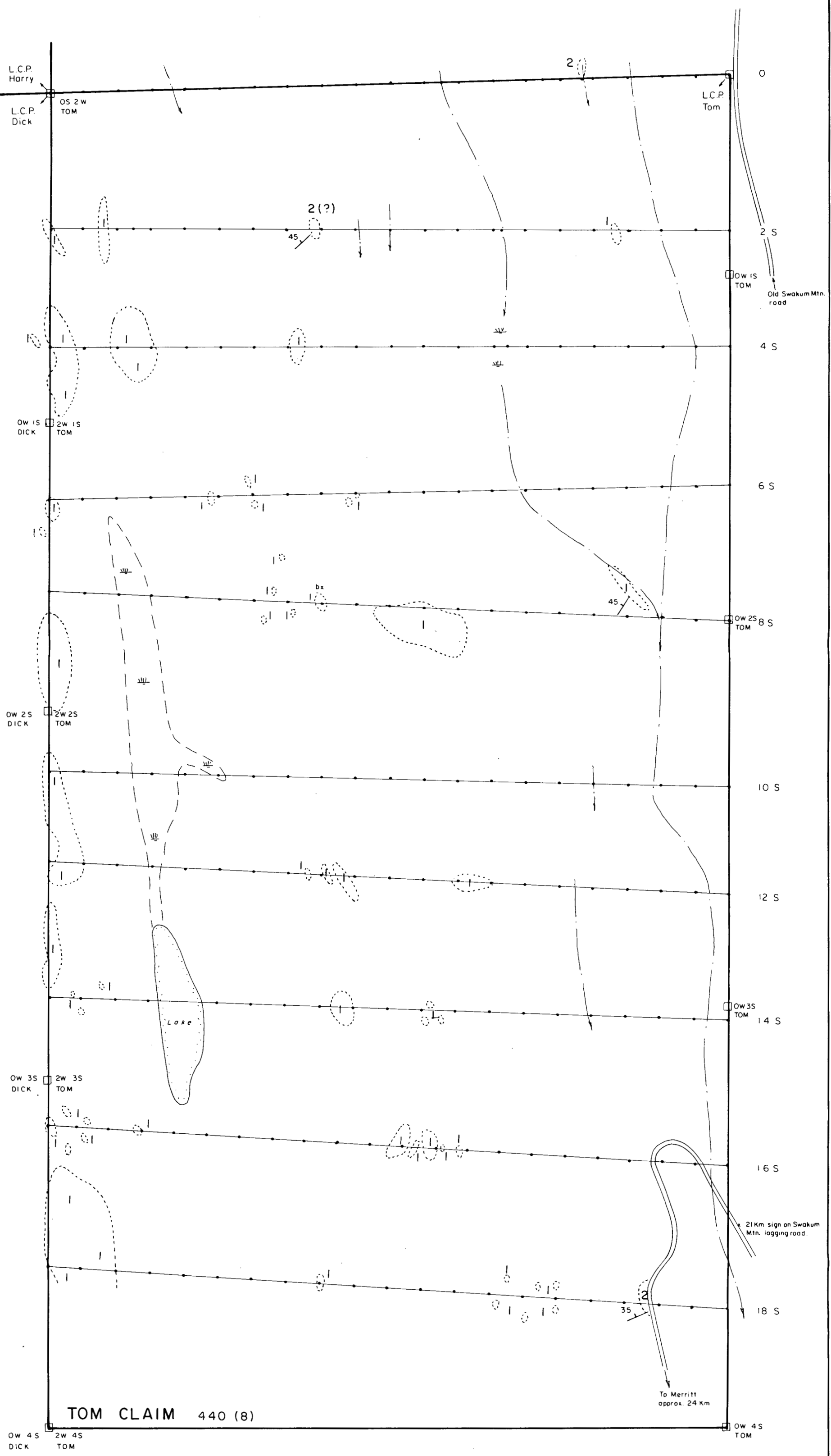
Limestone, which is exposed just to the north of the claim at the old Thelma mine, does not outcrop on the property. It could well be present in one of the many shallow draws on the Tom claim but is hidden by overburden.

Structure is not well defined. Three possible bedding or flow attitudes were seen. These were striking northeast and dipping 35° - 45° northwest.

Due to the reconnaissance nature of the geological survey, no attempt was made to outline various units within the Nicola Group rocks.

MAGNETOMETER SURVEY

A grid was laid out for control of the magnetometer survey. This was run using hip chain and Silva compass. Lines were spaced at 200 meter separations and stations at 50 meter intervals. All lines were well marked with flagging tape. The east and west claim lines were used as baselines. All lines were tied to these baselines, and the interval between each line measured. As is normal in this type of survey, lines often deviated. For this reason, line spacings were adjusted to correct for lines which drifted off course.



