GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

COULTER OPTION

GOZ CREEK AREA
(N.T.S. 106-C-7)
64°25'N 132°40'W
Mayo Mining District
Yukon Territory

FOR

CONWEST EXPLORATION COMPANY LIMITED
Tenth Floor, 85 Richmond Street West
Toronto 1, Ontario

BY

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

NOVEMBER, 1974

CLAIMS: ANN 1-64, GAL 1-50, GIN 1-70, GOZ 9-80, PAL 1-51, PAL 52F-58F, PAL 59-60, PAL 61F-67F, ZOG 1-8

LOCATION: 114 airmiles northeast of Mayo, Yukon Territory.

DATE: July 1st through August 31st, 1974

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I N T R O D U C T I O N

(Figure 1)

This report has been written at the request of Conwest Exploration Company Limited, and describes the results of a field programme conducted by Cordilleran Engineering Limited on the Coulter Option from July 1st through August 31st, 1974.

The purpose of this programme was to determine the economic potential of the claims under option, using reconnaissance geochemical surveys (stream sediment sampling and soil sampling) as well as prospecting in conjunction with geological mapping.

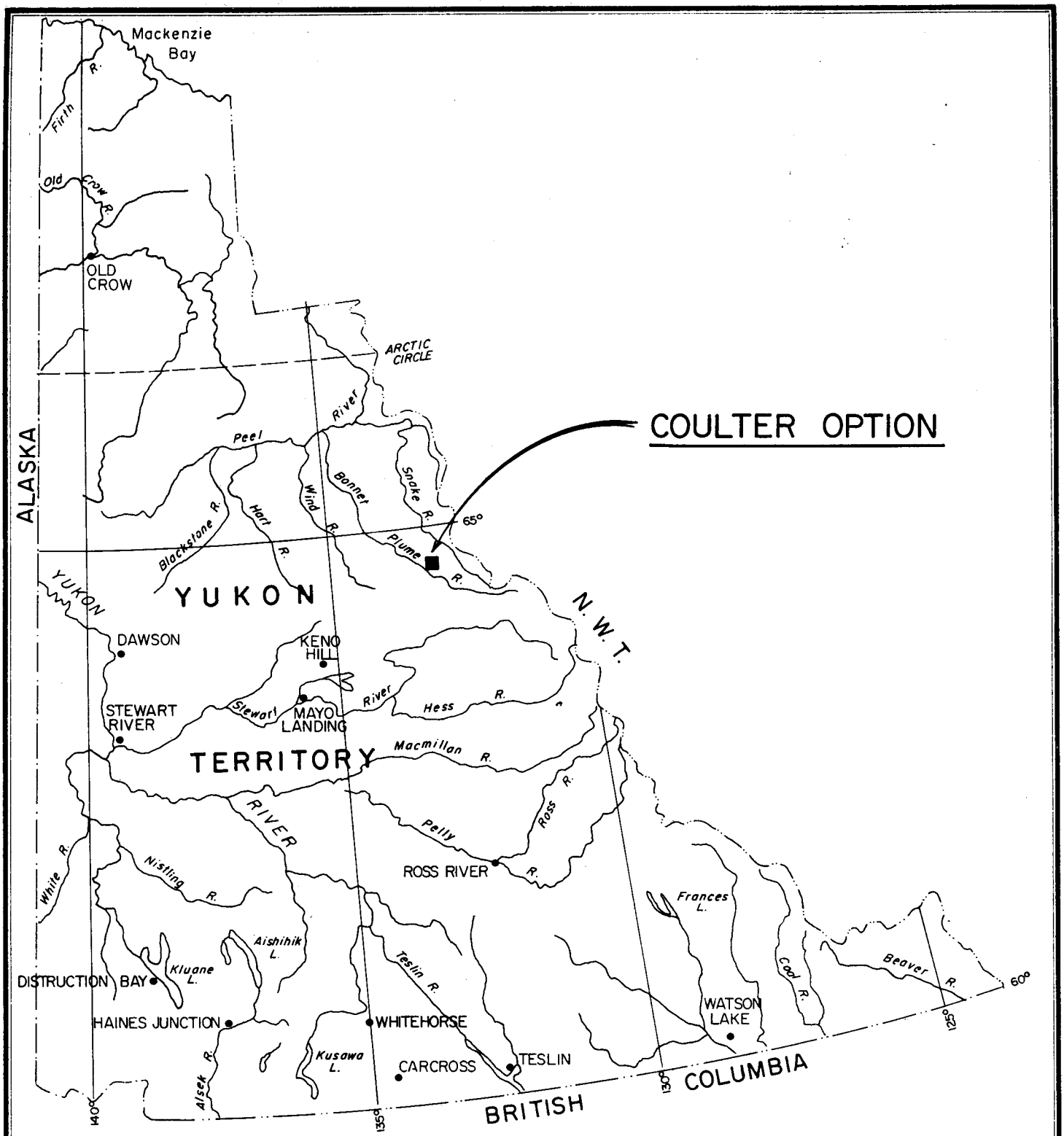
The Coulter Option is located in the Mayo Mining District of the Yukon Territory (refer to N.T.S. Map 106-C-7), latitude 64°25'N; longitude 132°40'W, and covers an area of

INTRODUCTION (cont'd)

approximately 26 square miles. The property is situated on Goz Creek approximately 3 miles from the confluence of Goz Creek and the Bonnet Plume River. Access to the claims is by float plane from Mayo to "Porter Puddle" (110 miles) and then by helicopter to a camp near the property, a distance of 4 miles.

The Coulter Option was staked during the 1973 field season after news that lead-zinc mineralization had been found to the northeast and west of the claim group by Cordilleran Engineering Limited's crews working for Barrier Reef Resources Ltd. (N.P.L.).

This report has been written to comply with requirements set forth in the Yukon Quartz Mining Act for assessment purposes.



LOCATION MAP
COULTER OPTION

SCALE 0 20 40 60 80 100 MILES

BY

CORDILLERAN ENGINEERING LTD.

1418 - 355 BURRARD STREET
VANCOUVER 1, B.C.
NOV. 1973

FIGURE 1

PROPERTY

(Plate 1)

The Coulter Option consists of a total of 331 full-sized and fractional mineral claims. Three hundred and one of these were staked in July, August, and September of 1973. During the course of work on the property 30 fractional and full-sized claims were found to be open and were subsequently staked. Eight fractional claims, HPV #1-8, were also staked between the Goz claims and the YK claims (Tournigan Mining Explorations Ltd.) and are at present held in trust by Cordilleran Engineering Limited. Claims, grant numbers and expiry dates are listed below.

CLAIMS	GRANT NUMBERS	EXPIRY DATES
Pal 1 - 50	Y 70006 - Y 70055	November 21, 1975
Ann 1 - 64	Y 84659 - Y 84722	November 21, 1975
Gal 1 - 46	Y 84613 - Y 84658	November 21, 1975
Gin 1 - 60	Y 84723 - Y 84782	November 21, 1975
Goz 9 - 80	Y 85558 - Y 85629	March 17, 1976
Zog 1 - 8	Y 85550 - Y 85557	March 17, 1976
Pal 51	Y 85977	March 17, 1976

PROPERTY (cont'd)

CLAIMS	GRANT NUMBERS	EXPIRY DATES
Staked in 1974:		
Pal 52F - 58F	Y 95305 - Y 95311	August 8, 1975.
Pal 59 - 60	Y 95312 - Y 95313	August 8, 1975.
Pal 61F - 67F	Y 95314 - Y 95320	August 8, 1975.
Gin 61 - 70	Y 95321 - Y 95330	August 8, 1975.
Gal 47 - 50	Y 95331 - Y 95334	August 8, 1975.

PHYSIOGRAPHY
VEGETATION AND CLIMATE

The Coulter Option lies on the north side of Goz Creek and covers an area varying in elevation from 3,000 feet ASL to 6,600 feet ASL. Two-thirds of the property is mountainous with good outcrop exposures. Cirque development in this area indicates that ice during the last stage of glaciation probably did not cover the higher peaks or ridges, but reached a level of around 5,000 to 5,500 feet.

Most of the low lying land is forest covered with timber line being between 3,500 and 4,000 feet. Vegetation varies from the typical alpine flora of the highlands to swampy areas with dense buck brush growth. Low relief on the southern part of the property has limited the development of much bedrock exposure, but extensive "rubble crop" on hills was found to be an asset in following lithologies in this rather critical area.

PHYSIOGRAPHY, VEGETATION AND CLIMATE (cont'd)

The climate of this part of the Yukon is one of extremes. Summers are mild to warm with high ground usually snow-free by the beginning of June. Winters are harsh with temperatures commonly around -40°F; snow fall for this area is generally light. Freeze-up usually begins in the last two weeks of September.

GEOLOGY

(Plates 2,3,4; Figures 2-8)

INTRODUCTION

Sedimentary rocks mapped in the Goz Creek area are of probable Lower Cambrian age*. Relatively flat lying carbonates and shales cover the northern two-thirds of the Coulter Option. These rocks appear to be thrust southward against steep, northerly dipping shales, phyllites and carbonates.

J. O. Wheeler of the Geological Survey conducted reconnaissance mapping in this area in the early 1950's. Most recently S. L. Blusson has undertaken more detailed mapping at 1:50,000 scale (cf.G.S.C. Open File #206).

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*Initially mapped as Hadrynian and Lower Cambrian by S.L.Blusson of the G.S.C.

