

82-#923

#10969.

GEOLOGICAL and GEOCHEMICAL REPORT

On The JAN CLAIM GROUP ||

Liard Mining Division
Cassiar Area, British Columbia
Latitude 59°23'N; Longitude 129°49'W
NTS 104/P-5
November, 1982
ASSESSMENT REPORT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

10,969

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This report describes geological and geochemical exploration conducted on the Jan 1 to 3 (inclusive) mineral claims during the field period August 12th to September 25th, 1982. Work was performed by Cordilleran Engineering crews from two fly camps on the property. Aircraft support for part of the program was provided by a contract helicopter based at the "Midway" camp of Regional Resources Ltd. Additional access to the property was by truck on a dirt road from the Cassiar minesite.

The Jan property is located 13 kilometres (8 miles) north of Cassiar, B.C. at latitude $59^{\circ}23'N$ and longitude $129^{\circ}49'W$. (NTS 104/P-5). The terrain is rugged, with elevations ranging from 1300 metres (4300 ft.) to 1900 metres (6300 ft.) above sea level. Vegetation is alpine to subalpine with sparse balsam, spruce and willow confined to the lower drainages. Overall outcrop exposure is approximately 25 percent.

Three Jan claims (45 units) were staked in October, 1981 to protect the source of base metal stream sediment anomalies emanating from Devono-Mississippian sediments of the Lower Sylvester Group.

Within these basinal "black clastics", horizons of pyritic, baritic, siliceous exhalite to 10 metres in thickness are exposed. Exhalitive strata of a similar nature and stratigraphic position are mineralized with significant galena and sphalerite on the Blue property, 19 kilometres (12 miles) to the northwest and the Midway property, 68 kilometres (42 miles) to the northwest. All three properties lie on the southwest flank of the northwest trending McDame Synclorium.

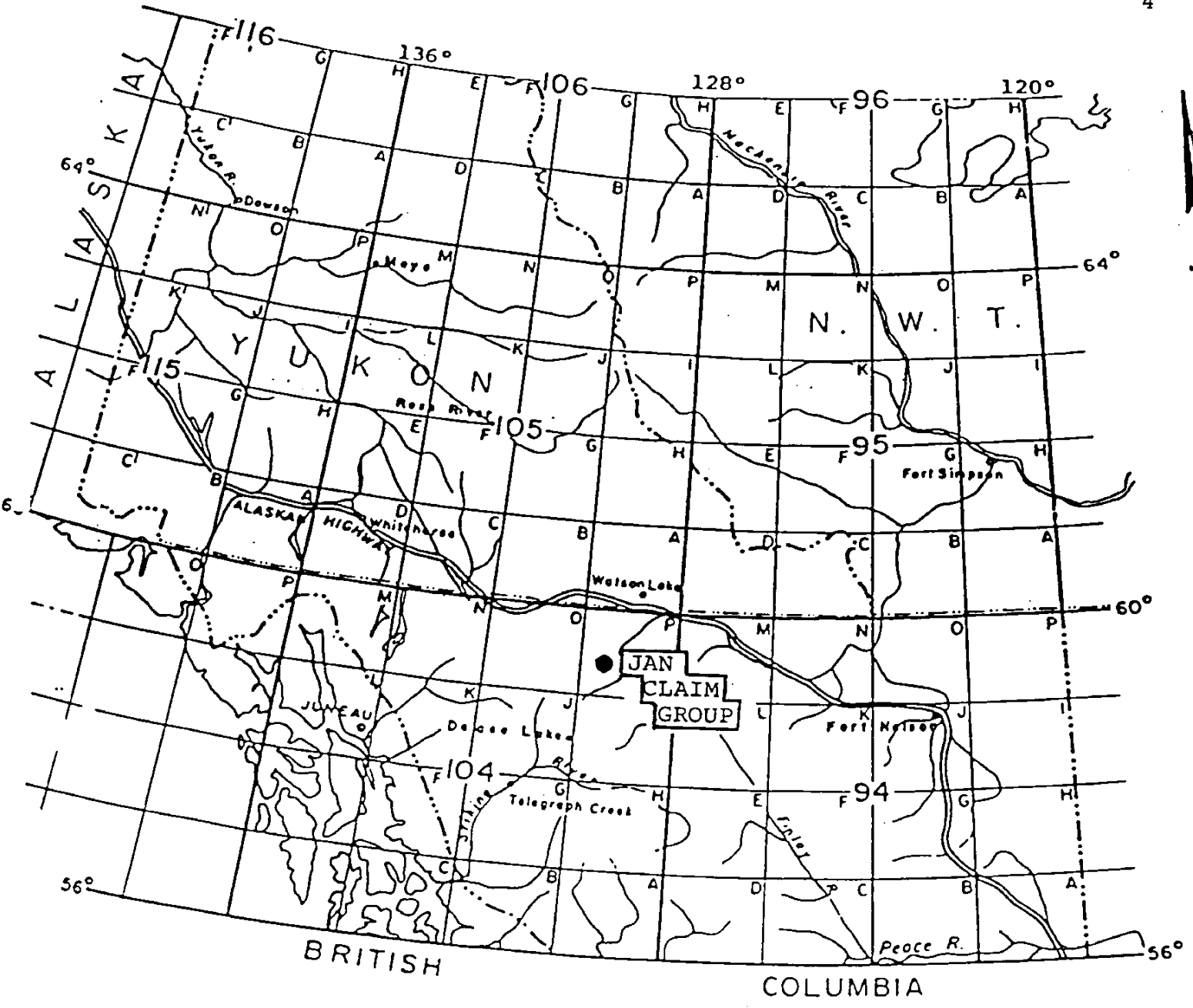
The 1982 program consisted of grid preparation (34.75 line kms), geological mapping, prospecting and soil geochemistry (657 samples). This work covered the entire claim group. Followup prospecting of geochemical anomalies and mapping of pyritic, baritic, siliceous exhalites indicated a favourable host environment for massive sulphide deposition.

2.0 LOCATION AND ACCESS

(FIGURE 1)

The Jan claim group is located 13 kilometres (8 miles) north of Cassiar, B.C., and is centred at latitude $59^{\circ}23'N$, longitude $129^{\circ}49'W$ (NTS 104/P-5).

Access during 1982 was provided by both truck and helicopter. A 6 mile dirt road from the Cassiar minesite allowed access to a camp at the northern end of the property. Helicopter support was required to a flycamp in the central claims area; the contract Bell 206B machine from Regional Resources' Midway camp was used. Food and supplies were purchased in Cassiar or Watson Lake.



REGIONAL RESOURCES LTD.

LOCATION MAP

JAN CLAIM GROUP

Liard Mining Division

Cassiar Area, British Columbia

SCALE: 1"=125 MILES

by

CORDILLERAN ENGINEERING
1418-355 Burrard Street
Vancouver, B.C. V6C 2G8

NOVEMBER, 1982

FIGURE 1

3.0

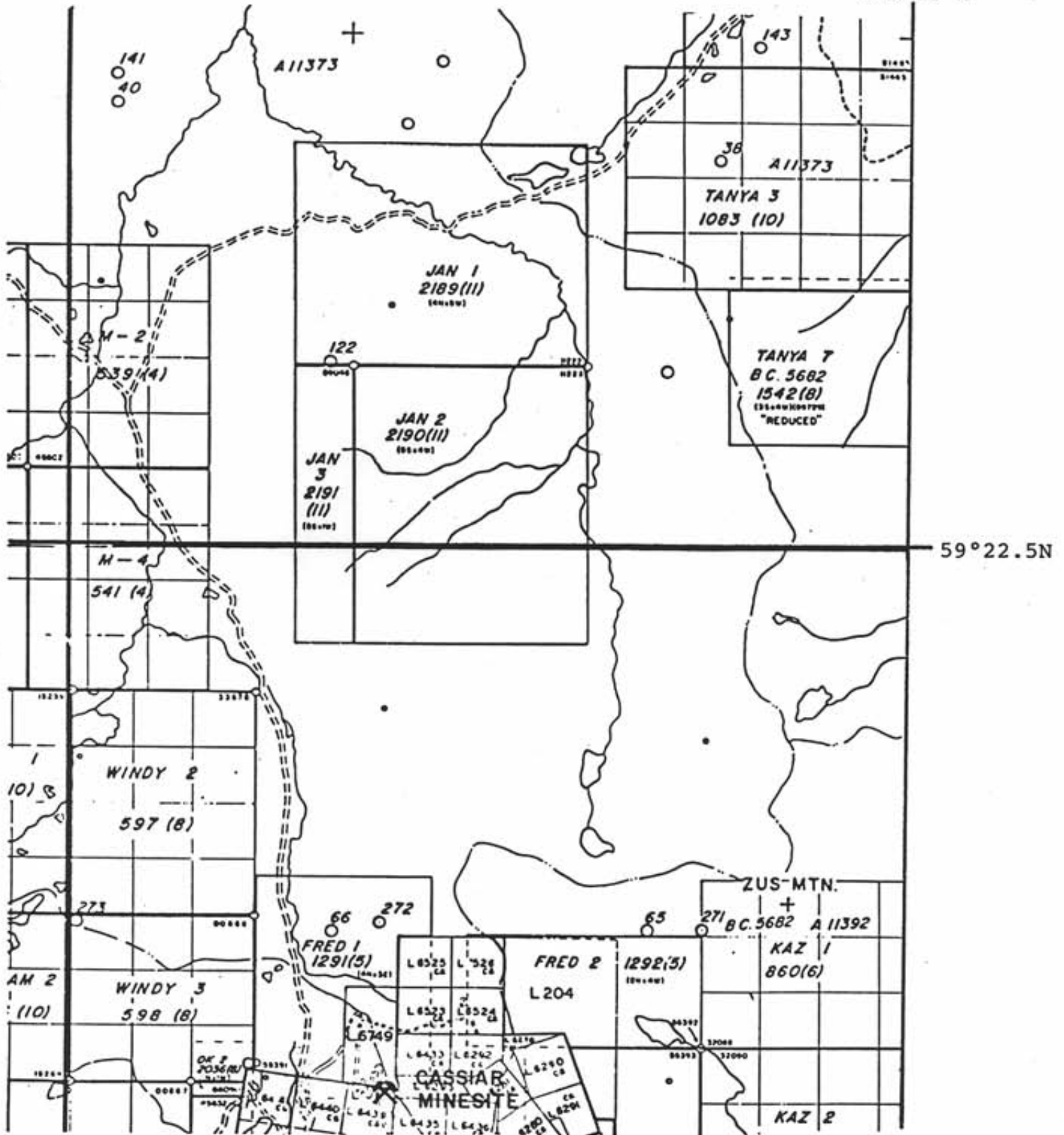
P R O P E R T Y
(FIGURE 2)

The Jan property consists of three mineral claims (45 units) in the Liard Mining Division.

