

4960

82L/6W

82L/6W

GEOPHYSICAL SURVEY REPORT

ON

BLUE JAY, ML #1-8, LM #1-4, MACK 1, 2 FR.

MINERAL CLAIMS

VERNON, B.C.

VERNON MINING DIVISION

50° 17', 119° 17'

FOR

LAURA INDUSTRIES AND RESOURCES LTD

AND

L. WONGS AND M.P. STADNYK

(Work performed: March 4 - April 19, 1974)

Department of
Mines and Technical Resources
1974
NO. **4960**

May 18, 1974.

M.P. Stadnyk, B.Sc.
Stadnyk Exploration Services Ltd.

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ILLUSTRATIONS

Scale

#1 Location Map	1 inch to 136 miles
#2 Index Map	1 : 50,000
#3 Mineral Claim Map	1 inch to 1,000 feet
#4 Magnetometer Survey Map (Contoured)	1 inch to 400 feet



Department of
 Mines and Technical Resources
 Geological Report
 NO. **4960** MAP **#1**

Mr. Stodnyk
 STADNYK EXPLORATION SERVICES LTD.
 LAURA INDUSTRIES & RESOURCES LTD.
 VERNON MINING DIVISION
 LOCATION MAP
 MILES 136 SCALE 0 136 MILES

STADNYK EXPLORATION SERVICES LTD.

LAURA INDUSTRIES & RESOURCES LTD.

