# 3219

GEOCHEMICAL AND GEOPHYSICAL REPORT

ON

BILL 5-10, 14-18, 21, 28, 30, 32, 46-52, 56-57 BIG 6, 9, 11-12

> 93 N 14 Omineca M.D., B.C. 23 Miles WNW from Germansen Landing

> > 55°53'N, 125°15'W 93 N / 14E & W

for

PYRAMID MINING CO. LTD. (NPL) Vancouver, B.C.

Ъу

Charles A. R. Lammle, P. Eng.

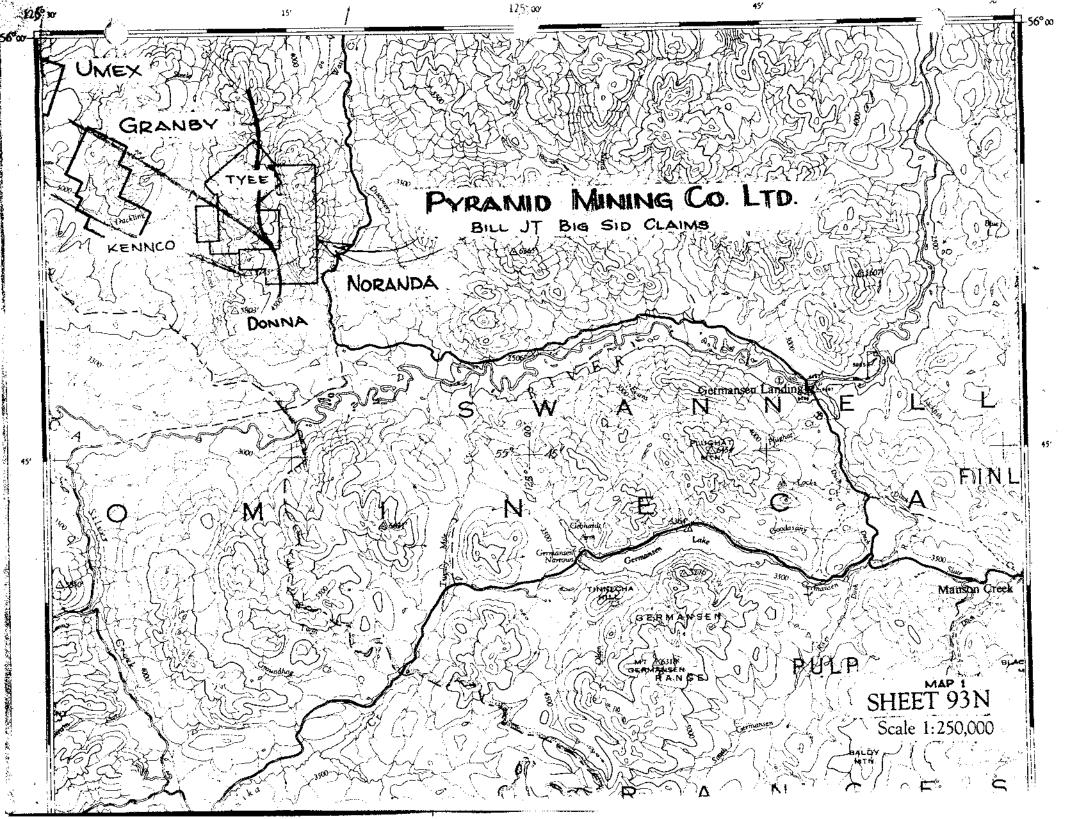
September 15, 1971

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 32.19 MAP



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\* Claim Name Abbreviations

"G" "B" Big = Bill =

PYRAMID MINING CO. LTD.

STAKING CONFIGURATION

1" = 3000' MAP 2 MAP 2

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#### GEOCHEMICAL AND GEOPHYSICAL REPORT

JT BIG BILL and SID CLAIMS 93 N 14 Omineca M.D., B.C.

## INTRODUCTION

During July and August, 1971, Newco Ventures Ltd., and part Pyramid Mining Co. Ltd., both of Vancouver recommenced a still continuing exploration program on the 139 contiguous claim property located 23 air miles WNW from Germansen Landing, B.C. The work program, initiated late last fall, has included to date road construction and maintenance by D7 and TD18 bulldozer, trenching, line cutting, geochemical survey, magnetometer survey and prospecting-geological work. This report, an amended part of a larger geological report, will describe the geochemical and geophysical report. Interpretations and conclusions will be drawn.