TABLE I
CLAIM DATA

<u>CLAIM</u>	<u>RECORD NO.</u>	<u>NUMBER OF UNITS</u>	<u>EXPIRY DATE</u>
Jan 1	2189(11)	20	November 10, 1982
Jan 2	2190(11)	20	November 10, 1982
Jan 3	2191(11)	5	November 10, 1982
TOTAL:		45 UNITS	

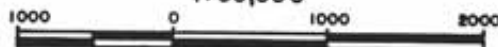
Title to the claims is held by J.W. Stollery, in trust for Regional Resources Ltd. Assessment work pertaining to the 1982 field program was applied on November 8th, 1982. Receipt of certificates of work is pending.



REGIONAL RESOURCES LTD.

CLAIM MAP

JAN PROPERTY
Liard Mining Division
1:50,000



SCALE IN METRES

NTS 104 P/5



4.0

O P E R A T I O N S

The 1982 field program was designed to evaluate the mineral potential of Devono-Mississippian stratigraphy on the Jan claim group. Exploration consisted of grid preparation, soil geochemistry and geological mapping as follows:

- GRID PREPARATION: A single baseline, 2.95 kilometres long and extending down the centre of the property, was secant chained and picketed. A total of 31.8 kilometres of lines crossing the baseline at 200 metre intervals was secant chained and flagged.
- GEOCHEMISTRY: A total of 657 soil samples, 11 stream sediment samples and 54 rock chip samples were collected. Soil samples were taken at 50 metre intervals along all grid lines while stream sediment and rock chip samples were collected at irregular intervals. Soil samples were analyzed for Pb, Zn and Ag; sediments and rocks were analyzed for Pb, Zn, Ag, Cu, Ba and Au.
- GEOLOGICAL MAPPING: Detailed geological mapping of the property was completed and plotted at a scale of 1:10,000. Eight rock samples were collected for assay.

5.0

G E O L O G Y

(Plate 1)

The Jan property is located on the southwest limb of the McDame Synclinorium within the Stikine Ranges of the Cassiar Mountains. Here, early Paleozoic miogeoclinal carbonates and clastics of the Cassiar Platform are overlain by mid to late Paleozoic eugeoclinal volcanics and sediments of the Sylvester Group. Indications of Pb-Zn-Ag mineralization are found within both mid-Devonian carbonates of the McDame Group and Upper Devonian to Mississippian basinal "black clastics" of the Lower Sylvester Group.

GEOLOGY (Cont'd)

5.1

STRATIGRAPHY

(Figure 3)

Present mapping has recognized the following geological units on the Jan property:

ATAN GROUP

LOWER CAMBRIAN

lEc Limestone and Dolostone

Where exposed, the Atan Group consists of thick-bedded to massive, white to dark grey limestone and dolostone together with minor quartzite. Carbonate members are frequently coarse-grained and moderately silicified, probably due to emplacement of the Cassiar Batholith immediately to the west.

KECHIKA GROUP

CAMBRIAN to

ORDOVICIAN

eOk Carbonaceous Argillite and Argillaceous Limestone

Rusty weathering, carbonaceous black argillite, locally silty, siliceous, hornfelsic, calcareous and dolomitic, together with argillaceous, grey to black limestone comprise the majority of this unit. In addition, local horizons of calc-arenite are present. Frequent thin quartz-calcite veins and abundant disseminated, nodular and laminated pyrite are exposed. Graptolitic horizons were locally observed. Approximately 250 metres of this unit is present on the Jan property.

JAN CLAIM GROUP

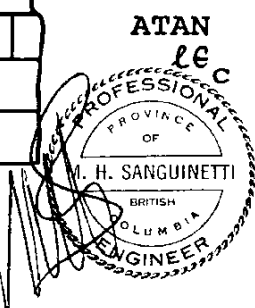
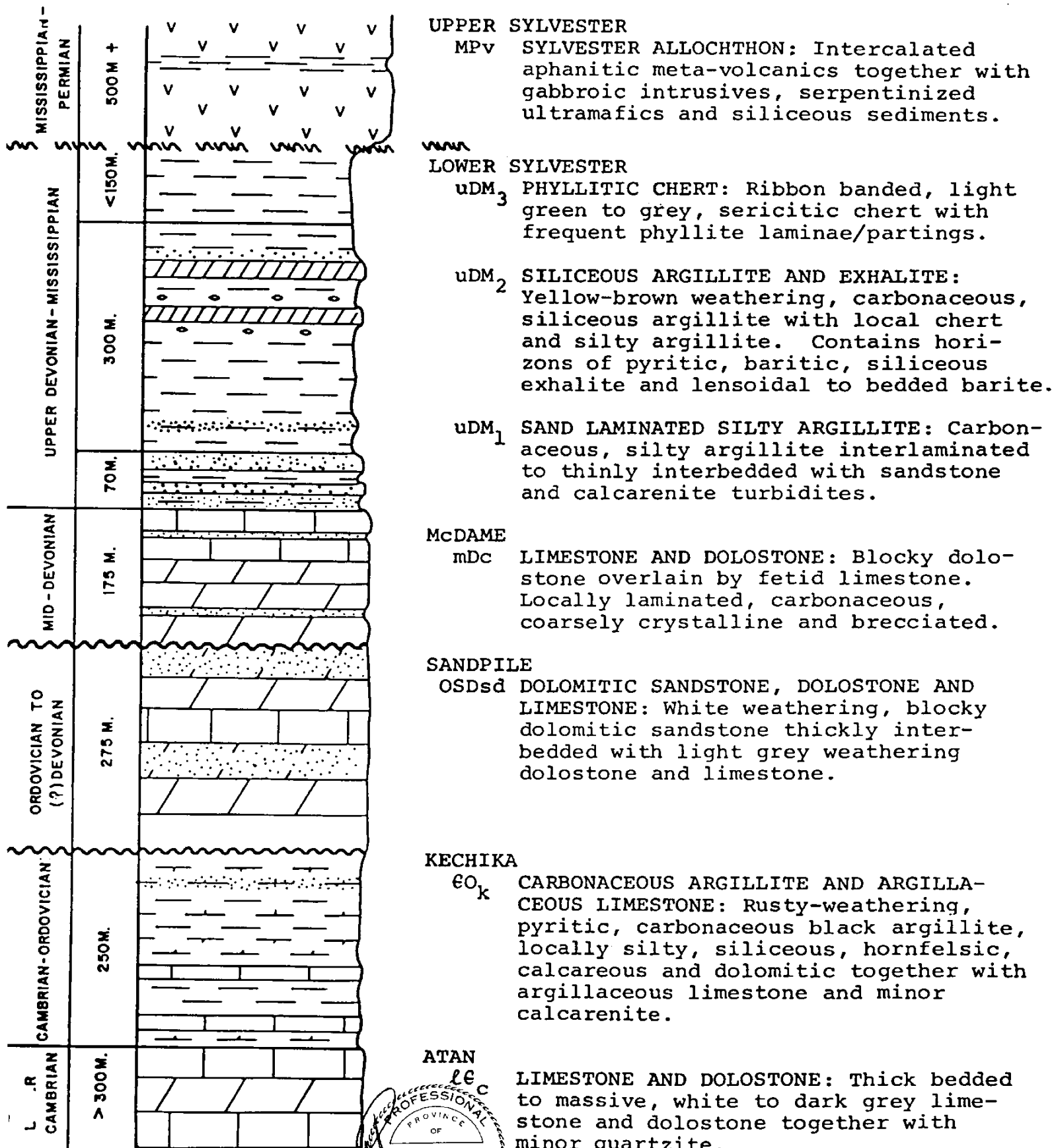


FIGURE 3

GEOLOGY (Cont'd)

SANDPILE GROUP Ordovician, Silurian and (?) Devonian

OSDsd Dolomitic Sandstone, Dolostone and Limestone

This unit consists of white-weathering, blocky, dolomitic sandstone thickly interbedded with light-grey weathering, locally sandy, dolostone and limestone. Matrix-supported or 'floating' millimetre-size quartz grains often form a distinctive tapioca-like texture. Interbeds of white to dark grey quartzite are common. Approximately 275 metres of this unit is exposed on the Jan claims.

McDAME GROUP

MIDDLE DEVONIAN

mDc Limestone and Dolostone

In general, the McDame group consists of a lower, light-grey weathering, blocky dolostone member overlain by a light-grey weathering, platy to blocky, fetid limestone horizon. Planar to wispy-wavy millimetre-sized laminae are common within both members. In addition, graphitic, siliceous, coarsely crystalline, fossiliferous (bryzoans), and brecciated facies have all been observed.

Interbeds of light-grey to black, moderate to well-sorted, clast-supported quartzite up to 5 metres thick are common within the McDame Group. In addition, strata of black, graphitic siliceous argillite to shale, with minor argillaceous, black limestone and dolostone are present.

Where exposed, the contact between the McDame Group and overlying Lower Sylvester Group appears conformable, although a brief period of erosion and/or non-deposition may have occurred; the uppermost exposures of McDame limestone are frequently brecciated with local limonitic, baritic and quartzose open-space fillings. Subsequent bedding-plane faulting, probably related to folding, is suggested. Approximately 175 metres of this unit is exposed on the Jan property.

GEOLOGY (Cont'd)

LOWER SYLVESTER GROUP Upper Devonian and (?) Mississippian

Field mapping has indicated that the Lower Sylvester can be subdivided into the following 3 units:

uDM₁ Sand Laminated Silty Argillite

Soft, carbonaceous, silty argillite, interlaminated to interbedded with fine to coarse-grained sandstone and calcarenite comprise the majority of this unit. A variety of sedimentary features, including graded bedding, load casts and flame structures, are indicative of rapid deposition by turbidity currents. Interbeds of graphitic, siliceous argillite are common, especially near the upper, gradational contact with unit uDM₂. Estimated thickness of uDM₁ is 70 metres.

uDM₂ Siliceous Argillite and Exhalite

This member consists of yellow-brown weathering, poorly-foliated, carbonaceous, black siliceous argillite with interbeds of graphitic chert, siliceous shale and silty argillite. Locally, both siliceous argillite and chert horizons are ribbon banded. In addition, this unit hosts discrete horizons of yellow-brown weathering, poorly-foliated, sericitic, siliceous exhalite, varying in thickness from one to greater than 10 metres. Locally, these exhalite beds contain abundant, very fine grained, disseminated to laminated pyrite and barite. In addition, lensoidal (slump brecciated) to bedded barite is frequently present; these exposures appear to be laterally equivalent to the siliceous exhalite strata. Extensive ferricrete zones and small transported gossans are common in creek gulleys cutting through these horizons.