GEOLOGY - Introduction (cont'd)

The Goz Creek area had only been lightly prospected before the summer of 1973; difficult access and limited geological knowledge being mainly the reason for little exploration.

LITHOLOGIES

Mapping at a scale of 1 inch to 1,000 feet has enabled the rocks of the Coulter Option to be subdivided into eight units which are described below:

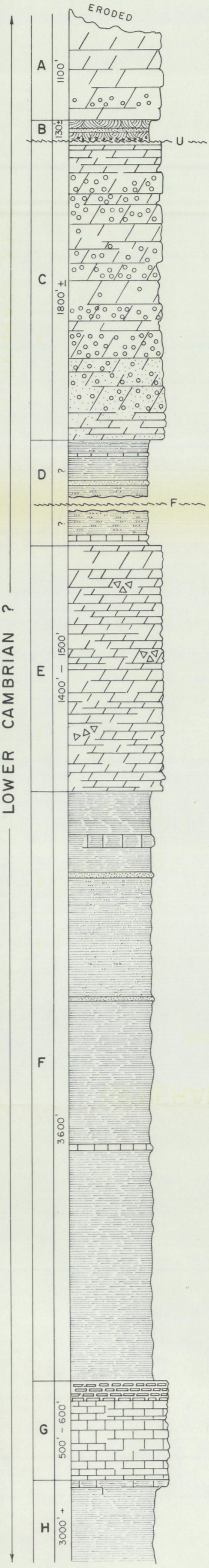
UNIT A

This unit is comprised of buff weathering, medium- to light-grey and mottled grey, thick-bedded, medium-crystalline to microcrystalline dolostone in which beds are commonly laminated. Irregular, thin beds of microcrystalline dolostone, in some instances, occur surrounded by finely crystalline dolostone. Vague structures suggestive of pisolites occur in some medium crystalline dolostone. Conformable, lenticular vugs, frequently lined with dolomite and quartz are rare although lenses of white sparry dolomite are common locally. Stylolites are common throughout this intensely fractured unit. Unit A, is the primary host unit to mineralization on the Barrier Reef Resources' property where sphalerite and galena occur as matrix in silicified breccia. This unit is believed to be in the order of 800 to 1,100 feet thick, but only the lower 500 feet occur on the Coulter Option. The

GENERALIZED STRATIGRAPHIC SECTION

COULTER OPTION

GOZ CREEK AREA, YUKON TERRITORY



DOLOSTONE: BUFF WEATHERING, LIGHT TO MEDIUM GREY AND RARELY MOTTLED GREY, THICK-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE. BEDS ARE COMMONLY LAMINATED AND LOCALLY PISOLITIC. IN GENERAL THIS UNIT IS NOT VERY POROUS ALTHOUGH IT IS INTENSELY FRACTURED.

SANDSTONE: REDDISH-BROWN WEATHERING, THICK TO THIN-BEDDED, CROSS-BEDDED QUARTZ SANDSTONE AND QUARTZITE WITH MINOR SHALE. CONTAINS CONGLOMERATE AT BASE.

DOLOSTONE: LIGHT GREY WEATHERING, DARK TO LIGHT GREY AND MOTTLED GREY, THICK TO THIN-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE THAT FOR THE MOST PART CONSISTS OF CROSS-BEDDED PISOLITIC SEQUENCES IN WHICH IRREGULARLY LAMINATED "ALGAL" DOLOSTONE IS COMMON. THIS UNIT IS MODERATELY TO LOCALLY VERY POROUS AND VUGGY. UNIT C BECOMES SANDY TOWARD ITS BASE.

SHALE: MEDIUM TO DARK GREY, THIN-BEDDED TO LAMINATED SHALE THAT CONTAINS REDDISH-BROWN WEATHERING, QUARTZ SANDSTONE BEDS AND LIMESTONE IN THIN, MICRITIC BEDS TO MORE MASSIVE REEFOID SEQUENCES. A WELL DEVELOPED CLEAVAGE CUTS THE SHALE GIVING IT A SHATTERED APPEARANCE.

DOLOSTONE: DARK GREY, THIN-BEDDED, MICROCRYSTALLINE TO FINELY CRYSTALLINE DOLOSTONE THAT NEAR THE TOP CONTAINS BUFF WEATHERING, LIGHT GREY, THICK-BEDDED SEQUENCES. THIS UNIT IS VUGGY AND BEDS ARE COMMONLY DISRUPTED GIVING A ZEBRA-LIKE STRUCTURE TO THE ROCK (IN PART). DOLOMITE, QUARTZ AND PYROBITUMIN ARE FOUND AS OPEN SPACE FILLINGS IN THESE DISRUPTED ZONES. SMITHONITE IS COMMON AS THIN COATINGS ON THE WEATHERED SURFACE AROUND DISRUPTED ZONES.

SHALE: MEDIUM TO DARK GREY, THIN-BEDDED, SLIGHTLY, PHYLLITIC SHALE THAT CONTAINS RUSTY WEATHERING LAMINATIONS AS WELL AS THIN, DARK GREY, MICRITE BEDS AND SANDSTONE BEDS.

LIMESTONE: ORANGE WEATHERING, PALE GREENISH-GREY, THIN-BEDDED, MICROCRYSTALLINE LIMESTONE. THE TOP OF THIS UNIT IS MARKED BY A BED OF INTRAFORMATIONAL BRECCIA CONSISTING OF TABULAR CLASTS OF LIMESTONE IN A MICRITE MATRIX.

PHYLLITE: NO EXPOSURES OF THIS UNIT OCCUR ON THE COULTER OPTION, BUT WORK TO THE EAST INDICATES A LIGHT TO MEDIUM GREENISH-GREY LAMINATED PHYLLITE UNDERLIES UNIT G.

SCALE: 1" = 500'

NOTES:

~U~ UNCOMFORMITY

~F~ FAULT

FIGURE 2

GEOLOGY - Lithologies (cont'd)

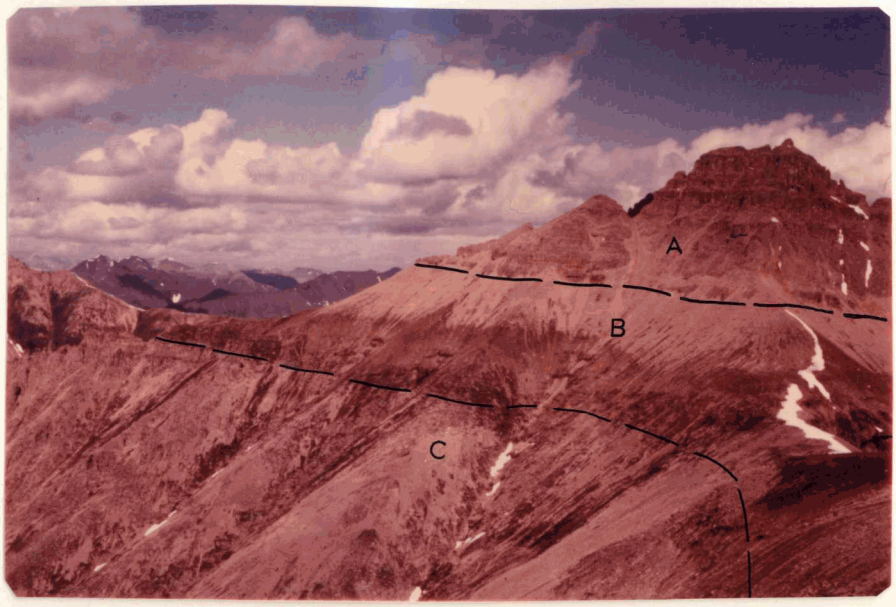


Figure 3: A, B, C Units.

Figure 4: Coulter Option in relation to Barrier Reef Resources' property.

GEOLOGY - Lithologies - Unit A (cont'd)

depositional environment for this unit is seen as one of shallow water and moderately high energy conditions.

UNIT B

Unit B consists of reddish-brown weathering, thick- to thin-bedded, cross-bedded, quartz sandstone which is inter-bedded with white to dark grey quartzite and minor dark grey laminated shale. The sandstone and quartzite are made up of well-rounded, frosted, colourless, coarse, quartz grains which are cemented with dolomite. Sorting and sphericity of the quartz grains is poor in the sandstone. Minor intraformational breccia with shale clasts has developed in some of the sandstone beds. Unit B, which is separated from the underlying Unit C by a disconformity (diastem), varies between 110 to 150 feet in thickness and is less resistant than the carbonates between which it is sandwiched. In some areas a mappable sandy dolostone lies beneath Unit B; this unit was not observed on the Coulter Option. A high energy, moderately shallow water environment is seen for the conditions in which Unit B was deposited.

UNIT C

Light grey weathering, dark to light grey and mottled grey, thick-to thin-bedded, medium crystalline to microcrystalline dolostone that for the most part consists of cross-bedded pisolitic sequences in which irregularly laminated "algal" dolostone is common. Silica replacement and dissolution of the dolostone has produced a variable structured rock. In some areas pisolites

GEOLOGY - Lithologies - Unit C (cont'd)

are silicified; in other areas it is only the material surrounding the pisolites that has been silicified. Some silicified pisolites occur in peculiar clusters suggestive of an algal origin (oncolites?). Completely dissolved pisolites, producing a very porous rock, are common locally. Linings of dolomite crystals are common in vugs; pyrobitumen is rare.

