

February 1979

# TAY GROUP

ALBERNI M.D., B.C. 92 F/6W

7191

## REPORT

by V. CUKOR, P. ENG. ■ NVC ENGINEERING LTD. ■ VANCOUVER, B.C.

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REPORT  
on  
TAY CLAIM GROUP  
PORT ALBERNI, B.C. AREA

1. INTRODUCTION

During 1978 the Tay Claims were abandoned and subsequently relocated in the same position

During the month of October 1978, a field program of an E.M.-16 Survey and limited geological mapping was carried out. The geophysical survey was performed by Presunka Geophysical Ltd., the operator was S. Presunka. The geological work and overall field supervision was by the author. Field assistance was provided by the property owner, F. Milakovich, prospector.

Since the completion of this program, the owner and George Kuchuk, prospector, visited the property on two occasions performing physical work on the discovered quartz vein.

## 2. REVIEW

### 2.1 SUMMARY

The Tay Claims are underlain by the volcanics of the Karamutsen Formation, intruded by numerous granodiorite dykes. Auriferous quartz veins also carry pyrite, arsenopyrite and locally chalcopyrite and/or galena and sphalerite.

Samples collected by the author and the others returned as high as .3 oz/t Au in float and over .2 oz/t Au in place. One sample also assayed 3% As but much more systematic sampling is necessary to establish a gold to arsenic and gold to copper ratio.

The E.M-16 survey outlined a number of conductive zones, several of which were extended beyond the property boundary. Additional ground has been acquired since to cover the possible extension of the detected conductors.

2. REVIEW (Cont'd)

2.2 CONCLUSIONS

The Tay Claims have so far developed at least three good exploration targets. The #2 showing area did not respond to the E.M.-16 survey, but the sample of pyritized quartz assayed as high as .226 oz/t Au.

The area of conductor A (see figs. 2 and 3) coincides with an extensive auriferous float. Due to the strength, continuity and length of the E.M. anomaly, combined with the abundance of mineralized float, this zone should be considered as the primary target on the property.

Conductor B is associated with an outcrop of a pyritized and silicious zone. Although the only sample taken on this outcrop assayed only trace of gold, due to the general erratic nature of gold appearance in the area, the author believes that this area still deserves more attention.

2. REVIEW (Cont'd)

2.3 RECOMMENDATIONS

In the author's opinion, the Tay Property is a good exploration target, and further work is definitely warranted. The first stage of the program should be comprised of basic exploration as detailed geological mapping, hand trenching on the known showings and attempts to relocate the galena, sphalerite vein described in the old reports. This should be accompanied by a systematic sampling of all showings and float.

The E.M. survey should be extended westward from the existing grid to outline the full extent of the detected conductors. Magnetic and/or self potential surveys should be attempted to confirm the anomalies encountered by the E.M. survey.

The second stage of the program should consist of diamond drilling carried out on recommended locations.

2. REVIEW (Cont'd)

2.3 RECOMMENDATIONS (Cont'd)

A minimum of 125 metres of B.Q. diamond drilling is required at this stage. If these results are encouraging, the drill program should be expanded at least an additional 600 metres along the conductive zones.

It is necessary to budget at least \$10,000.00 for the first stage and \$15,000.00 for the second stage of the program.

3. PROPERTY

3.1 CLAIMS

The original Tay property comprised eight (8) full size mineral claims. Recently ten (10) additional claims were located. The claims and record numbers are as follows:

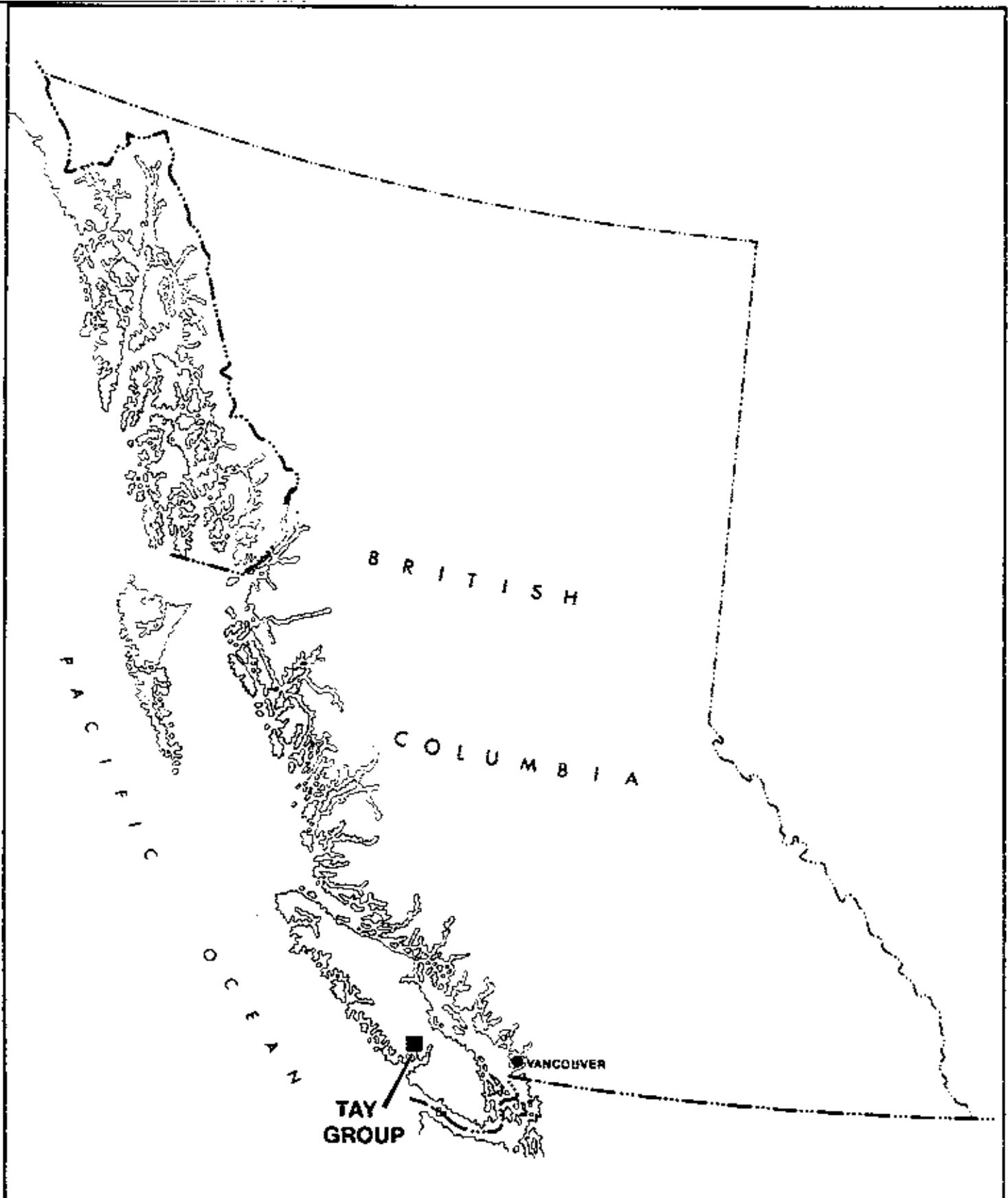
<u>Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>
TAY 1 - 8 (inc)	173 - 180 (inc)	March 17 1979
TAY 9 - 12 (inc)		February 14, 1980
TAY 13 - 18 (inc)		February 14, 1980

The claims are owned jointly by Mr. & Mrs Milakovich of Vancouver, B.C.

3.2 LOCATION

The Tay claims are located on the southwestern part of Vancouver Island only a few kilometres west of Sproat Lake, and immediately north of Taylor River. They are in the Alberni Mining Division on Map 92P/6W NTS and are centred on latitude  $49^{\circ} 19'$  north and longitude  $125^{\circ} 15'$  west. Along the eastern border they adjoin Crown Granted claims which were known in the past as Morning and Apex Groups.





**TAY GROUP**

**LOCATION MAP**

ALBERNI N.D. B.C.

92 F/6W

V. CUKOR, P. Eng. - NVC ENGINEERING Ltd. VANCOUVER, B.C.

DATE: February, 1979

SCALE: 0 100 Miles

FIG. 1

### 3. PROPERTY

#### 3.3 ACCESS

The property is readily accessible from Port Alberni via paved highway No. 4 which crosses the southern part of the claims. All parts of the property can be reached using a number of good quality dirt logging roads which join the highway.