While the lower contact with uDM₁ is conformable, the nature of the upper contact appears to vary throughout the property. At the north end, the uppermost stratigraphy of uDM₂ may have been removed during emplacement

GEOLOGY (Cont'd)

of the Upper Sylvester Allochthon in late Paleozoic to early Mesozoic time. At the south end of the claim group, this thrust fault lies higher up in the stratigraphy, exposing a third sub-unit of the Lower Sylvester Group (uDM₃). When this member is present, the upper contact of uDM₂ appears to be conformable. Estimated thickness of this unit is 300 metres.

uDM₃ Phyllitic Chert

Where present, this unit consists of green to red-brown weathering, ribbon banded (3-5cm thick), light grey to green, sericitic (?) chert with frequent green, moderately phyllitic laminae/partings. These chert horizons are possibly of exhalitive affinity. In proximity to the thrust contact with the overlying Sylvester Allochthon, a weakly to moderately developed, sub-millimetre shearing (flaser foliation?) is displayed. At the north end of the property, this unit appears to have been removed during emplacement of the allochthon. A maximum thickness of approximately 150 metres is estimated for uDM₃ on the Jan property.

UPPER
SYLVESTER Mississippian and (?) Permian
GROUP

MPv Sylvester Allochthon

This exotic assemblage (Sylvester Allochthon) consists of late Paleozoic eugeoclinal oceanic terrain which has been thrust over early to mid-Paleozoic rocks of the Cassiar Platform. On the Jan property, this unit consists of green-grey weathering, aphanitic, intermediate to basic metavolcanics ("greenstone") together with minor fine-grained gabbroic intrusives, serpentized ultramafics and moderately siliceous sediments. Resistant volcanic rocks form the highest exposures on the claims. A relatively low-grade regional metamorphism has resulted in pervasive chloritic alteration with local carbonatization and serpentization. In excess of 500 metres of this unit is exposed on the Jan claims.

GEOLOGY (Cont'd)

5.2

STRUCTURE

Within the Jan property, deformation is relatively mild. Located on the southwest limb of a broad, open syncline (McDame Synclinatorium), strata exposed on the claims dip primarily to the northeast. In many locations, however, intermediate to small scale, congruous flexures are observed. Throughout most of the property, the folded strata display a prominent southeasterly plunge. Field measurements of minor fold noses and "a-c" joint planes, oriented perpendicular to fold axes, indicate an average trend of 157° and plunge of 27° . In isolated exposures, a poorly developed, steeply dipping axial plane cleavage is present. A second deformational event is locally recorded by a centimetre-scale kinking of the folded strata. During this much weaker deformation, compressional axes were oriented at approximate right angles to the major compressional forces required to produce the McDame Synclinatorium and associated flexures.

6.0

MINERALIZATION

While no mineralized showings have been located on the Jan property to date, there are several positive indicators of both shale-hosted, stratiform Pb-Zn-Ag mineralization and carbonate-hosted, stratabound sulphide occurrences.

Horizons of baritic, pyritic siliceous exhalite of up to 10 metres in thickness are present throughout much of the property. These strata grade laterally into lensoidal to bedded white barite. Typically, baritic and/or siliceous horizons are facies equivalents to massive sulphide mineralization in major shale hosted deposits located in the MacMillan Pass, Midway and Gataga Districts of the Selwyn Basin. In addition, the abundant slump brecciation displayed by baritic and/or argillaceous horizons suggests an active tectonic environment often associated with basinal sulphide deposition. Further positive indicators are anomalous stream sediment geochemistry and large ferricrete gossans in creeks cutting the favourable stratigraphy. Also, local surface precipitation of white hydrozincite and thin quartz stringers (feeder zone?), frequently containing tetrahedrite, malachite and azurite, were observed.

MINERALIZATION (Cont'd)

Potential stratabound, carbonate-hosted mineralization is also indicated at the Jan property. A grab sample (#77239) of pyrite-dolostone breccia assaying 0.10% Pb, 0.04% Zn, 0.18% Ba and 0.15 oz/ton Ag (Table 2) is located at the same stratigraphic position as the Lower Zone mineralization of the Midway property (68 kilometres along strike to the northwest). A grab sample (JJS-103R) of zinc-oxide breccia collected from this uppermost McDame Group strata at the opposite end of the Jan property returned values of: 4400 ppm Zn and 1400 ppm Ba (Table 3). Additional grab samples of limonitic quartz-calcite veining cutting this same carbonate unit have run up to: 4500 ppm Zn, 2000 ppm Ba, 700 ppm Cu and 15.0 ppm Ag (JY-016R).

During the course of mapping and prospecting rock samples were collected for assay or analysis. Locations are shown on Plates 2-4 with results listed in Tables 2 and 3 below.

TABLE 2

ROCK ASSAY RESULTS:

	Ba (%)	Cu (%)	Pb (%)	Zn (%)	Ag (oz/ton)	Au (oz/ton)	REMARKS
7069	11.15	0.20	<0.01	0.07	<0.02	↑ ALL <0.002 ↓	Malachite-tetrahedrite in quartz-carbonate float
7070	1.53	0.75	<0.01	0.07	0.02		Malachite-tetrahedrite in quartz-carbonate float
7071	0.25	0.02	<0.01	3.05	0.02		Quartz-carbonate float
7072	22.00	0.01	<0.01	<0.01	0.02		Baritic, pyritic exhalite (subcrop)
7073	53.15	<0.01	<0.01	<0.01	<0.02		Bedded barite (subcrop)
7074	5.23	0.01	<0.01	<0.01	0.02		Pyritic, siliceous exhalite
7075	30.49	<0.01	0.01	0.04	0.02		Baritic, limonitic breccia in limestone
77239	0.18	<0.01	0.10	0.04	0.15		Pyrite-dolostone breccia

TABLE 3

ROCK ANALYSIS RESULTS:

	Ba (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	REMARKS
JY002	26.0*	16	2	14	0.2	10	Barite lenses in argillite
011R	5.0*	9	11	99	0.7	<5	Limonitic stringers in limestone
012R	1590	415	12	855	1.4	5	Limonitic quartz-calcite lenses
013R	25.0*	119	5	92	0.2	<5	Bedded barite (10cm thick) in argillite
016R	2000	700	6	4500	15.2	<5	Limonitic quartz-calcite veining (float)
JJS-103R	1400	22	24	4400	0.6	<5	Zinc-oxide breccia in limestone
104R	8.3*	7	69	133	0.2	<5	Pyrite stringers in limestone (subcrop)
Y834.RB-4			4	1880	0.5		Ferricrete rubble
Y840.RB-1			560	143	0.8		Pyrite-dolostone breccia
L4000N-3200E	2.4*	17	5	10	1.6	10	Talus fines

* Semi-quantitative assay in %.

7.0

G E O C H E M I S T R Y

(Plates 2-5, Appendices "B" & "F")

Soil sampling was conducted over the Jan #1 to #3 claim group on a 200 metre grid system. A 2.95 kilometre, north trending baseline was picketed and a total of 31.8 kilometres of crosslines were turned off at 200 metre intervals. Sample sites were located at 50 metre intervals along both baseline and crosslines. A total of 657 soil samples, 11 stream sediment and 54 rock chip samples were collected for analysis.

Whenever possible, soil samples were collected from the B horizon, stream sediments were taken from the active part of the channel and rock chips were cut from fresh material. Each sample site was marked with flagging and assigned a discrete number. Notes were written describing location and the nature of the material collected. Sample depth, soil type, colour, drainage and slope were recorded for each site. Samples were placed in numbered kraft envelopes, dried and sieved (soil and sediment only) to -80 mesh at base camp, then shipped to Bondar-Clegg & Company Ltd.'s laboratory in North Vancouver, B.C. for analysis.

Soils and stream sediments were analyzed for Pb, Zn and Ag; rocks were analyzed for Pb, Zn, Ag, Cu, Ba and Au. Hot

GEOCHEMISTRY (Cont'd)

HNO₃-HCl extraction of metals in the pulps was followed by the atomic absorption method of analysis for lead, zinc, copper and silver. Gold was analyzed for by fire assay-atomic absorption after aqua regia extraction; barium was determined by X-ray fluorescence.

Selection of threshold values through a statistical treatment (Appendix "B") of soil geochemical results has yielded the following categories:

TABLE 4 STATISTICAL CATEGORIES

	Pb (ppm)	Zn (ppm)	Ag (ppm)
"Background"	0-40	0-1010	0-2.7
"Possibly Anomalous"	41-90	1011-1200	2.8-4.0
"Anomalous"	>90	>1200	>4.0

Geochemical results indicate a 1300 metre northeast trending linear Zn-Ag-Pb soil anomaly (values to 6280 ppm Zn, 6.6ppm Ag, 97 ppm Pb) paralleling the McDame-Lower Sylvester contact in the north of the claim group. A second smaller, discontinuous linear trend is found in the south of the property, where anomalous soil geochemistry (values to 1645 ppm Zn, 4.6 ppm Ag, 73 ppm Pb) may be related to localized faulting. In addition, scattered single anomalies and clusters (values to 2120 ppm Zn, 8.5 ppm Ag, 53 ppm Pb) located within Unit uDM₂ may outline mineralization within the baritic-siliceous exhalite strata.

8.0 SUMMARY & CONCLUSIONS

The Jan property consists of three mineral claims (45 units) located in the Liard Mining Division, 13 kilometres (8 miles) north of Cassiar, British Columbia. Claim acquisition in October, 1981 and subsequent work have been conducted by Cordilleran Engineering for Regional Resources Ltd.

The Jan claims primarily cover steep, sparsely-vegetated alpine terrain with moderate to good exposure of rock units. The north end of the property is accessible on an existing gravel road off the Stewart-Cassiar highway; access in 1982 was by truck and helicopter.

Work completed to date includes geological mapping, geochemical soil sampling (657 collected) and prospecting.

