#### REPORT

on the

## **ORO PROPERTY**

Watson Lake Mining District Yukon

for

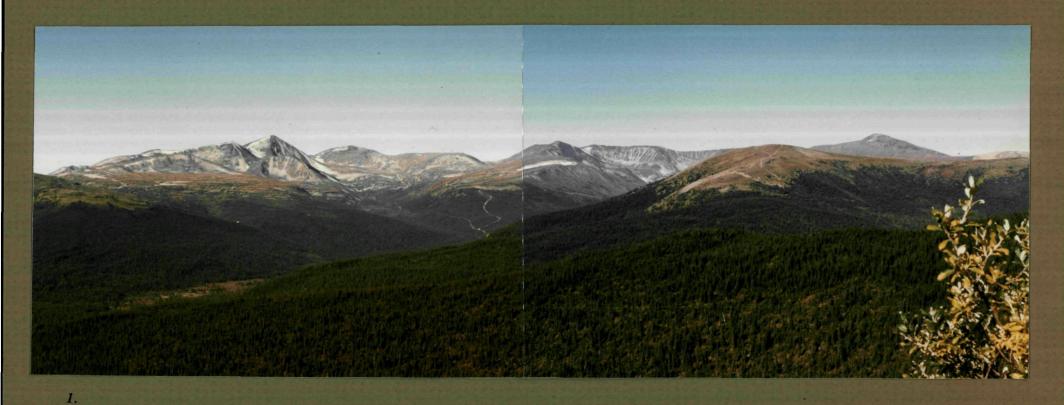
## YUKON MINERALS CORPORATION

11003 84 Avenue Edmonton Alberta T6G 0V6 & 510 Elliot Street Whitehorse Yukon Y1A 2A5

Latitude 60° 12'N Longitude 130° 27'W NTS 105 B1/W

by

Allan M Frew B.Sc., FGAC October 17th 1986



View of the ORO Property from the access road. View is to the northwest and the ORO claims occupy the middle-ground. The area of trenching is visible on the knoll to the right of the picture. The road continues into the distance, to the Wolf property of Pak-Man Resources Inc., which lies at the headwaters of Spencer Creek.

Photo by A. Rich

Yukon Minerals Corporation September 1986



2.
ORO property, Yukon, as seen from the southeast. View of the main area of trenching and drilling.

photo by A Frew
Yukon Minerals Corporation August 1986



Wiew of the ORO property from the northeast, along the mineralized structure.

photo by A Frew
Yukon Minerals Corporation August 1986



4. Trench number 3, ORO property.

photo by A Frew Yukon Minerals Corporation July 1986



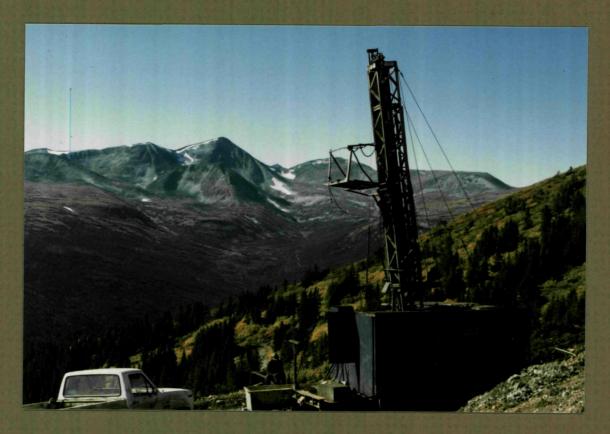
5. Blasting on the ORO property, Yukon.

photo by A Frew Yukon Minerals Corporation July 1986



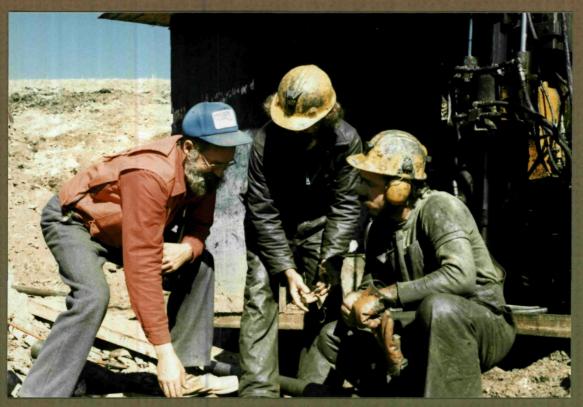
6.
Diamond drill set up on Hole 86-9, ORO property, Yukon.

Photo by A Frew
Yukon Minerals Corporation August 1986



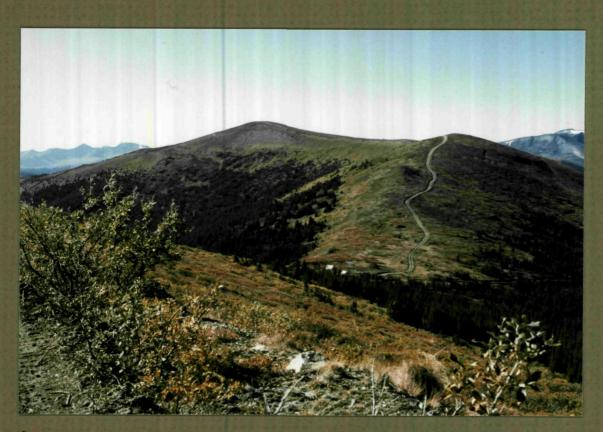
7.
Diamond drill, drilling Hole 86-10, ORO property, Yukon. View is of the headwaters of Spencer Creek.

Photo by A Rich
Yukon Minerals Corporation September 1986



8.
Drillsite No 10, ORO property, Yukon. Allan Frew with drillers Fred Harley and David McLellan.

photo by A Rich
Yukon Minerals Corporation September 1986



ORO property, view from a point near the northeast corner of the property {claim ORO 8} to the southwest, along the centre ridge. The camp lies at the junction of the road to the Wolf property.

Photo by A Rich
Yukon Minerals Corporation September 1986

# TABLE OF CONTENTS

•	Page
Introduction	1
Location and Access History Physiography and Vegetation Property Regional Geology	1 3 3 3 5
Property Geology	
Recent Observations	5
Additional Work Covered by this Report	
Pre-amble Crew Contractors Acknowledgements Grid	9 9 10 10 10
Geophysics	
Introduction Magnetics Electromagnetics Comments	11 11 11 13
Geochemistry	13
Prospecting	14
Trenching	15
Diamond Drilling	16
Conclusions	19
List of References	21
Certificate	22

## TABLE OF CONTENTS

# MAPS and TABLES

		page
Figure 1	Property Location Map	2
Figure 2	Claims Map	4
Figure 3	6	
Geology o	of the ORO Claims	23
Geology o	of Trench 7	24
Geology	of Trenches 8 & 9	25
Geology	of Trenches 10 & 11	26
Geology	of Trench 12	27
Geology	of Trench 13	28
Geology	of Trench 14	29
Geology	of Trench 16	30
Geologica	al Section DDHs 86-1, 86-2 & 86-6	31
Geologica	32	
Geologica	33	
Geologica	al Section DDH 86-8	34
Geologica	al Section DDH 86-3 & 86-9	35
Geologica	36	
Drill Hole	2 Logs 86-1 to 86-10	37 - 58
Survey N	otes - stadia survey	59 - 60
Map 1	VLF EM Survey	in pocket
Map 2	Soil Geochemical Survey	in pocket
Map 3	Topographic Survey of the Trenching and	<del>-</del> .
_	Diamond Drilling Area	in pocket
Geology o	in pocket	
Offering 1	Memorandum dated June 30th 1986	in pocket

#### **INTRODUCTION**

In response to a request from Terence McCrory, president of Yukon Minerals Corporation, this writer produced a report dated June 22, 1986, in which it was recommended that the Corporation acquire the ORO Minerals Claims, Watson Lake Mining District, Yukon <sup>1</sup>. The report also outlined a recommended exploration program by which the mineral potential of this property could be assessed. The June report also served as an qualifying report in order for the Corporation to utilize the flow-through share investment needed to raise the necessary funds to pursue the program as detailed <sup>2</sup>. The funds were successfully raised and the program implemented.

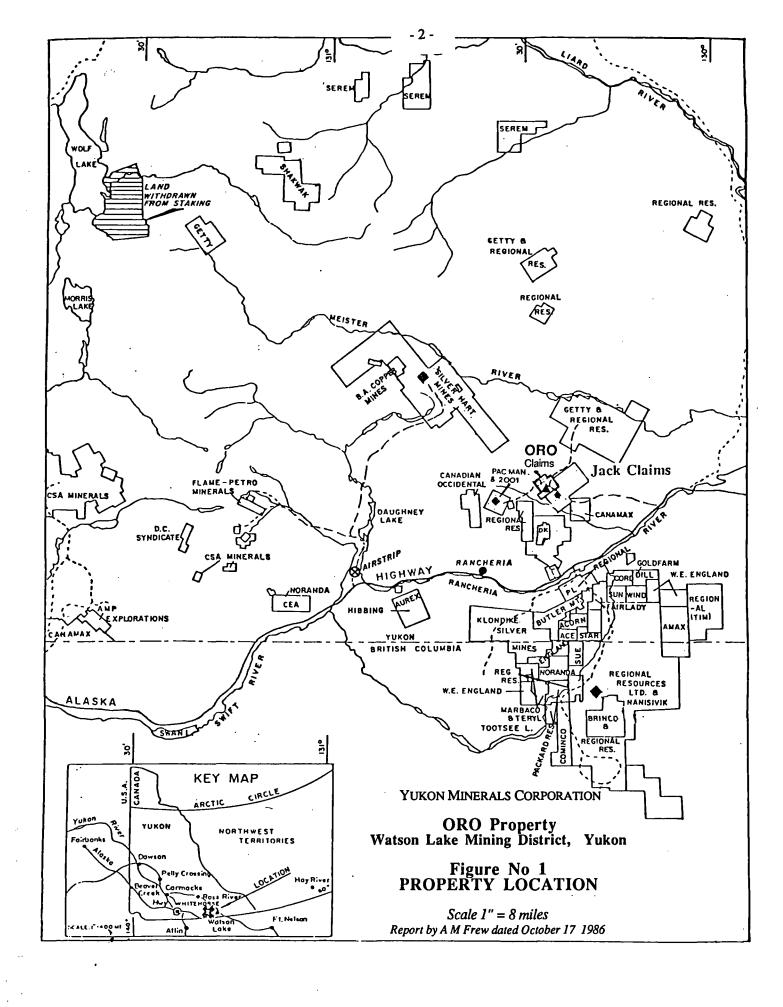
This report describes the exploration carried out on the ORO Minerals Claims during the period July 1, 1986 to September 7, 1986, and presents the results obtained therefrom.

#### LOCATION AND ACCESS

The ORO Minerals Claims property is located on the north side and near the headwaters of Spencer Creek, within the Watson Lake Mining District of Southeastern Yukon, (Figure 1). The centre of the property is situated at 60° 12' North latitude and 130° 27' West longitude. Access to the property is by means of a gravel bush road, which runs on the north side of the Alaska Highway from mile 692 and follows a general northwesterly direction along the north side of Spencer Creek. The centre of the property is approximately 27 km. (16 Miles) distant from the starting point at mile 692 and approximately 14 km. northeast of the settlement of Rancheria. Rancheria is at mile 710 on the Alaska Highway {approximately 160 km. (100 miles) west of Watson Lake}.

The town of Watson Lake is served on a regular basis by Canadian Pacific Airlines and has many services and amenities one would find in most large towns.

Rancheria has lodging accommodations and restaurant service available on a 24 hour basis. There is also a service station, which, besides the routine supplies, offers limited mechanical repair.



#### **HISTORY**

The property was originally staked in 1951 as the Hardtack property. At that time, some hand trenching was carried out. In 1967, Pacific Giant Steel Ores performed soil sampling and bulldozer trenching. Spencer Creek Mines conducted mapping, geophysical surveys and bulldozer trenching from 1968-1970 <sup>3</sup>.

In 1969, P. Sevensma uncovered silver-lead-zinc mineralization of which he stated: "an extremely encouraging assay was received from this narrow zone and together with its possibility of great length this becomes a showing of good merit.". This mineralization assayed 42 oz./ton Ag and 65.5% Pb across 16 inches.

In 1984, Douglas Schellenberg restaked the property and carried out a soil geochemical survey, along lines at 750 ft. (228 m.) spacings, parallel to the claim lines, with samples taken at 200 foot (60m.) intervals. The results indicated two widely spaced lead anomalies which have a general N 55° E trend 4.

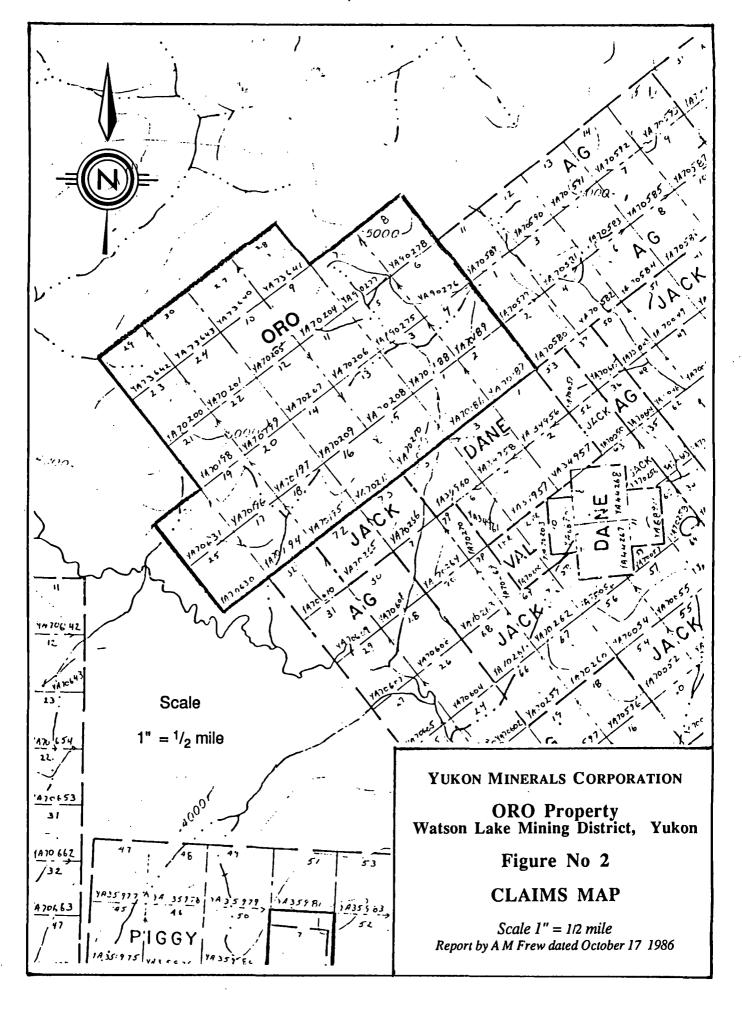
Anthony Rich optioned the property from Schellenberg in September 1985, then put in two D-8 tractor trenches. These trenches were on the same structure as the earlier showing but depth was limited by permafrost. They were approximately 100 feet apart.

#### PHYSIOGRAPHY AND VEGETATION

The ORO Mineral Claims property is located over a high alpine to sub-alpine ridge which occupies the western half of the property and an inter-ridge valley which occupies the eastern half. The ridge is rounded to subdued, and lies mostly above tree-line. The lower slopes, as well as the valley, are tree covered. The vegetation consists of varying thicknesses of balsam, spruce, scrub conifers, alder and dwarf-birch. The above the tree-line vegetation is predominantly mosses and lichen with occassional isolated clumps of dwarf-birch.