The closest supply centre is Port Alberni, approximately 40 km to the east which in turn connects to the main Island Highway by a paved road providing good access to Vancouver via Nanaimo and/or Victoria.

#### 3.4 TOPOGRAPHY

The Tay Group of claims occupies the northern side of Taylor River valley at an elevation of 200 ft. to 2,500 ft. above sea level. From the narrow valley floor, a gentle slope rises to a distance of approximately 1/4 mile where steep barren bluffs start. At approximately the 1,500 ft. elevation the hillside gradually flattens forming the plateau at about 2,000 ft.

3. PROPERTY (Cont'd)

3.4 TOPOGRAPHY (Cont'd)

The lower part of the property has been logged off. The higher elevation is covered by a forest of large cedar and fir trees. Sporadically there is a thick growth of underbrush.

Several small streams provide sufficient water for exploration.

The climate is characterized by warm, wet summers and mild winters. Snow cover seldom exceeds 2 ft. in the lower part of the claims.

4. HISTORY

The gold bearing quartz veins were discovered in 1899 on the Morning and Apex Crown Granted Mineral Claims which are now covered by leases adjoining the Tay property along the eastern border. A number of pits, trenches and one 107 metre adit were excavated at that time and several veins were described in the early reports. Some of the veins were reported to extend westward to the ground now covered by the Tay claims. It is difficult to identify the old workings and find these veins as extensive post logging debris covers the southern part of the claims.

Some of the Crown Grants have been held intermittently by various companies and limited exploration was started several times. On at least three occasions, limited diamond drilling was carried out and lately a long adit had been excavated along the Morning vein. The gold values were apparently fairly low and erratic, and the project was abandoned.

## 5. GEOLOGY

### 5.1 GENERAL GEOLOGY

The general geology is shown on Map 17-68 issued in 1969 to accompany G.S.C. Paper 68-50 by Mr. G.E. Muller. The property area is underlain by the volcanic sequence of the Upper Triassic or older Karmutsen Formation. It is composed mostly of volcanic flows which in places also include minor tuffs and limestone beds.

This formation has been invaded by late Triassic granitic intrusive of the Island Formation. These rocks appear only a few miles northwest of the claims.

Most of the faults in the area follow a west-northwest strike which is also the general trend of Taylor River.

### 5.2 LOCAL GEOLOGY

Dark green to almost black andesites outcrop in the lower part of the claim group. A pattern of vertical and horizontal fractures is the cause of the main topographic feature, development of cliffs and benches. The rock is locally intensely pyritized, with pyrite developed both along

5. GEOLOGY (Cont'd)

5.2 LOCAL GEOLOGY (Cont'd)

fractures and as disseminations. Numerous dioritic dykes from several cm. to more than ten metres wide criss-cross the claims in every direction. At least one small irregular intrusive body was recognized. In places fairly intense epidote alterations appear accompanied regularly by dark chlorite and abundant magnetite. Silicification is developed locally in the zones of especially intense alteration. Pyritized quartz veins follow the fracture zones and are mineralized by chalcopyrite, locally galena and sphalerite. Some of these carry gold and/or silver.

5.3 MINERAL SHOWINGS

Two localities with quartz veining have been identified on the Tay Claims, and at least two additional localities are known to contain gold bearing float.

Pyritized quartz veins outcrop in two places, (see fig.2). From old reports, it is obvious that several more

5. GEOLOGY (Cont'd)

5.3 MINERAL SHOWINGS (Cont'd)

veins were exposed in the past but as yet have not been located by the author since logging debris covers the area

Showing #1 is a wide zone of silicification, intensely pyritized. However, the author's sample returned only .016 oz/t Au and .05 oz/t Ag. The sample consisted of several fragments of pyritized rock. More systematic sampling is required on this outcrop.