#### PROPERTY, LOCATION AND ACCESS

The property consists of the following claims:

BILL	1-57	(57)	93646-702	Sept.	21	'71
SID	1- 6	( `6)	93703-708		**	
SID	11-16	(6)	93713-718	•	*1	
BIG	1-12	(12)	93723-734		*1	
BIG	15-18	(4)	93735-738		11	
$\mathtt{JT}$	1- 2FR	(2)	93901-902	Oct.	7	'71
JT	3-46	(44)	93903-946		11	
Bill	43-50	(8)	93973-980		11	

These 139 contiguous claims are located 23 miles WNW from Germansen Landing (Map 1) and the staking configuration is as shown on (Map 2). Access is 26 miles northwest from Germansen Landing via Department of Mines Road, thence 3 miles westerly via four wheel drive road to the property. Supplies and services are available at both Germansen Landing and Manson Creek, B.C.

#### GEOCHEMICAL REPORT - SOIL COPPER

During the course of the Newco - Pyramid work on the property soil samples were taken at 200' intervals on picket lines spaced at 400' intervals. Some 300 samples have been taken so far from three separate grid areas, the North, Middle and South Grids. The sampling was supervised by Bill Smith, contractor, and the analyses were performed by Bondar Clegg, North Vancouver. This portion of the report will describe the soils, sampling and analytical procedure, and the results of the soil copper survey to date.

# Character of Soil and Sampling Method

Soils on the property are poorly developed. They consist of a thin discontinuous humus material derived from forest floor debris upon a brown, oxidized, poorly developed B-C horizon. The B horizon, where present, has developed by podzolization of glacial drift. The material sampled consisted of a brown sandy to silty gravel. Samples were taken by hand from 8 inch mattock holes, placed in appropriately labelled soil sample envelopes and forwarded to laboratory for analysis. Samples were taken by Bill Smith and E. Tancowny.

#### Analysis

At the laboratory the samples were air dried and screened on 80 mesh stainless steel. A weighed portion of the undersize was then digested in hot acid, diluted with demineralized water, and the resulting solution analysed for copper by standard atomic absorption techniques.

## Results

The results are shown on maps 4, 5 and 6, attached, and in graphical form on Appendix 1. The chart, a logarithmic probability plot of the classified numerical data theoretically separates lognormally distributed data into separate populations, each population reporting as a separate straight line on the graph. Although overlap between populations can be expected, the intersection of the separate straight lines can be taken as population boundaries. Populations not distributed in perfect log-normal fashion plot as gentle curves on which points of major inflection can be taken as population boundaries.

Appendix I indicates soil copper to belong to three populations; the lower population, 56% of the soils tested, is attributed to glacial drift; the intermediate population, 26% of the soils, is attributed to locally derived soils; and the third population, the higher 18% of the samples is considered anomalous.

Map 4 shows that, on the north grid, the copper is concentrated. in a strong anomaly at the west edge of the grid, along the east side of a ridge. A lesser anomaly occurs near a diorite dyke at the north end of the grid and an irregular weak trend runs NW across the central part of the grid.

Map 5 shows two small areas of good soil copper at either end of the southernmost line of the grid. Both areas appear to have a northeast trend, conflicting with the geological picture.

Map 6 shows a fair anomaly at the east edge of the grid, near the base of the slope, and a weak northerly trend across the central portion of the grid.

#### GEOPHYSICAL REPORT - GROUND MAGNETICS

#### Instrument and Survey Procedure

During the course of the work on the property magnetometer readings were taken at 100° intervals on lines of the three separate grids. The instrument used was the Sharp MF-2 vertical field flux-gate magnetometer, an instrument designed to measure variations in the vertical component of the earths magnetic field. On the scale selector ranges used in the work, the sensitivity of the instrument was 20 gammas per scale division for readings less than 1000 gammas and 50 gammas per scale division for readings of higher magnitude.

Instrument operator was D. Tancowny under supervision of Bill Smith. Reading procedure was to face north with the instrument, hand level and read the direct reading galvanometer. Diurnal corrections were facilitated by checking master control stations at the beginning and end of closed loop magnetic traverses.