At the top of this unit there is a thin sequence of thin-bedded, finely crystalline dolostone in which light and dark grey laminations alternate. This sequence is moderately vuggy and contains spotty zinc mineralization. Clastic dykes of quartz sand cemented by dolomite occur in Unit C, but are uncommon features. Towards the base of this unit the dolostone becomes slightly sandy and also darker grey. Near the bottom, thin-bedded, dark grey, sandless, microcrystalline dolostone occurs as a distinct marker. In the southwestern exposures of Unit C an intensely silicified breccia occurs. This breccia, which is of large lateral extent, may represent a solution-collapse-type breccia, but it is devoid of lead-zinc mineralization. An undisturbed section of Unit C is not available for measuring on the Coulter Option; however, it is believed to be in the order of 1,800 feet thick. The contact between Unit C and Unit D, the underlying shale, is a normal depositional contact. The rock changes from a dark grey, sandy, pisolitic dolostone to an identical limestone which grades into calcareous shale, then shale. Unit C appears to have formed in very shallow water, high energy conditions.

GEOLOGY - Lithologies (cont'd)

Figure 5: View looking west across the Coulter Option.

Figure 6: Shale underlying Unit C.

GEOLOGY - Lithologies (cont'd)

UNIT D

This unit consists of medium to dark grey, thin-bedded to laminated shale that contains reddish-brown weathering, quartz sandstone beds (up to two feet thick) and limestone in thin micrite beds to more massive reefoid sequences. On a weathered surface this unit varies from a dark grey to a rusty brown colour. A well developed cleavage cuts the shale giving it a shattered or sheared appearance. The thickness of this unit is not known; much of it is believed to have been cut out by a major fault.

UNIT E

This unit consists of dark grey thin-bedded, micro-crystalline to finely crystalline dolostone that near the top contains buff weathering, light grey, thick-bedded sequences. This unit is vuggy and beds are commonly disrupted giving a zebra-like structure to the rock (in part). Dolomite, quartz, and pyrobitumen are found as open space fillings in these disrupted zones. Secondary zinc oxide and carbonate are common as thin coatings on the weathered surfaces around disrupted zones. Unit E is believed to be in the order of 1,400 to 1,500 feet thick and has been correlated with the mineralized dolostone found in Harrison Creek.

GEOLOGY - Lithologies (cont'd)

UNIT F

This unit consists of medium-to dark-grey, thin-bedded, slightly phyllitic shale that is approximately 3,600 feet thick. This unit contains thin (1/2 inch), dark grey micrite beds, some of which are silty and have a phyllitic sheen developed on cleavage surfaces. Sandstone beds are common in Unit F. The upper part of this unit is graphitic in some areas.

UNIT G

Unit F is underlain by a limestone sequence (Unit G), approximately 500 to 600 feet thick, consisting of an intra-formational breccia made up of tabular clasts of limestone in a micrite matrix. This breccia is underlain by a thin-bedded, orange weathering, pale greenish grey, microcrystalline limestone.

UNIT H

No exposures of this unit occur on the Coulter Option, but work to the east indicates a light-to medium greenish-grey, laminated phyllite underlies Unit G.

GEOLOGY (cont'd)

STRUCTURE

Rocks of the Coulter Option can be divided into two structural zones. Each of the zones appears to have been subjected to different intensities of folding although there are some similar elements of deformation that are common to both areas. The boundary between the two zones is a major fault, which is believed to have developed during the Laramide orogeny.

The southern structural zone is characterized by bedding that has a steep northerly dip direction. Minor folds within this area have tight, similar fold geometry. Near the fault boundary the fold axes of these minor folds vary from moderate westerly to steep easterly plunge directions; axial planes generally have a steep northerly dip direction. A well developed nearly vertical, easterly striking cleavage penetrates the shales and phyllites of this structural zone. The consistancy of this cleavage over this area suggests that it is probably an axial plane cleavage related to regional folding as opposed to a cleavage that has developed as a result of faulting. Assuming

GEOLOGY - Structure (cont'd)

the cleavage is related to regional folding, it is suggested that the shales and phyllites belong to the northern limb of an east-west trending anticline whose hinge lies south of the property.

The northern structural zone is characterized by relatively flat lying carbonates and shales. Minor folds in this plate have an open, parallel fold geometry. In general, cleavage is not as well developed as in the southern structural zone. Regional folding in this plate is outlined by Unit B and can be best seen from the air. This folding consists of a gentle buckling of the carbonates. It appears as though there have been two phases of folding since minor basins and domes have developed in these rocks. A monocline has developed on the southern edge of this plate and appears to die out towards the west over the Coulter Option.

The major fault which separates the two structural provinces is believed to be a relatively high angle reverse fault with the flat lying carbonates and shales being on the uplifted side. It is suggested that this fault may be the upturned edge of a thrust, with offset in the order of thousands of feet. Fault bounded wedges of Unit C, that appear to have been partly

GEOLOGY - Structure (cont'd)

overriden by the main, uplifted fault block, lie along the fault. The rock in these wedges is generally badly shattered; outcrops of solid bedrock are rare. Shale around the main fault is distinctly phyllitic. The development of slickensides in the shale and frequent kink banding are other features found around this major fault.

Faulting and fracturing across the two structural zones suggest they have undergone at least one similar stage of deformation. Within the northern plate fractures indicate this area may have been subjected to two phases of deformation. The much stronger development of northwesterly trending fractures than other fractures suggests that this fracture trend has been used by both phases of deformation. In the southern structural zone faults with this trend have apparent displacements of up to 4,700 feet. Age relations observed along some faults suggest that a maximum compressive force trending north-south was the last deformational force to leave its imprint on the property. This is reinforced by the fact that folding, thrusting, and minor faults appear to be related to this stress system and are more pronounced than features that could be related to an earlier phase. The most recent deformation is believed to be represented by northwesterly and northeasterly striking conjugate fractures and a northerly striking extension fracture set. The older deformation is believed to be represented by a conjugate fracture set and extension fractures as illustrated in Figure 8 (page 20).

GEOLOGY - Structure (cont'd)

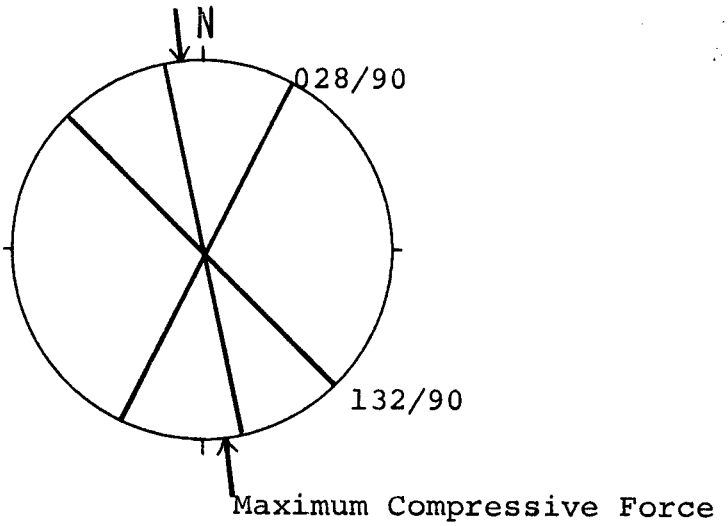


Figure 7: Stereogram of fractures related to younger (?) phase of deformation.

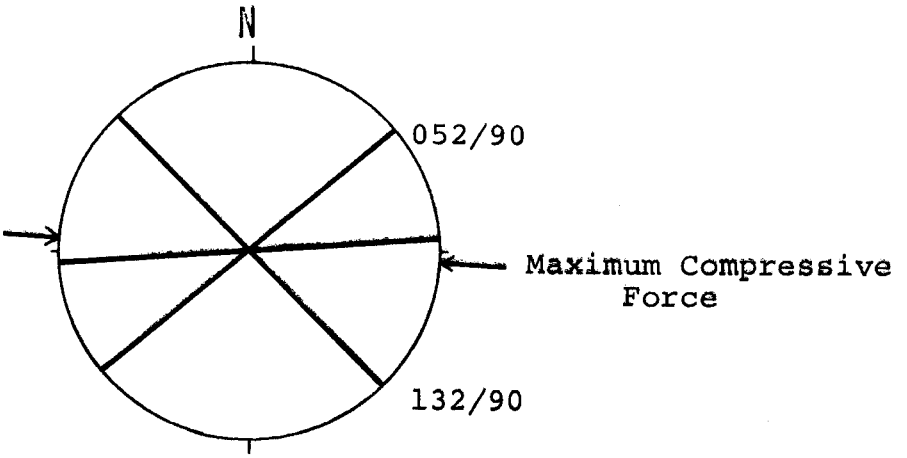


Figure 8: Stereogram of fractures associated with older (?) phase of deformation.

MINERALIZATION

Mineralization on the Coulter Option, in view of the structural development of this property, is best discussed in terms of the two structural zones.