Showing #2 consists of a 1 x 2 metre outcrop of quartz with pyrite, which has been opened sometime in the past by a small pit. Samples taken of the vein by the author assayed .064 oz/t Au and .10 oz/t Ag, while several fragments collected from the dump returned only .001 oz/t Au and trace of silver. In February 1979, Mr. Kachuk opened the showing further by hand trenching and reported that the vein is now exposed for approximately 3 x 4 metres. Two samples taken at that time assayed .226 oz/t Au, .05 oz/t Ag, 3.02% As and .01 oz/t Au, Trace Ag, and .16% As respectively.

5. GEOLOGY (Cont'd)

5.3 MINERAL SHOWINGS (Cont'd)

In the Conductive zone C area, revealed by E.M.-16 survey (see fig. 3) there is some rusty quartz-pyrite float and several pieces collected by the author assayed .126 oz/t Au, and 1.61 oz/t Ag.

The area of greatest interest is conductive zone A which contains much rusty quartz-pyrite float. Systematic assaying by Lou-Mex Mines Ltd. encountered results ranging from trace to .38 oz/t Au. An arithmetic average of 14 samples runs .13 oz/t Au. A number of float samples taken by the owner also returned results comparable to the Lou-Mex assays.



6. ELECTROMAGNETIC SURVEY

Instrument Ronka E.M.-16, Ser. No.2 was used to perform an electromagnetic survey on the Tay Claims. The survey consisted of two parts. On the southern portion of the property, a grid with 50 metre lines was established by chain and compass survey, and 20 metre stations were marked by red flagging. Readings were taken at every station and cross-overs were marked by red ribbon tied to the bushes in cross fashion.

On the upper part of the claims, the same instrument was used for reconnaissance, and in some cases logging roads were used for traverses. Figures 3 and 4 show the results encountered on the grid survey only.

Two V.L.F. Stations were used during the survey:  
Station 23.4 Hawaii, and Station 18.6 Seattle

V.L.F. Station 23.4 - Hawaii

Six conductive zones encountered by survey are shown on Fig. 3 and are marked alphabetically from A - G

6. ELECTROMAGNETIC SURVEY (Cont'd)

inclusive. The zones A, B, C, E and F strike northwesterly and conductor D strikes in a northeasterly direction. All readings are shown on a profiled plan, see fig. 3.

Conductor A is located west of the baseline and extends from lines 1S at 0+60W to line 1N at 1+70W for a length of some 250 metres. It probably extends in a southerly direction but interference from B.C. Hydro Power Lines become too great and no readings can be taken any further in that direction. This conductive zone should be considered a prime exploration target in future programs. The factors which support this conclusion are the strength and continuity of the anomaly, its length and most important the fact that the conductive zone bisects the area with abundant auriferous quartz float.

At least one diamond drill hole should test the zone, drilled at line 0 at 1+50W in an easterly direction at  $-55^{\circ}$  to an approximate depth of 50 metres. If results are promising enough, drilling should be extended along the zone with 50 metre stepouts.

6. ELECTROMAGNETIC SURVEY (Cont'd)

The B zone, located east of the baseline is a fair east dipping conductor, which passes very close to where showing #2 appears (see fig.2). The zone extends beyond the grid area in a southeasterly direction but stops abruptly on the north end after crossing the logging road where it might be faulted off. The survey on this conductor should be extended southerly and it should also be tested by diamond drilling from the location shown on fig. 2.

The C conductor is located east of the baseline in the area where samples of mineralized float assayed better than .1 oz/t Au. The zone fades out northward and is probably masked by "noise" from the Power Line at the south end.

Zones D, E, F and G require more work in order to establish their extent and strike. The survey was not extended in these areas originally since the conductors fell along the border or beyond the Tay Claims. Subsequent to the survey, additional ground was acquired to cover the zones of interest.

6. ELECTROMAGNETIC SURVEY (Cont'd)

V.L.F. Station 18.7 - Seattle

Readings are presented on a contoured map, see fig. 4. The only cross-over indicated by this station is located on line 0+50S at 2+40E. This conductor should be detailed in a north-south direction to find its east-west extent since it is in the general area of mineralized exposure.

The reconnaissance in the northern part of the claims did not return any results of interest except for an anomalous reading beyond the claim boundary. Since this area is now covered with newly acquired claims, followup detailed work should be performed there.

In conclusion, the electromagnetic survey was, in the author's opinion successful and provided encouraging results. Three of seven conductors fell in the areas with mineralized outcrops and/or auriferous quartz float, and at least two others require an extension of the survey.