TOM CLAIM 440 (8)

**GEOLOGICAL BRANCH
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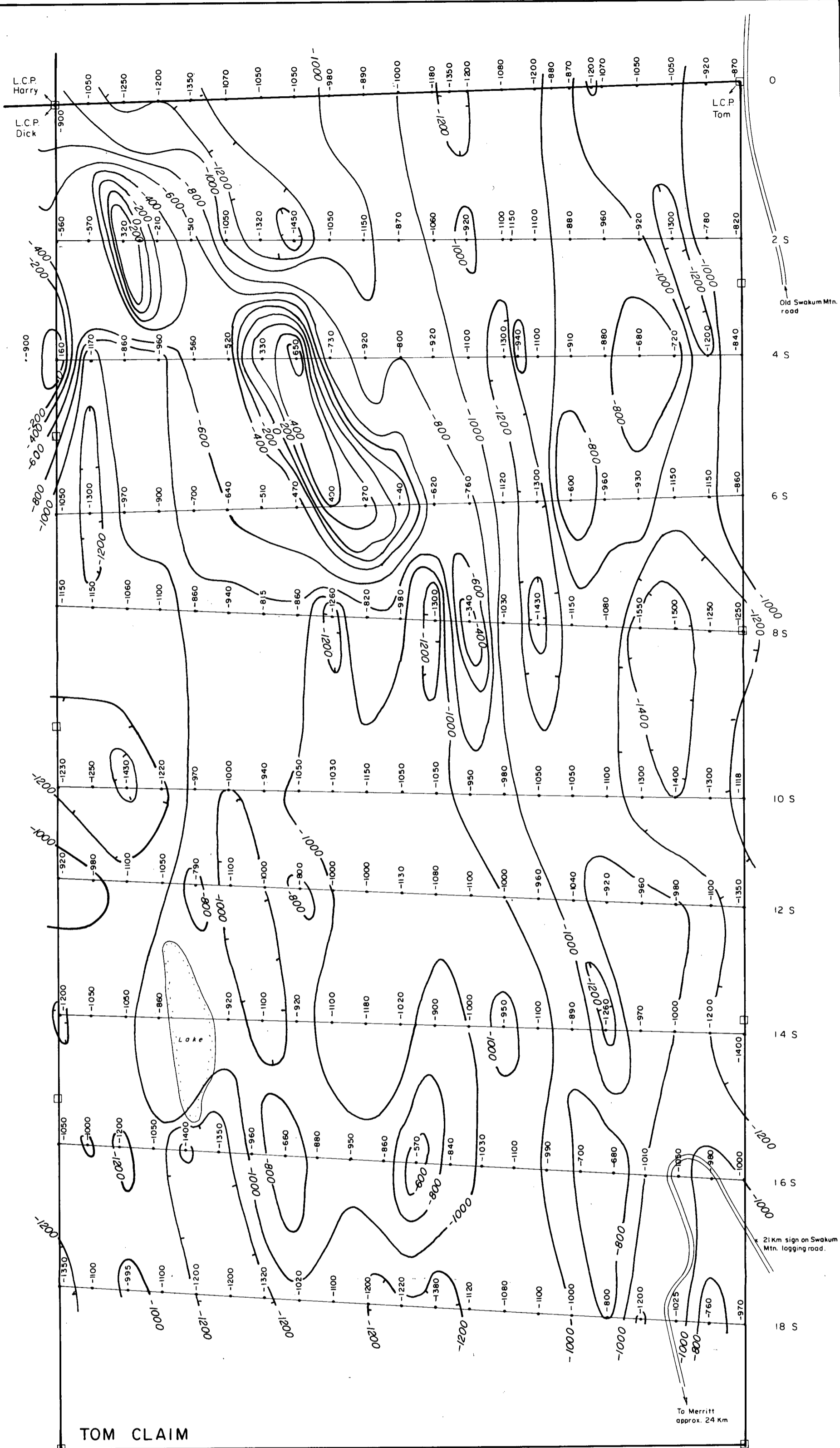
12,598



- LEGEND**
- Station
 - Claim post
 - Road
 - Stream
 - Swamp
 - Nicola Group - sediments
 - " " - volcanics
 - Limit of outcrop and/or scattered outcrop
 - Bedding



J. GEORGILAS	
G. A. NOEL & ASSOCIATES INC. VANCOUVER, B.C.	
TOM, DICK & HARRY CLAIMS GEOLOGY MAP	
MERRITT AREA	
N.T.S. 92 I - 7 E NICOLA M.D., B.C.	
0 100 200 300 Metres	
SCALE 1:5000	JULY 1984
H. M. JONES	FIG. 3



TOM CLAIM

**GEOLOGICAL BRANCH
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12,598

- LEGEND**
- ↑ Station
 - Claim post
 - Road
 - ~ Magnetic contour at 200m interval



J. GEORGILAS	
G. A. NOEL & ASSOCIATES INC. VANCOUVER, B.C.	
TOM, DICK & HARRY CLAIMS MAGNETOMETER MAP	
MERRITT AREA	
N.T.S. 92 I-7 E NICOLA M.D., B.C.	
0 100 200 300 Metres	
SCALE 1:5000	JULY 1984 FIG. 4
H. M. JONES	

A Scintrex MF-2 magnetometer was used on the survey. The instrument reads the total vertical magnetic field. It was adjusted so that 50,000 gammas were removed from the readings.