On the northern plate assays of rock chip samples taken over narrow mineralized zones have been as high as 33.60% total zinc, with the highest sulphide zinc assay 4.20% lead-zinc mineralization occurs in breccia zones, fractures and as vug fillings in Unit C. Erosional remnants of Unit A, found on the property, were not observed to contain any lead-zinc mineralization. Breccia zones that contain minor zinc mineralization are narrow (up to 10 feet wide, but commonly less than 2 feet in width) and of little lateral extent, frequently being confined to near vertical, northwesterly trending zones. A strongly silicified breccia of large lateral extent occurs in the southwestern outcrops of Unit C and may represent a solution-collapse-type breccia. Unfortunately, this breccia is barren of lead-zinc mineralization although limonite,

MINERALIZATION (cont'd)

probably derived from pyrite, was observed to be a constituent of the matrix. In relation to the silica, it appears that the pyrite came after silicification. Steep northeasterly trending fractures were observed to contain veins of galena (to 1/2 inch in width) in the Pal 59 claim. Mineralization in these fractures was sparse, being of little lateral extent like the mineralized breccias. Immediately under Unit B a thin-bedded, vuggy part of Unit C contains intermittent zinc mineralization. Vugs contain reddish, coarsely crystalline, sphalerite. The sphalerite is commonly surrounded by crystalline quartz which develops into rims of chalcedonic quartz. A rock chip sample over a mineralized zone ran 5.92% total zinc and 0.40% sulphide zinc.

The local extent and generally low grade of lead and zinc sulphide occurrences combined with the fact that these showings are generally restricted to fault or fracture zones suggests that these occurrences have little economic potential. None of the structures associated with the showings indicate a possible increase in mineralization with depth.

In the southern structural zone a dolostone unit (Unit E) has zinc oxides and carbonate developed on weathered surfaces of small breccia zones and areas of disrupted bedding. No sphalerite or galena was found in the few exposures of this unit

MINERALIZATION (cont'd)

that underlie the Ann claims, but outcroppings in Harrison Creek to the west of the Coulter Option do contain lead-zinc mineralization as a matrix with pyrite in a brecciated dolostone. A mineralized outcrop of this dolostone has been found on the YK claims immediately south of the Coulter Option and this dolostone is inferred to underlie the HPV fractions. The stratigraphic relationship between Unit G and E has allowed the position of Unit E to be determined where it is obscured by overburden.

The nature and occurrence of the mineralization in Unit E, as seen in Harrison Creek, suggests that seepage refluction (Adams, J.E., and Rhodes, M.L., 1960) may be the process responsible for dolomitization and brecciation. Beales and Jackson (1967) suggest that Pine Point and some Mississippi Valley-type deposits have been produced by late diagenetic processes in environments in which seepage refluction has played an important part in rock preparation. In light of this, Unit E appears to be a favourable unit for hosting lead-zinc mineralization. Pyrite, which is associated with the lead-zinc sulphides, would allow mineralized zones to be located with IP. Since Unit E has been disturbed by faulting there exists the possibility that mineralization is structurally controlled. Perhaps sulphides were introduced to the porous dolostone along the faults, or perhaps these faults have served as channelways during remobilization and concentration of the lead-zinc minerals.

GEOCHEMISTRY

(Plates 5,6,7,8,9; Appendix A)

A geochemical stream sediment survey for lead and zinc was undertaken with 293 samples being collected. Samples were taken at roughly 1,000 foot intervals along the main streams draining the Coulter Option. Detailed sampling was carried out over anomalous areas. Each sample site was flagged and labelled. In anomalous areas where mineralization was found by follow-up prospecting, rock chip samples were taken over the mineralized zones. Results of the assayed rock chip samples and descriptions of the sample sites are found in Appendix "A".

The favourable dolostone unit (Unit E) of Harrison Creek was found to continue across to the property and underlies the northwestern Ann claims. This unit produced an anomalously high response to stream sediment analysis and therefore warranted more detailed geochemical prospecting. A soil grid was located over this unit and 244 samples were taken by grub hoe at 200 foot

GEOCHEMISTRY (cont'd)

intervals along lines spaced 400 feet apart over 46,200 feet of line. Each sample site was flagged and labelled. Sample lines were run north-south from a baseline and were tied into a second baseline 1,800 feet north. The baselines, 12,000 feet in combined length, were cut and picketed.

Soil samples were taken from the B horizon which was fairly well developed over most of the area sampled. The sample depth, soil type, colour, drainage, and slope were recorded for each site. Where possible stream sediment samples were taken from active sediments or slide fines and dry sediments. The sample texture, colour, rock type, drainage, and slope were recorded for each sample. Both sediment and soil samples were placed in numbered kraft envelopes and delivered to Bondar Clegg and Company Ltd's laboratory in Whitehorse. There, each sample was dried, sieved and the minus 80 mesh fraction digested by hydrochloric and nitric acids. The atomic absorption method was used for both lead and zinc analysis. Rock chip samples were ground and then similarly processed by Bondar Clegg and Company Ltd.

GEOCHEMISTRY (cont'd)

RESULTS

STREAM SEDIMENT SURVEY:

Frequency distributions of the lead and zinc values are illustrated on Plates 5 and 6. It should be noted that the rather dispersed distribution for zinc presents a problem for analysis. This distribution may be partly due to the high mobility of zinc. It also appears as though there may be two populations represented, one for the shale and one for the carbonates. If this is the case the background for zinc in the carbonates may be higher. Background, threshold, and anomalous values for lead and zinc were visually estimated from frequency distributions and are listed below, zinc values ranged from 18 ppm to 7,350 ppm; lead from 20 ppm to 200 ppm.

	Zinc	Lead
Background	0 - 129 ppm	0 - 59 ppm
Above background	130 - 289 ppm	60 - 99 ppm
Possible anomaly	290 - 369 ppm	100 - 119 ppm
Possible anomaly	370 - 529 ppm	120 - 159 ppm
Strong anomaly	530+ ppm	160+ ppm

Anomalous samples are roughly localized in eight

GEOCHEMISTRY
Results - Stream Sediment Survey (cont'd)

areas which have been outlined on Plates 5 and 6 and are referred to in the following discussion. Anomalous lead samples, where they occur, are coincident with areas of anomalous zinc.

Area 1: Anomalous zinc values in this area have been caused by mineralization within the underlying dolostone unit (Unit E). Only one possibly anomalous lead sample was found. More detailed geochemical prospecting was conducted over this area and is discussed under "Soil Survey" following.

Area 2: In this area anomalous zinc values have been caused by sphalerite and smithsonite which occur in what are believed to be tectonic breccias. Mineralization in these narrow zones is at best intermittent,although one rock chip sample ran as high as 33.6% total zinc of which 30.25% was soluble zinc. This region is bounded by major faults and the rock is highly fractured. Sediment samples in this area were found to be above background for lead.

Area 3: A zone approximately 200 feet square in this anomalous area has undergone intense shearing; a cleavage is common in the pisolitic dolostone. The rocks in this area commonly have thin coatings of smithsonite and/or zinc oxides. An outcrop of slightly sandy dolostone with algal laminations and vugs, commonly containing reddish sphalerite, was found in the shear zone. This outcrop is unusual since the sedimentary structures in it are different from the structures in the surrounding dolostone which is sandless. The fact that this area has undergone intense faulting and shearing indicates that this outcrop may be an isolated wedge that has dropped down from the upper part of Unit C.

GEOCHEMISTRY
Results - Stream Sediment Survey (cont'd)

Area 4: Follow-up prospecting in this locality indicated that anomalous samples were the result of lead-zinc mineralization, which, again clearly exhibits structural control. Sphalerite was found to be restricted to narrow linear breccia zones. The grade of zinc over one of these breccias was 17% with 16.28% soluble zinc. Generally sulphide zinc was less than one percent over these breccia zones. Galena was found as fracture fillings 1/2 inch thick and traceable for not more than 10 feet.

Areas 5, 6, and 7:

Anomalous zinc samples in these areas were found to be caused by sphalerite that occurs as vug fillings in the upper portion of Unit C. Mineralization is persistent throughout this area, but is at best only weak. A rock chip sample taken over a mineralized portion of the dolostone assayed 1.56% sulphide zinc.

Area 8: Anomalous zinc and lead samples in this area were found to be caused by mineralization in a ten foot wide fault zone. A rock chip sample taken across this zone contained 8.92% total zinc of which 8.20% was soluble zinc.

GEOCHEMISTRY - Results (cont'd)

SOIL SURVEY:

Zinc values ranged from 15 ppm to 17,500 ppm. Lead ranged from 17 ppm to 295 ppm. From histograms that were plotted from the results the following categories were visually estimated for lead and zinc.

	Zinc	Lead
Background	0 - 129 ppm	0 - 54 ppm
Above background	130 - 289 ppm	55 - 114 ppm
Possible anomaly	290 - 369 ppm	115 - 144 ppm
Possible anomaly	370 - 529 ppm	145 - 204 ppm
Strong anomaly	530+ ppm	205+ ppm

A relatively broad lead-zinc anomaly is developed between Ann #31 and Ann #32 claims over the favourable dolostone (Unit E) and warrants further investigation. The strongest zinc anomaly (17,500 ppm) occurs between Ann #28, Ann #26, and Ann #41. Lead values in this area are just above background. This anomaly, which is in the dolostone, appears to be cut off by a northerly striking fault. A zinc anomaly that occurs within Ann #41 and extends into Ann #42 is located beside a creek and may therefore have been caused by local dispersion. No anomalous lead values are associated with these high zinc samples, although some samples are above background in lead. Ann #40, #57, and #58 claims contain an area in which anomalous lead and zinc values

GEOCHEMISTRY
Results - Soil Survey (cont'd)

occur; this area is believed to be underlain by shales. On The Ann #43 an anomalous lead sample was taken at line 16E-22N. Zinc is anomalous at this location also, but since the build up in lead is so abrupt its significance is questioned. This location is underlain by the favourable dolostone unit. Samples taken around a westward flowing creek, on the northern half of the grid are strongly anomalous. This anomalous area is probably due to locally transported zinc.