6. ELECTROMAGNETIC SURVEY (Cont'd)

Two of the conductors, so far, are recommended to be tested by diamond drilling. The interesting feature is the trend of most of the conductors which is not coinciding with the strike of the Morning vein, which is contrary to the author's expectations.

Respectfully submitted,



V. CUKOR, P. ENG.

February 19, 1979

APPENDIX A

List of personnel employed and costs of the TAY CLAIMS PROJECT

1. Field Program October 23 - 29, 1978 E.M.-16 SURVEY

Wages:

V. Cukor	P. Eng.	6.5 days @ \$250.00	1650.00	
S. Presunka	E.M. 16	6.5 days @ \$150.00	975.00	
F. Milakovich	Operator Helper	3 days @ \$ 50.00	<u>150.00</u>	2,775.00

Field Expenses:

4 x 4 Rental	7 days @ \$ 35.00	245.00	
Gasoline		44.96	
Ferry		31.00	
Motel		176.89	
Meals & Groceries		204.49	
Misc. Expenses		<u>25.00</u>	727.34

2. Field Program February 1 and 2, 1979 HAND TRENCHING

Wages:

G. Kachuk	Prospector	2 days @ \$100.00	<u>200.00</u>	200.00
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Field Expenses:

Ferry		28.00	
Restaurant		23.50	
Motel		23.10	
Gasoline		7.00	
Misc. Expenses		<u>6.00</u>	87.60

3. Report

V. Cukor	P. Eng	3 days @ \$250.00	750.00	
Drafting, Printing, Typing and binding			200.00	
Assays			<u>58.00</u>	<u>1,008.00</u>

TOTAL COSTS				<u><u>\$4,797.94</u></u>
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*V. Cukor*  
V. CUKOR, P. ENG.

CERTIFICATE

I, Vladimir Cukor, of 2841 West 18th Avenue Vancouver, B.C. do hereby certify that:

1. I am a Consulting Geological Engineer with business address as above.
2. I graduated from the University of Zagreb, Yugoslavia in 1963.
3. I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers in the Province of British Columbia.
4. I have practised my profession as a Geological Engineer for the past 16 years both in Yugoslavia and Canada.
5. I have no interest, direct or indirect in the Tay Mining Claims nor do I expect to receive or acquire any.
6. I hereby consent to the use of this report. in or in connection with a Prospectus or a Statement of Material Facts relating to the raising of funds for this project.

February 19, 1979

  
V. CUKOR, P. ENG.



# DOMINION BLUEPRINT & REPROGRAPHICS

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D.P. NORTH SHORE	1348 MARINE DRIVE	980-6912	SOUTHSIDE	1616 WEST 3RD AVE.	732-1491
D.P. DOWNTOWN COPY CENTRE	714 W. HASTINGS ST.	683-1536			

CHARGE TO

ACCOUNT NO.

*N. C. V. Eng.*  
*TAY group*

PICK-UP & DELIVERY **681-7501**

P.O. NO.

DATE *Feb 20/79*

ORDERED BY *X U.W.*

SIGNATURE

TIME WANTED

*Wait*

PHONE NO.

DIAZO	XEROX	PHOTO	NO. OF ORIGINALS	NO. OF EACH	PROJECT NO.	DESCRIPTION (OR SPECIAL INSTRUCTIONS)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
BLUE-LINE	1860 BOND	NEGA-TIVE				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
BLACK-LINE	1860 VELLUM	MYLAR				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
BROWN-LINE	XEROX	PAPER				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
SEPIA P.	9200 XEROX	35 MM	<i>23</i>	<i>4</i>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
SEPIA P.	OTHER	OTHER				

	TOTAL SQ. FT.	PRICE	AMOUNT	CODE NO.
<i>1X4 Cover stock + Backs.</i>				
<i>23X4 Customer stock</i>				
<i>Collated</i>				
<i>Cerloxed</i>				

REMARKS OR DELIVER TO

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YOUR WORK ORDER NO.