#### **PROPERTY**

The property is comprised of the ORO Minerals Claim Group, which consists of the 30 Yukon Quartz claims, which are a group of contiguous claims known as ORO 1-30



inclusive (Figure 2). They were optioned from Mr. Douglas Schellenberg by Anthony Rich in September 1985. Yukon Minerals Corporation acquired the property by virtue of an agreement dated June 24, 1986. Details concerning the acquisition of the property by the Company are given within the Offering Memorandum <sup>2</sup> of Yukon Minerals Corporation, dated June 30, 1986, a copy of which is included in the pocket of this report. All claims are in the Watson Lake Mining District, on Mapsheet 105-B-1. Particulars are as follows:-

CLAIM NAME	GRANT NUMBER	RECORD DATE*		
ORO 1-4	YA70186-YA70189	July 5, 1986		
ORO 5-8	YA90275-YA90278	September 13, 1986		
ORO 9-14	YA70204-YA70209	July 6, 1986		
ORO 15,16	YA70210-YA70211	July 13, 1986		
ORO 17-24	YA70194-YA20201	July 5, 1986		
ORO 25,26	YA70630-YA70631	October 3, 1986		
ORO 27-30	YA73640-YA73643	August 9, 1986		

work has recently been filed, so that none of these claims will expire until 1991

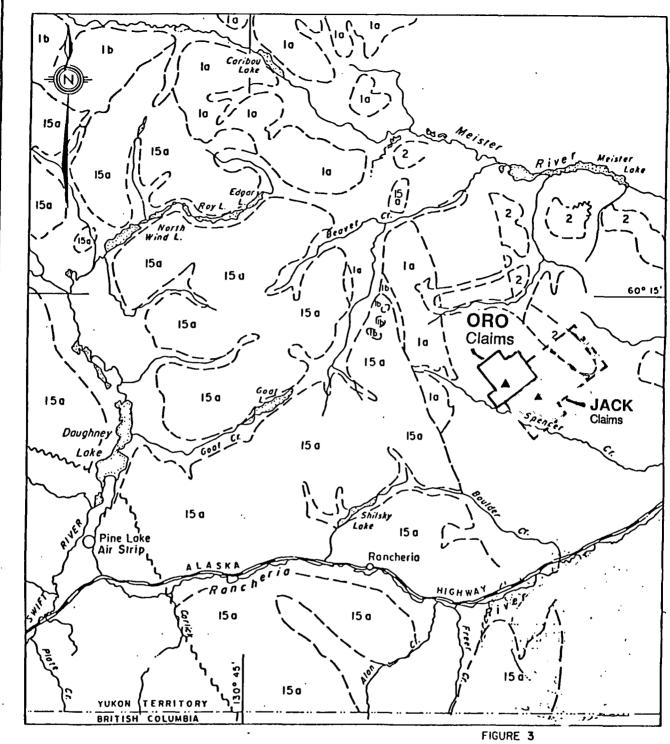
#### REGIONAL GEOLOGY

The geology of the general area is dominated by the Cassiar Batholith, which is a north-westerly trending mass of mainly biotite quartz-monzonite and granodiorite of Jurassic/Cretaceous age. It intrudes Lower Cambrian to Devonian sediments and metasediments. The area appears to form major, nearly isoclinal, folds, with numerous shears and tear faults which have a generally northeasterly trending orientation. The rocks underlying the ORO Mineral Claim Group belong to a Lower Cambrian age, limestone, dolomite, slate and phyllite sequence. (Unit 3, Map 10-1960) (Figure 3). Recent research of the mineralization genetics has led some geologists to conclude that the mineralization and associated volcanics are younger than the Cassiar Batholith and that the intrusives are of Tertiary age 5. These Tertiary intrusives occur in widely spaced centers along the eastern margin of the Cassiar Batholith.

#### PROPERTY GEOLOGY

#### RECENT OBSERVATIONS

The property is underlain by a series of calcareous phyllites, limestones and slates of Lower Cambrian age. Quartzite is present but is of undetermined extent. Younger basic



CRETACIOUS

15 CASSIAR BATHOLITH - quartz monzonite

CAMBRIAN AND (?) EARLIER

Quartzite, minor slate and phyllite, quartz grit and fine pebble conglomerate 2a, phyllite, minor slate; 2b, hornfels.

Probably metamorphic equivalents of 2; Ia, biotite schist and quartzite; Ib, marble and skarn; Ic, biotite schist and quartzite with sills, dykes, and irregular bodies of pegmatite; Id, biotite schist and gneiss. YUKON MINERALS CORPORATION

ORO Property
Watson Lake Mining District, Yukon

Figure No 3

**REGIONAL GEOLOGY** 

Report by A M Frew dated October 17 1986

and felsic volcanic dykes intrude this sequence of rocks. Polyphase deformation occurs throughout the general area, as is evidenced by the refolded isoclinal folds in the trench area. Major faulting, of varying ages and orientations, was observed, with the most dominant having a northeast-southwest trend. Narrow quartz veins were seen at widely spaced locations throughout the property. Most are barren, white, massive bull-quartz, yet a few are coarsely crystalline milky quartz containing coarse grained galena which assays two to three ounces per ton silver.

The dominant attitude of the sedimentary rocks is from 150° to 170° with low dips to the east; steeper dips are present close to crests of folds. The attitude of the faults and dykes ranges between 040° and 070° and are dipping steeply to vertical.

An oxidized gossan zone, located in the southwestern part of the property (near the south boundary of claims ORO 19 and 20), occurs withing a major fault zone which transects the property in a general northeast-southwest orientation. The oxidized zone has been traced by trenching, for a distance of 400 metres. The fault zone has been traced for a distance of 800 metres and has an indicated length of over 2600 m.

The oxidized zone ranges in width from 1m. to 6.5m. It consists of iron and manganese oxides intermixed with manganiferous silicified limestone and phyllite fragments, vuggy quartz veins and quartz fragments, varying sized fragments of altered dyke material, massive argentiferous "steel" galena nodules, galena veins and vein remnants and lead and zinc oxidation products. Minor fracture fillings and fracture surface coating of crystalline black sphalerite is present in lesser quantities than the argentiferous galena. Small irregular blebs and disseminations of chalcopyrite are present within some of the galena veins. Carbonate veins of varying widths (up to 25 cm.) occur along the oxidized zone, with highest concentrations towards the west. They consist of coarse crystalline white calcite, black manganiferous calcite and to a lesser extent, siderite.

The iron oxides observed were goethite, limonite and hematite. Colors range from various shades of brown, orange, black to purple. The manganese oxides are mostly black sooty material and finely crystalline black and steel grey pyrolusite and psilomelane. Dendritic coatings on fracture surfaces is common.

Galena nodules, coated with weathered products and cerussite, and ranging in size from 2 cm. to 10 cm. have been observed. The galena, is dominantly fine to medium grained "steel" galena, banded, arcuate crystals with associated tetrahedrite (freibergite). Locally

there are veins of argentiferous galena up to 30 cm. wide. These veins are most often fault bounded and occur within or adjacent to altered basic dykes. Galena also occurs as fracture filling of manganiferous, silicified limestone.

The oxidized zone is most often bounded by basic and felsic dykes. The felsic dykes could be intensely altered - carbonatized and silicified - basic dykes 6. On fresh surfaces, the dykes are medium grey-green to dark green, medium to fine grained (almost aphanitic groundmass) containing phenocrysts of black-rimmed white feldspar, dark green to black pyroxene (or hornblende) and widely spaced 2 mm. diameter quartz-eyes. Finely disseminated pyrite occurs in varying concentrations throughout most of the dykes. Where fractured, faulted or sheared, the dykes have been intensely altered. been extensively kaolinized, carbonatized, and leached. Sericitization is strong, but not in all dykes. Colors range from buff to orange-brown. Fracture surfaces are coated with dendritic manganese minerals. Along the margins of the dykes, the limestone has been silicified and replaced by manganese. Varying thicknesses of fine, 'puggy' fault gouge bound most dykes, indicating either movement contemporaneous with emplacement or, most likely, post-emplacement movement.

The dykes occupy pre-existing sutures which have been reopened by faulting after emplacement of the dykes. The late faults are either parallel to or are cutting the dykes at low angles.

Faulting has been the latest activity in the oxidized zone. Although the majority of the faults are steeply dipping to vertical, there is much evidence of imbricate faulting. This writer suggests that the galena nodules and veins have been transported along fault planes to their present postition, and are therefore not likely to be continuous in their present locations. Once the direction and distance of movement along these faults has been established, the pre-fault position of the mineralization should be sought.

Drilling proved that the oxidized zone extends to a depth of at least 83 m. in the area of the initial trenching. Therefore, trying to encounter primary sulfides in this area shallower than 83 m. would be futile. A strong possibility does exist for primary mineralization and secondary enrichment zones to the east and below elevations of 1440 m.

#### ADDITIONAL WORK COVERED BY THIS REPORT

#### PRE-AMBLE

The property became accessible during late June. Although passage over the roads was difficult, the camp was established and the program commenced in early July.

Since the objective was primarily to establish a diamond drilling target, and secondarily to do a cursory evaluation of the additional potential of the property, emphasis was placed on trenching along the known oxidized zone.

Geophysical and geochemical surveys were performed to see how the property responded, and to determine the effectiveness of these exploration tools. Prospecting, to find extensions to known mineralization and to find other potential areas of mineralization was carried out.

Diamond drilling began on August 16, 1986 and the project was terminated when the contracted footage of 2000 feet (609.6m) was completed on September 6, 1986.

The following is a description of all aspects of the 1986 exploration program. (A discourse on the property geology has been presented earlier in this report.)

#### **CREW**

NAME	POSITION	RESIDENCE
Barry Buchanan Graham Davidson Allan Frew Terry McCrory Michael Nielsen Sean Pownall William Preston Anthony Rich	Prospector Geophysical Technician Consultant Geologist President/Prospector Prospector Field Assistant Director/Prospector Director/ Geol./ Surveyor	New Denver B.C. Whitehorse, Y.T. Edmonton Alberta Salmon Arm, B.C. Whitehorse, Yukon New Denver B.C. Whitehorse Yukon Edmonton Alberta
Lillian Willette	Cook	Edmonton Alberta
Ryan Wilson	Geologist	Edmonton Alberta

#### CONTRACTORS

NAME	SERVICES	BASE OF OPERATIONS		
Ampex Exploration	D-7 (trenching)	Whitehorse Yukon		
E. Caron Diamond Drilling	Diamond Drilling	Whitehorse Yukon.		
Gordon Clark and Associates	Drill, Blasting and hand trenching	Whitehorse Yukon		
Kevin McCrory Minerals	Expediting	Whitehorse Yukon		
McCrory Holdings	Camp equipment, trucks field equipment	Whitehorse Yukon		
Northern Mountain Helicopters	Helicopter Service	Whitehorse Yukon		

#### **ACKNOWLEDGEMENTS**

Numerous professionals, with years of experience in the Yukon, visited the property during the summer. Most of them held open discussions with this writer, who benefited from their expertise. M. Stammer, D. Sinclair, D. Fleming, D. Prince, R. Coll, and C. Boyle: this writer says "thank you" for all your help. To those who visited the property in this writer's absence and who have expertise and opinions and made recommendations, this writer can only relay his regrets at not having met them. To some degree the program was invariably affected by all vistors; the extent of which will never be determined.

#### GRID

The main fault zone and associated oxidized/mineralized zone on the property, has an orientation of N  $56^{\circ}$  E. A base line was established just north of and parallel to the structure. Line 0 + 00 was positioned just north and west of Trench No. 1, lines were run at  $90^{\circ}$  to the base line at 60 m. spacing, both east and west. Stations along the lines were established at 30 m. intervals.

The base line extends to line 34+00 East and line 8+00 West. All lines had stations established at 30 m. spacing to 330 m. north and south of the base line, every fourth line

was extended to the north to 1380 m. with stations between 330 m. north and 1380 m. north at 60 m. spacing.

The grid was established to check extensions of, and additional zones parallel to, the main zone. The zone has been named the A.F. zone, therefore the baseline is referred to as the A.F. baseline.

#### GEOPHYSICS

#### INTRODUCTION

It was decided to test the effectiveness of magnetometer and very low frequency (VLF) electromagnetic geophysical methods over the oxidized zone and associated structure in order to establish additional exploration tools. If the results were positive, the property could be covered rather quickly and cheaply, and the approximate extent of the discovery zone, as well as additional zones on the property, could be determined. Mr. Graham Davidson, a geologist and geophysical technician, was employed to carry out the work.

#### **MAGNETICS**

Four lines, which run over the oxidized zone in the area of the trenches were tested with a proton magnetometer. The response was discouraging as there was no magnetic signature. It was therefore decided not to pursue the use of magnetic surveys further.

#### **ELECTROMAGNETICS**

Using a Ronka EM16, very low frequency electromagnetic instrument, test readings were taken over the oxidized zone in the area of the trenches {Line 0 to L3+00E, 330m. north and 330 m. south}. The readings were low, but by applying the Fraser Filter process the oxidized zone and/or the fault structure were strongly indicated. It was therefore expeditious to cover the property as shown on Map No. 1.

In addition to outlining the A.F. Zone and proving its existence from Line 6W to Line 34E, the survey detected several parallel conductors and at least three conductors at an angle of 30° -40° to northeast oriented ones.

Since the signal from Seattle cannot be picked up there was no way to check for conductors with a general north-south trend, but the possibility of such conductors existing on the property should not be overlooked.

The conductive zones detected during the survey have been labelled I through XII on Map No. 1 their locations are as follows:-

- I Moderate to strong conductor between Line 6W and Line 4E, 60 S and 30 N. Peaks occur at Line 6N, 15N as well as Line 2E and Line 4E at 30S.
- II Very strong conductive zone between Line 10E and Line 34E, running in an arcuate fashion from 45S through 120 S back across the base line and ending at 60 N, it begins at Line 19E, 60 S swings through Line 24E, 100 S, cuts the base line on Line 28E and ends at Line 32E, 90N.
- III Moderate conductor between Line 8E, 150 S and Line 12E, 240 S.
- IV Moderate conductive zone; with arcuate shape, between Line 0, 240S. swinging to the north through Line 2E, 210 S and then south to Line 6E, 270 S.
- V A broad, weak conductive zone (which could be topographic effects). Running on the west between Line 6W, 120 N and Line 6W 480 N and on the east on Line 1E between 120N and 330 N.
- VI A strong conductor between Line 12E, 300 N and Line 20E, 420 N.
- VII A moderate, isolated conductor at Line 34E, 720 N.
- VII Strong conductor between Line 11E, and Line 16E, running from 720 N to 810 N.
- IX Moderate conductor between Line 1-50E, 840 N and Line 5E, 840 N (This could be related to VIII)

- X An isolated narrow conductor between Line 4W, 640 N and Line 6W, 690 N. It is open to the west.
- XI A strong conductor, at Line 6W, 1350N, which is open to the west.
- XII A broad high conductive zone between Line 11E and Line 24E, ranging between 1020N and 1320 N. This could be a combination of conductor and topographic effects.

#### COMMENTS

The VLF-EM16 type survey is not exacting or definitive. The instrument is more or less a reconnaissance tool. However, if conductors are indicated they should be followed up by using more state-of-the-art instruments, such as Max-Min.

The possibility of pipes (or shoots) at points A and B on Map No. 1 should not be overlooked.

The use of geophysics as a guide to propecting could ultimately reduce the prospecting costs and speed up the discovery of other potential zones of mineralization.

#### GEOCHEMISTRY

Initially the soil geochemical program was intended to check both sides of the baseline to a distance of 330 m. Once geophysics results were available, it was decided to do selective soil sampling over indicated conductors. The soil geochemical program was terminated because the directors of the company decided that complete coverage of the property by soil geochemistry was not warranted at this stage of exploration. The cost of the analyses was a serious consideration: silver, manganese lead and zinc together cost a little over \$5.00, however the cost of each antimony analysis is \$2.80, arsenic \$5.40 and gold \$6.25.

In determining the anomalous areas for silver in soils it was decided to consider all values of 0.7 p.pm. Ag. and above, as being high and areas between 0.5 ppm. and 0.7 ppm. Ag. as being possibly anomalous. Using this criteria, the following areas are worthy of further investigation.

- 1. Line 34E between 180 North and 300 North; this coincides with a moderate EM conductor.
- 2. Area of EM conductor VI, between lines 14 E and 20 E, between 240 N and 600 N.
- 3. An area between Line 20E and 24 E bounded by the base line and 210 North. This could be related to EM conductor II.
- 4. An area between Line 8E and Line 17E north of 1000 North. This appears to be associated with the western portions of EM conductor XII.
- 5. An area between Line 0 and Line 3W between 60 South and 300 South which could be the extension of EM conductor IV.
- 6. There are several anomalous areas between L3E and L4W which lie north of the base line, and since they are up-slope from the trenched oxidized zone are in most likelihood unrelated to it.

High lead, for the most part, is coincident with the high silver. Zinc and manganese are less so, zinc being more easily transported most likely represents transport from sphalerite associated with the lead-silver zones. Very high arsenic indicates the presence of the sulfosalts tetrahedrite and freibergite, the antimony is a further indication of the tennantite-tetrahedrite series of sulfo salts.

#### **PROSPECTING**

Observations of the oxidized zone in the area of the trenches indicated that there were several rock types to look for which could be indicative of the presence of similar mineralization. These were, quartz veins, basic dykes, manganiferous replacement (wad) and goethite.

The area along the projected strike of the AF zone was traversed looking for these rocks. Wad and basic dyke material was found in the area of the baseline at line 8+00 W. This indicated that the zone extended to at least this far west. To the east there was too much overburden and nothing of significance was discovered.

