

1747

REPORT
on
GEOCHEMICAL SURVEY
TRAPLINE CLAIMS - TERRACE AREA
OMINECA MINING DIVISION, B.C.

VELOCITY SURVEYS LIMITED
January 10, 1969

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PROPERTY

The property consists of some thirty-six located mineral claims in two groups of contiguous claims located in the Omineca Mining Division, Province of British Columbia. The two groups are comprised as follows:

GROUP I	-	Trapline 1-24 inclusive	47422 - 47445
GROUP II	-	Trapline 25-36 "	47446 - 47457

LOCATION AND ACCESS

Group I, consisting of twenty-four claims, occurs one and one half miles due west of the confluence of the Chlore and Zymoetz Rivers. Group II, consisting of twelve claims, occurs three quarters of a mile due east of the junction of the Chlore and Zymoetz Rivers. Facile access is available to Terrace, B.C. some 24 miles to the WNW by means of a graded, gravel road, constructed and maintained by Columbia Cellulose Limited. The town of Terrace, B.C. is serviced by CPA and by Highway 16 making connection with the major centres of British Columbia. Various logging roads traverse the area so that vehicular traffic is practical to the northern margins of the two claim groups.

TOPOGRAPHY AND VEGETATION

The major portions of the property lie between 1,000 feet A.S.L. and 2,500 feet A.S.L. in elevation. The ground surface presented is that of roughly rolling glaciated mountain topography. Locally, slopes of 100 percent grade are common with the average grade of the order of 60 percent. In general the area is heavily forested with commercial Fir and Cedar and with minor Poplar on the lower ground, especially along the

rivers. Frequent open areas are present where standing timber has been cut however salvage operations have not been effectively carried out so that access is frequently impeded due to extensive slash and debris.

GEOLOGY

The area of the claim groups is entirely underlain by Mesozoic rocks of Middle and possibly Lower Jurassic formation. In particular, the Hazelton Group. The observed rocks on the property consist primarily of volcanic lavas, i.e., andesites, basalts and rhyolites. The volcanic rocks are made up of sequential lava flows with intercalated beds of sediments of volcanic derivation, that is, andesite lavas, autobreccias, tuff beds and minor rhyolites. The lavas are predominantly red to purple in colour due to haematitic staining resulting from late stage fumarolic action. The rocks are frequently vesicular with fillings of epidote, calcite and quartz.

Two main directions of jointing are prevalent on the property, the main set of joints strike ENE with a steep southerly dip of 70 to 80°. The second set of joints strike NW/SE with a westerly dip of 50 to 60°. In general the lava flows strike NNE with an easterly dip of 30 to 40°.

METHOD OF OPERATION

During the period October 7th to 28th inclusive, a field crew consisting of two men conducted a reconnaissance geochemical soil sampling programme over the two groups of claims. On the east group, a base line was laid out in an

east/west direction along the north margin of the claim group. Lines were turned off at 1,000 foot intervals with stations established at 100 foot spacing. Soil samples were taken at 100 foot intervals along the north/south lines. On the second group to the east of the junction of Zymoetz and Chlore Rivers, a single line was cut and chained in a N/S direction and sampled at 100 foot intervals along the length of the property.

Soil sample specimens were extracted by means of a stainless steel ship's auger at a depth of the order of one foot. In all cases an attempt was made to sample the "B" horizon, that is, the soil immediately below the humus layer, so as to avoid the erratic effects attributed to concentration by humus and vegetable material. The individual samples were extracted, placed in heavy manila envelopes and catalogued by the field crews, and analysis was carried out by Crest Laboratories Ltd. of Edmonton, Alberta under the direction of Mr. R. Sawyer, Chemist. Individual samples were air-dried, screened to -80 mesh and then subjected to atomic absorption analytical techniques for the detection of copper. These values are expressed in parts per million on the enclosed plan. After each extraction, the auger was carefully cleaned to avoid contamination of subsequent samples.

DISCUSSION OF RESULTS

GROUP I

Three zones of anomalous copper content in the overburden have been detected during the course of the sampling programme. These zones have been titled 1, 2, 3, etc. and are herein des-

cribed.

ZONE 1 - consists of an open area peaking at 3 to 4 times background. The contour could not be closed due to proximity to the property margin and lack of sampling in that direction. The strike of the zone is not definitely known, however, past experience in the area dictates the direction of the contour shown. The topography of the area of the zone is a low, flat depression immediately south of the river so that heavy overburden precluded correlation of the anomalous effect with geological information.