VERNON MINING DIVISION

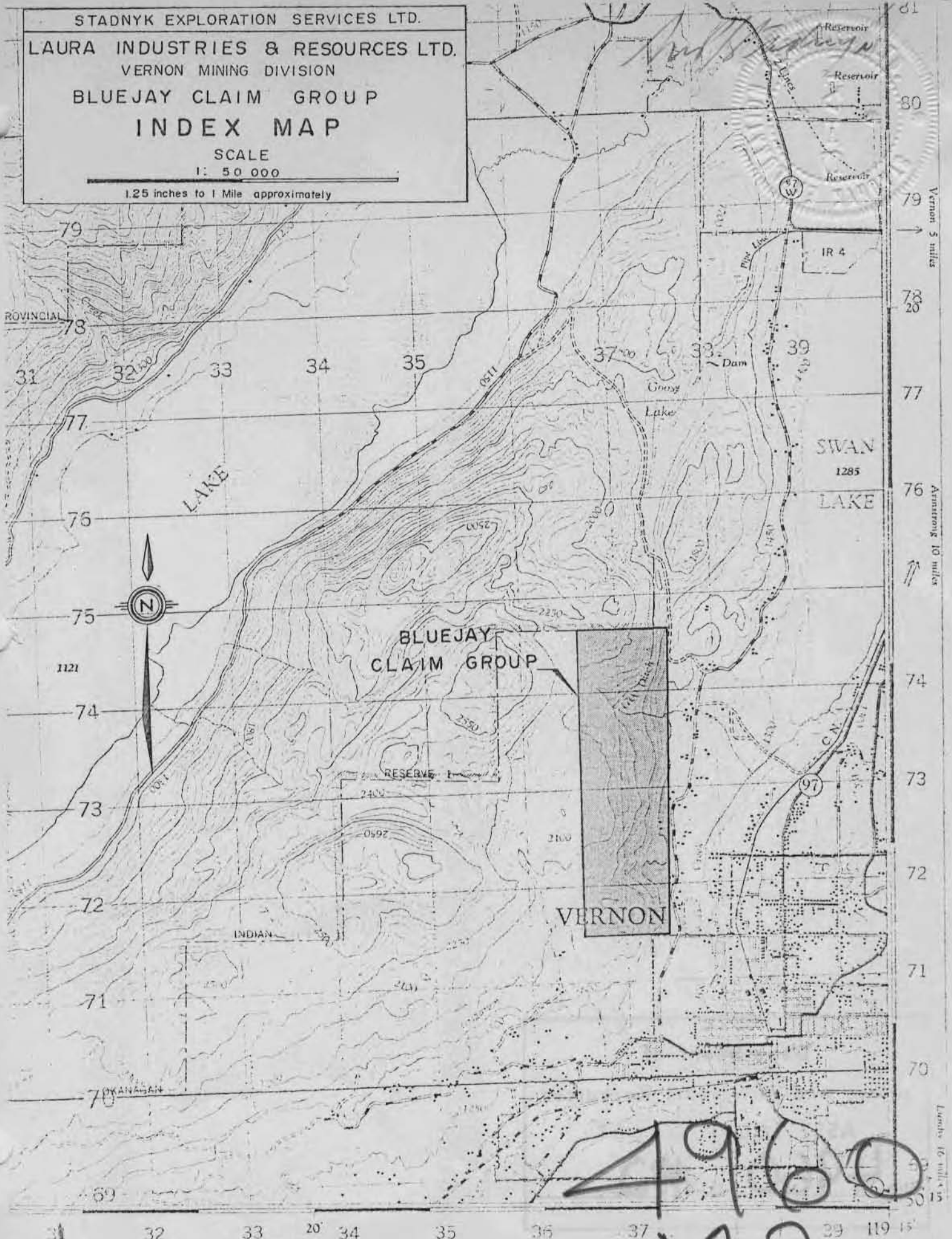
BLUEJAY CLAIM GROUP

INDEX MAP

SCALE

1: 50 000

1.25 inches to 1 Mile approximately



81
80
79
78
77
76
75
74
73
72
71
70
69

Vernon 5 miles
Armstrong 10 miles
Lynch 16 miles

31 32 33 34 35 36 37 38 39

Over 11 miles To Kelowna

4960
M2

INTRODUCTION

A grid comprising of 13.7 miles was laid out over the Blue Jay claim group between March 4 and April 19, 1974 for the purposes of a magnetometer survey. This grid had to be re-established a second time before the survey was completed due to vandals destroying picketed location stations. The survey was carried out by Stadnyk Exploration Services Ltd for the optioners (Laura Industries and Resources Ltd) and the owners L. Wongs and M. Stadnyk over the Blue Jay, ML #1-8, LM #1-4 and Mack #1, 2 Fractional mineral claims.

It was hoped that an electromagnetic and a self-potential survey would have been performed concurrently with the magnetometer survey but due to an access dispute over the privately owned surface rights and the high security bond demanded by the Gold Commissioner there was insufficient time.

Corrected contoured magnetometer survey data did not reveal any unusual features associated with the rock types observed in the Blue Jay "shaft".

However, a change in rock type is indicated 2,000 feet north of the Blue Jay workings. There is very little outcrop in this area and a further evaluation as to the meaning of these anomalies should wait until other geophysical and geochemical surveys are carried out.

LOCATION AND ACCESS

The Blue Jay, Mack, ML and LM claim group are situated immediately west of the City of Vernon, B.C., or more specifically adjoining the Blue Jay Subdivision and also the old Vernon City Dump.

Co-ordinates are - 50° 17' north latitude
119° 17' west longitude

Access to the property from Old Kamloops Road is possible from the Blue Jay Subdivision or by a private secondary road immediately north of the City Dump. An old dirt road on the property parallels the now defunct Vernon Irrigation Ditch and other tracks take off from this road. Access to the property is possible at all times of the year.

TOPOGRAPHY AND VEGETATION

The claim group is located on low to moderate rolling hills which reach their highest elevations near the Okanagan Indian Reserve at the north end of the property.

Vegetation over the group comprises of native and introduced grasses for grazing purposes, xerophytic type trees, spinifix and other scrub type bushes on steeper slopes and near water seepages. In the area of the old Blue Jay workings (adit and shaft) sagebrush is the dominant vegetation.

Abundant water for drilling purposes would be available only during the spring run-off period.

MINERAL CLAIMS

The Blue Jay mineral claim, now owned by L. Wongs and M.P. Stadnyk, was formerly known as the Blue Jay Crown Grant (No.738) and its surveyed boundaries are shown on the Vernon map 82 L/6 west, 1:50,000 series. The ML and LM claims are owned by M.P. Stadnyk.

The above claims have been grouped as the Blue Jay Group and have been optioned by Laura Industries and Resources Ltd of Vancouver, B.C.

Details of the claims are:-

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
LM #1-4	17181-184	April 19, 1973
ML #1-8	17185-192	April 19, 1973
Blue Jay	17299	August 1, 1973
Mack #1-2 Fr.	17381-382	September 11, 1973

All claims are located in the Vernon Mining Division.

HISTORY

The British Columbia Minister of Mines' Reports for 1897 (pp.609), 1899 (pp.747), and 1934 (pp.D32) reveal development work consisting of a shaft 44 feet deep, a tunnel 175 feet long, and other open cuts on the Blue Jay Crown Grant. The shaft was sunk on a vein bearing gold, silver, lead, zinc and copper.

OKANAGAN INDIAN RESERVE

ML 8

ML 7

ML 6

ML 5

ML

ML 3

ML 2

ML 1

MACK FR 1

BLUEJAY

SHAFT

MACK 2 FR

LM 2

LM 4

LM 1

LM 3

AREA COVERED BY
MAGNETOMETER SURVEY



Mineral Claim #3

NO.