Branching out from the area of known mineralization, goethite fragments were found in a localized area to the south by about 100 metres and in the vicinity of line 1 west. A four inch wide galena bearing quartz vein was discovered in place 177 m. east and 260 m. south. This was white, vuggy quartz containing coarse crystalline galena, minor pyrite an limonite. It has an attitude of 092° and was vertical. Samples from this vein assayed 2.02 oz. silver per ton. Another quartz vein which is located at Line 30 E, 1000 N and was pointed out to us by D. Schellenberg, assayed 2.30 oz. silver per ton and 3.55 % lead. This vein is approximately 8" wide, and is similar in character to the previously mentioned one. Veins could be the higher level, barren zone in the system.

In the course of collecting soil samples, S. Pownall discovered pure white prismatic crystals of aragonite, located in the area of L25+70E and 1260 North. The vein was eventually uncovered in place and ranges up to 11/2 feet across.

In the area of Line 0, 810 North, an abundance of wad and limonite stained rock was discovered. A fragment containing about 1/4" wide stringer of galena was also found here. This is just north of the eastern extension of EM conductor X. In this area, the surface slopes to the north and solifluction is evident. Unfortunately testing was carried out at the exact site of the wad fragments and the source of the fragments was not determined.

#### TRENCHING

A total volume of 5355 cubic metres in 19 trenches was excavated by hand drill and blast and D-7 dozer. The majority of the trenches were in the area of the two trenches put in by A. Rich in September 1985. The trenches were concentrated along the strike of the oxidized structure between Line 3E and Line 2W, with check trenches put in at Line 34E are and Line 8W area.

Trenching was also done in the areas of galena-bearing quartz vein goethite and wad fragments, and suspected strontianite.

In some localities, particularly on the eastern slopes, permafrost hindered effective trenching by dozer, however these areas were cleared sufficiently to allow melting so that trenching may proceed in subsequent years.

Map No. 3 shows the location of trenches 1 to 13, the individual plans of the other trenches are contained within this report.

#### DIAMOND DRILLING

A total of 1998 feet of diamond drilling was carried out in 10 holes. The drilling was done under contract by E. Caron Diamond Drilling Limited.

The holes were located primarily to undercut the surface oxidized zone and intersect it at 75-100 feet below surface. Subsequent holes were drilled to try to intersect veins which were visible on surface, or provide structural information.

Details of the drilling is contained in the individual drill logs and sections which accompany this report.

# Yukon Minerals Corporation ORO Project 1986

# Table - Diamond Drilling Data

Hole #	coordinates	elevation	dip	azimuth	core size	depth	started	completed	logged by
AF 86-1	47m.E 48.8m.S	1512.7m 4963'	-500	3240	0-95 NQ 95-166 HW 166-252 NQ	252'	Aug 18,86	Aug 20	A M Frew
AF 86-2	"	11	-70°	3240	0-190 HW	190'	Aug 20	Aug 21	A M Frew
AF 86-3	24.5m.E 24.7m.S	1515.8m 4973'	-70º	3100	0-52 HW	129'	Aug 21	Aug 22	R Wilson A M Frew
AF 86-4	H	29	-60°	280°	0-117 HW	117'	Aug 22	Aug 23	R Wilson A M Frew
AF 86-5	11	"	-80º	2800	0-175 HW 175-257 NQ	257'	Aug 23	Aug 25	R Wilson checked by A Frew
AF 86-6	45m.E 11.7m.S	1513.9m 4967'	-500	3320	0-50' HW	50'	Aug 25	Aug 26	R Wilson
AF 86-7	139m.E 17.5m.S	1492.5m 4897'	-500	3020	0-202 HW	202'	Aug 26	Aug 27	R Wilson
AF 86-8	190m.E 2m.S	1473m 4833'	-550	3470	0-152 HW	152'	Aug 27	Aug 28	R Wilson & A M Frew
AF 86-9	2m.E 78m.N	1530m 5020'	-500	1350	0-194 HW 194-252 NQ 252-532 BQ	532'	Aug 29	Sept 5	R Wilson & A M Frew
AF 86-10	73.5mW	-1514.8m	-80°	332º	0-117 HW	117'	Sept 5	Sept 6	A M Frew

Elevations are based on arbitrary elevation of 5,000 feet which was assigned the baseline marker located near the end of Trench #1

Coordinates and directions are relative to the established grid.

## Yukon Minerals Corporation

# ORO Project 1986

# Diamond Drill Core Assay Results

Sample #	Hole #	Footage	Interval (feet)	Ag oz/t	Au oz/t	Pb %	Zn %	Rock type
7201	86-1	184.25 -186	1.75	0.16	tr	0.04	0.04	fault breccia
7202	86-1	186 -191	5.0	tr	tr	0.06	0.13	ti .
7203	86-1	191 - 193.5	2.5	0.02	tr	0.11	0.25	oxidized zone
7204	86-1	193.5 - 197	3.5	1.08	.014	1.74	6.22	fault breccia
7205	86-1	205 - 209	4.0	0.06	tr	0.10	0.56	n
7206	86-1	209 - 211.75	2.75	tr	tr	0.13	0.15	11
7207	86-3	86 - 87	3.0	1.44		0.73	3.51	wad + limonite
7208	86-4	71.5 - 76.	5.0	0.08		0.21	1.06	sheared limonitic phyllite black-purple-brown wad
7209	86-4	76.5 - 78.75	2.25	0.46		0.53	1.86	yellow sandy pug, limonite & wad
7210	86-4	78.75 - 83	4.25	0.16		0.10	1.69	sheared phyllite; wad; green- grey limonitic and yellow gouge
7211	86-4	83 - 87.25	4.25	0.36		0.58	1.97	wad, limonitic sheared phyllite
7212	86-5	22 - 23.5	1.5	0.02		0.62	0.44	pug & black sooty material vuggy limestone w. carbonate
7213	86-5	23.5 - 28.5	2.0	0.20		0.55	0.16	filling crumbly fragmented limestone
7214	86-5	28.5 - 33.5	5.0	2.28		5.05	0.23	pug, limonite & xstalline carbonate sandy gouge, wad, black pug; small
								galena veins, cerussite, siliceous limestone & phyllite
7215	86-5	165 - 167.75	2.75	0.20	tr	0.41	0.39	tight breccia, cracks with black filling & limonite
7216	86-5	186 - 191	5.0	0.54		1.01	2.36	brown sandy gouge & pods of
7217	86-5	191 - 192	1.0	1.12		4.35	6.95	black sooty material black sooty material with
7010	06.5	100 100	4.0	0.24		1.05	254	limonite pods
7218	86-5	192 - 196	4.0	0.24		1.25	3.54	sandy gouge pug & limonite
7219	86-5	196 - 200	4.0	1.13		5.65	2.98	sandy gouge & limonite
7220	86-6	7.5 - 12.5	5.0	1.06		1.08	2.88	pug & wad w limestone fragments & limonite
7221	86-6	12.5 - 16	3.5	1.20		1.25	5.62	wad, siliceous l.stone & phyllite pyrolusite w. blebs of galena
7222	86-6	16 - 18	2.0	0.84		0.88	5.29	brown sandy gouge w. limonite & wad fragments
7223	86-6	18 - 22.75	4.75	0.30		0.30	4.57	sheared phyllite, sandy gouge, pug + wad fragments
7224	86-6	38.75 - 41	2.25	0.58		0.87	2.32	hae Lagrious
7225	86-5	240 - 244.5	4.5	0.12		0.04	0.91	vuggy l.stone, wad + limonite
7226	86-7	33.75 - 38	4.25	0.12		0.76	2.05	sil. l.stone, phyllite, wad + pug
7227	86-7	38 - 42	4.0	0.10		0.58	2.30	l.stone, limonite, phyllite, wad
7228	86-7	107.5 - 109.5	2.0	0.62		0.63	1.45	wad; sheared phyllite
7229	86-8	36.5 - 40.5	4.0	0.02		0.03	0.05	brecciated limestone & phyllite
7230	86-8	40.5 - 42.5	2.0	tr		0.03	0.03	wad + fault gouge
7230 7231	86-10	36 - 38.5	2.5	0.20		0.04	3.76	oxidized calc phyllite. Mn altn
7231	86-10	38.5 - 40.5	2.0	0.28		0.04	1.44	oxidized cone
7233	86-10	42 - 46.5	4.5	tr		0.41	0.88	"
7234	86-10	66.5 - 71.5	5.0	0.28		0.14	0.86	н

#### CONCLUSIONS

The exploration program carried out on the ORO property of Yukon Minerals Corporation during the summer of 1986 has effectively proven the existence of a significant oxidized lead-zinc silver zone. It has been uncovered for a length of 400 metres and surface trenching and diamond drilling has shown that it ranges from 3 feet to 22 feet in width and extends to a depth of at least 200 feet.

Geochemical and geophysical surveys indicate the hosting structure is over 7800 feet long and has excellent possibilities of containing several other zones, if indeed not one extremely long zone. These surveys have also indicated the existence of parallel anomalies which could be caused by similar mineralization.

In view of the fact that this zone is similar to others in the area (Meister and Silver Hart), every effort should be made to discover the full potential of the ORO ground.

Respectfully Submitted

Allan M Frew, B.Sc., F.G.A.C.

October 1986

#### LIST OF REFERENCES

- Report on the ORO Claims, Watson Lake Mining District, Yukon, (dated June 22, 1986) by Allan M. Frew. This Report is contained in its entirety in the Offering Memorandum which is included within this report.
- Yukon Minerals Corporation Memorandum for Flow-Through Share Offering, dated June 30, 1986. This is contained in the pocket of this report.
- Geology of Spencer Creek (105-B-1) and Daughney Lake (105-B-2) Map Areas, Rancheria District, Southeast Yukon, by G.W.Lowey and J.F.Lowey, Indian and Northern Affairs Canada, Northern Affairs: Yukon Region, Open File 1986-1.
- Geochemical Report on the ORO 1-26 Mineral Claims, Yukon Territory.
   R. Darney, 1984.
- G.S.C. Map 10-1960, Wolf Lake, Yukon, Sheet 105B by W.H. Poole, J.A. Roddick, and L.H. Green. 1951-1969.
- 6 David Sinclair, G.S.C., Personal communication.

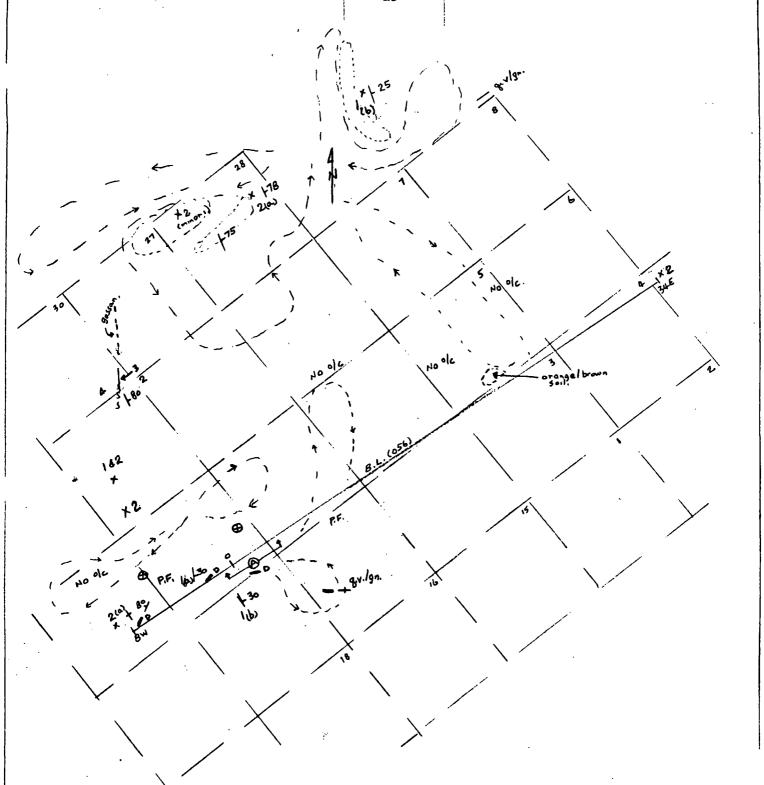
#### CERTIFICATE

- I, ALLAN M FREW, do hereby certify that:
- 1. I am a consulting geologist, operating out of my residence at: 110 Michener Park, Edmonton, Alberta.
- 2. I studied geology at the University of New Brunswick and Memorial University of Newfoundland, from which I graduated with the degree of B.Sc., Geology. I have done graduate studies at the University of Alberta, Department of Geology.
- 3. I am a Fellow of the Geological Association of Canada.
- 4. I have been practising my profession since 1958. As an independent consultant and employee, I have worked for several major corporations in senior managerial positions. My experience has been acquired through extensive work throughout Canada, Latin America and the Caribbean.
- This report is based on personal examination of the property over a continuous period between July 1st and September 7th, 1986 as well as a review of reports by and personal communications with Professional Engineers and government geologists who have worked in the area.
- 6. I hold no interest, directly or indirectly in the ORO property, nor do I own any shares of YUKON MINERALS CORPORATION or any affiliated company. Further, I do not expect to receive any shares in said corporation or affiliate.

Dated at Edmonton, Alberta this 17th day of October, 1986.

FELLOW

Allan M. Frew, B.Sc., F.G.



#### LEGEND.

2 - PHYLLITE; 2(a) calcareous.

3 - QUARTZITE

4 - SHALE

g.v./gn: - guarty vein, with galena mmeralization D - ! -Basic . Dyke

P.F.: Perma frost.