While no mineralized showings have been located on the Jan property to date, there are several positive indicators of both shale-hosted, stratiform Pb-Zn-Ag mineralization and carbonate-hosted, stratabound occurrences. The baritic, pyritic, siliceous exhalite horizons are of a similar nature and stratigraphic position to exhalative strata hosting massive

SUMMARY and CONCLUSIONS (Cont'd)

sulphide mineralization on the Blue property, 19 kilometres (12 miles) to the northwest and on the Midway property, 68 kilometres (42 miles) to the northwest. Typically, baritic and/or siliceous horizons are proximal facies equivalents to Pb-Zn-Ag mineralization in major shale hosted deposits located in the MacMillan Pass and Gataga Districts of the Selwyn Basin. Further positive indicators of potential stratiform mineralization are:

- anomalous stream sediment geochemistry (values to 1050 ppm Zn, 3.5 ppm Ag) and large ferricrete gossans in creeks cutting the favourable stratigraphy.
- an active tectonic environment indicated by slump brecciated baritic, siliceous argillites.
- frequent thin quartz stringers, locally containing tetrahedrite, malachite and azurite cutting the favourable stratigraphy. These veinlets may represent a feeder zone to stratiform mineralization.
- local hydrozincite surface precipitation.


In addition, potential stratabound, carbonate-hosted mineralization is also indicated at the Jan property. Pyrite and zinc-oxide breccias, as well as high soil geochemical results (values to 6,280 ppm Zn and 4.4 ppm Ag), have been located within McDame Group carbonates at the same stratigraphic position as the high grade Lower Zone of the Midway property.

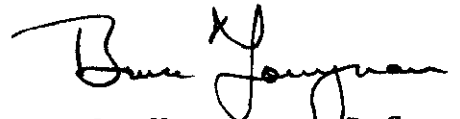
SUMMARY and CONCLUSIONS (Cont'd)

These features indicate that the Jan property is situated within a favourable geological environment for locating economic massive sulphide mineralization. Further work, in the form of additional prospecting and lithogeochemical sampling, is recommended.



Respectfully submitted
CORDILLERAN ENGINEERING


M.H. Sanguinetti, P.Eng.,
Geologist


B.A. Youngman, B.Sc.,
Geologist

MHS;BAY/b
Vancouver, B.C.

January, 1983

APPENDIX "A"

STATUTORY DECLARATION

DOMINION OF CANADA:
 PROVINCE OF BRITISH COLUMBIA.

To Wit:

In the Matter of a geological and geochemical report on the Jan 1 to 3 mineral claims on behalf of Regional Resources Ltd.

I, Michael H. Sanguinetti, agent for J.W. Stollery

of 1418 - 355 Burrard Street, Vancouver

in the Province of British Columbia, do solemnly declare that an exploration program was undertaken on the Jan #1 to #3 (inclusive) mineral claims during the period August 12th to September 25th, 1982. This work consisted of grid preparation (2.95 km baseline, 31.8 km crosslines), geochemistry (657 soil, 11 stream sediment, and 54 rock chip samples) and geological mapping (1:10,000).

The following are some of the expenses incurred in this work and in the later preparation of the report:

Helicopter (Northern Mountain)	\$ 5,103.00
Helicopter fuel	795.00
Salaries	6,265.00
Management	1,855.00
Professional fees (M.H. Sanguinetti, P.Eng. and J.W. Stollery, P.Eng.)	6,387.50
Shipping	194.53
Assays and Analyses	3,783.40
Food	740.12
Travel	750.00
Rentals and misc. fuel	1,807.92
Equipment, supplies	1,065.70
Expediting	611.84
Map preparation	95.89
Propane	38.55
	<u>\$29,493.45</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 10th
 day of December 1982, A.D.

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

APPENDIX "B"

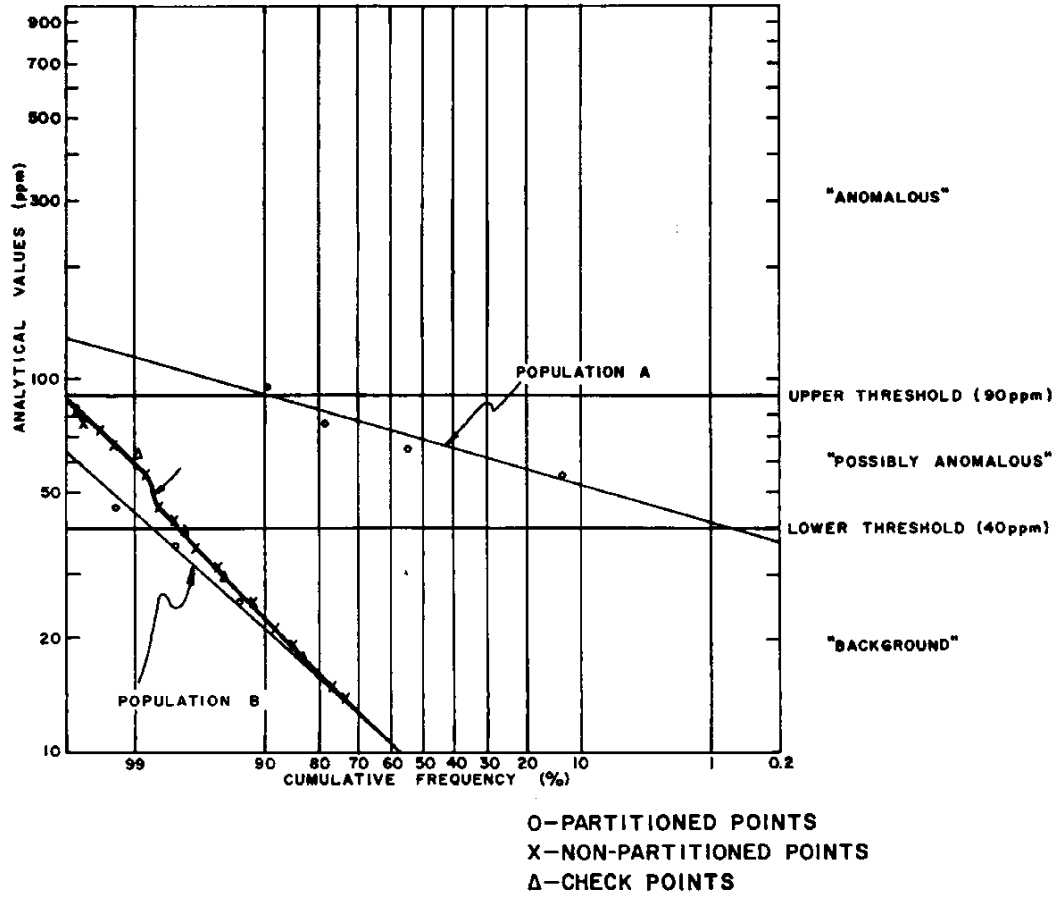
STATISTICS

STATISTICS

Geochemical data from the 657 soil samples collected on the Jan property were plotted on lognormal cumulative probability paper (Figures 4 to 6). On these graphs, the ordinate logarithmic scale represents geochemical values in parts per million while the abscissa probability scale represents cumulative frequency. A single lognormal distribution will plot as a straight line on this paper. When two lognormally distributed populations are present, as was the situation for lead and silver soil geochemistry, a curve containing a single inflection point will result. From this composite curve, the two component populations can be segregated to produce two discrete straight line plots. In this case, the upper line displays the range in values of the lognormally distributed anomalous population while the lower line represents background levels. When two inflection points are present in the composite curve, as was the situation for the zinc soil geochemistry, then three individual populations can be segregated. In this case, the upper two populations (A and B) are considered to be anomalous, while the lower population is interpreted to be a background distribution. Once these component populations have been graphically identified, a technique described by Sinclair (1976) allows for accurate selection of threshold values.

The probability plot of the 657 lead analyses is shown in Figure 4. The inflection point on the composite curve (marked by an arrow) defines the relative proportion of the anomalous (A) and background (B) populations. In this case, 1.4% of the total data are found to be anomalous while 98.6% are determined to be

LEAD IN SOILS - JAN PROPERTY

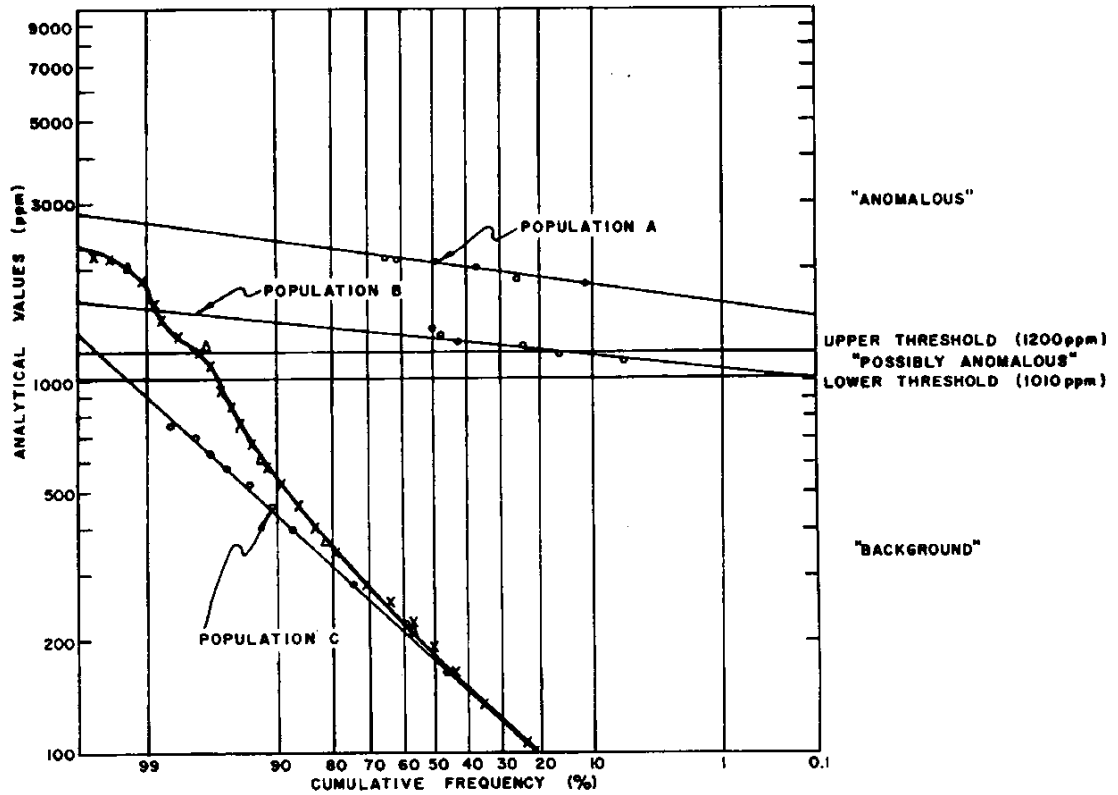


<u>CATEGORY</u>	<u>RANGE (ppm)</u>	<u>% BACKGROUND *</u>
"BACKGROUND"	0-40	100.0
"POSSIBLY ANOMALOUS"	41-90	48.3
"ANOMALOUS"	> 90	17.4

*PERCENTAGE OF SAMPLES WITHIN SPECIFIED INTERVAL BELONGING TO TRUE BACKGROUND POPULATION.