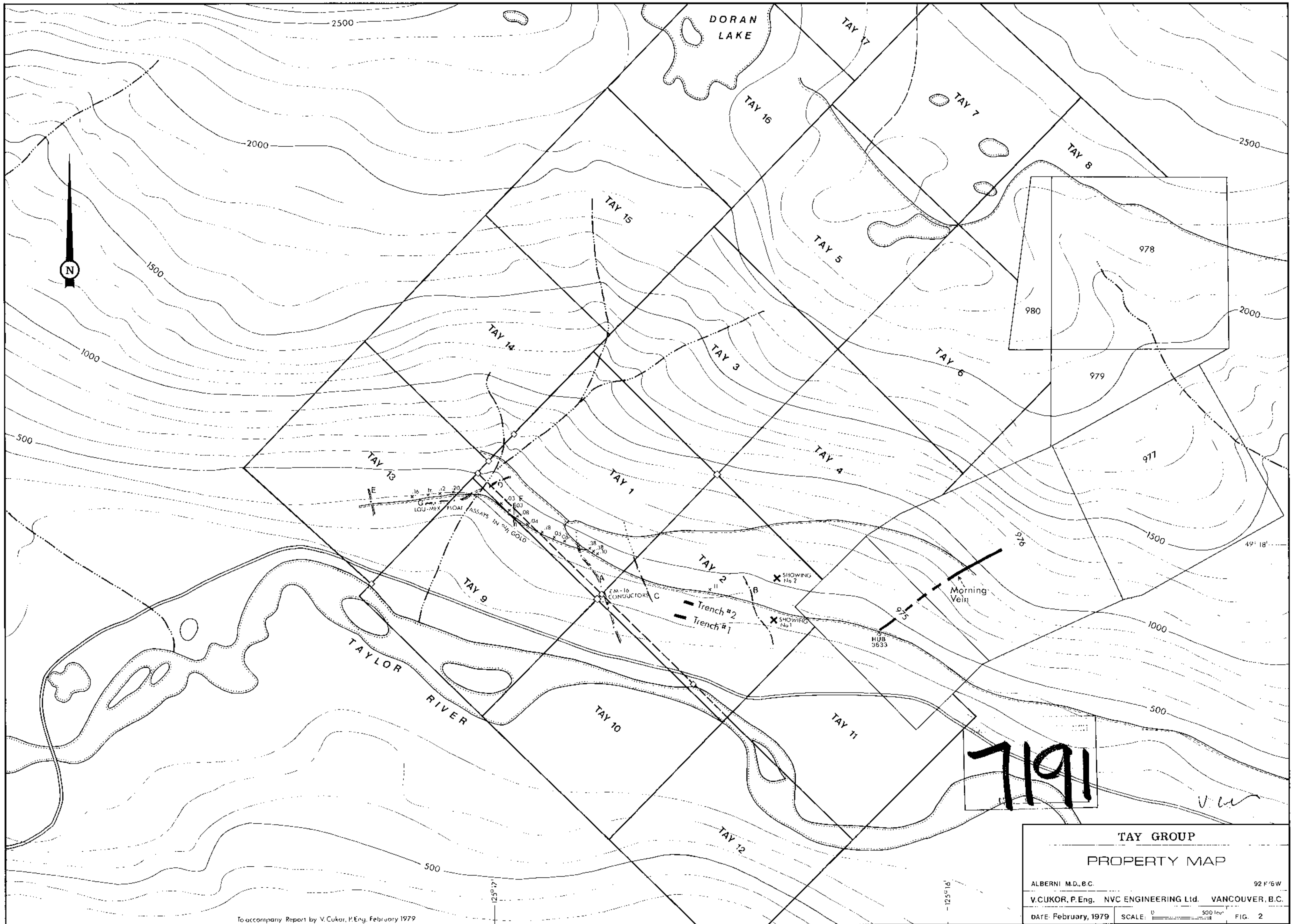
*7064-58*

TERMS: NET 30 DAYS  
OVERDUE ACCOUNTS SUBJECT TO  
INTEREST

\$		TOTAL
\$		FED. TAX
\$		TOTAL
\$		PROV. TAX
\$		TOTAL
\$		MAIL DELIVERY, LABOR EXPENSE
\$		TOTAL

PACKING SLIP





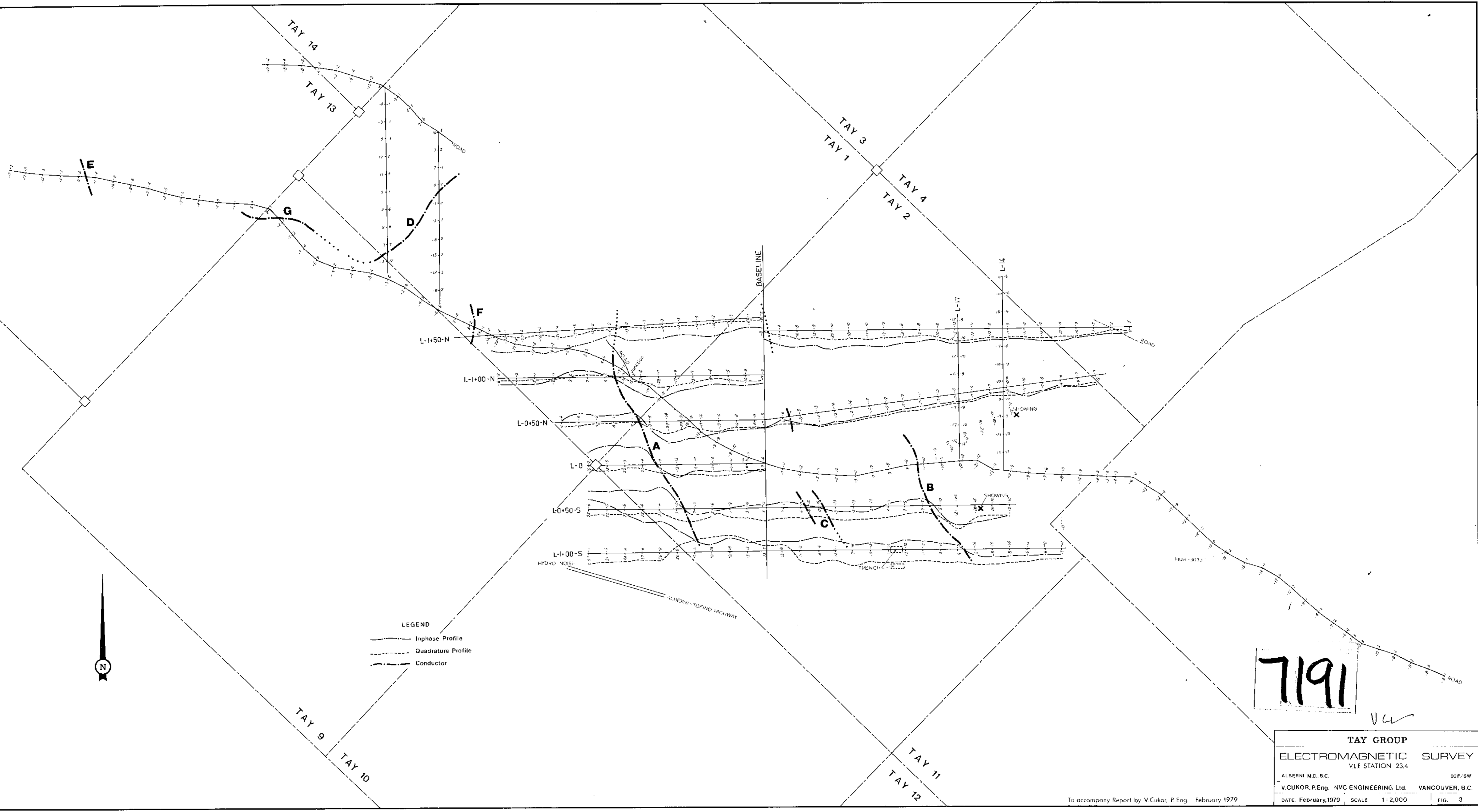