area of quartite boulders

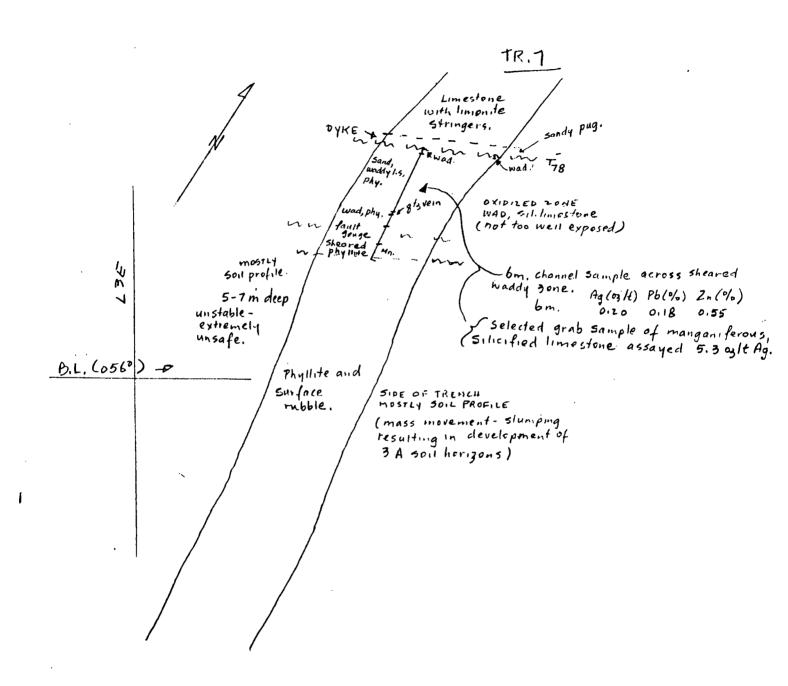
AREA OF CONCENTRATED TRENCHING 4

#### YUKON MINERALS CORPORATION

**ORO Claims** Watson Lake Mining District, Yukon

## **GEOLOGY**

Scale 1:1200 by A M Frew September 1986



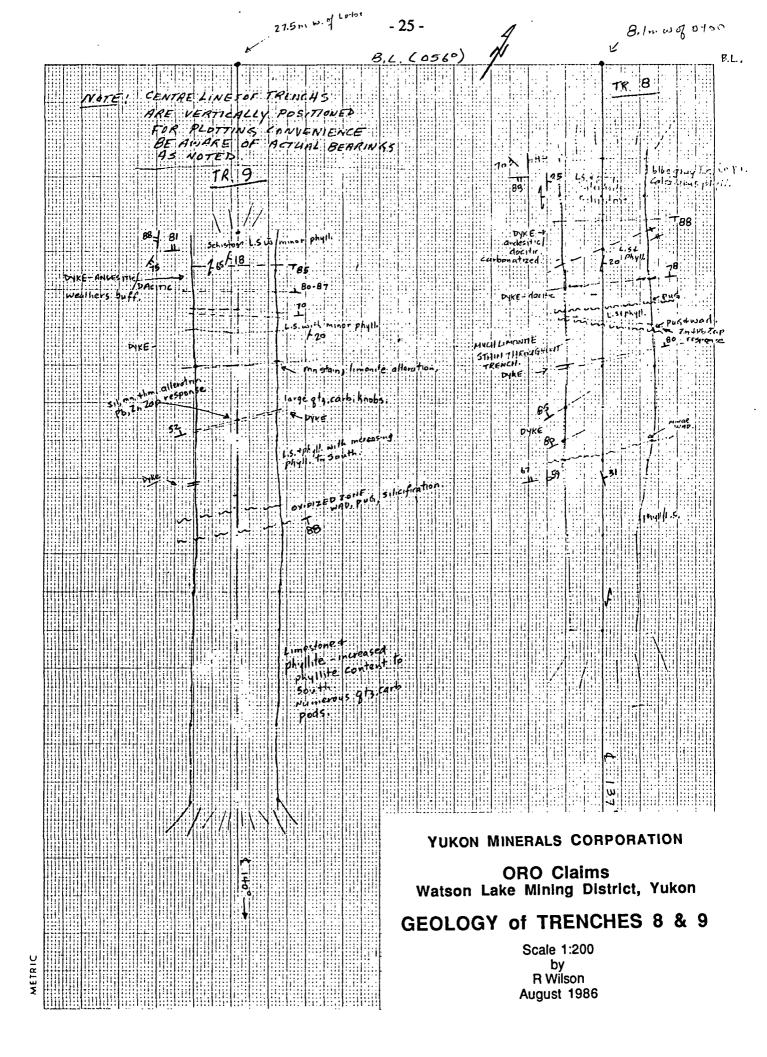
#### YUKON MINERALS CORPORATION

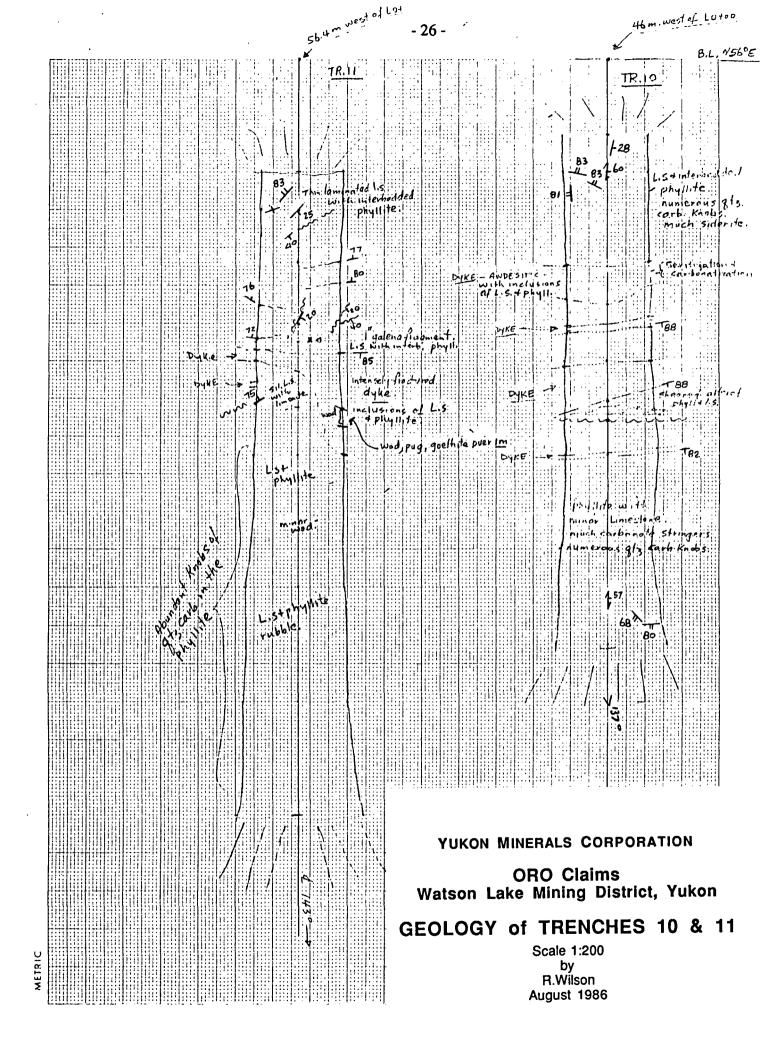
ORO Claims
Watson Lake Mining District, Yukon

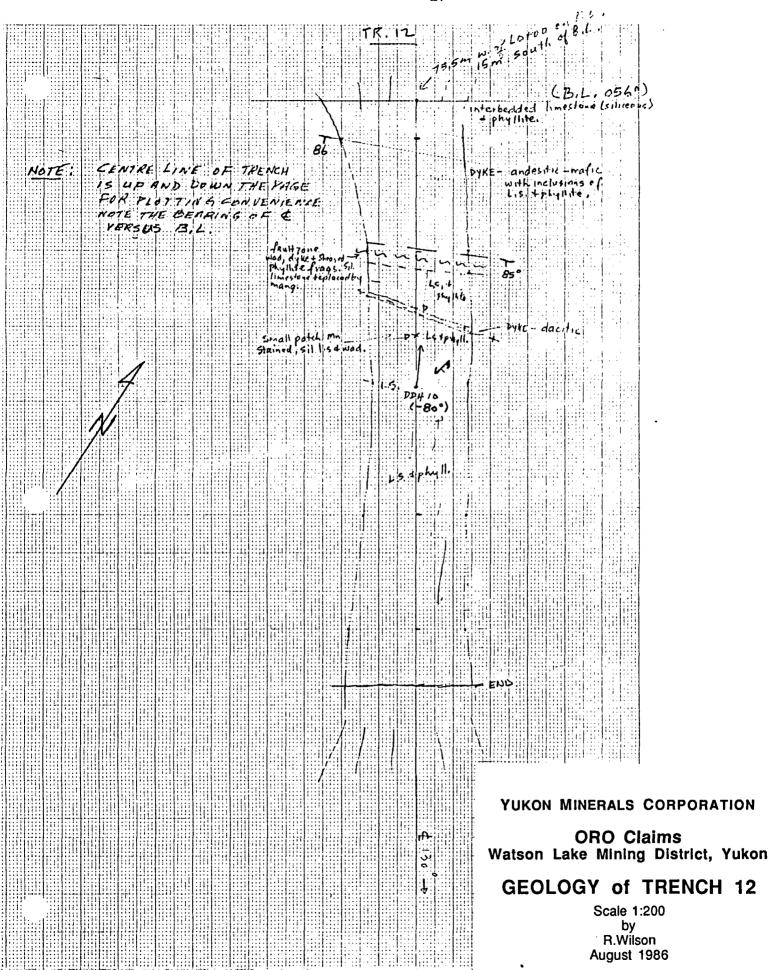
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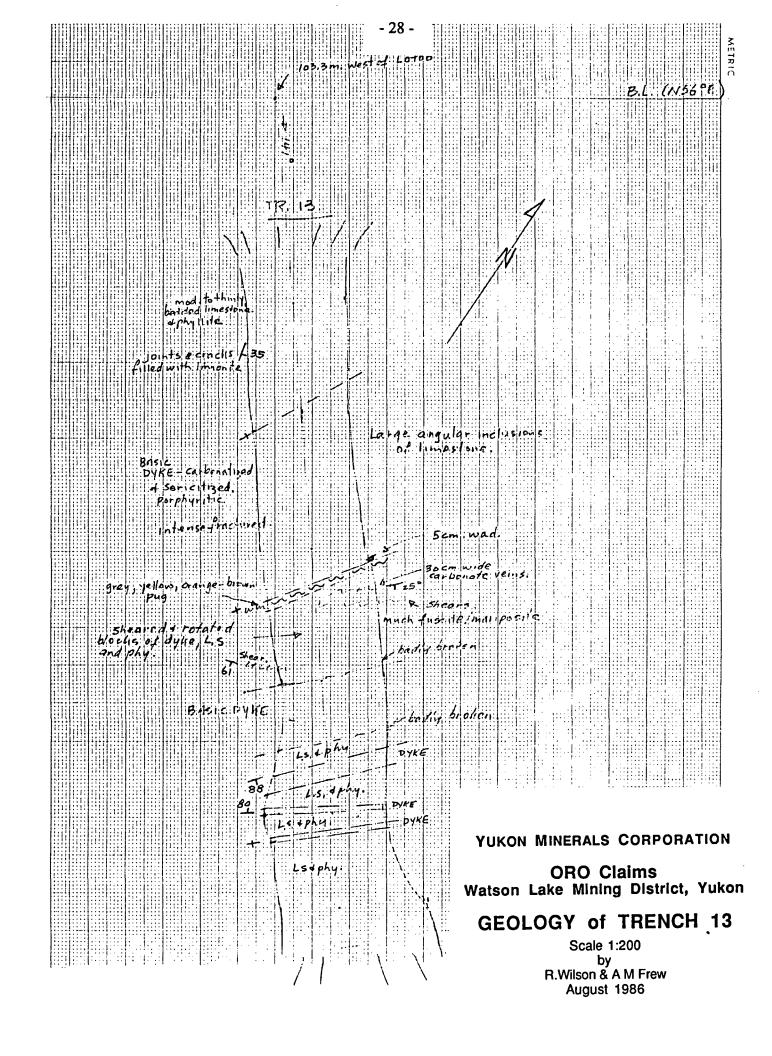
## **GEOLOGY of TRENCH 7**

Scale 1:200 by R Wilson August 1986

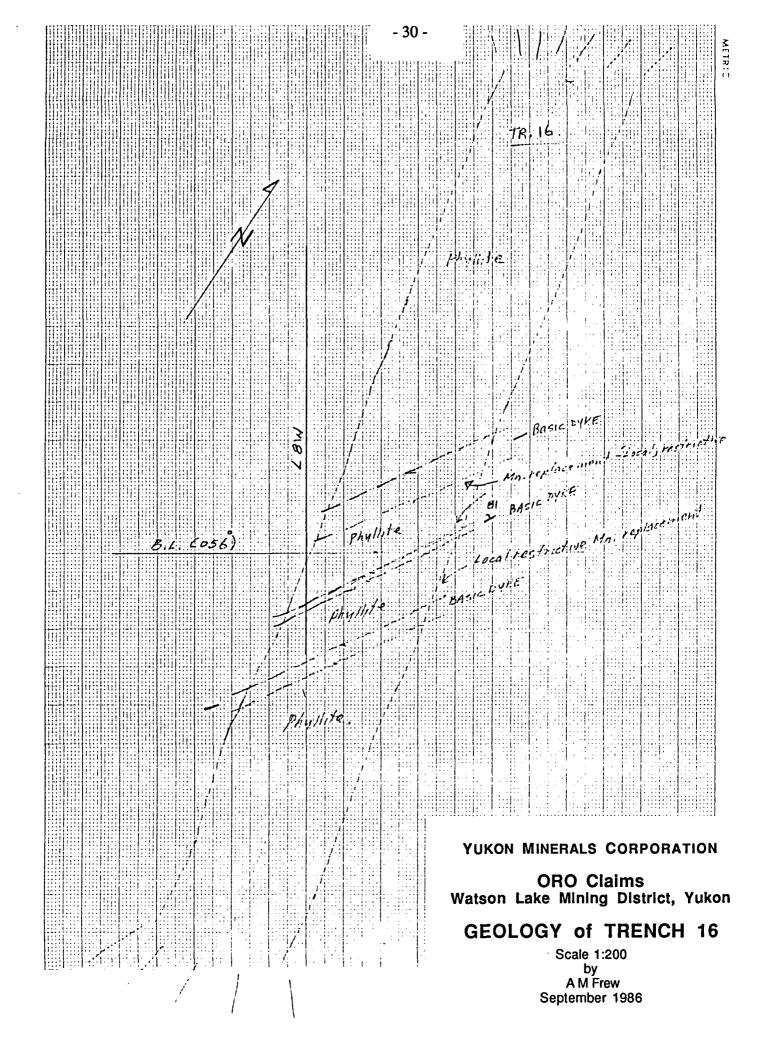


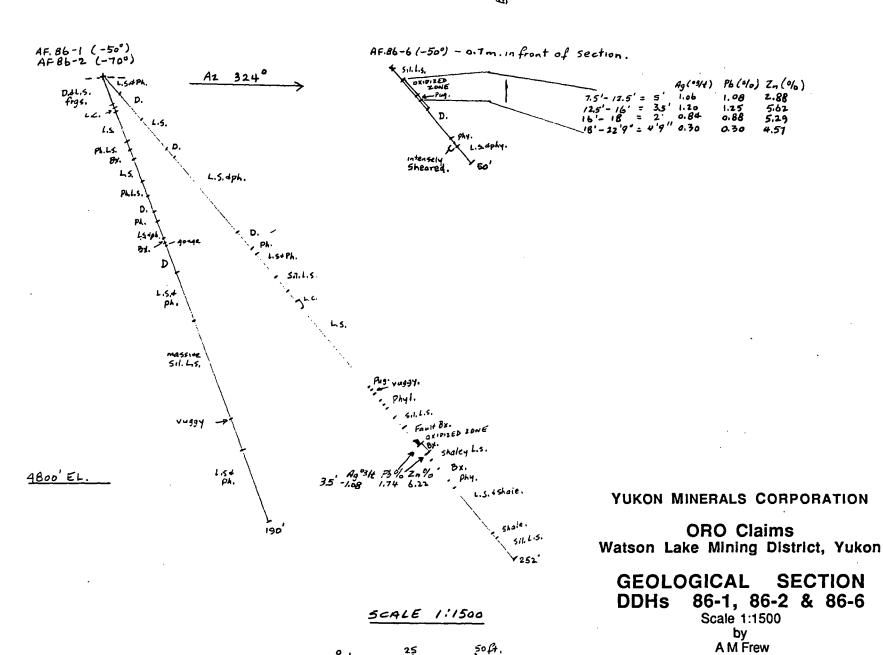






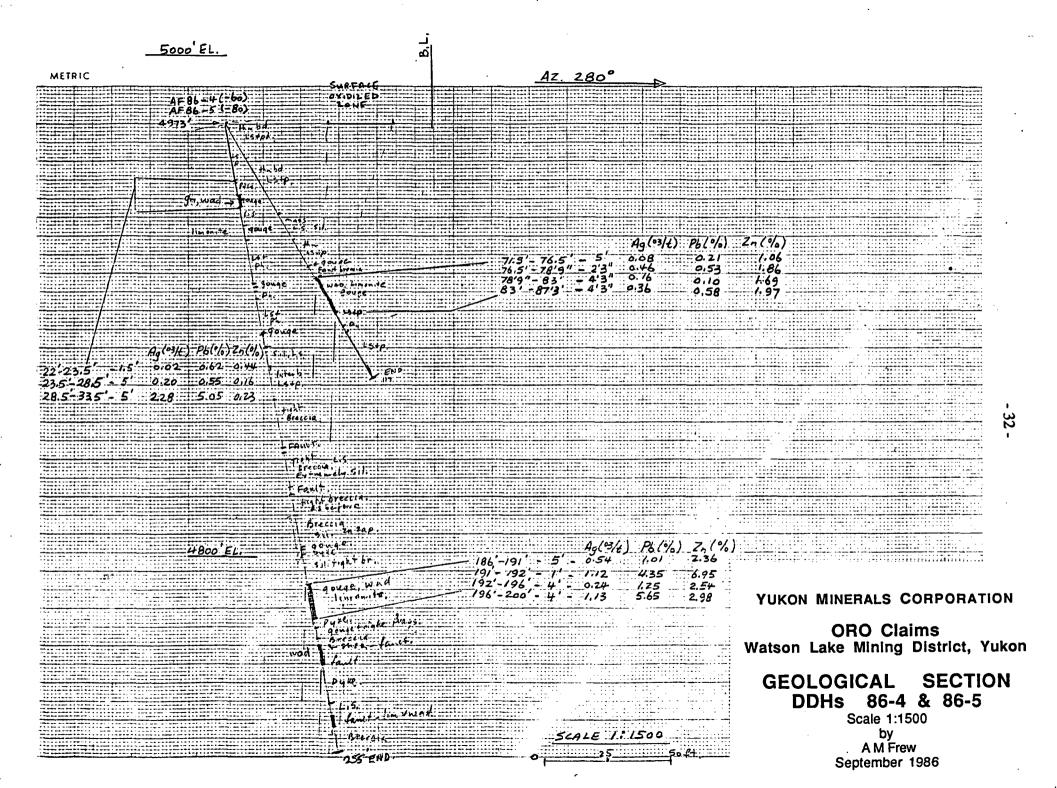
Scale 1:200 by A M Frew August 1986





- 31

September 1986



SCALE

1:1500

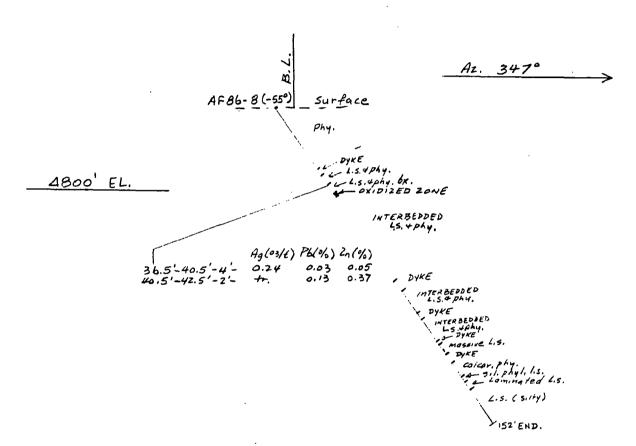
2,5

50ft.