SUMMARY AND CONCLUSIONS

The Coulter Option consists of 317 full-sized mineral claims and 14 fractional claims in the Mayo Mining District, Yukon Territory. Access to the property is by float plane and/or helicopter from Mayo, a distance of 114 miles.

The property is underlain by probable Lower Cambrian sediments. Flat lying dolostone and shales appear to have been thrust southwards against steep northerly dipping shales, phyllites, limestone, and dolostone.

A reconnaissance geochemical stream sediment survey was undertaken to delimit areas of potential lead-zinc mineralization. A total of 293 samples were collected and analyzed for lead and zinc. Follow-up prospecting around anomalous areas located lead-zinc mineralization in the flat lying dolostones (Unit C), but this mineralization is not considered to be of

SUMMARY AND CONCLUSIONS (cont'd)

economic potential. A dolostone unit (Unit E), which has been correlated to the mineralized dolostone in Harrison Creek, is believed to have potential for hosting economic lead-zinc mineralization. A soil grid was cut over Unit E and 244 soil samples were taken and analyzed for lead and zinc. Four strongly anomalous areas were located; three of these have coincident lead anomalies and three are underlain by Unit E. Further exploration of Unit E is warranted.

RECOMMENDATIONS

It is recommended that only the Zog #1-8, Goz #9-20 and Ann #1-60 claims be kept for further evaluation. For these claims at two-phase exploration programme is recommended.

PHASE I: INDUCED POLARIZATION SURVEY, GEOCHEMICAL SOIL SURVEY, AND GEOLOGICAL MAPPING.

Accurately relocate, extend, and cut grid lines of previous grid in preparation for induced polarization survey. Map the grid area at a scale of 1 inch to 400 feet. Extend geochemical soil sampling from this grid to close off anomalies. Ten miles of IP with lines spaced at 800 feet intervals over the grid area and over the assumed southern extension of Unit E. Trenching should be considered if feasible.

Estimated Cost of Phase I $20,000

RECOMMENDATIONS (cont'd)

PHASE II: DIAMOND DRILLING.

Contingent upon the success of Phase I in locating suitable targets, a minimum of 2,000 feet of diamond drilling in five holes would be required to evaluate such targets.

Estimated Cost of Phase II $55,000

NOTE: Estimated costs will vary depending largely upon the sharing of support costs with others in the area.

Respectfully submitted

CORDILLERAN ENGINEERING LIMITED

Carl Verley

C. G. Verley, B.Sc., Geologist

SUPERVISED BY: O. S. Hairsine, B.Sc., P.Eng.

LIST OF ASSAYS

Rock Chips:

Sample Number	Zn Soluble % / Zn Total %	Lead %	Sample Site Description
6859	0.08/ 0.25	0.94	10' across a shear zone.
6860	4.20/ 4.28	0.21	15' across a shear zone.
6861	0.07/ 0.09	0.03	5' across a shear zone.
6862	0.12/ 0.34	0.03	5' in a gossanous zone.
6863	0.05/ 0.07	0.02	5' in a gossanous zone.
6864	0.07/ 0.07	0.01	10' in a gossanous zone.
6865	2.08/ 2.24	0.01	5' of mineralized dolostone.
6866	0.11/ 0.12	0.01	5' of mineralized dolostone.
6875	0.36/ 0.50	0.01	10' of dolostone with $ZnCO_3$.
6876	0.15/ 0.18	0.01	10' of dolostone with $ZnCO_3$.
6881	0.80/ 1.92	0.02	2' across a narrow mineralized (ZnS) fracture zone.
6882	2.24/ 2.56	0.02	1' across a narrow breccia zone.
6883	0.21/ 0.23	0.01	1' across a fracture zone with $ZnCO_3$.
6884	8.20/ 8.92	0.03	10' across a fault zone.
6885	4.52/ 5.00	0.02	10' across a fault zone.
6886	6.20/ 8.88	0.08	2' across a shear zone.
6887	5.36/ 5.48	0.02	2' across a breccia zone.
6888	3.08/ 3.40	0.02	1' across a breccia zone.
6889	30.25/33.60	0.01	2' across a breccia zone.
6890	25.60/29.80	0.01	2' across a breccia zone.
6891	2.72/ 2.64	0.02	1' across a shear zone.
6892	1.80/ 1.72	0.01	1' across a shear zone.
6893	5.52/ 5.92	0.02	5' across mineralized dolostone.
6894	4.20/ 4.44	0.02	10' across mineralized dolostone.
6895	0.38/ 1.00	<0.01	10' across mineralized dolostone.
6896	1.28/ 2.84	0.10	10' across mineralized dolostone.
6897	4.00/ 4.08	0.02	10' across mineralized dolostone.
6898	8.64/ 9.20	0.02	10' across mineralized dolostone.
6899	1.88/ 2.12	0.02	1' across a fault.
6900	1.46/ 2.08	0.02	1' across a shear zone.
6776	16.28/17.08	0.02	1' across a breccia.

PERSONNEL

RUDOLF DURFELD	#112 - 1915 Haro Street Vancouver, B.C.
GLEN HOLMES	R.R.#1, North Bay, Ontario
GRANT PAULSON	R.R.#2 404 Polaris Drive Prince George, B.C.
CARL VERLEY	3829 West 35th Avenue Vancouver, B.C.

REFERENCES

ADAMS, J.E. and RHODES, M.L.:

1960: "Dolomitization by Seepage Refluction" Amer.Assn.Pet.Geol.Bull.44 pp.1912-1920.

JACKSON, S.P. and BEALES, F.W.:

1967: "An Aspect of Sedimentary Basin Evolution; The Concentration of Mississippi Valley-Type Ores During Late Stages of Diagenesis". Bull.of Can.Pet.Geol. Vol.15,No.4, pp.384-433.

WHEELER, J.O.:

1954: "A Geological Reconnaissance of the Northern Selwyn Mountains Region, Yukon and North West Territories. G.S.C. Paper 53-7.

APPENDIX "D"

CANADA)
)
)
TO WIT:)

In the matter of a geological and geochemical report on behalf of Conwest Exploration Company Limited.

I, John, W. Stollery, Agent for Cordilleran Engineering Limited of city of Vancouver, Province of British Columbia do solemnly declare, - that geological mapping, prospecting and geochemical sampling were conducted on the Pal 1-50, Ann 1-64, Gal 1-46 and Gin 1-60 mineral claims, Mayo Mining District, Y.T., during the period July 1 - August 21, 1974 and on the Goz 9-80, Zog 1-8, Pal 51 mineral claims during the period July 1 - August 31, 1974 at a total cost of:

Consulting Fees	$8,908.84	
Salaries	8,900.64	
Fixed Wing	3,362.80	
Helicopter	17,326.83	
Geochemical Analysis	1,493.25	
Travel	1,044.40	
Office supplies, telephone Freight and drafting	2,540.81	
Camp supplies and Food	5,941.41	$49,518.98

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 Vancouver)
Province of)
in the British Columbia this)
22nd day of November 1974)

William R McClintock

~~A Commissioner for Oaths for Yukon Territory OR~~ Notary Public for the province of British Columbia

CORDILLERAN ENGINEERING LIMITED

MINERAL EXPLORATION
MANAGEMENT AND
ENGINEERING CONSULTANTS

1418 - 355 BURRARD STREET
VANCOUVER, B.C.
V6C 2P8
TELEPHONE (604) 681-8381

SUPERVISOR'S CERTIFICATE

I, Owen S. Hairsine of Port Moody, British Columbia hereby certify that:

1. I am a geological engineer residing at 1069 Cecile Drive, Port Moody, B.C.

2. I am employed by Cordilleran Engineering Limited of 1418 - 355 Burrard Street, Vancouver, B.C.

3. I received a Bachelor of Science degree from Michigan Technological University, Houghton, Michigan in 1969 and have practiced my profession since that time.

4. I am a member of the Association of Professional Engineers of the Province of British Columbia.

5. I supervised the writing of this report and the field work upon which it is based.

6. I have no beneficial interest in Conwest Exploration Company Limited or the mineral claims described in this report, nor do I expect to receive any.

CORDILLERAN ENGINEERING LIMITED

O. S. Hairsine, P.Eng.
Geologist

November, 1974
Vancouver, B.C.

CORDILLERAN ENGINEERING LIMITED

MINERAL EXPLORATION
MANAGEMENT AND
ENGINEERING CONSULTANTS

1418 - 355 BURRARD STREET
VANCOUVER, B.C.
V6C 2P8
TELEPHONE (604) 681-8381

WRITER'S CERTIFICATE

I, Carl G. Verley of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 3829 West 35th Avenue, and employed by Cordilleran Engineering Limited of 1418 - 355 Burrard Street, Vancouver, B.C., V6C 2G8.

2. I am a graduate of the University of British Columbia, B.Sc., in 1974, and have practiced my profession since that time.

3. I am the author of this report which is based on work conducted on the Coulter Option during the period July 1st through August 31st, 1974. This work included picketing lines, geological mapping, and geochemical sampling, undertaken on behalf of Conwest Exploration Company Limited.

4. I have no beneficial interest in the properties described in this report, nor do I expect to receive any.

CORDILLERAN ENGINEERING LIMITED

Carl Verley

Carl G. Verley, B.Sc.,
Geologist

November, 1974
Vancouver, B.C.

PLUME

RENECK

RANGE

CREEK

PLUME

DUO CREEK

GOZ

3400

3300

3500

3000

BARRIER REEF RESOURCES LTD. (N.P.L.)