Readings were taken on each line at 50 m intervals. Base stations were set along the tie lines and check readings made on these after each circuit.

RESULTS

Check readings made to various base stations during the survey showed various readings, which when averaged, showed little magnetic variation (± 50 gammas). For this reason, the magnetic readings were not adjusted. Figure 4 is a plot of the magnetometer data.

The data indicates a significant magnetic anomaly which trends through the Tom claim from its northwest corner to near its southeast corner. The stronger part of the anomaly is in the northern half of the claim. Other anomalies are present, but are much weaker than the above.

Reconnaissance geological mapping indicates that much of the anomaly occurs in areas of poor outcrop. That which is present is all volcanic units of the Nicola Group.

DISCUSSION

The significance of the main magnetic anomaly is not known. It may represent a volcanic flow with a slightly higher magnetite content or magnetite related to a mineralized structure, i.e., a mineralized limestone lense similar to that on the Thelma claim. The

anomaly trends north-northwest on to the Harry claim, which to date has not been examined.

CONCLUSION

A north-northwest-trending magnetic anomaly was located within the Nicola Group rocks. The source of this anomaly is not known. Additional work is warranted to explore this anomaly and its northward extension.

RECOMMENDATIONS

The magnetic survey should be continued to cover the entire claims area. Anamolous areas should be tested by geochemical surveys and detailed geological mapping.

Respectfully submitted,

Harold M.  H. Eng.

REFERENCES

- B.C.M.M. Annual Reports** 1926 to 1934
- Cockfield, W.E. (1961)** Geology and Mineral Deposits of Nicola Map Area, B.C., Geol. Surv. Canada Memoir 249
- Geol. Surv. Canada** Aeromagnetic Map 521G
- Trenholme, L.S. (1984)** A Report on the Tom Claim (No. 1440), private report.

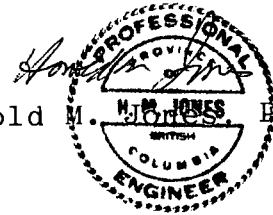
CERTIFICATE

I, Harold M. Jones, of the City of Vancouver, British Columbia, do hereby certify that:

1. I am a Consulting Geological Engineer with offices at 721-602 West Hastings Street, Vancouver British Columbia.
2. I am a graduate of the University of British Columbia in Geological Engineering, 1956.
3. I have practised my profession as a Geological Engineer for 25 years.
4. I am a member of the Association of Professional Engineers of British Columbia, Registration No. 4681.
5. I examined the Tom, Dick and Harry claims on April 11, 1984, and between July 18-21, 1984 conducted a geological-geophysical survey on the property.
6. I have no direct interest in, nor do I expect to receive any interest, direct or indirect, in the Tom, Dick and Harry claims, or in Decade Development Ltd., or its securities.

DATED AT VANCOUVER, B.C. THIS 26th day of July 1984.

Harold M. Jones P.Eng.



APPENDIX I

ESTIMATE OF COSTS

**HAROLD M. JONES, P.ENG.
CONSULTING GEOLOGIST**

STATEMENT OF EXPENDITURES

Wages	<ul style="list-style-type: none"> - Harold M. Jones, P.Eng. Consulting Geologist - Conducting geological- geophysical survey - Travel Time -two 1/2 days 	<ul style="list-style-type: none"> \$ 1,125.00 350.00 <hr/>	<ul style="list-style-type: none"> \$ 1,475.00
Room & Board	<ul style="list-style-type: none"> - Meals - Room & Phone 	<ul style="list-style-type: none"> \$ 84.22 128.50 <hr/>	<ul style="list-style-type: none"> 212.72
Vehicle Rental	<ul style="list-style-type: none"> - Pickup truck - Gas 	<ul style="list-style-type: none"> 263.55 54.27 	<ul style="list-style-type: none"> 263.55 54.27
Field Supplies	<ul style="list-style-type: none"> - Hip Chain thread, flagging tape 	<ul style="list-style-type: none"> 57.57 	<ul style="list-style-type: none"> 57.57
Magnetometer Rental	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> 100.00 	<ul style="list-style-type: none"> 100.00
Report & Map Preparation:			
Report	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> \$ 500.00 	<ul style="list-style-type: none"> 500.00
Drafting	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> 110.00 	<ul style="list-style-type: none"> 110.00
Secretarial	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> 85.10 	<ul style="list-style-type: none"> 85.10
			<hr/>
			<ul style="list-style-type: none"> 695.10
			<hr/>
			<ul style="list-style-type: none"> \$ 2,878.21
			<hr/>