FIGURE : 4

ZINC IN SOILS - JAN PROPERTY



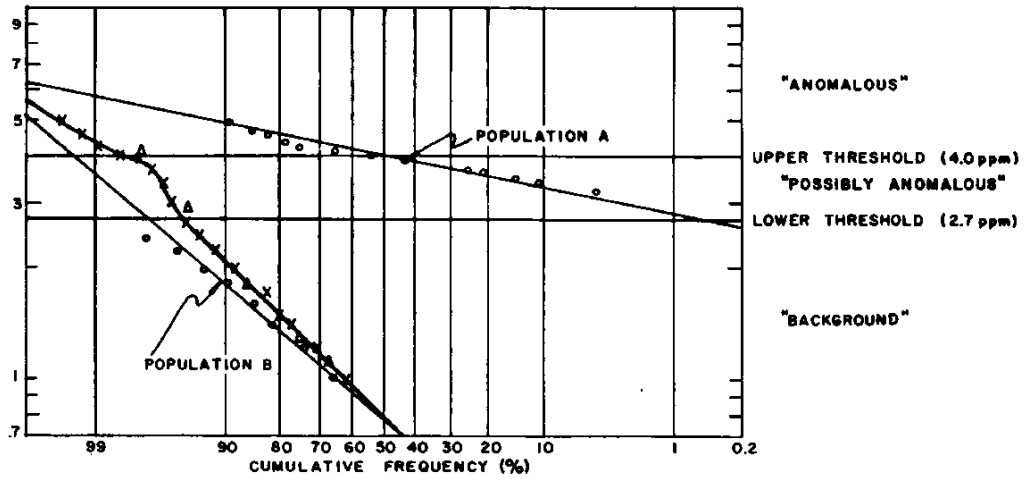
O - PARTITIONED POINTS
 X - NON-PARTITIONED POINTS
 Δ - CHECK POINTS

<u>CATEGORY</u>	<u>RANGE (ppm)</u>	<u>% BACKGROUND*</u>
"BACKGROUND"	0-1010	100.0
"POSSIBLY ANOMALOUS"	1011-1200	44.6
"ANOMALOUS"	> 1200	11.5

*PERCENTAGE OF SAMPLES WITHIN SPECIFIED INTERVAL BELONGING TO TRUE BACKGROUND POPULATION.

FIGURE: 5

SILVER IN SOILS - JAN PROPERTY



O- PARTITIONED POINTS
 X- NON-PARTITIONED POINTS
 Δ- CHECK POINTS

<u>CATEGORY</u>	<u>RANGE (ppm)</u>	<u>% BACKGROUND *</u>
"BACKGROUND"	0 - 2.7	100.0
"POSSIBLY ANOMALOUS"	2.8 - 4.0	51.8
"ANOMALOUS"	4.0	19.5

*PERCENTAGE OF SAMPLES WITHIN SPECIFIED INTERVAL BELONGING TO TRUE BACKGROUND POPULATION.

FIGURE: 6

background. It can be seen that there exists considerable overlap between the much larger background population (B) and the smaller anomalous population (A). Therefore, when threshold values are chosen, a certain percentage of samples from a selected "anomalous" interval may, in fact, be part of the background population. To clarify the extent of this overlap, the proportion of samples belonging to the true background population (B) within each specified interval is listed in the table below the graph.

A similar overlap between background and anomalous population was found to exist for both zinc* and silver cumulative frequency plots (Figures 5 and 6). As the inflection points indicate, a higher proportion of zinc (4.2%) and silver (4.25%) analyses belong to the true anomalous population(s) than was the case for the lead data (1.4% anomalous).

Statistical categories were selected as follows:

- "Anomalous" - at least 80% of the samples belonging to this group are members of the true anomalous population(s).
- "Possibly Anomalous" - approximately 50% of these samples belong to the true anomalous populations(s).
- "Background" - all samples in this group are members of the true background population.

* As mentioned, the Zn distribution yields two anomalous populations (A and B) and one background population (C).

APPENDIX "C"

PERSONNEL

PERSONNEL

The following personnel worked on the Jan 1 to 3 claim group or were engaged in the report preparation:

B.A. Youngman, B.Sc.
Geologist

8364 Fremlin Street,
Vancouver, B.C.

-Mapper, sampler, report preparation

J.M. Slack
Technologist

311 - 2065 West 5th Avenue,
Vancouver, B.C.

-Sampler, prospector, draftsman

J.L. Tindle, B.A.

General Delivery,
Whistler, B.C.

-Cook, sampler

R.D. Mirko

102 - 380 East 1st Street,
North Vancouver, B.C.

-Sampler, line cutter

T.G. Simard

212 - 1025 Sutley Street,
Victoria, B.C.

-Sampler, line cutter

K.C. McInnis

509A Sunnydale Place,
Waterloo, Ontario

-Sampler, mapper

M.H. Sanguinetti, P.Eng.
Geologist

1418 - 355 Burrard Street,
Vancouver, B.C.

-Supervisor, report preparation

	<u>PERIOD WORKED</u>	<u>DAYS</u>	<u>RATE</u> (plus 20% o/t)	<u>TOTAL SALARY</u>
B. Youngman	May 1-Sept.25	25	\$2500./mo	\$2500.
J. Slack	June 2-Sept.25	22	1400./mo	1320.
J.L. Tindle	Aug.12-Aug. 28	17	2000./mo	1275.
R. Mirko	Aug.12-Aug. 28	17	1500./mo	1105.
T. Simard	Aug.12-Aug. 28	17	1400./mo	1020.
K. McInnis	Aug.12-Aug. 28	17	1500./mo	1105.
M.H. Sanguinetti	May 1-Sept.25	4	350./day	1400.
TOTAL.....				\$9725.

NOTE: This total refers to field time only and contains no report preparation time; nor does it contain 15% benefits (U.I.C., C.P.P., etc.)

APPENDIX "D"

WRITER'S CERTIFICATES

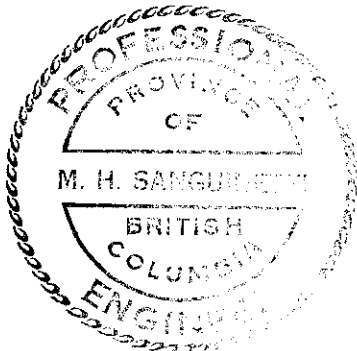
CORDILLERAN ENGINEERING

1418 MARINE BUILDING, 355 BURRARD STREET, VANCOUVER, BRITISH COLUMBIA V6C 2G8 TEL: (604) 681-8381

WRITER'S CERTIFICATE

I, Michael H. Sanguinetti of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 2208 West 35th Avenue, and employed by Cordilleran Engineering of 1418-355 Burrard Street, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia, B.Sc., in 1965, and have practiced my profession since that time.
3. I am a member of the Association of Professional Engineers of the Province of British Columbia.
4. I am a co-author of this report which is based on the results of a field program conducted on the Jan #1 to #3 claim group by Cordilleran Engineering during the period May to September, 1982.



CORDILLERAN ENGINEERING

A handwritten signature in black ink, appearing to read "M. H. Sanguinetti".

Michael H. Sanguinetti, B.Sc., P.Eng.
Geologist

MHS/jb
November 10th, 1982
Vancouver, B.C.

CORDILLERAN ENGINEERING

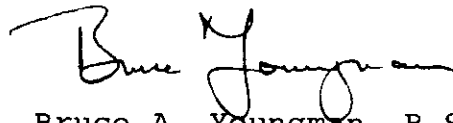
1418 MARINE BUILDING, 355 BURRARD STREET, VANCOUVER, BRITISH COLUMBIA V6C 2G8 TEL: (604) 681-8381

WRITER'S CERTIFICATE

I, Bruce A. Youngman of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 8364 Fremlin Street and employed by Cordilleran Engineering of 1418-355 Burrard Street, Vancouver, B.C., V6C 2G8.
2. I am a graduate of the University of British Columbia, B.Sc., in 1981 and have practiced my profession since that time.
3. I am a co-author of this report which is based on work conducted on the Jan #1 to #3 mineral claims during the period August 12th to September 25th, 1982. This work included geological mapping and geochemical sampling, undertaken on behalf of Regional Resources Ltd.

CORDILLERAN ENGINEERING



Bruce A. Youngman, B.Sc.,
Geologist

BAY/jb
November 10th, 1982
Vancouver, B.C.

APPENDIX "E"

REFERENCES

REFERENCESDIAKOW, L.J., and PANTELEYEV, A.:

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- 1982: 1981 Summary Report on the Midway Property, Company Report.