ZONE 2 - is strongly linear in character and probably reflects a continuous shear zone or fault along its length. The values are generally low with the exception of peak values of 5 to 6 times background at the southwesterly extremity of the area.

ZONE 3 - this zone near the easterly margin of the property is again strongly linear and with exceptionally high values over very narrow widths. Mineralization in the area is normally concentrated in very narrow shear zones. The strongly linear character of the zone suggests such an environment or causative effect.

At random over the area of Group I occur several points or individual readings standing above background. No great emphasis may be placed upon these readings and they may in fact be caused by erratics in the overburden. Due to the wide spacing of the lines the contours cannot be accurately closed.

GROUP II

The single traverse the full length of the group indicated three zones of anomalous copper content in the overburden. Similarly, these three zones have been labeled 1, 2, 3 etc. Due to the fact that samples were taken along a single traverse the zones could not be contoured in the normal manner and the results have been represented pictorially. No direction is implied in this representation.

ZONE 1 - represents a section of values intermittently approaching 5 times background. This section of the traverse represents extremely steep topography with maximum slope following the line of the traverse in a northerly direction. This could possibly explain the erratic values as a result of gravitational drift.

ZONE 2 - is similar to Zone 1 in that values intermittently approach 5 to 8 times background. Similar conditions of topography exist here as well.

ZONE 3 - the section indicated as Zone 3 is poorly defined due to the lack of sufficient sampling. Steep topography and rock debris precluded taking consistent soil samples. The zone then simply represents anomalous values with no definitive information.

In all three cases overburden is generally light and would afford further investigation by physical methods. In most cases hand trenching would be effective. The extreme topography in some cases would preclude investigation by means of bulldozer trenching.



SUMMARY AND CONCLUSIONS

During the course of the reconnaissance geochemical soil sampling programme, six discreet zones were detected on the two claim groups. Insufficient samples have been taken to make statistical analyses of the results feasible, however the sharp contrast of the values obtained in the anomalous areas against the simple arithmetic average copper content is to be considered significant. On Group I the strongly linear character of the Zones 2 and 3 suggest structural causative effects. It is plausible to believe that these geochemical anomalies are the result of percolation of mineralized solutions in the immediate vicinity of linear structures such as shear zones and faults. Further, experience in the area has shown that mineralization is concentrated along such structures where visible.

RECOMMENDATIONS

It is recommended that the anomalous conditions indicated by the geochemical survey on Groups I and II be further investigated in order to determine their causative effects. Such investigation should preferably take the form of bulldozer trenching so as to expose bedrock surface. Should the investigations prove effective and favourable, it is recommended that the two claim groups be subjected to further geo-



Expiry Date: May 28, 1989

chemical sampling in order to detect and delineate additional areas of interest within the property boundaries.



Expiry Date: May 28, 1969

Jan 4/69

Respectfully submitted,

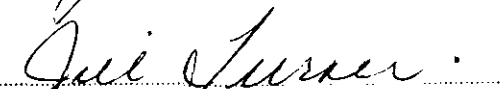
VELOCITY SURVEYS LIMITED

J.B. Prendergast, M.A., P.Eng.

LIST OF PERSONNEL

<u>Name</u>	<u>Position</u>	<u>Period Worked</u>	<u>Salary</u>
William Melleur	Field Technician	Oct. 2-20, 1968	\$25.00/Day
Samuel Cook	Field Technician	Oct. 2-6, 1968	\$25.00/Day
Bernie Frankum	Field Technician	Oct. 7-20, 1968	\$25.00/Day
C.T. Pasioka, B.Sc.	Geologist	Oct. 2-4, 19, 1968 Jan. 8, 1969	\$850.00/Month
J.B. Prendergast	Consultant	Jan. 9, 10, 1969	\$150.00/Day
Kory Martell	Typist	Jan. 10, 1969	\$400.00/Month

Declared before me at the *City*
of *Abbotsford*, in the
Province of British Columbia, this *31*
day of *January* 1969, A.D.



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

Sub-mining Recorder

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

To WIT:

In the Matter of a Geochemical Survey
carried out by Velocity Surveys Limited
on behalf of Pio Vogrig and Primac
Exploration Services Limited.