**ORO Claims** Watson Lake Mining District, Yukon

**GEOLOGICAL SECTION** 86-7 DDH

Scale 1:1500 by A M Frew September 1986



SCALE 1:1500

50ft.

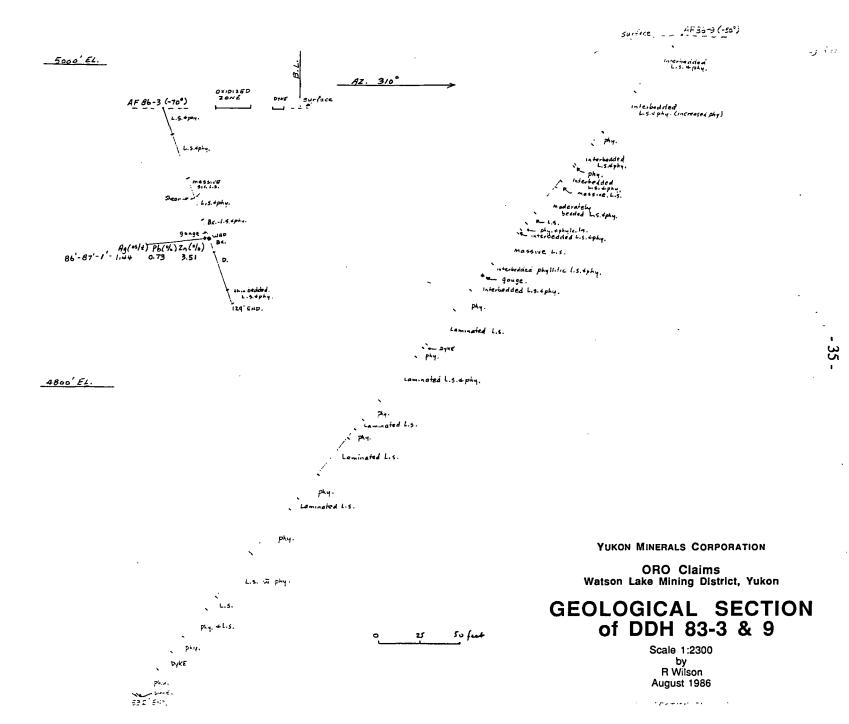
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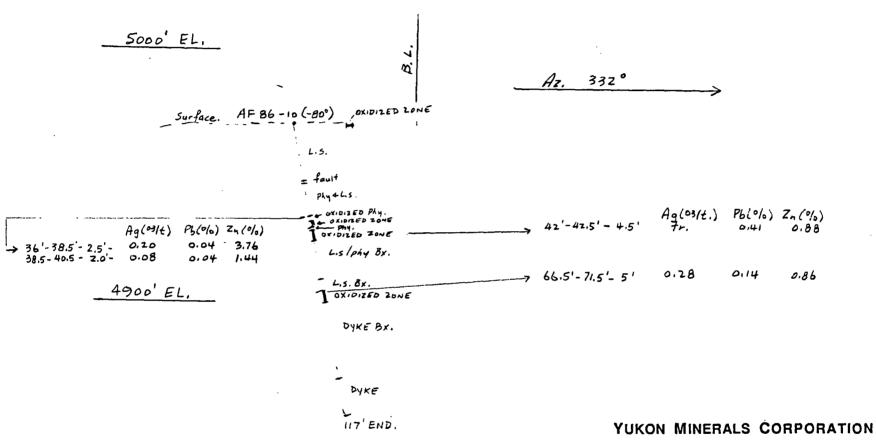
YUKON MINERALS CORPORATION

ORO Claims Watson Lake Mining District, Yukon

GEOLOGICAL SECTION DDH 86-8

Scale 1:1500 by A M Frew September 1986





SCALE 1:1500

**ORO Claims** Watson Lake Mining District, Yukon

**GEOLOGICAL** SECTION DDH 86-10

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#### HOLE No. AF86-PAGE 1 OF

#### DRILL HOLE LOG

COORDINATES 47 m.E, 48 8 m. 5 ELEVATION 1512.7 m. (4963') DIP -50° AZIMUTH 324° SCALE CORE SIZE HW +NQ HOLE STARTED AUG 18, 1986. HOLE COMPLETED AUG. 20, 1986. LOGGED BY A.M. FREW.

SCAL	<b>E</b>	
FOOTAGE	DESCRIPTION	DIP
0-6'	CASING.	
5-7'	LIMESTONE: massive, dark grey. Fractured. Limonitic.	1
7-99"	I Y I	
49-23	1 • 1	
77-23	DYKE: Medium to fine grained, buff colored, Kaolinized, Carbonaiized. Inclusions of limestone and phyllite. Narrow carb. Stringers. 15.5: - gouge.	
23-38	19': - sandy gouge.	İ
25 26	LIMESTONE: Fairly massive, medium to dark grey. Widely spaced thin phyllite.	
	25.5' - 6" 9040	
	27-28.5: - archate fracture at 50 to core, filled with white and black (manganiferous) caroonate.	
İ		1
	34': - increase in phyllite beyond here.	
38-42	DYKE: Similar to 9'9"-23'. Fractured, manganese cratings.	
42-82	LIMESTONE: With intercolded phyllite Limestone is massive, up to 1.5 thick, phyllite ranges between 14" and 1".  Buff limenitic staining 57'4"-59' and 79'-82'.	
32-90	· DYKE: Similar to previous. Finely disseminated pyrite throughout	
90'-93'	PHYLLITE. some narrow limestone beis. Limoustic Staining throughout	1
43-105.5	1 . 1 NIGOLY Sea Cod June and to Share at 200 To COPP AXIS	
1,0 1,00.0	Thick, Pringe limonitic Staining, increased phyting over has 2.	
سر بروروا	102 92 103/4 = quarty carconate vein at 450 to core axis.	
105.5 -	SILICIFIED LIMESTANE: Mossive, contains wide spaced clusters a pyrite.  Buzz staining throughout.	
113'-165'	LIMESTONE: Silicified, phyllitic, out honomitic stain near fractures, thick phyllite beds (up to 1.5') at 123', 128', 133' and 160.5'.	
1.	Sandy and Pupay Rouse as follows: - 1/8-177 lest spre	1
	Sandy and publy gouse as follows - 118-122 Lost core, 123 = 13", 127 = 12", 129" 3", 133' = 4", 135' 2" = 1", 138.5 - 140' - bady broken, 140.5' = 3", 141' 3" = 12", 158-160', 160'9" = 6", 163 - 165' = pug and Sand.	
165-166	LIMESTONE: Massive, ruggy. Reservoir looking.	
166-	A Landa Mayor and Samura	
,	167-168:- Lost core.	
170.5 -	INTERBEDDED LIMESTONE & PHYLLITE: Limestone is fine gramed medium grey.	
	Phyllite beds up to 4" across Core badly broken.  Funlt gours as follows! - 170.5'= 2", 171.5'= 6", 172.7"- 175.5	5/
I	178-179: Yery blocky.	

#### HOLE No. AF86 PAGE 2 OF 2

## DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH SCALE

SCALE	Loose Bi
FOOTAGE	DESCRIPTION
179'-,	LIMESTONE: Fairly massive, silicified, tightly fractured. White and buff Carbonate fracture filling. Widely spaced stringers of black manganiferous Calcite.
	181'9": - 1" fine gouge. at 45° to core axis.
184'3"_	The matrix consists of buff carbonate, white and black manganiferous calcite. (Weak positive response to 2n Zap).
	189:- 2" gorge.   Sample Nos. 7201 + 7202
191'- 193.5'	OXIDIZED ZONE: Predominantly black wad, with lesser amounts of limonite and hematite. Tiny black crytals of manganese. Strong positive response to Zn Zap.   Sample No. 7203.
193.5'- 197'	· FAULT BRECCIA: Same as 1843"-191' except there are more phyllite fragments.   Sample No. 7204,
197'-201'	Bedding at 600 to core axis.
201'-202	· DYKE: Dark orange - brown Intensely altered and stomed.
202-205	· SHALEY LIMESTONE: Same as 197-201
205'- 211'9"	FAULT BRECCIA! Same as before.   Sample Nos. 7205, 7206.
ב"פ'ווג	206-206'9":- Wad Sample Nos. 7205, 1286.
2151	PHYLLITE Calcareous.
215'-239	widely Spaced quarte- Carb Knobs. Minor Imenitic Stain.
239-241	. They to slock. Traphitic. Weakly Schististe at 45" a fore axis,
241-252	LIMESTONE: Fine grained, siliceous, dork to medium gray. Widely spaced  silty bands. (upto 18" wide). Abundant finely disseminated pyrite  throughout. Lost 3" is limonitic stained.
252	END of HOLE.
	<del>.</del>
•	·

HOLE No. AF86-2 PAGE I OF

DRILL HOLE LOG

COORDINATES 47m. E, 48.8m S.

ELEVATION 1512.7m (4963')

DIP - 70° AZIMUTH 324°

CORE SIZE HW HOLE STARTED 446,20,1986 HOLE COMPLETED AUG 21, 1986. LOGGED BY A.M. FREW.

SCALE	E	LOSSED BY ATM. FREW.	
FOOTAGE		DESCRIPTION	DIP
0-4'	•	CASING	
4-12	•	DYKE & LIMESTONE FRAGMENTS. Badly broken core. Some fragments	-
	•	have Mn. Staining.	
	•	7.5'= gouge	
	•		
12-26		1	
12-26	•	LIMESTONE: Massive, fine grained, medium grey. Wide spaced 2"bands of	
1	-	12'-14' 15 6' 14 15 15 15 15 15 15 15 15 15 15 15 15 15	
	•	Calcareous, phyllite.  12'-14':- 6' Lost core. Beyond 14' recovery 15 98-100%.  249"-25':- Sandy gouge	
1.7.		Contact anadations	
26-29.5	•	PHYLLITIC LIMESTONE: Dark grey with thin bands ("4") phy lite. Tight  Shearing, Some Solution holes - vuggy 3 ones throughout. Contact  15 gonge. (29.5")	
	•	Shearing, some solution holes - vugar a and throw hout a	
٠, ,	•	15 gonge. (29.51)	-
29.5′-35	•	BRECLIA: Coarse fragments of limestone is carbon et an atomicity	
	•	BRECCIA: Coarse fragments of limestone in carbonate matrix. White and black Min calcite. Minor Limenitic Stain.	
35'-45'		PHYLLITIC LIMESTONE: 25% phyllite bands unto 8" unde Baria"	
1	•	wide spaced 1/11 + 11 11 1 ore limestone. Occassional	
45-51.5	•	PHYLLITIC LIMESTONE: 250/ -/ 11/ land of phyllite.	Į.
	•	Schistosity at 7 to Mite bands cyp To 8" wide, Begains +	
51.5'-57'	•	PHYLLITIC LIMESTONE: 25% phyllite bands cypts 8" wide. Beginned to Schistosity at 70 to core oxis. Contact at 51.5' at 93 to core.  DYKE: Extremely aftered - Kaoling and contact at 51.5' at 93 to core.	
'	•	brown Imanities the state and carponatized. Dark rusty	
57-61.5	•	DYKE: Extremely altered - Kaolinized and Carbonatizes. Dark rusty brown limonitic Stain. Contact at 57' is sharp at 87° to core.	- 1
	•	- Incareous, Minor intercedited thin Imperior Roll of	
61.5'-525'	•	QUARTZ-CARBONATE VEIN, Basily broken.	, e.
62.5'-	•	LIMESTONE & PHYLLITE, WILL ON I	
69		Interbeds of Phullite	i
	•	64-64'8' - gouge	
69-70.5	•	68.9"-69' - you'ge	
70.5'-71'		LIMESTONE APHYLLITE: 4" to 8" beds of dark grey limestone with narrow ht-64"8' - gouge 68'9"-69' - Jouge FAULT BRECCIA: 1/2" to 2" limestone and phyllite fragments. Limonitic Gouge; Sandy times is	
		GOUGE: Sandy & imanitic.	
7/-83		DYKE: Kaplanad carl de la la la la la la la la la la la la la	1
	:	Inclusions of limestone and phy lite.  72.5'-75.5'- Zone of precipited disc with quarty-carbonate matry.  LIMIESTONE APHYLLITE Interpretate limestone (up to 2 "across) and	•
83'-104.5"		12.5 - 75.5 - Zone of precupied durc with quartz - carbonate matrix	
	٠	LIMESTONE + PHYLLITE Intercental limes and Cupto 2 across) and	- 1
h	•	1 197011 C 199 FU L UCLESS) FLACTURES WING BU MI CALLE JULY 1	
104,5'-	•	Black Min fracture coating. Bedding and schistosity at 500 to to	
159'	•	LIMESTONE: Massive, blueish grow silicited, wide spokes bands no	220
	•		,,,,,
	•	1 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	1
	•	134.5'-137.5: Vuggy limestone (possible recemented fault) 129: 12" calcite (strontionite?)	
	•	1345; 1/2" A " 1345; 1/2" A "	
	:	146.5'- 147.5': - Nugay Limestone	
		131,3 - 154; - Badly Broken.	
159-190	•	INTERREDDED LIMESTAGE AND BLUESTAGE ON Fracture faces.	
	•	INTERBEDDED LIMESTONE AND PHAILITE! Medium to siert gree and	- 1
, ,	•	blue-gray limestane with him who it of graphitic phyllic.	- 1

#### HOLE No. AF 86-

## DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH SCALE

SCALE FOOTAGE	. 1	Continued) Middle 500 (ad white and bull Continued Stronger
170		Continued) Wide spaced white and buff carbonate stringers.  Phyllite increases over last 3! Bedding and schistocity  at 65° to 70° to core axis.
		163.5':- Vuggy limpstone. 163.5'-168:- highly Silicified
190'		END OF HOLE
		<b>*</b> €*
	:	
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	•	

HOLE No. AF86-5 PAGE / OF

DRILL HOLE LOG

COORDINATES 24.5 m.E, 24.7 m.S.

ELEVATION 1515.8 m. (' 4973 ft.)

DIP -70°

AZIMUTH 310°

SCALE -

CORE SIZE HW + NQ HOLE STARTED AUG. 21, 1986. HOLE COMPLETED ANG. 22, 1986. LOGGED BY R. WILSON & A. M. FREW.