YUKON REVENUE
FUN CLAIMS
COMINCO OPTION

TOURNIGAN MINING EXPLORATIONS, LTD.
YK 1-40

NOTES:
MAGNETIC DECLINATION 34° 30' (1973)
TOPOGRAPHIC BASE FROM N.T.S. MAP 106 C/7
CONTOUR INTERVAL: 100 FEET

CONWEST EXPLORATION COMPANY LIMITED

CLAIM MAP

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000
SCALE IN FEET

BY
CORDILLERAN ENGINEERING LTD.
1418-355 BURRARD STREET
VANCOUVER 1, B.C.
OCT. 1974

PLATE I

LEGEND

LOWER CAMBRIAN (?)

- A — UNIT A: BUFF WEATHERING, LIGHT TO MEDIUM GREY AND RARELY MOTTLED GREY, THICK-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE. BEDS ARE COMMONLY LAMINATED AND LOCALLY PISOLITIC. IN GENERAL THIS UNIT IS NOT VERY POROUS ALTHOUGH IT IS INTENSELY FRACTURED.
- B — UNIT B: REDDISH-BROWN WEATHERING, THICK TO THIN-BEDDED, CROSS-BEDDED QUARTZ SANDSTONE AND QUARTZITE WITH MINOR SHALE. CONTAINS CONGLOMERATE AT BASE.
- C — UNIT C: LIGHT GREY WEATHERING, DARK TO LIGHT GREY AND MOTTLED GREY, THICK TO THIN-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE THAT FOR THE MOST PART CONSISTS OF CROSS-BEDDED PISOLITIC SEQUENCES IN WHICH IRREGULARLY LAMINATED "ALGAL" DOLOSTONE IS COMMON. THIS UNIT IS MODERATELY TO LOCALLY, VERY POROUS AND VUGGY. UNIT C BECOMES SANDY TOWARDS ITS BASE.
- D — UNIT D: MEDIUM TO DARK GREY, THIN-BEDDED TO LAMINATED SHALE THAT CONTAINS REDDISH-BROWN WEATHERING, SANDSTONE BEDS AND LIMESTONE IN THIN, MICRITIC BEDS TO MORE MASSIVE REEFOID SEQUENCES. A WELL DEVELOPED CLEAVAGE CUTS THE SHALE GIVING IT A SHATTERED APPEARANCE.
- E — UNIT E: DARK GREY, THIN-BEDDED, MICROCRYSTALLINE TO FINELY CRYSTALLINE DOLOSTONE THAT NEAR THE TOP CONTAINS BUFF WEATHERING, LIGHT GREY, THICK-BEDDED SEQUENCES. THIS UNIT IS VUGGY AND BEDS ARE COMMONLY DISRUPTED GIVING A ZEBRA-LIKE STRUCTURE TO THE ROCK (IN PART). DOLOMITE, QUARTZ, AND PYROBITUMIN ARE FOUND AS OPEN SPACE FILLINGS, IN THESE DISRUPTED ZONES.
- F — UNIT F: MEDIUM TO DARK GREY, THIN-BEDDED, SLIGHTLY PHYLLITIC SHALE THAT CONTAINS RUSTY WEATHERING LAMINATIONS AS WELL AS THIN DARK GREY MICRITE BEDS AND SANDSTONE BEDS.
- G — UNIT G: ORANGE WEATHERING, PALE GREENISH-GREY, THIN-BEDDED, MICROCRYSTALLINE LIMESTONE. THE TOP OF THIS SEQUENCE IS MARKED BY A BED OF INTRAFORMATIONAL BRECCIA CONSISTING OF TABULAR CLASTS OF LIMESTONE IN A MICRITE MATRIX.
- H — UNIT H: NO EXPOSURES OF THIS UNIT OCCUR ON THE COULTER OPTION, BUT WORK TO THE EAST INDICATES A LIGHT TO MEDIUM GREENISH GREY, LAMINATED PHYLLITE UNDERLIES UNIT G.

- BEDDING; INCLINED, VERTICAL, HORIZONTAL
- FRACTURES, INCLINED, VERTICAL
- CLEAVAGE
- AXIAL PLANE TO MINOR FOLDS
- FOLD AXIS TO MINOR FOLDS
- ORIENTATION OF MAXIMUM COMPRESSIVE FORCE (AS INTERPRETED FROM CONJUGATE FRACTURES)
- FAULT; DEFINITE, INFERRED
- GEOLOGICAL CONTACT; DEFINITE, INFERRED, ASSUMED
- MINERALIZATION; SPHALERITE, GALENA (*Zn, x Pb)
- OUTCROP
- TALUS BOUNDARY
- CLEAR AND WOODED AREA

NOTES: STRUCTURAL CROSS-SECTIONS A TO B, C TO D ARE LOCATED ON PLATE 3.
MAGNETIC DECLINATION = 34°30' (1973), TOPOGRAPHIC BASE FROM NTS MAP 106 C/7, CONTOUR INTERVAL 100 FEET.

CONWEST EXPLORATION COMPANY LIMITED

GEOLOGY

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000
SCALE IN FEET

BY
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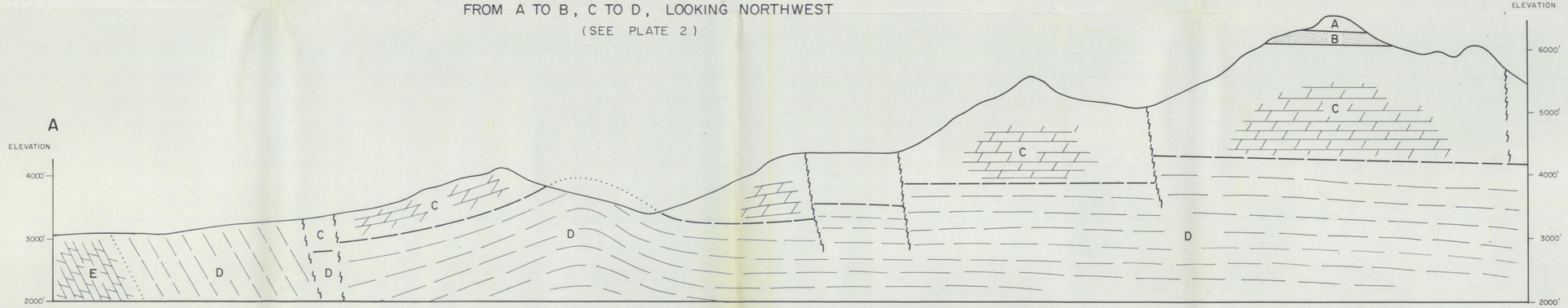
1418-355 BURRARD STREET
VANCOUVER 1, B.C.
OCT. 1974

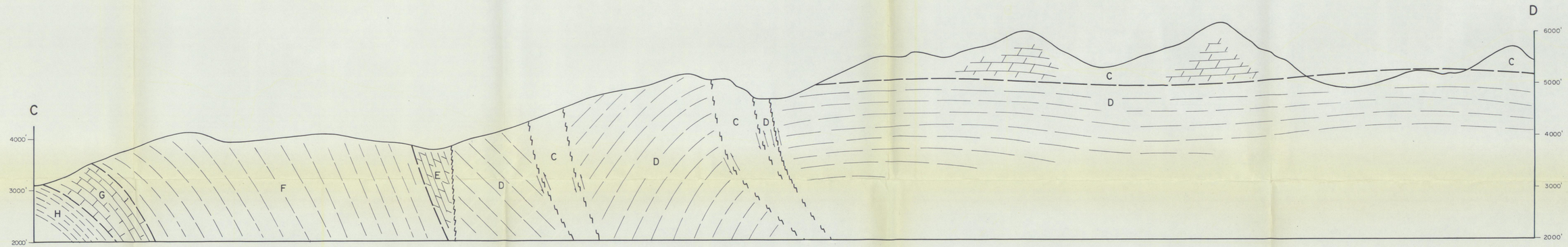
PLATE 2

GENERALIZED STRUCTURAL CROSS-SECTIONS

FROM A TO B, C TO D, LOOKING NORTHWEST

(SEE PLATE 2)





L E G E N D

LOWER CAMBRIAN (?)

A **UNIT A:** BUFF WEATHERING, LIGHT TO MEDIUM GREY AND RARELY MOTTLED GREY, THICK-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE. BEDS ARE COMMONLY LAMINATED AND LOCALLY PISOLITIC. IN GENERAL THIS UNIT IS NOT VERY POROUS ALTHOUGH IT IS INTENSELY FRACTURED.

B **UNIT B:** REDDISH-BROWN WEATHERING, THICK TO THIN-BEDDED, CROSS-BEDDED QUARTZ SANDSTONE AND QUARTZITE WITH MINOR SHALE. CONTAINS CONGLOMERATE AT BASE.

C **UNIT C:** LIGHT GREY WEATHERING, DARK TO LIGHT GREY AND MOTTLED GREY, THICK TO THIN-BEDDED, MEDIUM CRYSTALLINE TO MICROCRYSTALLINE DOLOSTONE THAT FOR THE MOST PART CONSISTS OF CROSS-BEDDED PISOLITIC SEQUENCES IN WHICH IRREGULARLY LAMINATED "ALGAL" DOLOSTONE IS COMMON. THIS UNIT IS MODERATELY TO LOCALLY, VERY POROUS AND VUGGY. UNIT C BECOMES SANDY TOWARDS ITS BASE.