4960

MAP

#3

And Stodnyk

STADNYK EXPLORATION SERVICES LTD.

LAURA INDUSTRIES & RESOURCES LTD.

VERNON MINING DIVISION

BLUEJAY CLAIM GROUP

MINERAL CLAIM MAP

SCALE IN FEET

0 1000 2000

Another tunnel, 107 feet in length, plus other open cuts were also found at the north end of the property at 76N, 14E (near the Indian Reserve). It is not known when this work was carried out but some remains of a small stamp mill still exist.

There are a number of old open cuts and shallow holes (shafts?) scattered throughout the claim group.

No records exist of work being performed over the past ten years.

REGIONAL GEOLOGY

Rocks of the Cache Creek group occur in the south and south-western parts of the Vernon map area in a belt from Mt. Cahilty, through Vernon and south-easterly to Monashee Mountain. This group is overlain with an angular unconformity by the Kamloops group of Tertiary age and by unconsolidated Pleistocene and Recent debris.

The Cache Creek group is believed to rest unconformably on members of the Shuswap terrane. (Geological Survey of Canada, Memoir 296, and map 1059A.)

Rocks comprising the Cache Creek group are argillite, andesitic lava, tuff, quartzite and limestone.

Faults striking south and south-east converge in the area of Vernon. Of these the most important is the Sicamous - Vernon fault which separates the high grade metamorphic Monashee group rocks (to the east) from the low grade metamorphic rocks of the Mount Ida group (to the west).

LOCAL GEOLOGY

The property has not been mapped geologically, but observations made during the geophysical survey indicate that outcrops are not plentiful. Most rocks on the property are crystalline andesite lava and tuffs which in many places are cut by white or oxidised pyritic quartz veins striking north to north-west and dipping steeply.

On the Blue Jay claim a shaft has been sunk in excess of 35 feet on a four foot quartz vein which strikes 10-20° north and dips 55-65° east. On the foot wall of this vein is a shear zone containing crushed pyrite galena and possibly arsenopyrite containing gold, silver and other base metals. Values of precious metals are irratic but certainly interesting and recent samples by the author returned gold as high as 4.10 ounces per ton.

Pyritized quartz veins were sampled in a 107 foot adit at the north end of the property (ML #7) but only traces of gold were found.

A number of other open cuts were observed on the property but have not been sampled.

SURVEY GRID

A survey grid comprised of 13.7 line miles was laid out by Stadnyk Exploration Services Ltd. The base line commenced 1,200 feet south of the Blue Jay shaft and extended north to the boundary of the property at the Okanagan Indian Reserve. Cross lines were placed at right angles at each 200 foot station from 2S to 32N, and at 400 foot stations from 36N to 76N.

Pickets were used for all stations and axe work was restricted to small areas of spinifix vegetation near seepage areas. Stations were marked at 200 foot intervals and the pickets flagged.

The lines east of the base line are of varying lengths, being determined by the fence which roughly parallels the old irrigation ditch, as shown on the Magnetometer Survey Map.

The grid had to be laid out a second time because of a period of inactivity on the property (waiting for the security bond) before the survey was able to be completed. During this period all pickets were dislodged, some moved over 1,000 feet, and others completely removed by unknown persons.

GEOPHYSICAL SURVEY

Equipment

The magnetometer survey was conducted using a Sharpe Model MF 1-100 fluxgate, No.30110, and a Sharpe Model MF 1 fluxgate, No.30544, coupled to an Esterline Angus continuous recorder model MR 100, serial no.71101. The fluxgates are self orienting and require only coarse levelling. Temperature compensations have been built into the instruments. Values on the lowest scale can be read to two gammas and estimated to one gamma on the MF 1-100. Values on the lowest scale on the MF 1 can be read to twenty gammas and estimated to five. Normally this scale is used for taking readings during a survey.

Scales for both instruments range from plus 100,000 to minus 100,000.

A high latitude adjustment permits zeroing of the instruments at any location. A battery check is also built into the metering circuit.

The Esterline Angus recorder has a battery operated drive motor which moves the tape at a constant speed of three inches per hour. The instrument can be set to read full scale deflections of $\pm 150,300$ or 500 gammas. Values per minor division can be read to 6, 12 or 20 gammas respectively.

Field Procedure

Both instruments were zeroed for the property at a master station at 8 North, 0+50 West. Base readings were established at 200 foot intervals from 2S to 32N, and at 400 foot intervals from 36N to 76N, along the base line.