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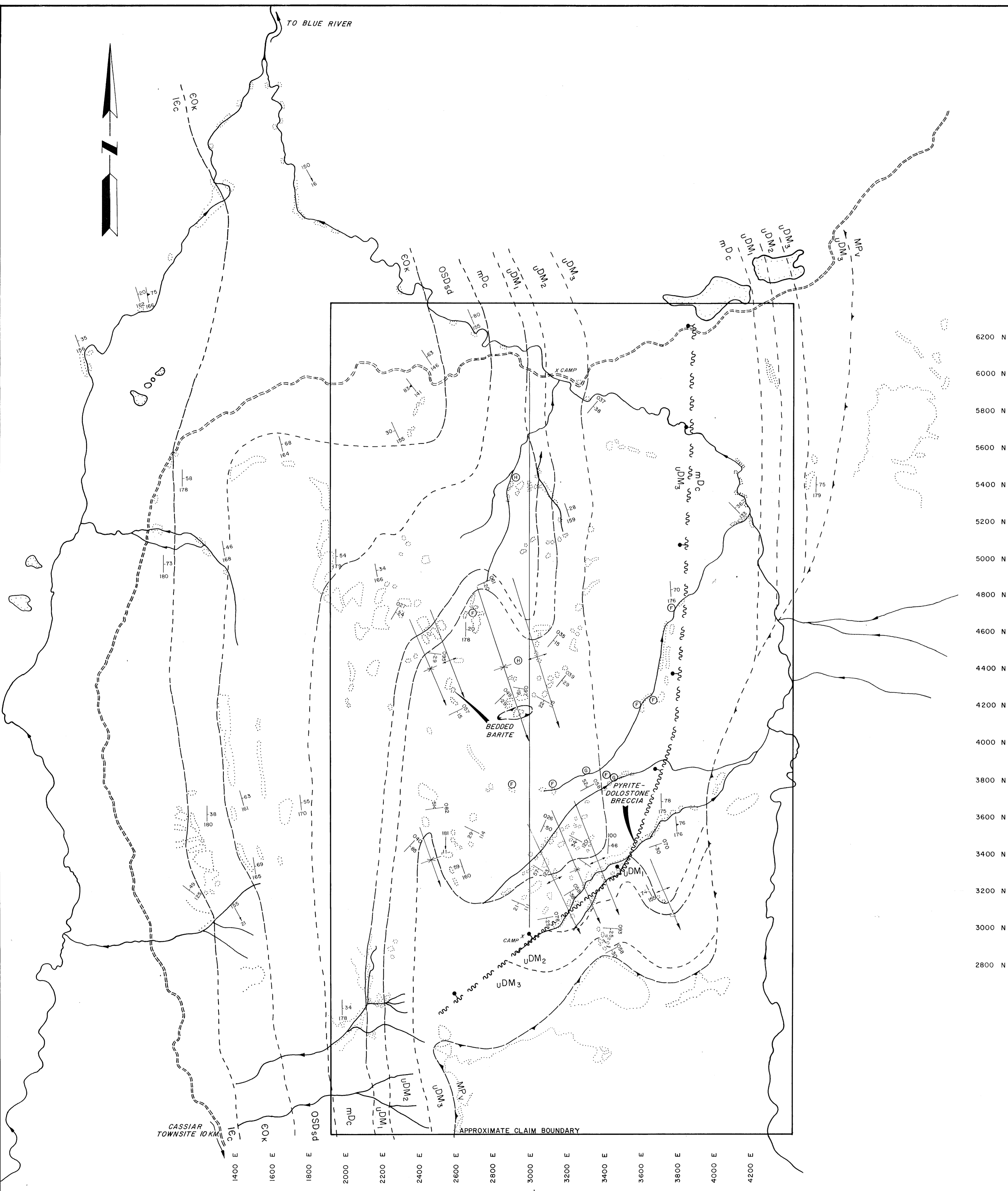
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Report.



LEGEND

- UPPER SYLVESTER**

MP_v SYLVESTER ALLOCTHON: Intercalated aphanitic meta-volcanics together with gabbroic intrusives, serpentinized ultramafics and siliceous sediments.
- LOWER SYLVESTER**

UDM₃ PHYLLITIC CHERT: Ribbon banded light green to grey, sericitic chert with frequent phyllite laminae/partings.

UDM₂ SILICEOUS ARGILLITE AND EXHALITE: Yellow-brown weathering, carbonaceous siliceous argillite. Contains horizons of pyritic, baritic, siliceous exhalite and lensoidal to bedded barite.

UDM₁ SAND LAMINATED SILTY ARGILLITE: Carbonaceous, silty argillite interlaminated to thinly interbedded with sandstone and calcarenite turbidites.
- MCDAME**

mDc LIMESTONE AND DOLOSTONE: Blocky dolostone overlain by fetid limestone. Locally laminated, carbonaceous, coarsely crystalline and brecciated.
- SANDPILE**

OSD_{sd} DOLOMITIC SANDSTONE, DOLOSTONE AND LIMESTONE: White weathering, blocky dolomitic sandstone thickly interbedded with light grey weathering dolostone and limestone.
- KECHIKA**

CO_k CARBONEOUS ARGILLITE AND ARGILLACEOUS LIMESTONE: Rusty-weathering, pyritic, carbonaceous black argillite, locally silty, siliceous, hornfelsic, calcareous and dolomitic together with argillaceous limestone and minor calcarenite.
- ATAN**

IE_c LIMESTONE AND DOLOSTONE: Thick bedded to massive, white to dark grey limestone and dolostone together with minor quartzite.

EXPLANATION

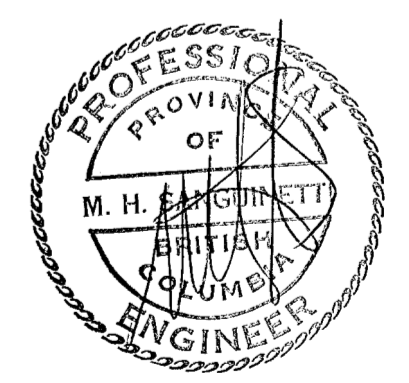
- CONTACTS:**
- DEFINED
 - - - APPROXIMATE
 - - - ASSUMED
- FAULTS:**
- THRUST (DEFINED, APPROXIMATE, ASSUMED)
 - DOWNTHROWN SIDE
 - APPROXIMATE
 - ASSUMED
- PLUNGING ANTICLINE
 - PLUNGING SYNCLINE
 - TREND AND PLUNGE OF MINOR FOLD AXIS
 - BEDDING ATTITUDE
 - CLEAVAGE ATTITUDE
 - "A-C" JOINTING
 - FERRICRETE
 - GOSSAN
 - HYDROZINCITE OCCURRENCE
 - OUTCROP

6200 N
6000 N
5800 N
5600 N
5400 N
5200 N
5000 N
4800 N
4600 N
4400 N
4200 N
4000 N
3800 N
3600 N
3400 N
3200 N
3000 N
2800 N

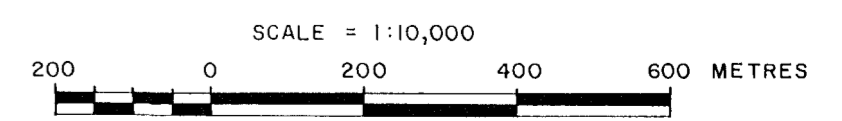
NOTE: DECLINATION (1982) 30°30' EAST.

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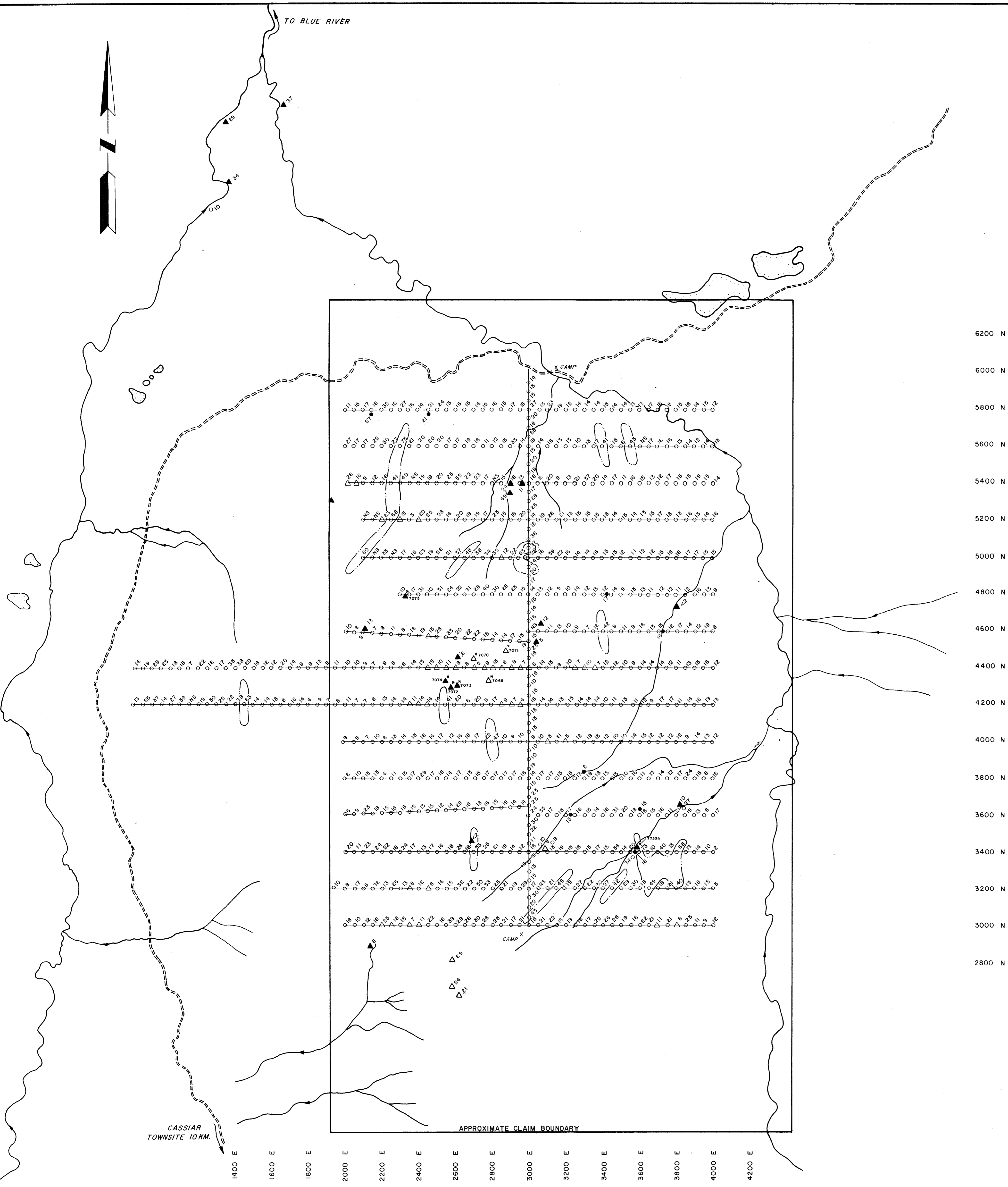
10,969



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GEOLOGY
JAN CLAIM GROUP
MCDAME MAP AREA, N.T.S 104P/5
LIARD MINING DIVISION, B.C.



BY
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118-355 BARRARD STREET
VANCOUVER, B.C. V6C 208



EXPLANATION

- SOIL SAMPLE (50M. INTERVAL)
- NS NO SAMPLE
- ▲ ROCK ANALYSIS (IN PLACE)
- △ ROCK ANALYSIS (FLOAT)
- ▲⁷⁰⁷⁰ ROCK ASSAY (IN PLACE)
- △⁷⁰⁷⁰ ROCK ASSAY (FLOAT)
- STREAM SEDIMENT SAMPLE
- - - 40 ppm CONTOUR (POSSIBLY ANOMALOUS)
- - - 90 ppm CONTOUR (ANOMALOUS)

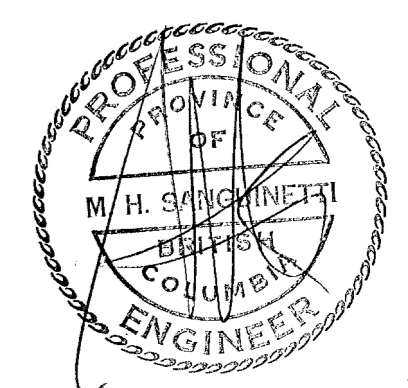
Pb CONCENTRATION IN PPM.