D **UNIT D:** MEDIUM TO DARK GREY, THIN-BEDDED TO LAMINATED SHALE THAT CONTAINS REDDISH-BROWN WEATHERING, SANDSTONE BEDS AND LIMESTONE IN THIN, MICRITIC BEDS TO MORE MASSIVE REEFOID SEQUENCES. A WELL DEVELOPED CLEAVAGE CUTS THE SHALE GIVING IT A SHATTERED APPEARANCE.

E **UNIT E:** DARK GREY, THIN-BEDDED, MICROCRYSTALLINE TO FINELY CRYSTALLINE DOLOSTONE THAT NEAR THE TOP CONTAINS BUFF WEATHERING, LIGHT GREY, THICK-BEDDED SEQUENCES. THIS UNIT IS VUGGY AND BEDS ARE COMMONLY DISRUPTED GIVING A ZEBRA-LIKE STRUCTURE TO THE ROCK (IN PART). DOLOMITE, QUARTZ, AND PYROBITUMIN ARE FOUND AS OPEN SPACE FILLINGS, IN THESE DISRUPTED ZONES.

F **UNIT F:** MEDIUM TO DARK GREY, THIN-BEDDED, SLIGHTLY PHYLLITIC SHALE THAT CONTAINS RUSTY WEATHERING LAMINATIONS AS WELL AS THIN DARK GREY MICRITE BEDS AND SANDSTONE BEDS.

G **UNIT G:** ORANGE WEATHERING, PALE GREENISH-GREY, THIN-BEDDED, MICROCRYSTALLINE LIMESTONE. THE TOP OF THIS SEQUENCE IS MARKED BY A BED OF INTRAFORMATIONAL BRECCIA CONSISTING OF TABULAR CLASTS OF LIMESTONE IN A MICRITE MATRIX.

H **UNIT H:** NO EXPOSURES OF THIS UNIT OCCUR ON THE COULTER OPTION, BUT WORK TO THE EAST INDICATES A LIGHT TO MEDIUM GREENISH GREY, LAMINATED PHYLLITE UNDERLIES UNIT G.

GEOLOGICAL CONTACT: DEFINITE, INFERRED, ASSUMED

FAULT: DEFINITE, INFERRED (WITH RELATIVE MOVEMENT)

CONWEST EXPLORATION COMPANY LIMITED

STRUCTURAL CROSS-SECTIONS

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000

SCALE IN FEET

BY

CORDILLERAN ENGINEERING LTD.

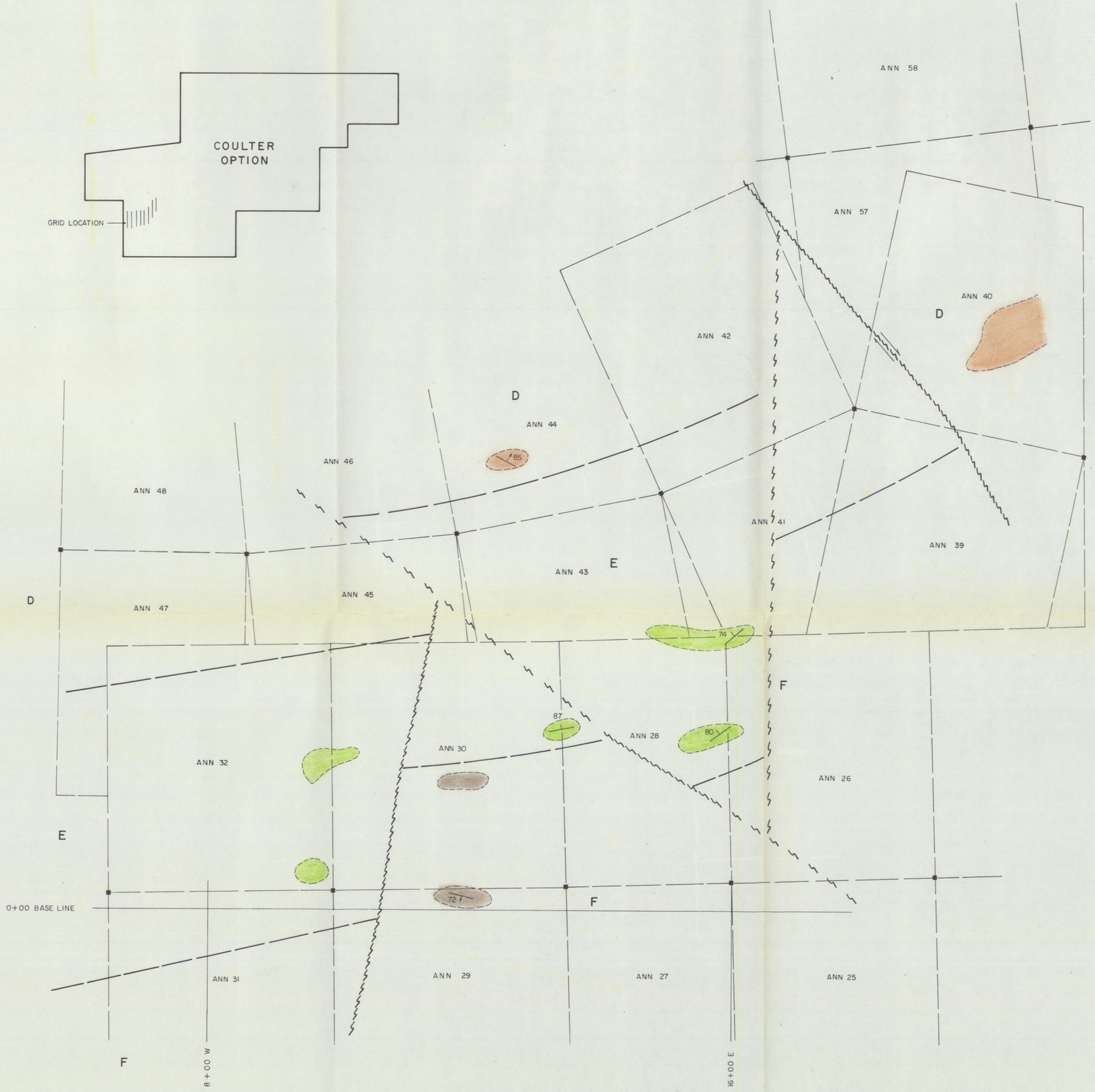
1418-355 BURRARD STREET

VANCOUVER 1, B.C.

OCT. 1974

PROFESSIONAL ENGINEER B.C. R.S. HARSH

PLATE 3



LEGEND

LOWER CAMBRIAN (?)

- D — UNIT D: MEDIUM TO DARK GREY, THIN-BEDDED TO LAMINATED SHALE THAT CONTAINS REDDISH-BROWN WEATHERING SANDSTONE BEDS AND LIMESTONE IN THIN, MICRITE BEDS TO MORE MASSIVE REEFOID SEQUENCES. A WELL DEVELOPED CLEAVAGE CUTS THE SHALE GIVING IT A SHATTERED APPEARANCE.
- E — UNIT E: DARK GREY, THIN-BEDDED, MICRO-CRYSTALLINE TO FINELY CRYSTALLINE DOLOSTONE THAT NEAR THE TOP CONTAINS BUFF WEATHERING, LIGHT GREY, THICK-BEDDED SEQUENCES. THIS UNIT IS VUGGY AND BEDS ARE COMMONLY DISRUPTED GIVING A ZEBRA-LIKE STRUCTURE TO THE ROCK (IN PART). DOLOMITE, QUARTZ AND PYROBITUMIN ARE FOUND AS OPEN SPACE FILLINGS IN THESE DISRUPTED ZONES.
- F — UNIT F: MEDIUM TO DARK GREY, THIN-BEDDED, SLIGHTLY PHYLLITIC SHALE THAT CONTAINS RUSTY WEATHERING LAMINATIONS AS WELL AS THIN, DARK GREY MICRITE BEDS AND SANDSTONE BEDS.

- BEDDING
- CLEAVAGE
- GEOLOGICAL CONTACT, INFERRED
- FAULT; DEFINITE, INFERRED
- OUTCROP

CONWEST EXPLORATION COMPANY LIMITED

GEOLOGY MAP OF SOIL GRID

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

400 0 400 800 1200

SCALE IN FEET

BY

CORDILLERAN ENGINEERING LTD.
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VANCOUVER 1, B.C.