FOOTAGE		DESCRIPTION	-000-
0-6'	•	CASING	
6'-8'	•	LIMESTONE BLOCKS	
3'-165		INTERBEDDED LIMESTONE & PHYLLITE: - Slightly silicified, gray limestone	
	•	with thin layers (up to I"across) of Phyllite. Bedding and	
	•	Schistosity at 650 to 700 to core axis. Some isoclinal	ļ.
1 1	•	with thin layers (up to 1"across) of phyllite. Bedding and schistosity at 65° to 70° to core axis. Some isoclinai folding evident. Minor Mn Staining of limestone and phyllicat 9:	ڪ
16.5'-17'	•	SHEAR: Limonitic with limited solutioning of carbonate.	
17'- 46'	•	THICKLY INTERBEDDED LIMESTONE & PHYLLITE! Limestone is schistose and	
	•	Silicified. Limestone beds in to 1.5' thick, phyllite upto	
	•	Silicified. Limestone beds into 1.5' thick, phyllite upto 1! Bedding at 600 to Core axis. Stringers of buff Carbonate and limonite throughout the limestone.	
	•	24: - Clusters of well formed white Carbonate Crystals.	l
	•	24'-26.5: /imomitic stained Linestone,	
	•	32-325; well developed Carbonate Crustalis (Strontianite .)	1
	·	37': Clump of well formed radiating slusters of carbonais,  Possibly strontionits. 11/2"x z"x,1")	ĺ
-6'-59'	•	MASSIVE LIME STONE: Schistose, Silverfied, Slightly phyllitic- NITA	
	•	thin, widely spaced lauere of physics Besidnes the via	
	:	thin, widely spaced layers of phyllite. Besiding at 650%. Core axis. Jome Isochinal felding evident.	
	•		]
	•		1
	•	Most limestone is diverge, out new Shearing it is	1
1	•		l
	•	49'3"-50':- Vugay, Solutioned limestone filled with, well	
, ,	•	574": pulse sheer.	1
57272"		SMEHR. : ruggy, dark wrown Inscentic.	
592"-74"	l :	I NTERBEDDED LIMESTONE & PHULLIFE TO IN I	l
	:	and phyllite up to 1.5: Limestone silicities and sharify  Phyllitic throughout Be down in 500 to	1
	•	Phyllitic throughout Be tome silicities and sharify throws of white anguit and buff carbonate throughout.	1
	·	Knows of white answing and buff carbonate throughout.	
		blue-arous except near flactures, the line strice is	1
74'-86'	•	timonite stainants 2003 to fractures, the line strice is blue-arey except near fractures. The line strice is 73' - Shear-filled with limonite at 200 to core axis.	1
	:	Grania and A miestone which has been shooting	1
	•	16.6 Interestin Shearen	.
	1:	matrix: homostone breccio. White and but carbonar.	
		mathy:	1
36-87	٠	Mn Mod mod sandy gouge.	1
	$oldsymbol{oldsymbol{\cdot}}$	galous gouge + pug. possible very fine disserningles	
87-9510"		Mn Wad, rusty, limonite gouge + pug. possible very fine dissernmated  Fruit BRESCIA: musiciple So. 7207	
0 / - 1310	:	1 Somo Jan Over Jan	
	:	1 William Disch Die de December 1	
9510 1	١.	1 2 1/2 2 1/3 "ZCFOSS.	
120.5		DYKE: First 3 = fine grained and a force a small some.	1
I	.	sal 15 = larger unation of dute . I am in some a state .	L

## DRILL HOLE LOG

HOLE No. AFE

COORDINATES ELEVATION DIP AZIMUTH

AZIMUTH SCALE	LOGGED BY
FOOTAGE	DESCRIPTION
	(continued) Surface, porphyritic, fine grained. Chilled contacts are finer grained. Phénocrysts of hornblende and plagioclase. Carbonatization.
29.	THINLY BEDDED LIMESTONE + PHYLLITE: Imerta L.
·  :	THINLY BEDDED LIMESTONE +PHYLLITE: limestone beds up to I inch.  phyllite up to 2". Limestone is phyllitic in places, and phyllite is pervasively calcareaute
<u> </u>	and pligilite is pervasively calcareous. Isoclinal folds present in limestone.  120.5-121:- injections of dyke material-limenitized.
	Delaina at 60 to care and but 1
	Carbonate threnghout.  Axial planes of 150 clinal folds parallel bedding.
:	Axial planes of isoclinal folds parallel bedding. Limestone is silicipled and contains minor disseminated pyrite throughout.
29'	END of HOLE
<b>'</b> :	
:	
-	-
:	
<u>                                   </u>	· ·
:	
:	
:	

HOLE No. AF 86 PAGE | OF

DRILL HOLE LOG

COORDINATES 24.5 m.E, 24.7 m.S,
ELEVATION 1515.8 m (4973 ft.)
DIP -60°
AZIMUTH 280°
SCALE

HW CORE SIZE HOLE STARTED AUG 22, 1986
HOLE COMPLETED AUG 23, 1986
LOGGED BY R. WILSON & A.M. FREW.

SCALE		- K.WILSON & A.M. PKEW.
0-6'	_	DESCRIPTIONDIP
		CASING.
45-7	•	PHYLLITE & LIMESTONE RUBBLE.
7'-16'9"		INTERBEDDED LIMESTONE + PHYLLITE: Thinly bedded; limestone beds (up to 1")
	•	and phyllite (up to 2.5") Limestone is largely phyllitic. Bedding at 600 to 700 to core axis. Isoclinal folds present. Knows at quarts - Carbonate throughout. Yellow, orange brown limenitic
1		quarts - Carbonato throughout wall folds present. Knobs at
1	•	staining throughout.
	$\overline{\cdot}$	09:- Shear.
1	•	9.5 :- "4" carbonate veinlet,
}	:1	imestone is light buff color. limestone is silicified
1/2" 1	•	VEINMATERIAL: - vein of quarte colors 14 01
169-184"	•	VEINMATERIAL: - vein of quarts, calcite and buff carbonate.
184"- "		THICKLY BEDDED LIMESTONE & PHYLLET LAND AND THE CARDONATE.
4z'11"	•	THICKLY BEDDED LIMESTONE + PHYLLITE: Limestone up to 1', phyllite up to 15'
_	•	Bedding at 650 to 700 to core.
1	•	21' - Shearing at 55° to core axis.
1 1		FROM 35-34' 40'-111111111111111111111111111111111111
	•	Slightly more silicified. Elsewhere it is light buff brown.  Jestinal folds are abundant throughout Locally the phyllite is  throughout Knobs of quarts-carbonate and imposite state
		graphitic. Knobe ai abundant throughout Locally the phullite is
4211"_	•	
53'8"		MASSIVE LIMESTONE; Blue-grey Silici fied, pyritized, wide spaced limonite stain. Bedding at 650 to core axis. Pyrite is narrow phyllite beds.
	•	concentrated in the self at 650 to core axis. Pyrite is
53'8"-		harrow phyllite beds.
66'	•	IHTINLY INTERBEDDED PHYLLITE & LIMESTONE, limestone beds note!"
1		1 19 19 11 11 18 SPAS (AD In D' Some District On O hede Very Ob. 11.1.
	•	Bedding at 350-400 to core axis. Limonite Staining on shear faces. Some fractures filled with yellow, orange and red
		5 50 11 - (17 5 1 5 1 7 5 F)
1		57'1- 2" recemented gouge. 60'10"1-2" gouge.
1/1/1/2	•	bolio": - 2" gouge  Knobs of quart; - carbonate (with siderite) throughout.  FAULT GOUGE: One distribution of the siderite of throughout.
66-66.5	•	FHULT Gouge: Orange limonite and orange-brown sand.
66.5'-71.5'	•	FAULT BRECCIA: Fragments of Educatied limestone and phyllite in
	•	carbonate matrix, Frags, up to 2"across.
71.5-8731		Oxinion - tracture faces coated with Mn.
	•	OXIDIZED ZONE: Wad, limonitic and sandy gouge.
		71.5 -73.5; - Intensely sheared phyllife with Mn. Stain (purple-black)
	•	71.5'-73.5'; latensely sheared phyllite with Min Stain (purple-black) pright arange limonite pads and yellow-grey and medium orown pug.
1 1	•	73.5-74'g": - relatively competent, purpleish-brown wad. Limonite stringers up to 1/2". Some black sooty dirt, Mn. 74'9"-75'9". Solt brown Sold and Sold South
	•	coatings, up to 1/2", some black sooty dirt, Mn.
ł	•	
	•	75'9"-76.5":- Com potent, blackish-purple wad. Limonite stringers, brown Sandy gouge, Positive Zn Zap.
1	•	Janay Jouge, Positive 2n 2ap.

#### HOLE No. AF86-PAGE 2 OF 2 4

### DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH

2241.5	LOGGED BY
, SCALE FOOTAGE	OF SCIDITION
• •	(CONTINUED) 76.5-77.5':- light to medium brown gouge, soft & crumbly, yellow forange alteration. I sample No. 72.09
	77.5'-83.5'1- Competent black-purple wad, intensely limonitic phyllite, Mn. Stain, greenish yellow-gray gouge. Positive In Zap. Some goethite. / Sample Nos 7209 d 7210.
	B3.5 - Bb :- Sheared phyllite, some "4" orange limonite veins. browny-green to yellow gouge, black sooty dirt.
•	5ample No. 7211.  86'-873":- Soft, crumbly, light orangey-brown to medium brown Sandy gouge. Pieces of wad (2"2"x3"x1=") with
73"-	An unidentifiable shiny silver crystalline growth.  Lower contact is a shear at 550 to core axis.
93'3"	BRECLIATED LIMESTONE & PHYLLITE: Tightly fractured. Much limonite,  88':- Vuggy limestone, highly siliceous
:	88'3"-91: breccia - blocky 90.5'-92': large vein (or pod) of dark brain carbonate. 92':- 4" partly recemented gonge.
3'3-96	DYKE: Upper and Lower contacts at 400 to core axis Extensively Kaolinized,
5-117	and Carbonatized. Limonitic, Buff colored. Some fractures have Mn Coating.
	INTERBEDDED LIMESTONE & PHYLLITE: Limestone beds up to l'across, phyllite up to 8" across. Limestone is phyllitic Locally.  99.5'-100': Limestone is blue-gray - silicified. Abundant
:	99.5'-100': Limestone is blue-gray - silicified. Abundant disseminated pyrite. 96-99':- brecciated. Matrix is calcite and brown carbonate. Much Limonite.
	102.5'-103.5: - possible dyke material.  Bedding at 55° to 70° to core axis.  116.5': - phyllile is graphitic. Mn stain.
177	END of LOLE
	·
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HOLE No. AFB6-5
PAGE 1 OF 3

DRILL HOLE LOG

COORDINATES 24.5 m. E, 24.7 m. S.

ELEVATION 1515.8 m (4973 ft.)

DIP -80

AZIMUTU: 22-0

AZIMUTH 280° SCALE

CORE SIZE HW4NQ HOLE STARTED AUG. 23, 1986.
HOLE COMPLETED AUG. 25, 1986.
LOGGED BY R. WILSON (checked by A. Frew.

SCALE		DIP
FOOTAGE	Description	
0-6	CASING.	
5.5'-7'	LIMESTONE RUBBLE: Intensely limonitized limestone with carbonate still	
7-22	INTERBEDDED LIMESTONE + PHYLLITE: THIN bedded, with limestone beds in to 6" and phyllite up to 8" timestone locally phyllitic.	up
1 1	to 6" and phyllite up to 8" timestone locally phyllitic.	′
	Phyllite is calcareous. Where the limestone is blue-grey is silicified and carries abundant disseminated	
1	Pyrite Locally the phyllite is graphitic Bedding	
1 L	pyrite. Locally the phyllite is graphitic. Bedding a	"
	153-165:- Sandy gouge	
22'-23.5	15'3"-165':- Sandy gouge. 21.5':- 6" zone of buff carbonate and calcite.	1 1
22 - 25	Vuggy LIMESTONE with PHYLLITE, Vugs filled with brown carbonate. Rock is dark brown with brown alteration. Minor amounts of clay.	,
	Some yellow- orange limonite. SAMPLE NO. 7212.	
23.5 -2 <del>1</del> 3"	PHYLLITE + LIMESTONE: Crumbly and fragmented.	1 1
1	25-25.5': receinented fault gonge. Much limonite, yellowish-	.
ì	orange + grey png. Mn. stain.	1 1
	Too it is the vag.	1 1
	timestone is silicified over total section.	
	28-28,5: Limestone is riddled with limonite and brown calcite string	ers
293"-	SANDY GOLGG.	1 1
33.5 <sup>′</sup>	54NDY GOUGE: Yellow - orange & grey pug, Imenite blebs and stringers, 29'3"-29.5: - Sheared of white	
1 1	- 1 - 2/3 - 2/3 - 40 + k brown du + with cli.	1 1
1 h	of black entire in the fired limestone with string	gers
	31.5-32:- Silicified limestone with limonite stringers, My stain and 32-335'- Soud him	1 1
1 1	32-335:- Sandy brown gonge.	!!
335-413"	INTERBEDACE LIMESTONE & PHANTER . 2	1 1
	INTERBEDDED LIMESTONE + PHYLLITE: Beds up to 6" thick. Rubbly and	1 1
1 1	Framented. Limestone is silicified throughout.  Bedding at 55° to core axis. Minor yellow torange p throws input.	ua
413-47		´
f <sup>+12-4</sup> / }	GOUGE: Sandy, green-brown Sheared phyllite and limestone.	
	A13-A2! Sandy gouge, green-brown.	
i l	42-42.5: orange-brown limonitiz alteration. 42.5'-47': fine sandy green gouge.	
47 -64.5	INTERBEDDED PHYLLITE & LIME STONE : Grant to L'acuse	,, ,
1	INTERBEDDED PHYLLITE + LIMESTONE: Limestone up to 1'across, phyllup to 1.5' across. Limestone is phyllitic locally. Phyll	///e
	15 Eallar Paul Baddung at 70° To Core avic	1
	489": - Sandy Sheor - 6" wide - cuts core at 150 yellowish- and brown limenite, reddish brown hematite. Limes:	iorai ae
// - // -	- The fled, espically of 54!	
64.5 465	· Gouge: sandy, brown, sheared phyllite.	
665-68	PHYLLITIC LIMESTONE: Silicifed, fragmented. Some buff and	1
68-71.5	orange limite throughout	
00-74.3	SHENKED PHYLLITE: Yellow-green and grey gouge. Limenitic	.
71.5'-91'	INTERBEDDED LIMESTONE + PHYLLITE! Moderate To thick we beach	101.
	· Hintestone up to 1.5' doublide up to 1 thick.	
1 1	· Bodding of 500 to 300 to com alle	

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## DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH

SCALE			
FOOTAGE		DESCRIPTION D	<u>IP</u>
		(CONTINUED) Limestone is silicified throughout, locally it is phyllitic, Local isoclinal folding. Quarty-carbonate knobs throughout.	
1	•	86.5-8610" - Sandy brown 90 402	
91-97		90.5'! - 6" recemented gouge.	
11-97		11HESTONE: Blue-grey, Silicified. Wide spaced thin bands of phyllite. Minor disseminated pyrite. Fractures filled with arbonate and limonite.	•
97-112.5	, : I	with earbonate and limonite;	
7/-112.5	•	INTERBEDDED LIMESTONE + PHYLLITE: Thinly to moderately bedded.	
	•	Limestone and phyllite up to 6" thick. Limestone is phyllitic and becomes increasingly silicified with depth. Bedding at 50° to core axis. Limonitic staining and hematic staining and	,
	•	hematities stamme locally the phillite is	
		hematitic staining locally. Locally the phyllite is graphitic.	
131.5		TIGHT BRECLIA: Intensely fractured limestone and phyllite.	
151.5		timestone is Silicified throughout but increasingly so with depth.	
	•		
l l	•	1169":- Shear with grey and yellow-orange pug. 125": 3" wide shear limonitic.	
131.51-	•	128.5: Sheared, graphitic phyllite.	
/33'		FAULT ZONE: - Intensely Sheared phyllite, much limonite Orange - brown, yellow, rusty brown and black alteration coloring.	
133-147.5		TIGHT BRECCIA / imectone and physilite limestone is silicities Some	
İ		TIGHT BRECCIA. Limestone and phyllite limestone is silicified. Some fracturing, with fractures filled with curbonate and	
		Imanite." 1465:- Shear.	
147.51- 150.5	-	FAULT ZONE: Sheared phyllite, yellow-grey, brown-orange, limonitic pug.	
150,5'-	1:	148-149:- Several ting ("4") fragments of galena.	
159'4'		TIGHT BRECCIA. Fragmented limestone, phyllite Sequence. Fractures filled with brown carbonate and limobite. Mn. Stain in	
1594"	•	some fractures timestone is very siliceous.	
1715'	:	BRECCIATED LIMESTONE: - Tightly fractured, highly silicified	
	Ŀ	limestone. Evidence of widely spaced harrow phallite.	
	•	164.5-1715' Characterized by irregular jagged-edged cratings of precia fragments by a black dull mineral, that sometime is seen as silver-grey on fresh Euts. Last 5 Shows sporadic response to ZnZap. SAMPLE No GOUGE TO TAIL	l
	.	is seen as silver-grey on fresh Eure	[
<u> </u>	1:	Last 5 Shaws sportalic response to In Zap. 7215	
171.5'-		Gouge: Sandy, greenish brown, orange. Some Small silicified Limestone fraginents. Black-brown stain. Limenitic.	
172.5 -	•	DYKE: Carbonatized and Kaplinized buff colored Limonitic. Sandy	
	<u> </u>	Pug. Dendritic Mn growth's on some fragment surfaces.	
173'4"	:	HIGHLY SILICIFIED TIGHT FAULT BRECCIA: Originally a limestone	Ì
186'	:	Rhyllite Seguence Fractured intensely- infilling	
		Rhyllite Seguence Fractured intensely- infilling by dark brown carbonite, calcite and Mn Highly limonitic locally.	
186-20	ا	OXIDIZED ZONE: Sandy gouge pug black sooty dutilimonite	l
		OXIDIZED ZONE: Sandy gouge, pug, black sooty dirty limonite	
•			_

## HOLE No. AFR6-

## DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH :

FOOTAGE	DESCRIPTION
	(CONTINUED) 186-191: - dark brown sandy mud. Some pods of black sooty material: At 1885 - 189: - some phyllite fragments.  191-192: - very black, velvet feeling sooty material. 54MPLENO7217
	191-192: - Very black, velvet feeling sooty material. SAMPLENOTZIT
	usty red-brown pug at 191 and 1913 as well as 192.
	192-200:- Sandy, brown muddy gouge. Some black sooty Pochets. Limonitic. phyllite fragments. Tiny cubeso galera SAMPLES NO. 7218 + 7219.
200'-2041	• DYKE: Carbonatized, Kaolinized, altered to buff brown. Carbonate fracture filling throughout. Some Mn coating of fracture faces.
204.5 -	FAWT GOVE WAY DULL FORCE THE GOVERNMENT OF THE STATE OF T
204.5	FAULT GOUGE WITH DYKE FRAGMENTS: Gouge is an orangey-brown clay with fragments of dyne associated. Limonitic staining is awandant.
201.5'- 211'3"	TIGHT BRECCIA. : fime stone and phyllite. Imestone is sinceous. Fractures are filled with limenite and carioonale:
]	· 210'-210'4": brown & orange muddy gouge.
2113"-	FAULT-SHEAR! confact 300 - ocore are partly recemented fault
212-217	gouge. Oranged yellow limonite. Partly altered blacy cubic mineral. Greenish - grey pug.  212-217! Biohole - fragments of limonite.
217-2195	FAULT ZONE: brown 4 orange limonitic puo.
	• Z18-219: pods a veins of black dirt with black cubic mineral imbedded in it. Fragments of duke material throughout
219,5 - 235 3 "	BRECCIATED DYKE: Sheared and tichtly brecciated. Upper contact 20° to Core.  Lower centact 35° to core. Dyke is carbonatized and kaolinged.  Fractures filled with white and buff carbonate. Mn  staining.
	Limestone is religional throngrowt, phyllite fragments have limonia stain Inclusions.
	228.5-2363": mossive quarta camicnate Vein. 231-235's": dylie is lossely breceived - limestone and provide inclusion
235'3"- 240'	LIMESTONE 4 PULLITE BREEZING fragments up 3/4 across, Limonitic Possible live fragments throughout Fragment control with Mn. Ilmostone is highly stirified.
240- 244.5	FAULT ZONE: sheared limestone and phyllife demonstres. Limestone is vuggy, with calcife, brown conscious, limonite and ablack subject miner; is surrounded by black dist (Mn?)
2445'- 257'	SILICIFIED TIGHT BAZZIA: Impostone and phyllite. Limonite and  orano Carponate metal.  249:- fragment of dyke -3-4"wide.
	243'-249'3" - puggy Shear Imonitic
	CORE badly orcion Recovery about 74% over this
257	END of HOLE
1	<del></del>

HOLE No. AF86-6 PAGE / OF /

DRILL HOLE LOG

COORDINATES 45 m. E. 11.7 m. S.