**TAY GROUP**  
**PROPERTY MAP**

ALBERNI M.D., B.C. 92 F'6W

V. CUKOR, P. Eng. NVC ENGINEERING Ltd. VANCOUVER, B.C.

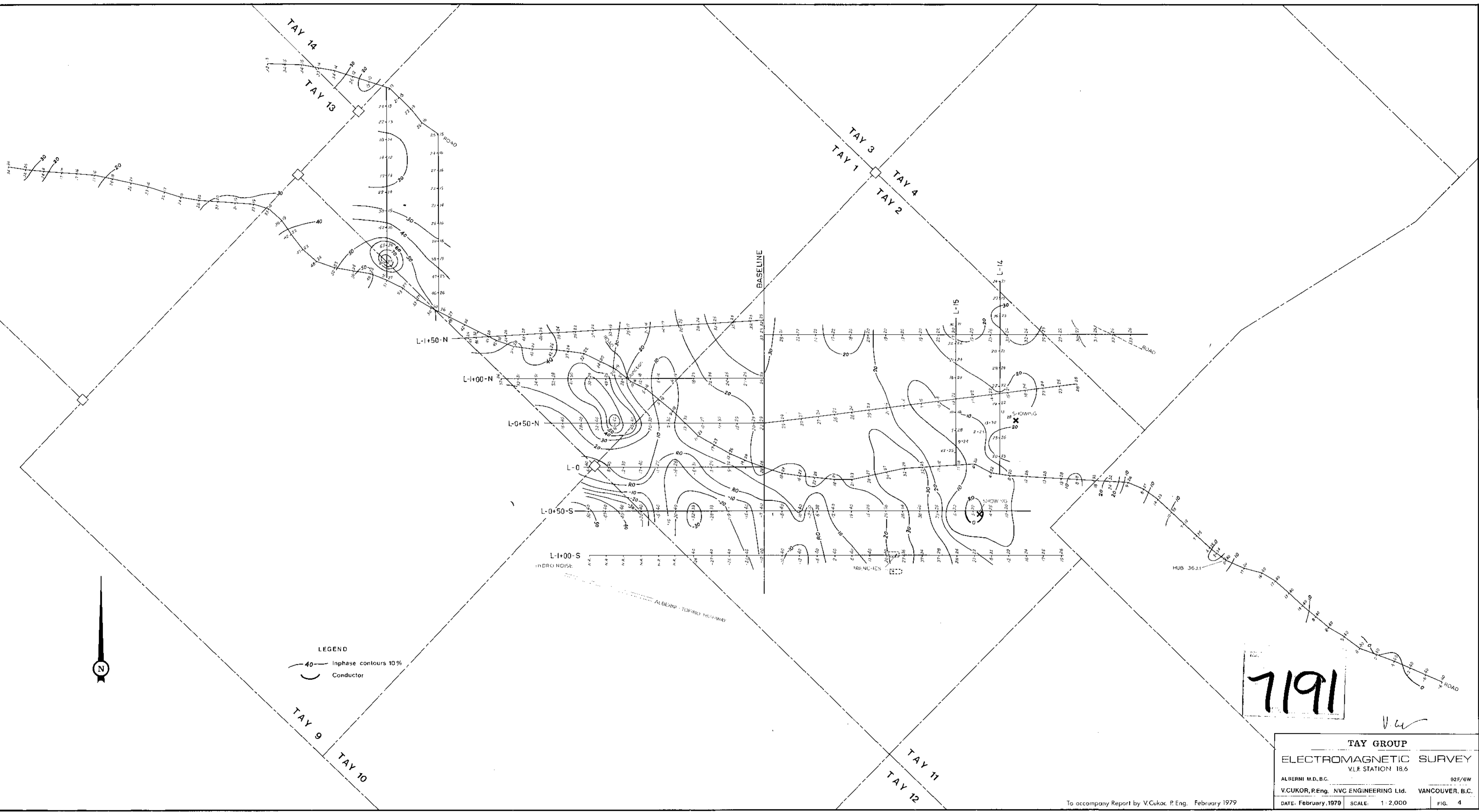
DATE: February, 1979    SCALE:    FIG. 2

To accompany Report by V. Cukor, P. Eng. February 1979



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<b>TAY GROUP</b>		
<b>ELECTROMAGNETIC SURVEY</b>		
V.L.F. STATION 18.6		
ALBERNI M.D., B.C.		92F/6W
V. CUKOR, P. Eng. NVC ENGINEERING Ltd.		VANCOUVER, B.C.
DATE: February, 1979	SCALE: 1 : 2,000	FIG. 4

To accompany Report by V. Cukor, P. Eng. February 1979