## Results and Correlations

The results are shown together with the geochemical results on Maps 4,5 and 6. Map 4 shows a distinct northwesterly trend across the central part of the grid, striking towards Tyee's exploration area and two areas of irregular strong magnetics on the southwest half of the grid, both of which correlate well with high soil copper, in an area of pyritic, hornfelsic basalts, less than 2000' east of the major geological contact. Several poorly defined northwesterly mag highs at the north side of the grid with a small central soil copper high, are probably related to diorite dykes in the area, one of which has been trenched and contains chalcopyrite. A linear mag low northwest across the central part of the grid, with poor weak correlating soil copper could reflect a structural zone, contact or fault; the presence of monzonite porphyry along strike adds to this possibility.

Map 5 shows a weak northeast magnetic high between the two small soil copper anomalies, confirming the anomalous trend. The two higher readings at the northeast corner of the grid have no geological or geochemical correlations.

Map 6 shows a central, north-trending mag high with weak soil copper along its downhill east side. A north trending, linear low at the east side of the grid also has higher copper on its downhill side. The mag high parallels the interpreted position of the batholithic contact, and could reflect circumstances similar to the mineralized zone on the Tyee Property. The linear low corresponds

in position with an area of high surficial iron oxidation, judging from a poor road cut, and could reflect a strong northerly structure close to the Willie George Creek lineament.

#### SUMMARY

The Pyramid Mining Companies' Bill and J.T. Property, 23 airmiles WNW from Germansen Landing, B.C., covers a major batholithic contact and spans a 5 mile strike-length of a geologically favourable basalt unit in which, on the adjoining property, attractive iron-copper mineralization has been found. Work to date on the Pyramid property has indicated geological, geochemical and magnetic relationships similar to those on the adjoining discovery ground, and accordingly further evaluation of the available data and continuation of the work programs already initiated are necessary and justified.

#### CONCLUSIONS AND RECOMMENDATIONS

Intriguing exploration possibilities occur in the Takla Group basalt unit at the sudden, south-eastern terminus of the syenite complex, at the northwestern wedge of the property east of the major contact, and at projected structural intersections with the major Willie George Creek Lineament. Further evaluation of the presently available results and continued exploration are recommended:

#### STATEMENT OF QUALIFICATIONS

The geochemical work described in this report was carried out by mining exploration contractor, Bill Smith, who has had several years experience carrying out and supervising such work, and helper E. Tancowny, both of whom are adequately educated and responsible to competently carry out their duties related to this work.

The geophysical work described in this report was carried out by Dan Tancowny, who has studied several years at U.B.C., and who is, of course, adequately educated and responsible to competently carry out his duties related to this work.

Charles A. R. Lammle,

Chas GLLan

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Clas. G. Lammer

# Province of British ColANCOUVER, B. C.

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Mag. Rental	Siegel						200	
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MIDDLE GRID								•
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Mag. Rental	Siegel						60	
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Engineering & Repor							100	
	Applicable Exp						\$1520	
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Sampling & Mag.	Smith	3	11	@	40	. 120		
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	D. Tancowny	4	**	@	30	120	330	
Analyses	Bondar-Clegg					0	70	
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# (SOUTH GRID CON'T.)

Mag. Rental	Siegel				\$	60		
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Applicable Expenditures								
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15 claims