ELEVATION 1513.9 m. (4987 ft.)

DIP -50°

AZIMUTH 33 Z°

SCALE -

CORE SIZE HW HOLE STARTED ANG 25,1986 HOLE COMPLETED ANG 26,1986 LOGGED BY R. WILSON

SCALE FOOTAGE		DESCRIPTION	DIP_
0-5	•	CASING.	
5-7.5'	•		ا ر
7,5'-229"	•	SILICIFIED LIMESTONE, Silicified limestone with minor phyllite. Brecart	<i>.</i> .
13-229	•	OXIDIZED ZONE: fault gouge, mad and intensely sheared phyllite.  Muddy. First z' - blocky fragments of silicified limeston: Carbonatized and Kaolinized dyke fragments. Some manga	.
	•	girered imestens (Waa) Jandu muadu pua	21 ES
Ì		Sample No.s. 915-12.5: - green-groy and brown pug. few fragments of wad	
	•	7220 7221 7222 12.5'-16':- tubbly wad. This appears to be replacement of a	
	•	brecciated Silicenic Phillips Imagine VIAR Property	i
	•	16'-22'9": - Intensely Sheared phyllite, and light-brown lorange Sandy gouge. Grey-green phyllite is locally extremel limonitic. Lower contact at 700 to core axis.	/
22'9"-	•	DYKE, Contains large inclusions of limestone Thedyke is Kaolinized	
. I	•	and carbon atized - giffered to buff brown color. The impostone inclusions are silicified Lower contact of 250 to corp axis	
37'-389"	•	HIGHLY CONTORTED AND SHEARED PHYLLITE; contains carbonate and liminite stringers. Some inclusions of dyke material.	
389-41	•	INTERPOLLY SHEARED PHYLLITE: Green brown, nightly timonitic, sandy pha	
	:	some wad fragments and blebs of black Min (?)	
41-50	•	LIMESTONE 4 PHYLLITE BRECCIA: tightly bracciated, intensely fractured.	
		LAST 4' is fragmented and rubble Isochial folds	
	<u> </u>	evident timestone is silicipled throughout. Stringers find veins of calcito, brown carbonate and limonite throughout.	
50'		END of HOLE	
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HOLE No. AF. 86-7 PAGE 1 OF 2

DRILL HOLE LOG

COORDINATES 139m.E, 17.5m.5.

ELEVATION 1492,5m. (4897 ft.)

DIP -50°

AZIMIITH 2 - 50° AZIMUTH : 302°

HW CORE SIZE HOLE STARTED AUG. 26,1986 HOLE COMPLETED AUG. 27, 1986 LOGGED BY R.WILSON.

AZIMUTH	302	
SCALE	DESCRIPTION	)IP
FOOTAGE		
0-11	[NTERBEDDED LIMESTONE & PHYLLITE: Thick beds, limestone up to 1', phyllite up to	
1	1.5'. Lime stone is blue-grey, highly silicified. Near shears and fractures it is stained brown. Isoclinal folds evident.	
	0-12: - Erumbly. Carbonate + Limonte Stringers.  Bedding at 45 + 0500 to Core axis. Fracturing increases with  depthy	
1:	13:- phylite is Slightly graphitic.  Limestone is locally ruggy. Knobs of granty-carbonate throughout	
-	throughant. Last 1' is tight breezea.	
339"-42"	OXIDIZED ZONE: - Wad, Sheared phyllite with abundant /imonite, fragments of Silicified limestone with limenite and managenese replacement.	
	First 12' is black, blocky wad. Some face's havea grey shiny metallic.  Sheen. Some possible goethite. Positive In Zap response.  Some limestone has black Cubic mineral Surrounded by black  Soot. SAMPLE NOS. 7226 4 7227	
42-62	IMPERBEDDED LIMESTONE + PHYLLITE; First I's breceinted, then tightly fractured.	i
1 -	MPDER CONTACT IS 35° 10 core axis	
	bedding at 10-500 to core axis.	
	US.5-47.5': limestone is vugay some limestone is blue-gray Silicified. Fradure's filled with buff carbonate or	
62-67	DYKE: Contains many inclusions of linestone and phyllite.  Dyke has been carbonatized and Kaolinized Highly limonitic Fractures in dylic contain quartz, carbonate, Limonite and Mn.	
67-89.5	INTERBEDDED LIMESTONE +PHYLLITE! limestone content increases with	
	depth, it is blue-gray and silicified. Hear shears and fractures it is stained outst-orowin. Thin about the beds throughout. Isoclinal folding evident. Bedding at 450 to 600 to core axis.	
	Midely spaced limenities and characture filling and reproved all the	
	Spaced throughout, widely spaced thy enter of pyrite.	
89.5'- 90.5'	· DYKE: Carbonatized and Kaclinized, Locally Limonitic.	
90.5'-107.5'	. INTERBEDDED LIMESTONE APHILLITE: Limestone is blue-one, silicipled.  near shears and phyllite birds it has been stringed buff  Myllite content increases with depth. Bedding at 6000.  Core axis. Is oclinal filding evident.	
107.5'-	OXIDIZED ZONE: Wad, Sheared phyllite, Limonitic. Fragments of Silicified limestone, Mn alteration Positive response	
	TP 2n 2ap. / Januale No. 2228. , , ,	
116'	BRECCIH: - Dyke, limestone and distorted phyllide fragments.  Dyke fragments are carbonarized and limenityed. Upper  Contact at 450 to core axis.	
116'-136'	INTERBEDDET, LIMESTONIE AND PHYLLITE! Moderatal hadded - water I make	
	thickness. Bedding at 600 to core axis. Locally fractured or tightly brecciated, with Carbonate and limonite infilling. Limeticing is blue-are, and very siliceous. Over the last 41  the limestone is pale greenish area and less siliceous.	
136-	MASSIVE LIMESTONE: Blue-way Silver Field homeofring widely spaced	

### DRILL HOLE LOG

HOLE No. AF86-7

COORDINATES ELEVATION DIP AZIMUTH

AZIMUTH	LOGGED BY
SCALE	
FOOTAGE	DESCRIPTION DI
ı.	(CONTINUED) with carbonate in filling. Bedding at 550 to core axis.
155'-	
	INTERBEDDED LIMESTONE, PHYLLITIC LIMESTONE + PHYLLITE: The majority
165'	of the limestone 13 blue-grey and silicified, otherwise it is green-
١.	- grey or buff and less silicified. Ledding at 55° 7065° 70 Core
•	of the limestone 13 slue-grey and silicified, otherwise it is green- grey or buff and less silicified. Bedding at 550 to 650 to core asis. Local slearing.
١.	154-156:- fragmented, rubbley.
	163-163.5':- quartz-carbonate vein certs core at 60°.
5-167	Dure as and all the things of the state of t
1 / <sup>07</sup>	Dyke MATERIAL: Carsonatized, Rachaized and "monitic Stained - Suff-brange
1 7	DYKE MATERIAL: Carbonatized, Kaolinized and limonitic Stained - buff-orange brown. Widely spaces blebs of pyrite. In fracture coatings.
. $\vdash$	166-166.5';- MUD.
7-190	INTERBEDDED PHYLLITE & LIMESTONE; - Limestone is locally blue-gray
′′′′	THE HOLDED LILY TELLE TO THE TELLE TO THE TELLE TO THE TELLE THE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE THE TELLE THE TELLE THE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE TELLE THE THE TELLE THE THE TELLE THE TELLE THE THE THE THE TELLE THE THE THE TELLE THE THE THE THE THE THE THE THE THE TH
	Silicified over first 10' it is very siliceous otherwise, and for the most part-limestone is greenish gray and
١,	and to Who most want - limestone is greenish grow and
	less silicified.
	167-174.5'! - Core is froquiented and rubbly.
- 1 '	172, Bedding at 50°- 70° to core axis.
1 '	177 1 - 6" 500 - 1
1 1	
<b>⊢</b>	179.5:1-3" pug.
1 .	1835-1845: Vein of funt - Carbonate at 70 10 Core axis
	1835'-1845'. Vein of quarts - carbonate at 700 to core axis 1855'!- Shear latt 2500 to core axis
	7,050
70-202	LIMESTONE! Blue-grey very siliceous widely spaced thin
	The state of the s
, i	Phyllite beds. Stringers and veins (narrow) of curbonate
	thronahout section. Phyllite content increases.
	with Heirh Redding of the to core dris tocally the
	phylita c Shally and inc
	throughout section. Phyllite content increases with depth. Bedding at 600 to core axis. Locally the phyllite is slightly graphitic.
zc2'  -	END OF HOLE.
262	END 52 77528.
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#### DRILL HOLE LOG

HOLE No. 4 F 86-8 PAGE | OF 2

COORDINATES 190 m. E. Z m 5. ELEVATION 1473.0 m. (4833 ft.) DIP -55° AZIMUTH 347° SCALE CORE SIZE HW PAGE | OF HOLE STARTED Aug. 27, 1986 HOLE COMPLETED Aug. 28, 1986 LOGGED BY R. WILSON & A.M. FREW.

FOOTAGE		DESCRIPTION	DIP
0-10	•	CASING.	
0-28.5	•	PHYLLITE, with minor limestone interbedded. Core is very fragmented and rubbly. Limestone is slightly silicified.	
		rubbly. Limestone is slightly silicified.	
	•	13-14: - Limonitized, Siliceous limostone fragments. 11.5: - Limonitized pug fragments of limestone and phyllite. Bedding at 250 to 300 to Core axis, phyllite is locally graphitic.	
	•	Bedding at 250 to 300 to Core axis, Phyllite is locally	
		graphytic.	
	•	18:1- pugphyllitic.	
		1 40 1- (61)	
İ	•	26'8":- 4" of Imanitic Pus	
ŀ	•	DYKE: carbon at and a la silver field with depth.	
28.5′-32′	:	DYKE: carbonatized and Kail I le I an	
	•	Numerous fractions and Rablinized, altered buff oronge-brown	
	•	dyke alteration is not so witense Here Have the	
		emerald green suche - locks line there are little	
		sericite series the flichsite, himyse pale green	
	:	1 7 7 9 9	
32-36.5	•	29'4":- /"' 4"	
70.5	•	LIMESTONE APHYLLITE! Thinly beaded. Limestone is blue-grey, Silicified.	
	•	Locally phyllitic Houndant blebs and stringers of quarty.	
1	•	339" - buff - crouse brown dylo eff shoots. & Kaolinized and a 36.5 !-	
1	:	36.5 1- 2 Carbonatizeds	
		brecciated with calcite and the infilling.	
36.5-405	•	1	
Į	•	1	
	•	Sheared. First 44 is a areanish-aron Phyllite is intense.	
70.5'-		1	
42.5	•	OKIDIZED Zone: Fault goude, purple-black wad limonie sheared  phyllite and framments of silicitied homesisms. Some	
	•	Crucialina harmonts of silicitied himesiania Some	
,	-	Crustaline mandanese and mangamiferons sends force.	
42.5 - 93.5'	<b>!</b> :	INTERCEDIES LIMESTONE FRAULLITET! Moderate to thick be Now Limes	۶۰۰۶
د.ره		1 STATE OF THE ANGLES OF BOUND OF THE STATE	,
	•	the carting Locally the Innessone is phylling.	
1	:	Assermented ourse locally, Limestone contains	
İ	•	Alsseninged durite locally, Limonite throughout.	
33.5'-	l :	DYKE : Composing of 40 sto core aris. First and lost for allered	
88'10"		buff orange-brown, otherwise green with temnant	
	:	phenocrysts of feld apar and pull rene (hornbiende?) Duze	
	•	15 Faroch of 120'd through cill.	
	•	85.5 -86.51 - Phyllitic himestone Inclusion.	
2010"		Large of the prosent near contacts.	
77.5	۱.	MERREDED LIMESTONE UPHICLITE! Moderation of thinky	
1		Interior Aded . Mighal homerono is blue-organ be asked the second of the second . Redding at Hothe committee.	
•	ı	The state of the s	L

#### HOLE No. AF86-4

## DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH

AZIMUTH :	LOGGED BY
SCALE	0.00
FOOTAGE	DESCRIPTION UP A CONTROL OF THE PROPERTY OF TH
. •	(CONTINUED) Phyllite beds generally host calcite and buff Carbonate Veins.
99.5'-102'	DYKE: Andesitic, dark greenish grey, fine grained, applicantic groundmass with small anhedral to subhedral phenocrysts of altered feldspar, Fairly massive Contacts at 50° to core axis. The limestone near the contacts appears to be baked!
•	Foirly massive - Contacts at 500 to com axis The linestone near
	the contacts appears to be baked!
102-113'	INTERBEDDED LIMESTONE +PHYLLITE! Limes fone is Slue-are. Silver find
•	INTERBEDDED LIMESTONE +PHYLLITE: Limestone is Slue-grey, Silicified, massive, with beds up to 11/2" thick the interbedded phyllite
•	Bedding at 500 to 550 to core axis.
113-1145	Bedding at 500 to 550 to Core axis.
	1 19KE: Porphyritic, Medium To dark green. Similarto 99.5-102
•	In the following sediment at ME' is 500to care
•	DYKE: Porphyritic, Medium to dark green. Similar to 99.5-102' except there are more phenos. Chilled contacts. The bedding in the following sediments at 114.5' is 550 to core axis, the dyke contact is normal to this.
114.5'-	MASSINE PHULLITIC LIMIESTORIE! Dark blue-and she P.
119'	MASSIVE PHYLLITIC LIMIESTONE: Park blue-gray, silicified, narrow (upto 1/4") beds of phyllite. Tightly fractured. Finely disseminis. And small slebs of pyrite throughout.
•	and small blebs of purite throughout.
•	1145-116'; - Several fragments, or 2"-3" irregular dyke off. shoots
/   <u> </u>	Culting across L bedding
119-123.5	DYKE: - Light gray, hyalopilitic groundmass with numerous aftered feldquer phenocrysts - black rimmed. Widely spaced try quartz-eyes.
•	phenocrysts - black rimmed. Widely spaced tiny quartz-eyes.
•	Apple green colored inineral throughout. Chilled confacts.  Apper confact at 350 to core, outter contact at 550 to core.
123.5'-	Concrete a prince of the state of the property of the a protonniant
130'	CALCAREOUS PHYLLITE: Thinky interbetsted limestone with in a predominant
1	Calcareous phullite unit. Phyllite is sheared, along which there is limonitic stain. Gradational confect.
130'-	SILICIFIED, PHYLLITIC LIMESTONE! Limestone is sieth to nedium
132.5'	grey, fairly massive. Abundant 114" Carbonate Stringers.
1. 1.	Throughout there are blebs of emerald green micoceous mineral - fuschite or mariposite(?).
132.5'-	mineral - fuschite or mariposite(1).
136'	LIMESTONE! Finely Commated, interloyered blueish-grew and white limestone. Redaine at 250 to core axis.
12/1/61	LINESTONES & Deal to made blooms widely conce / Sille bounds
136'-152	LIMESTONE: Dark to medium blue-oncy. Wido's space ! Silty bands !
1 1	137-133: Severai Shards of Shale.
1 13	The lumes one is finely banded and locally shale in
1 <b>-</b>	the longestene is finely banded and locally shalely tooking. The lost 41/15 rusty, limonise stained
.    '	Phyllite.
1 , 1 ;	
152	END OF HOLE
1 1.	
1 1	•
1 1	
\ \-	<b>-</b>
	<u>.  </u>
1	
1 1	•
1	•
1	•
1 1	·

HOLE No. AF86-9
PAGE 1 OF 4

CORE SIZE HW, NR + BR PAGE 1 OF HHOLE STARTED AUG, Z9,1986
HOLE COMPLETED SEPT. 5, 1986
LOGGED BY R.WILSON & A.M.FREW.