I, CLEMENS T. PASIEKA

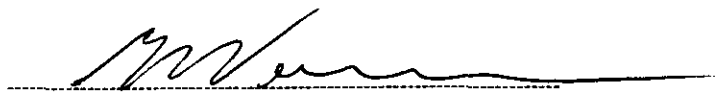
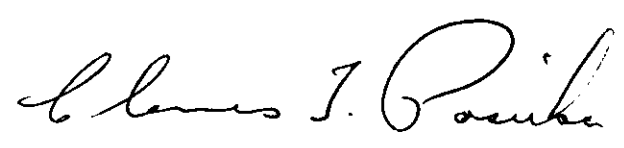
of 824-602 West Hastings Street, Vancouver 2,

in the Province of British Columbia, do solemnly declare that the following costs were
incurred by, invoiced to and paid by Primac Exploration Services
Limited:

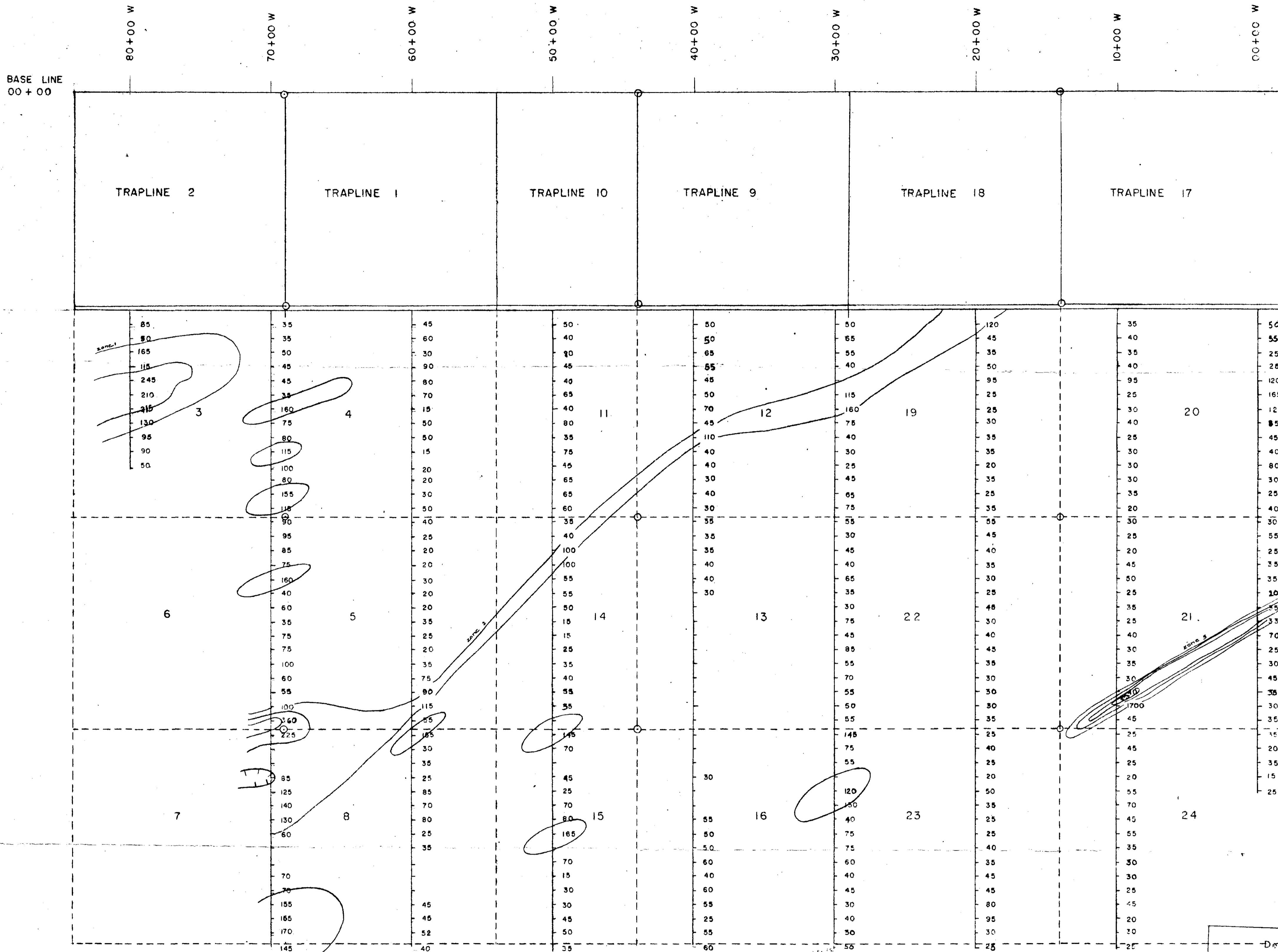
Line Cutting - 11.25 miles @ \$150.00/mile	\$1,687.50
Soil Samples - 412 samples @ \$2.50 ea.	1,030.00
Vehicle Rental - 4 wheel drive	420.00
Consulting and report	500.00
TOTAL	<u>\$3,637.50</u>

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 31st
day of January 1969, A.D.