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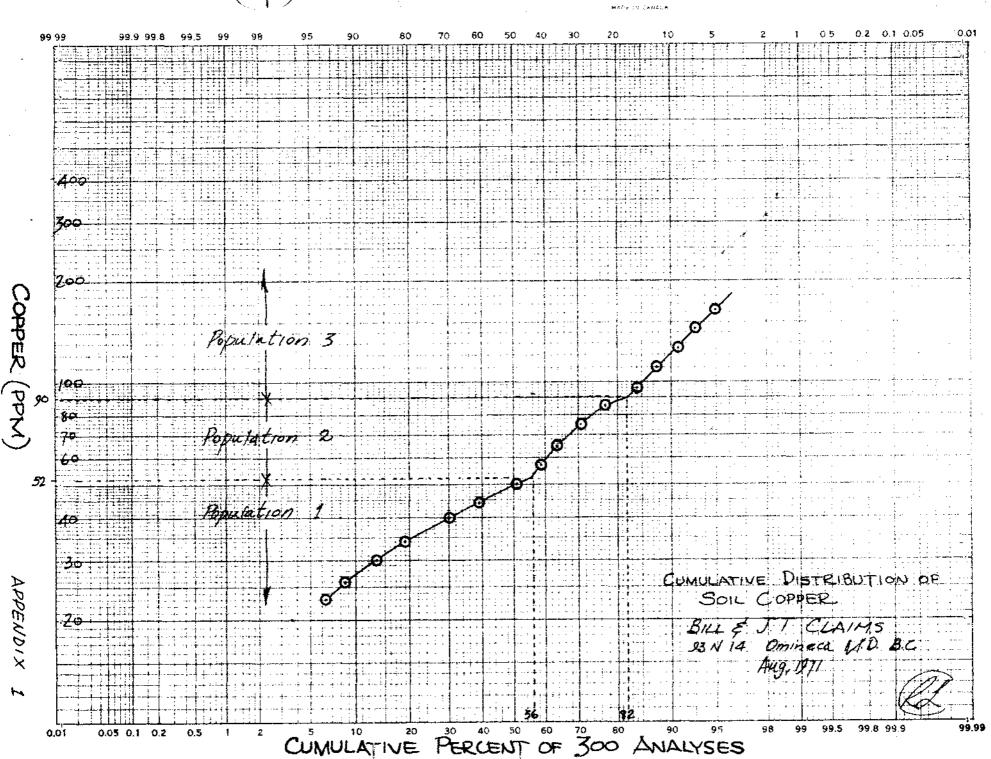
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Sub Mining Recorder

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia.

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RAI 0 0 0 Department of Mines and Petroleum Resources 0 ASSESSMENT REPORT 0 NO. 3217 0 0 BILL 28 FILL 6 - MARUBENI TIDA 30001 57000 40081 BILL 8 36008 86008 14008 14008 14008 14008 14008 COMINCO 130008 Legend Soil Copper (ppm) -= 319 (botted contours) Soil Sample Site Diurnally Corrected & Solid contours (gammas) To hacompany Gerchemeral Geophysical Reput IT Big Bill Sid Claims 93 NIA Omineia By Call Lammer P. Eng. Sept 151071 PYRAMID MINING CO LTD VANCOUVER, B.C. Magnetics Sharpe MF-2 Vert. Field Fluxgate
Sensitivity 20 81 scale division for readings < 1000 8

50 81 scale division for readings > 1000 8

Operator - Dan Tancowny BILL & J.T. CLAIMS

93 N 14 Omineca M.D., B.C.

MIDDLE GRID analyses Bondar Clegg (atomic absorption) SOIL COPPER & GROUND MAGNETICS aug '71 1" = 400' MAP 5

Soils !

CLAIMS

DUKE

Legend Soil Copper ppm 60 Soil Sample site 0 BILL 14 BILL 13 Diurnally Corected Wagnetometer rdg. BILL 15 Department of TRENCH Mines and Petroleum Resources ASSESSMENT REPORT BIG 6 NO. 3219 MAP BIG 9 BILL 18 BILL 17 BILL 20 BILL 19 BIG 12 TRENCH

To Krompany Gerchemical Geophysical Report

JT Big Bill Sid Claims 93 N 14 Omeneca
by CAL Lammele Sept 15 1971

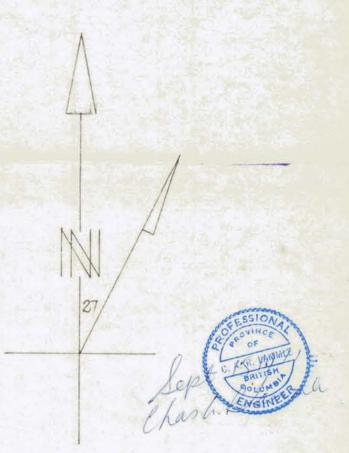
Magnetics: Sharpe MF-2 Vert Field Fluxgate

sensitivity: 208/scale division for readings < 10008

508/scale division for readings > 10008

operator: Dan Tancowny

Soils: Sampling: WI Smith & Dan Tancowny analyses: Bondar Clegg (atomic absorption)



PYRAMID MINING CO. LTD.

BILL & J.T. CLAIMS

93 N 14 Omineca M.D., B.C.

SOUTH GRID

SOIL COPPER & GROUND MAGNETICS

Aug '71 1" = 400' MAP 6