- BACKGROUND 0-40
- POSSIBLY ANOMALOUS 41-90
- ANOMALOUS >90

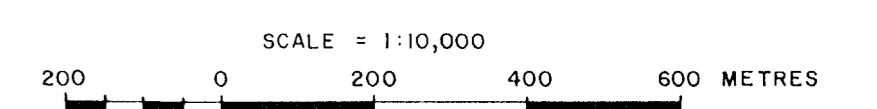
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NOTE:
DECLINATION (1982) 30°30' EAST.



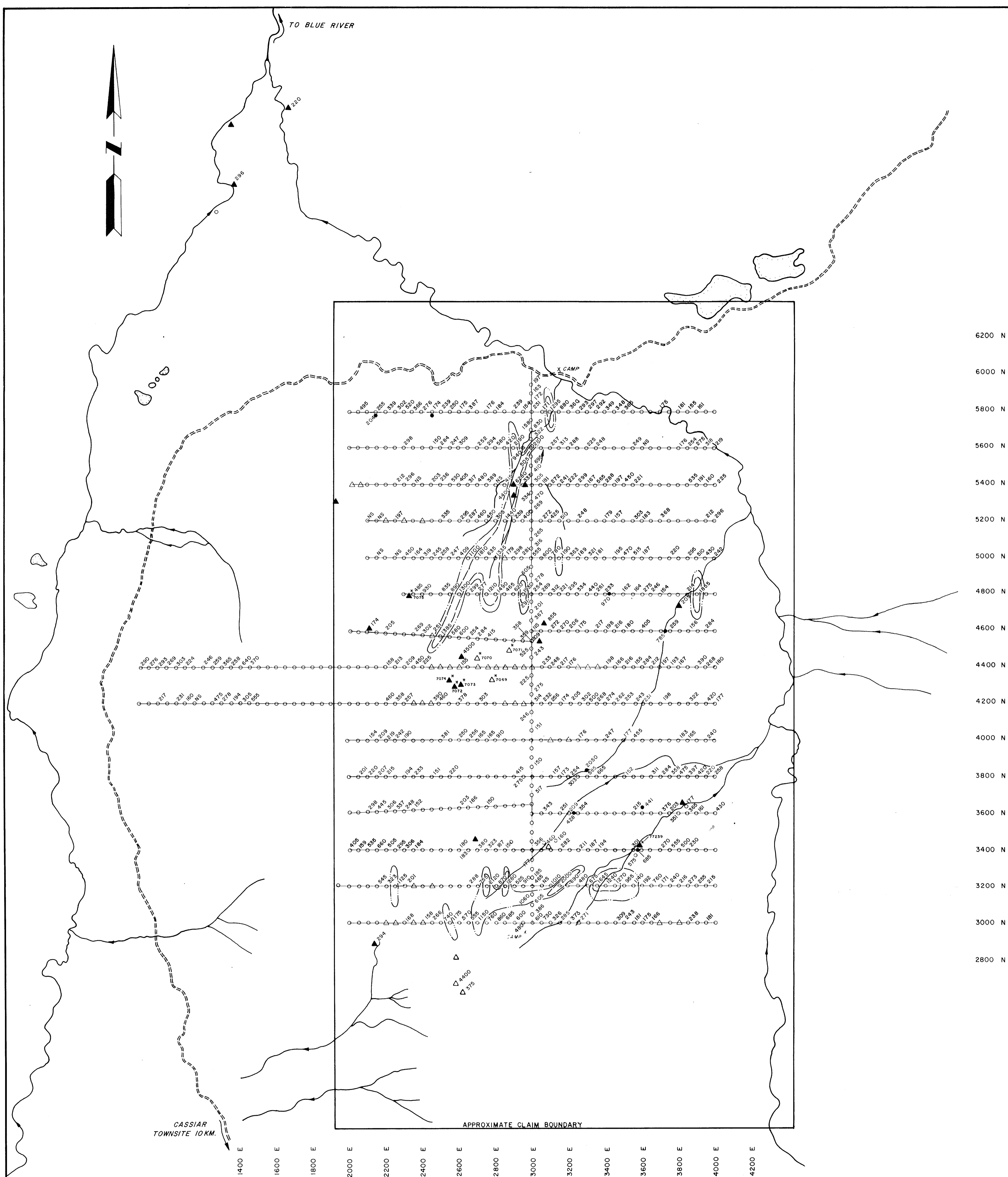
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LEAD GEOCHEMISTRY
JAN CLAIM GROUP
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VANCOUVER, B.C. V6C 2G8

***ASSAY RESULTS**

ASSAY	Pb (%)
77239	0.10
7069	< 0.01
7070	< 0.01
7071	< 0.01
7072	< 0.01
7073	< 0.01
7074	< 0.01
7075	< 0.01



6200 N
6000 N
5800 N
5600 N
5400 N
5200 N
5000 N
4800 N
4600 N
4400 N
4200 N
4000 N
3800 N
3600 N
3400 N
3200 N
3000 N
2800 N

EXPLANATION

- ○ ○ SOIL SAMPLE (50M. INTERVAL)
- NS NO SAMPLE
- ▲ ROCK ANALYSIS (IN PLACE)
- △ ROCK ANALYSIS (FLOAT)
- ▲⁷⁰⁷⁰ ROCK ASSAY (IN PLACE)
- △⁷⁰⁷⁰ ROCK ASSAY (FLOAT)
- STREAM SEDIMENT SAMPLE
- 1010 ppm CONTOUR (POSSIBLY ANOMALOUS)
- 1200 ppm CONTOUR (ANOMALOUS)

Zn CONCENTRATION IN P.P.M.

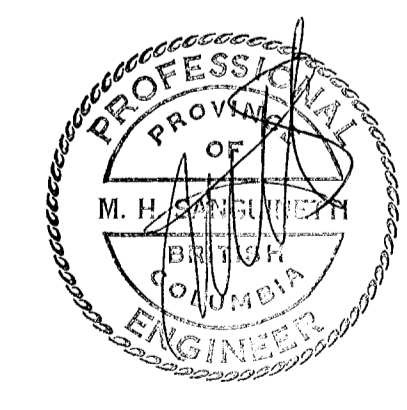
- BACKGROUND 0-1010
- POSSIBLY ANOMALOUS 1011-1200
- ANOMALOUS >1200

ALL VALUES LESS THAN 150ppm HAVE NOT BEEN PLOTTED.

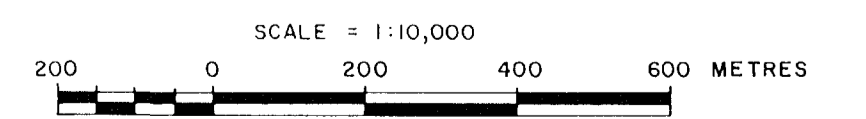
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NOTE:
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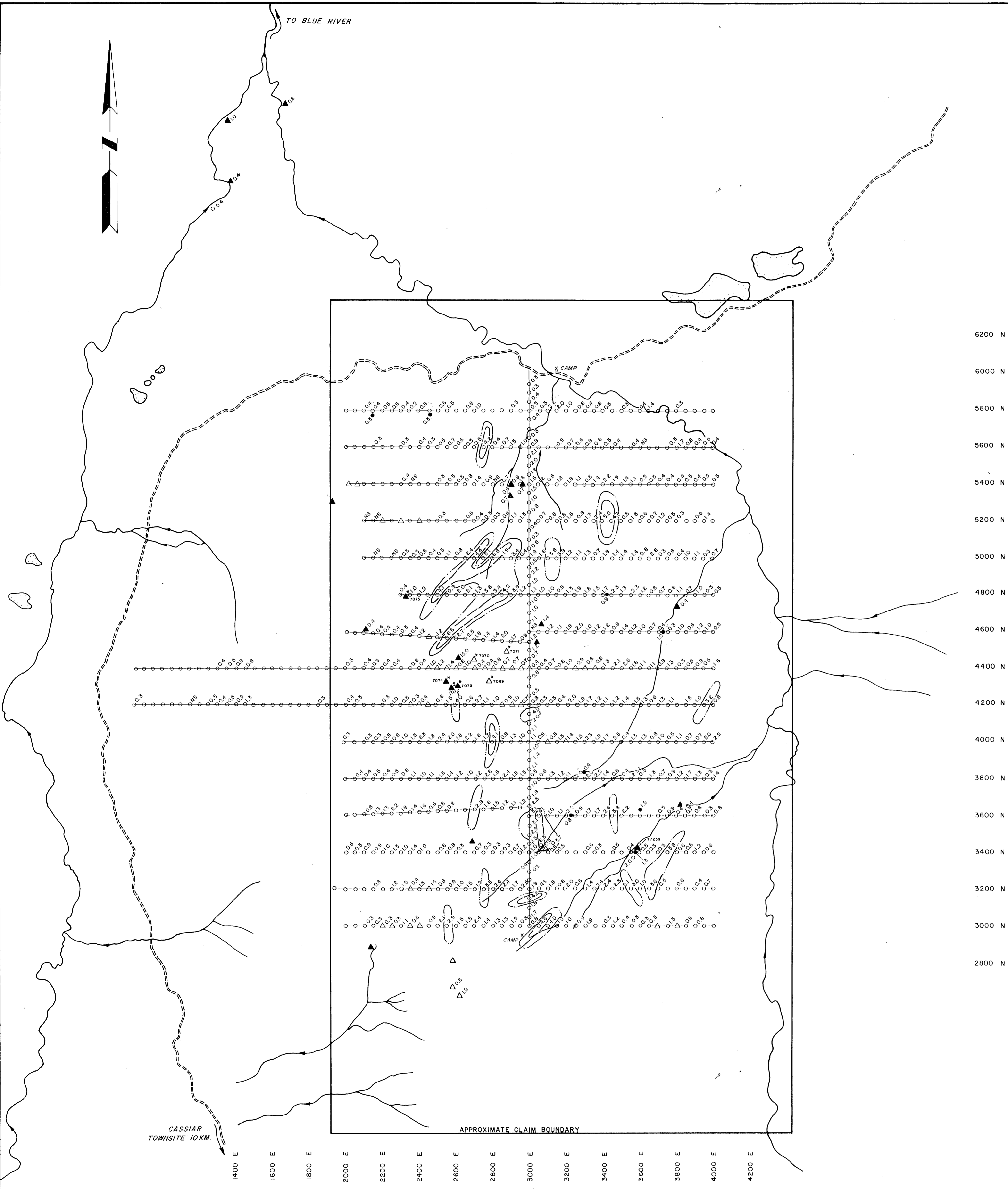
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JAN CLAIM GROUP
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VANCOUVER, B.C. V6C 2G8

*ASSAY RESULTS

ASSAY	Zn (%)
77239	0.04
7069	0.07
7070	0.07
7071	3.05
7072	< 0.01
7073	< 0.01
7074	< 0.01
7075	0.04



6200 N
6000 N
5800 N
5600 N
5400 N
5200 N
5000 N
4800 N
4600 N
4400 N
4200 N
4000 N
3800 N
3600 N
3400 N
3200 N
3000 N
2800 N

EXPLANATION

- SOIL SAMPLE (50M. INTERVAL)
- NS NO SAMPLE
- ▲ ROCK ANALYSIS (IN PLACE)
- △ ROCK ANALYSIS (FLOAT)
- ▲₇₀₇₀ ROCK ASSAY (IN PLACE)
- △₇₀₇₀ ROCK ASSAY (FLOAT)
- STREAM SEDIMENT SAMPLE
- 2.7ppm CONTOUR (POSSIBLY ANOMALOUS)
- - - 4.0ppm CONTOUR (ANOMALOUS)

Ag CONCENTRATION IN P.P.M.