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

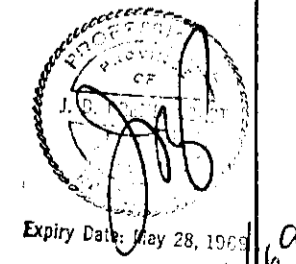


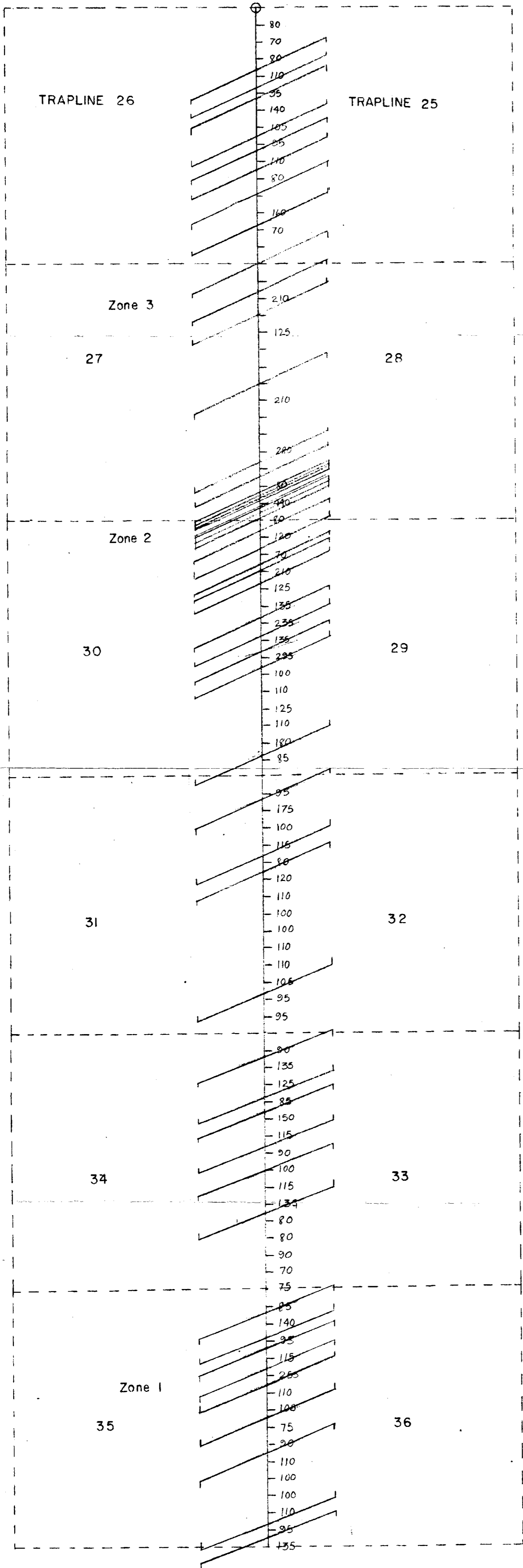
LEGEND
 COPPER ASSAYS EXPRESSED AS PARTS PER MILLION
 CONTOUR INTERVAL 100 (ppm)

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1747 MAP 1

1747

PLAN OF
 GEOCHEMICAL SURVEY
 TRAPLINE CLAIMS 1-24
 TERRACE AREA
 OMINECA MINING DIVISION
 ARDO MINES LIMITED
 VELOCITY SURVEYS LTD.
 JANUARY 1969
 SCALE 1" = 400'





Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1747
2

LEGEND
COPPER ASSAYS EXPRESSED AS
PARTS PER MILLION
CONTOUR INTERVAL 100 (p.p.m)

1747

PLAN OF
GEOCHEMICAL SURVEY
TRAPLINE CLAIMS 25-36
TERRACE AREA
OMINECA MINING DIVISION
ARDO MINES LIMITED
Velocity Surveys Ltd
JANUARY 1969
SCALE 1" = 400'

TO ACCOMPANY REPORT BY J.B. PRENDERGAST

(2)