OCT. 1974

PROVINCE OF BRITISH COLUMBIA — O.S. HAIRSINE — ENGINEER

PLATE 4

PLUMERANGE

PLUMERANGE

CREEK

GOZ

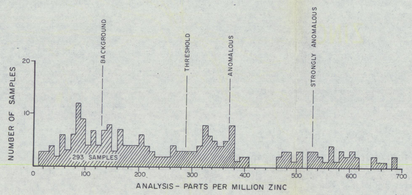
DUOT CREEK

SOIL GRID
SEE PLATES
4,889

Zn
FREQUENCY DISTRIBUTION
ZINC IN STREAM SEDIMENT SAMPLES

BACKGROUND	130 ppm
THRESHOLD	290 ppm
ANOMALOUS	370 ppm
STRONGLY ANOMALOUS	530 ppm

NOTE:
70 SAMPLES (>700 ppm) NOT SHOWN ON DIAGRAM



EXPLANATION

△ ROCK CHIP SAMPLE (SOLUBLE ZINC % / TOTAL ZINC %)

○ STREAM SEDIMENT SAMPLE LOCATION

ZINC CONTENT	
BACKGROUND	0 – 129 ppm
ABOVE BACKGROUND	130 – 289 ppm
POSSIBLE ANOMALY	290 – 369 ppm
PROBABLE ANOMALY	370 – 529 ppm
STRONG ANOMALY	530 + ppm

NOTES:
MAGNETIC DECLINATION 34° 30' (1973)
TOPOGRAPHIC BASE FROM N.T.S. MAP 106 C/7
CONTOUR INTERVAL: 100 FEET

CONWEST EXPLORATION COMPANY LIMITED

ZINC CONTENT OF STREAM SEDIMENTS

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000
SCALE IN FEET

BY
CORDILLERAN ENGINEERING LTD.
1418 – 355 BURRARD STREET
VANCOUVER, B.C.
OCT. 1974

PLATE 5

PLUME RANGE

PLUME RIDGE

CREEK

DUO CREEK

3400

4400

4700

3300

3500

3100

3000

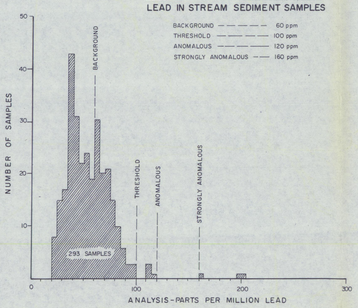
GOZ

W

SOIL GRID
SEE PLATES
4,889

Pb
FREQUENCY DISTRIBUTION
LEAD IN STREAM SEDIMENT SAMPLES

BACKGROUND — — — — 60 ppm
THRESHOLD — — — — 100 ppm
ANOMALOUS — — — — 120 ppm
STRONGLY ANOMALOUS — — 160 ppm



EXPLANATION

△ ROCK CHIP SAMPLE (% Pb)

○ STREAM SEDIMENT SAMPLE LOCATION

LEAD CONTENT

○ BACKGROUND — — — — 0 – 59 ppm
○ ABOVE BACKGROUND — — — 60 – 99 ppm
● POSSIBLE ANOMALY — — — 100 – 119 ppm
● PROBABLE ANOMALY — — — 120 – 159 ppm
● STRONG ANOMALY — — — — 160 + ppm

NOTES:
MAGNETIC DECLINATION 34°30' (1973)
TOPOGRAPHIC BASE FROM N.T.S. MAP 106 C/7
CONTOUR INTERVAL: 100 FEET

CONWEST EXPLORATION COMPANY LIMITED

LEAD CONTENT OF STREAM SEDIMENTS

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000
SCALE IN FEET

BY
CORDILLERAN ENGINEERING LTD.
1418 - 355 BURRARD STREET
VANCOUVER 1, B.C.
OCT. 1974

PLATE 6

PLUME RANGE

PLUME RANGE

CROWNECKE

CREEK

DUO CREEK

3400

3300

3000

3100

3200

W

SOIL GRID
SEE PLATES 4,8,9

EXPLANATION

△ 6821 ROCK CHIP SAMPLE LOCATION

○ V-41 STREAM SEDIMENT SAMPLE LOCATION

NOTES: MAGNETIC DECLINATION 34° 30' (1973)
TOPOGRAPHIC BASE FROM N.T.S. MAP 106 C/7
CONTOUR INTERVAL: 100 FEET

CONWEST EXPLORATION COMPANY LIMITED

STREAM SEDIMENT SAMPLE LOCATION MAP

COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106C)

MAYO MINING DISTRICT, YUKON TERRITORY

1000 0 1000 2000 3000
SCALE IN FEET

BY
CORDILLERAN ENGINEERING LTD.
1418 - 355 BURRARD STREET
VANCOUVER 1, B.C.
OCT. 1974

PLATE 7

52 + 00 N
48 + 00 N
44 + 00 N
40 + 00 N
36 + 00 N
32 + 00 N
28 + 00 N
24 + 00 N
20 + 00 N
16 + 00 N
12 + 00 N
8 + 00 N
4 + 00 N
0 + 00
4 + 00 S

16 + 00 W
12 + 00 W
8 + 00 W
4 + 00 W
0 + 00
4 + 00 E
8 + 00 E
12 + 00 E
16 + 00 E
20 + 00 E
24 + 00 E
28 + 00 E
32 + 00 E
36 + 00 E
40 + 00 E

COULTER OPTION

GRID LOCATION

ANN 58
ANN 57
ANN 40
ANN 42
ANN 44
ANN 46
ANN 48
ANN 41
ANN 39
ANN 47
ANN 45
ANN 43
ANN 32
ANN 30
ANN 28
ANN 26
ANN 29
ANN 27
ANN 25
ANN 31

EXPLANATION

- SOIL SAMPLE LOCATION

ZINC CONTENT

- BACKGROUND ——— 0 — 129 ppm
- ABOVE BACKGROUND ——— 130 — 289 ppm
- POSSIBLE ANOMALY ——— 290 — 369 ppm
- PROBABLE ANOMALY ——— 370 — 529 ppm
- STRONG ANOMALY ——— 530 + ppm

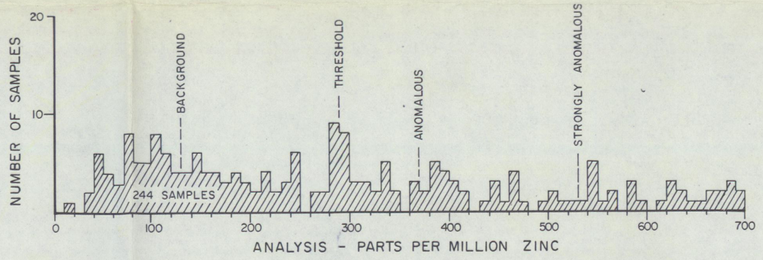
CONTOURS : 500, 1000, 2000 ppm

DRAINAGE

Zn
FREQUENCY DISTRIBUTION
ZINC IN SOIL SAMPLES

BACKGROUND ——— 130 ppm
THRESHOLD ——— 290 ppm
ANOMALOUS ——— 370 ppm
STRONGLY ANOMALOUS ——— 530 ppm

NOTE:
47 SAMPLES (>700ppm) NOT SHOWN ON DIAGRAM



CONWEST EXPLORATION COMPANY LIMITED

ZINC CONTENT OF SOILS

NORTHWESTERN ANN CLAIMS, COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106 C)

MAYO MINING DISTRICT, YUKON TERRITORY

400 0 400 800 1200
SCALE IN FEET

BY
CORDILLERAN ENGINEERING LTD.
1418 - 355 BURRARD STREET
VANCOUVER 1, B.C.
OCT. 1974

PLATE 8

52 + 00 N
48 + 00 N
44 + 00 N
40 + 00 N
36 + 00 N
32 + 00 N
28 + 00 N
24 + 00 N
20 + 00 N
16 + 00 N
12 + 00 N
8 + 00 N
4 + 00 N
0 + 00
4 + 00 S

16 + 00 W
12 + 00 W
8 + 00 W
4 + 00 W
0 + 00
4 + 00 E
8 + 00 E
12 + 00 E
16 + 00 E
20 + 00 E
24 + 00 E
28 + 00 E
32 + 00 E
36 + 00 E
40 + 00 E

COULTER OPTION

GRID LOCATION

ANN 58
ANN 57
ANN 42
ANN 40
ANN 44
ANN 46
ANN 48
ANN 41
ANN 39
ANN 47
ANN 45
ANN 43
ANN 32
ANN 30
ANN 28
ANN 26
ANN 29
ANN 27
ANN 25
ANN 31

EXPLANATION

- SOIL SAMPLE LOCATION

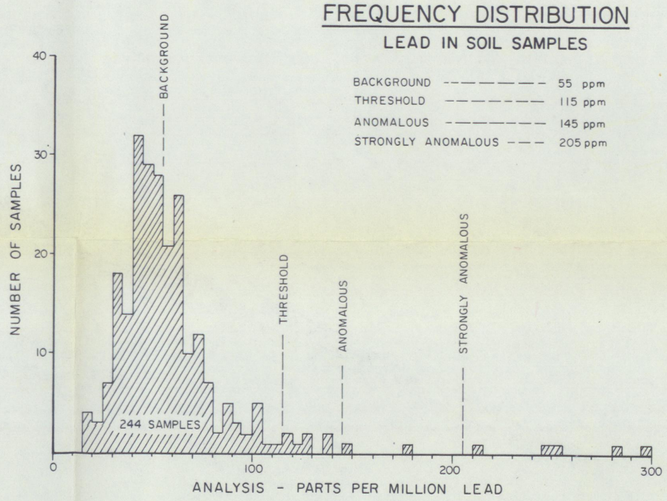
	LEAD CONTENT
BACKGROUND	0 — 54 ppm
ABOVE BACKGROUND	55 — 114 ppm
POSSIBLE ANOMALY	115 — 144 ppm
PROBABLE ANOMALY	145 — 204 ppm
STRONG ANOMALY	205 + ppm

CONTOUR INTERVAL: 50 ppm

DRAINAGE

Pb
FREQUENCY DISTRIBUTION
LEAD IN SOIL SAMPLES

BACKGROUND — 55 ppm
THRESHOLD — 115 ppm
ANOMALOUS — 145 ppm
STRONGLY ANOMALOUS — 205 ppm



CONWEST EXPLORATION COMPANY LIMITED

LEAD CONTENT OF SOILS

NORTHWESTERN ANN CLAIMS, COULTER OPTION

NADALEEN RIVER AREA (N.T.S. 106 C)

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. S. HAIRSINE

PLATE 9