Corrections

Compensations are built into the fluxgates to eliminate any need for temperature corrections being applied to field readings. Diurnal corrections were applied to field readings using variations plotted by the continuous chart recorder and from continuous looping data (closed traverses).

GEOPHYSICAL INTERPRETATION

Calibration for the fluxgates at the master station for the survey was set at +500 gammas. Recorder was set at zero.

Highest and lowest readings were plus 1350 and plus 280 gammas. Background for the survey area is 500-600 gammas.

The purpose of the magnetometer survey was to aid geological mapping, electromagnetic and self-potential surveys and hopefully to trace some of the larger quartz veins which are associated with mineralization, such as found at the Blue Jay shaft.

However, a glance at the magnetometer survey map shows the Blue Jay shaft and the adit at the north end of the property (76N 14E) correspond to background values.

The north-west trending high and low anomalies found between lines 16N and 40N may be associated with one of the many north-west faults found in the area, or a different rock type, and it should be checked out by other survey methods. Very little outcrop was noted here, but EM or a geochemical survey may determine if this structure is important from an economic viewpoint.

Values slightly above background were obtained at the north end of the property but no importance is attached to them at this time.

PERSONNEL AND EQUIPMENT

Grid preparation and magnetometer survey was carried out by Stadnyk Exploration Services Ltd of Vancouver, B.C. The author carried out the survey and assisted in laying out the grid. Field assistants were obtained from Vernon, B.C.

This work was conducted between March 4 and April 19, 1974.

Stadnyk Exploration Services Ltd provided a Ford 3/4 ton 4X4 pick-up truck for transportation; Sharpe MF 1 and MF 1-100 fluxgates, Angus Esterline recorder, pickets and other miscellaneous field supplies. The author used local motels for accommodation.


CONCLUSIONS AND RECOMMENDATIONS

The magnetometer survey performed on the Blue Jay, ML, LM and Mack Fr. mineral claims at Vernon, B.C. did not reveal any anomalies that could be correlated with known mineralization. It did reveal a series of north-west trends which may be important and other surveys should be conducted in the vicinity of these trends.

It is recommended that:-

1. The property be geologically mapped.
2. A detailed geochemical survey be carried out in the vicinity of the Blue Jay shaft, and a reconnaissance survey be carried out over the anomalous magnetometer zones.
3. That an electromagnetic and self-potential survey be carried out in the vicinity of the shaft, and magnetometer survey.
4. Limited stripping and/or drilling be dependent upon information gained from the above surveys.

Report respectfully submitted,


M.P. Stadnyk, B.Sc.
Stadnyk Exploration Services Ltd.

May 18, 1974.

CERTIFICATION

I, Mike Peter Stadnyk, of North Delta, B.C., do hereby certify that:

1. I am a mining exploration geologist residing at 11625 Cory Drive, North Delta, B.C.
2. I am a graduate of the University of New Zealand and have practised my profession in Canada since 1961.
3. I am an Associate Member of the Geological Association of Canada, a Member of the Australasian Institute of Mining and Metallurgy, and a Member of the Australian Society of Exploration Geophysicists.
4. Information contained in the report is based upon work carried out by me, or at my direction, between the period of March 4 and April 19, 1974.

May 18, 1974
North Delta, B.C.



M.P. Stadnyk, B.Sc.
Geologist.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of Magnetometer Survey on the
Blue Jay, ML #1-8, LM #1-4, Mack #1-2 Fr.
Mineral Claims, Vernon, B.C., Vernon Mining
Division.

I, M.P. Stadnyk,
11625 Cory Drive,
North Delta,

F.M.C. #116266
Issued May 17, 1972
at Vancouver, B.C.

of

in the Province of British Columbia, do solemnly declare that the following personnel were employed and costs incurred in conducting this survey.

Personnel:

	March 4-9,			
Jim Robertson	April 18,19, 1974	8 days @ \$50.00 per day		\$400.00
Jack Robertson	April 18,19, 1974	2 days @ \$50.00 " "		100.00
M.P. Stadnyk	March 4-12,			
	April 18,19, 1974	11 days @ \$100.00 " "		<u>1,100.00</u>
				\$1,600.00

Disbursements:

Magnetometer rentals (2 Fluxgates, 1 recorder)	600.00
March 4 - April 19, 1974	
Truck - 11 days @ \$25.00 per day	275.00
Motel and Food - 11 days @ \$20.00 per day	220.00
Field supplies	40.00


Report:

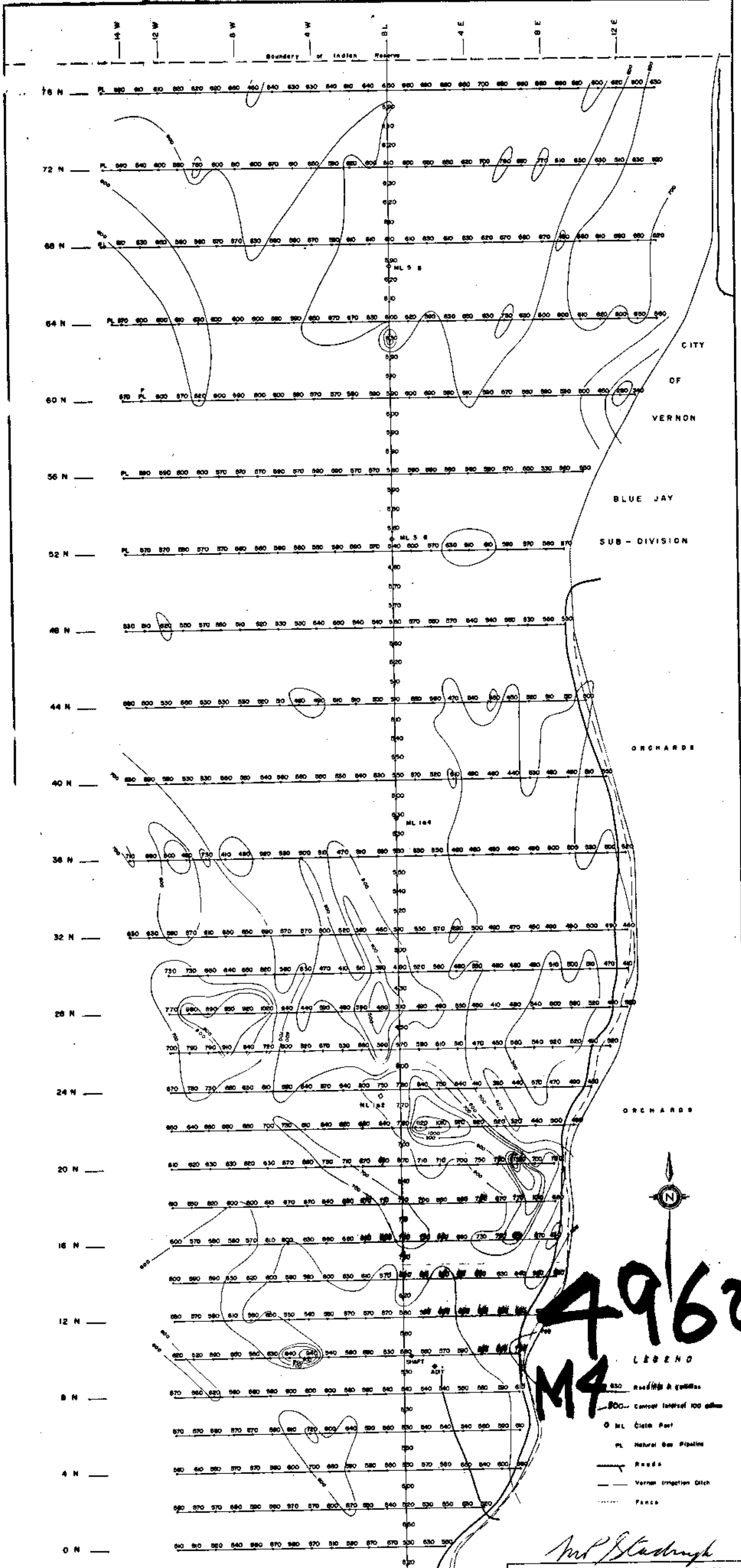
Preparation - 2 days @ \$100.00 per day	\$200.00	
Drafting and Printing charges	85.00	
Typing and copies	<u>75.00</u>	<u>360.00</u>
		Total <u>\$3,095.00</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 21st
day of May, 1974, A.D.




A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub-mining Recorder



Department of
 Mineral and Technical Resources
 ALL INFORMATION CONTAINED
 HEREIN IS UNCLASSIFIED
 DATE 11-19-80 BY SP-6
 NO. **4960** M.P. # **4**

W. P. Stodrup
 STADNYK EXPLORATION SERVICES LTD.
 LAURA INDUSTRIES & RESOURCES LTD.
 BLUEJAY MINERAL CLAIM GROUP
 VERNON MINING DIVISION
MAGNETOMETER SURVEY
 SCALE IN FEET
 400 800 0 400 800
 MAY 1974