- BACKGROUND 0—2.7
- POSSIBLY ANOMALOUS 2.8—4.0
- ANOMALOUS > 4.0

ALL VALUES LESS THEN 0.2ppm HAVE NOT BEEN PLOTTED.

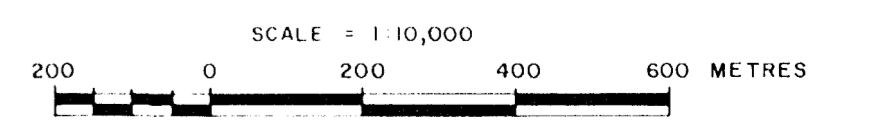
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NOTE:
DECLINATION (1982) 30°30' EAST.



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NOVEMBER 1982

PLATE: 4

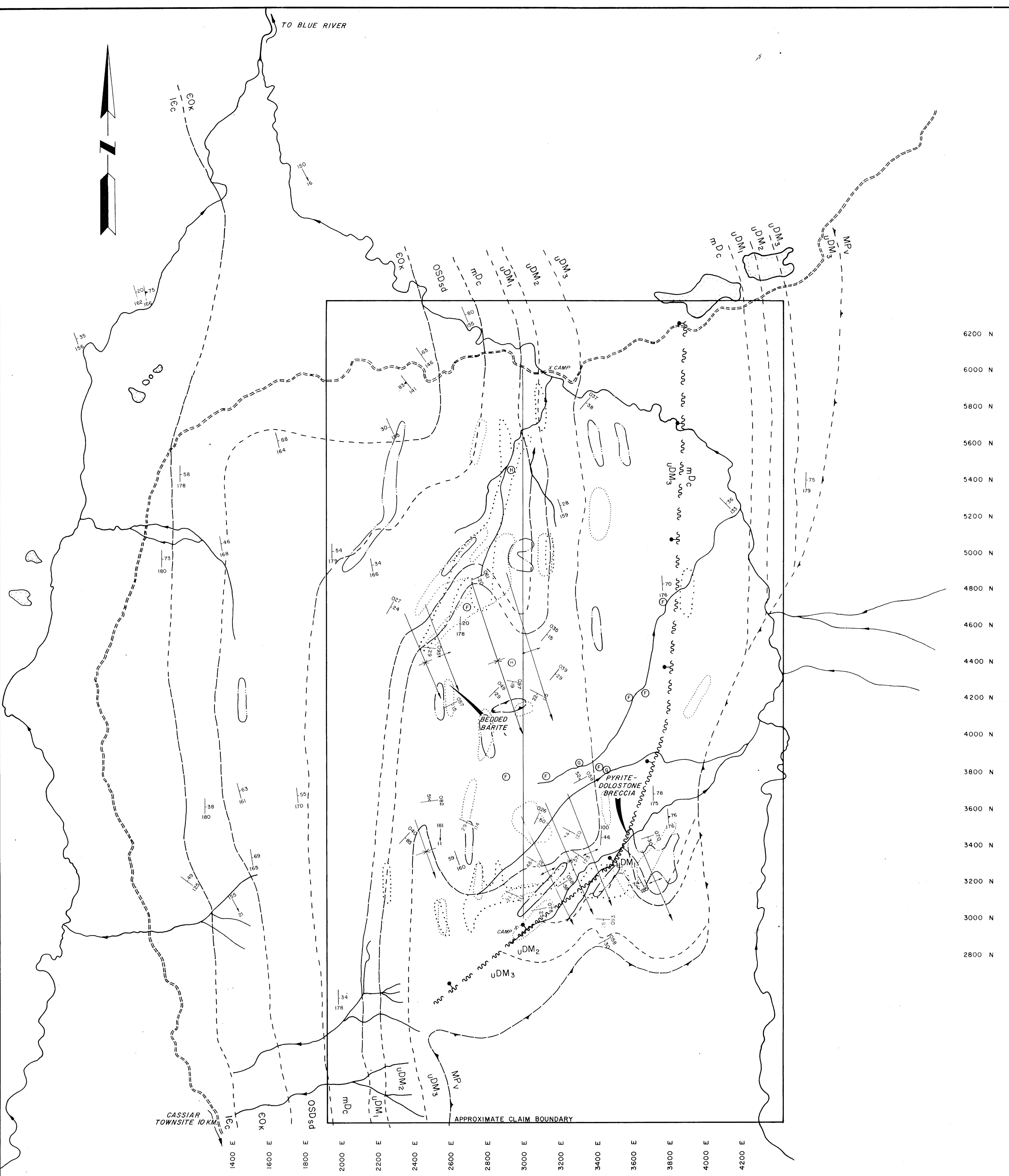
***ASSAY RESULTS**

ASSAY	Ag(oz/ton)
77239	.15
7069	<.02
7070	.02
7071	.02
7072	<.02
7073	.02
7074	.02
7075	.02

CASSIAR
TOWNSITE 10KM.

APPROXIMATE CLAIM BOUNDARY

1400 E 1600 E 1800 E 2000 E 2200 E 2400 E 2600 E 2800 E 3000 E 3200 E 3400 E 3600 E 3800 E 4000 E 4200 E



LEGEND

- UPPER SYLVESTER**
 MP_V SYLVESTER ALLOCTHON: Intercalated aphanitic meta-volcanics together with gabbroic intrusives, serpentinized ultramafics and siliceous sediments.
- LOWER SYLVESTER**
 UDM₃ PHYLLITIC CHERT: Ribbon banded light green to grey, sericitic chert with frequent phyllite laminae/partings.
- UDM₂ SILICEOUS ARGILLITE AND EXHALITE: Yellow-brown weathering, carbonaceous siliceous argillite. Contains horizons of pyritic, baritic, siliceous exhalite and lenticular to bedded barite.
- UDM₁ SAND LAMINATED SILTY ARGILLITE: Carbonaceous, silty argillite interlaminated to thinly interbedded with sandstone and calcarenite turbidites.
- MCDAME**
 mD_c LIMESTONE AND DOLOSTONE: Blocky dolostone overlain by fetid limestone. Locally laminated carbonaceous, coarsely crystalline and brecciated.
- SANDPILE**
 OSD_{sd} DOLOMITIC SANDSTONE, DOLOSTONE AND LIMESTONE: White weathering, blocky dolomitic sandstone thickly interbedded with light grey weathering dolostone and limestone.
- KECHIKA**
 CO_k CARBONACEOUS ARGILLITE AND ARGILLACEOUS LIMESTONE: Rusty-weathering, pyritic, carbonaceous black argillite, locally silty, siliceous, hornfelsic, calcareous and dolomitic together with argillaceous limestone and minor calcarenite.
- ATAN**
 IC_c LIMESTONE AND DOLOSTONE: Thick bedded to massive, white to dark grey limestone and dolostone together with minor quartzite.

EXPLANATION

- CONTACTS:**
 ——— DEFINED
 - - - - - APPROXIMATE
 - - - - - ASSUMED
- FAULTS:**
 ——— THRUST (DEFINED, APPROXIMATE, ASSUMED)
 ~~~~~ DEFINED (SOLID CIRCLE INDICATES DOWNTHROWN SIDE.)  
 ~~~~~ APPROXIMATE  
 ~~~~~ ASSUMED
- GEOCHEMISTRY:**  
 ——— LEAD 40 ppm CONTOUR  
 - - - - - ZINC 1010 ppm CONTOUR  
 - - - - - SILVER 2.7 ppm CONTOUR
- ↗ ↘ PLUNGING ANTICLINE  
 ↘ ↗ PLUNGING SYNCLINE  
 → TREND AND PLUNGE OF MINOR FOLD AXIS  
 ——— BEDDING ATTITUDE  
 ——— CLEAVAGE ATTITUDE  
 ——— "A-C" JOINTING  
 ⊙ FERRICRETE  
 ⊙ GOSSAN  
 ⊙ HYDROZINCITE OCCURRENCE

6200 N  
6000 N  
5800 N  
5600 N  
5400 N  
5200 N  
5000 N  
4800 N  
4600 N  
4400 N  
4200 N  
4000 N  
3800 N  
3600 N  
3400 N  
3200 N  
3000 N  
2800 N

1400 E  
1600 E  
1800 E  
2000 E  
2200 E  
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4200 E

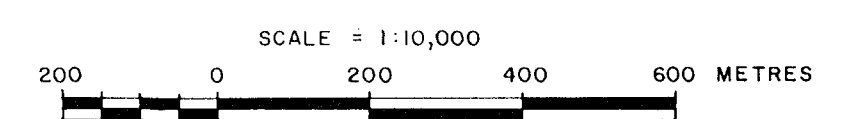
**GEOLOGICAL BRANCH ASSESSMENT REPORT**

**10,969**

NOTE: DECLINATION (1982) 30°30' EAST.



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 COMPILATION  
 JAN CLAIM GROUP  
 MCDAME MAP AREA, N.T.S. 104P/5  
 LIARD MINING DIVISION, B.C.



BY  
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 1418-355 BURNARD STREET  
 VANCOUVER, B.C. V6C 2G8