SCAL FOOTAGE	E	DESCRIPTION DATE
0-9'	•	CASING.
0-46	. •	<del></del>
		INTERBEDDED LIMESTONE & PHYLLITE! Mostly blue-gray, silicified Imestone beds, up to 1.5 thick, with lesser 6"-9"phyllite
•	•	beds. Limestone is pyritic, and locally phyllitic. Phyllite
	•	15 calcareous throughout Bedding at 40°-500 to core.
1111	•	beds. Limestone is pyritic, and locally phyllitic Phyllite is calcareous throughout Bedding at 40°-500 to core. Widely spaced Knobs of guartz-Carbonate. Gradational Contact.
46-77.5	Ŀ	INTERREDUED LIMESTONE UPHYLLITE. Similar to above except
	•	there is an increase in phyllite. (upto 50%) Bedding at 350 to 550 to core axis. The beds are
1		of pan of thickness to core axis, the beds are
	:	evident. himonite stain throughout Sound
		evident himonite stain throughout, some phyllite is weakly graphitic. Thearing at 57.5', 62', and 65'.
77.5'-88'		PHYLLITE, Light buff, orange-brown phyllite and phyllitic
	•	IMESTANE - VEILL MINOR HIMESTONE, KNOWNS OF GRAFTS.
	<u> </u>	Carbonate throughout. Some phyllite's assisting. Bedding of 450 to core. Last 3" is purp.
33'-1039	:	INTERNATION OF THE TO CORE Last 3" IS pus
25 -1059	:	INTERBEDDED LIMESTONE 484 YLLITZ ! Moderate to thickly
	•	domingit. The linecrope is silicified the
		Interbedded. Some limestone is phyllitic. Phyllite dominant. The limectone is silicified. The phyllite is a crisenic Quarty, carbonate knows throughout. Phyllite locally graphitic. The
	•	lings consist hime are execut near which
1		hinestane is blue-night except near physical parids where it is linguiste stamed. Pyrite is
103'9"	<u> </u>	120 100 100 100 100 100 100 100 100 100
1055	:	PHULLITE: Thinly bedded phyllite and very phyllitic himeslene.
		Budding of Was to Core.
1055'-		INTERBEDDED LIMESTONE APPRILLITE! The homestone mades
117.5'	<b> </b> :	in and out of a more phyllitic limestone, Limestone
		whore hungione is blue arey it is siles from where
	Ŀ	it is limonite stained it is less silicified. Relaine
		at 40° to 55° to core. The homes and
		phy the is locitly pyritis, Carbonate Straining
	•	Throw shout, Some provide is graphille.
1175'-	1:	MASSIVE LIMESTONE 1. Bive-tra. Silver Pad, purific, contains thin bands of whithe Bedding of 400 to core, within part of carbonare total ghout.
/22/3	:	withings of Carbona & throughout.
122.5'-	1:	MOSFRITE IN BEDDED LIMESTONE SPRINGLITE! LIMESTONE WITTE
23.5	<u> </u>	1 0/1/1/2 20 5 1/ Can 1/50 Car/301 1/4. 6/5/5/6/1/6-
	:	depth. But saining The home town is blace -
	١.	Bedding at 50 to core. Physica imonita
}	:	Stand - Arabas brown hide can of
		Stained - orange - brown, Widesporod
:43.51_	1:	LIMESTONE 1. Massive, blue-grave, site don't pyritic with widely spaced narrow phylitic beas, Limenter stain,
151,51	•	widely spaced narrow physic bear. Limon for stay,

#### HOLE No. 4F86-9 PAGE 2 OF 4

## DRILL HOLE LOG

COORDINATES ELEVATION OIP AZIMUTH . SCALE

SCAL	Ε		
FOOTAGE		DESCRIPTION	DIP
	•	(continued)	
151,51	. •	PHYLLITE + PHYLLITIC LIMESTONE; Bands of phyllite locally limonitized and graphitic. Knobs of quartz-carb.	
	•	PHYLLIE THE TOURS I and anachitic Kingle of quarter-carlo.	1
156,5!	•	imonitized and graphine. Anos of quality	
1	•	Ilmonitized and graphitic. Knobs of quartz-carb.  throughout. Bedding at 550% core.	
156.5'-		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1
159.5	J :	INTERBEDDED LIMESTONE + PHYLLITE: Limestone 15 due-gray, Silicified, locally phyllitic. Phyllite dominant. Abundant is oclinal folds. Bedding at 350 to Core. Much shearing throughout.	
1		Silicified, locally phyllitic, inglite or minum:	
i		Abundant is oclinal folds. Bedding at 350 10	
1	•	core. Much shearing throughout.	
im el	•		1
139.5-	•	MASSIVE LIMESTONE: Blue-grey, Silicified. Pervasively,	
184'	•	Pyritic. Widely spaced narrow phyllite bands.	l. [
- (	•	Bedding at 400 to come. Phyllite bands.	
•	l :	increases with depth. Knobs of guarty-	
1	:	Carponate midal socied throughout	l i
· (		Carbonate widely spaced throughout, wide spaced limonite staim.	l 1
184-	<u> </u>	INTERALIBORIO PULLO TA LA CONTRACTORIO DE LA CONTRA	
1931	•	INTERBEDDED PHYLLITIC LIMESTONE +PHYLLITE: - Blue gray	1 1
1775	•		{
	•	Much isoclinal folding, Carbonate Knobs	·
	1:	and stringers throughout. Bedding at 300 To	il
1	1:	40 to core. Where silicification is	}
ŀ		Much isoclinal folding, Carbonate Knob's and stringers throughout. Bedding at 300 to 400 to core. Where silicification is strongest there is much disseminated Pyrite. Where snearing occurs the phyllite. Is arother occurs the phyllite.	
		pyrite. Whore snearing occurs the phyllite	
	١.	15 graphitic. Axial planes of the isoclinal folds	\ \
1	<u> </u>	are parallel to bedding.	1
193'-	•		
194	1:	Gube: Muddy, thick, Clayey gouge, with fragments	1 1
1	1:	GOUGE: Muddy, thick, Clayey gouge. with fragments of graphitic phyllite and silicified limestone.	1
194'-		1	
	١.	INTERBEDDED LIMESTONE + PHYLLITE: Bluegray, silicified	
205.5	•	phyllitic limestone up to 2'thick with interbedded limionite stained phyllite up to 1'thick Isocling folding evident. Pervasively pyritic throughout.  Much carbonate Veining throughout.  197-2055'- pronounced increase in liminate store-	y
l l	l •	phyllific timestone apto 2 miles with the leading	
	١.	Inionite Stained phyllise upto I take Isterny	
		folding evident. Pervasively pyritic throughout.	
- [	1:	Much carbonate Veining throughout.	
1		197-205,5'1- pronounced increase in limonite stoin-	
		Possibly due to pyrite.	
١,		1 9 11 10 10 19 11 12 1	<b>l</b>
205.5-	.   •	PHULLITE, D. 1 + 11 1/2 1/2 1 1 1/4 1/4	
22/	•	1" Your E: Vary grey to black (graphitic) phytille with	
122/	١.	narrow (up to 2") interpedded light grey limestone	<u> </u>
j	· .	PHYLLITE: Dark grey to black (graphitic) phyllite with  narrow (up to 2") interbedded light grey limestone Much carbonate as Knobs and stringers	
1		throughout.	
1	1.	219 5- 72 0'1 0000	1 '
<b>,</b>	1.	219.5-220'!- gouge.	1
221-	1.	1 Y	l
249	1.	LAMINATED LIMESTONE: With narrow interbedded phyllite.  Angular clasts of light brown, fine grained shaley material throughout Much light brown Limonite  the	1 .
	1.	Angular clasts of light brown fine grained shaley	
	•	material Hronday Much light brown Limonite	
	1:	Stain.	
	ட்	274171	<u> </u>

## HOLE No. AF 86. PAGE 3 OF 4 9

#### DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH SCALE

. .

CORE SIZE HOLE STARTED HOLE COMPLETED LOGGED BY

. 134

_	FOOTAGE		DESCRIPTION	DIP
1		•	(continued) massive limestone beds at 226'-229 and 2445'-248.	
		•	The lamination is fine and the limestance and Elle	
		•	Interpeds are mostly "" to " thick Redding +	
- 1		•	550 to core locally the the litere and the	
-1.	, 1	•	Interbeds are mostly 14" to 1/2" thick. Bedding at 550 to core. Locally the phyllite is graphitic.	
	49'-	•	,	
	252'		DYKE: Lightbrown, leached, extremely schistose.	ŀ
		•		
2	52-		PHYLLITE: Dark grey to greenish grey. Wide spaced blobs of apple green micaceous mineral-fuchsite or mariposite (?) (Could be extremely schistose and altered dyke.)	
- [ ;	259	•	apple green micaceous mineral-fuchsite or	
- 1		•	mariposite (?) (Could be extremely schistose	
- [		•	and altered dyke.)	
2	259-	•	1000000	
	294'		LAMINATED LIMESTONE 4 PHYLLITE. Limestone dominant.	
	•	•	Laminations up to 2", but generally less than	
		•	1" Bedding at 550 to core, Limestone is fine	
		•	grained, light blue-grey, siliceous,	
	794-		Laminations up to 2", but generally less than  1". Bedding at 550 to core. Limes tone is fine grained, light blue-grey, siliceous.	
- [		•	PHYLLITE; With interbedded limestone. Phyllite up to	
ł	310'		- 1 1 octore 211 211 Ma Hlad a UNEARANCE	
		•	2.5', Imestone 2"-3". MoHled appearance. (calcareous phyllite.)	
٦,	, ,	•	( careare bus phyllite.)	
2	310-	•	Laminated LIMESTONE: Minor, narrow, widespaced phyllite.	
	317	•	Laminated Limestone; Minor, narrow, widespaced phyllite. Limestone is blue grey, Silicified.	l
1,	317- ,	•		
	324.5	•	PHYLLITE ! Calcareous, minor narrow (12) beas of limestone.	
		•	Limonite stain Bedding is along core, loving	i
	l	•	PHYLLITE: Calcareous, minor narrow (1/2") bads of limestone.  Limonite stain. Bedding is along core, (60ing through axis of isoclinal fold.)	ľ
- 1:	324.51-	•	lu de de la compania de compania	
		•	LAMINATED LIMESTONE' Same as 310-317. Isochnal	
	354'	:	folds throughout.	
١.	-1	·	50,000,201/22/2	
7	354'-		PHYLLITE I with interbedded limestane Jame as 294-310	1
	373'	•	PHYLLITE: with interbedded limestone Same as 294-310' Isoclinal fold at 372! Bedding at low angle to Core	1
		_	LAMINATED LIMESTONE: With minor phyllite. Same as 310'- 317', Bedding at 55° to core.  PHYLLITE: with interbedded limestone. Much like 294-310'.  Bedding at 55° to core. Locally phyllite is calcareous and mottled in appearance. Small isoclinal (dragfolds) throughout.	l
. ] 5	73'-	•	LAMINATED LIMESTONE, With minor phyllite. Same as 310-	ĺ
	382'		317', Bedding at 55° to core.	İ
3	182'- 418'		PHYLLITE; with interhedded limestone Much like 294-310.	
r	418	•	Bedding at 550 to core Locally phullite is calcareous	
		•	and northled in a preavoure Small isoclinal	
- 1		•	(dreakede) throughout	
- 1.		•	January Town of the state of th	ł
4	18-,	·	1 = C = 1 = 11 In Lando Same as 310-317'	
	453.5		LIMESTONE WITH PHYTITE INTERBENS.	1
			LIMESTONE : WITH Phyllite interbeds. Same as 310-317' Bedding at 450 to core. Locally Limestone is	
	,	•	3' thick. Blue - grey, silicified.	
4	153.5'-	•		
	4631	•	LIMESTONE: Minor, widely spaced narrow phyllite beds (upto It") Limestone is blue-grey, finely laminated.	
	5	:	12" Limostone is blue - are lived law Jal	1
1		•	The state is state grey, They will ased.	
ĺ				
			· · · · · · · · · · · · · · · · · · ·	

#### HOLE No. AF86-PAGE 4 OF 4- 9

#### DRILL HOLE LOG

COORDINATES
ELEVATION
DIP
AZIMUTH
SCALE

SCALE			
FOOTAGE		(CONTINUED)	DIP
463'- 485:5'	•	PHYLLITE + LIMESTONE INTERBEDDED: Limestone upto 5 "thick,  Phyllite upto Z' thick. Bedding at 58° to core.	
485.5'- 497'	• • •	PHYLLITE: Dark grey, conterted. Minor tusty brown limonitic  Stain. Locally graphitic. White carbonate veins and stringers throughout.	
497 <sup>1</sup> - 511.5	• • • • •	DYKE: Fine to medium grained, remnant pyroxene (hornblen phenocrysts. Finely disseminated pyrite. Light grey dacitic looking.	10)
511.5 - 531	•	PHYLLITE: Same as 485,5'-497'. Contact at 531'cuts core at 300 to core axis.	
531- 532		DYKE: Same as 497'-511.5'.	
53z		END of HOLE	
:	•		
	•		  -
	<u>:</u>		
		e to the second of the second	

DRILL HOLE LOG

HOLE No. AF-86-1 PAGE / OF 7\_

COORDINATES 73.5 m W, 15 m. 5. ELEVATION 1514.8 m. (4970 ft.) -80°

AZIMUTH: 3320 SCALE

HOLE STARTED SEPT. 5, 1986 HOLE COMPLETED SEPT. 6, 1936 A.M. FREW. LOGGED BY

HW

CORE SIZE

0-4' CASING. 0-22' 22-23 PHYLLITE +LIMESTONE: Predominantly Phyllite-up to 2'thick with interbedded limestone (up to 2" thick). Dark reddish brown (siderite) crystals throughout. 23'-36' 23-24'1-Vuggy quart-carbonate vein at 400 to core OXIDIZED PHYLLITE: Interisely limenitic, calcareous phyllite. Darkbrown and orange-brown stain. Minor Mn. replacement. Last 4" is vuggy. | Sample No. 7231 36'-38.5' OXIDIZED ZONE: Limonitic, hematitic, manganiferous exidized zone.

Fragments appear to be phyllite, but original rock
Completely altered and replaced. Badly broken.

50me ordinge limonite widely spaced throughout
30ne. Contects obliterated. 38.5 -40.5 38.5'-39':- gouge Sample No. 7232 40 - 405': - gonge PHYLLITE: Phyllite with fragments of limestone. Somewhat brecciated with white and manganiferous calcite matrix. Minor limonite. 40.5'-42' 42'-OXIDIZED ZONE'. Vuggy, calcareous phyllite, with much 46.51 manganese replacement. Dark orown, orange-orown, and Light rusty brown limonite. Tiny black crystals of Mn. Throughout. I sample No. 7233. 44-45':- gouge. 46-46.5':- gouge. 46.5'-LIMESTONE / PHYLLITE BRECCIA: Blocks of coorsely brecciated phyllite and limestone within a finer breccio with framents 62 as small a! 1/2" The large blocks are up to 21/2 across. White and daily orangey-brown matrix. My throughout. 58-59': - vuggy 60.51 !- Shear. LIMESTONE BRECCIA: Fragments of dark grey silicified limestone
in a tight breccia. White, buff and dark brown
Carbonate inatrix. Some manganiferous calcite in
matrix. Wide spaced siderite. Mh. crystais coating
fracture surfaces and your. 66,5' OXIDIZED ZONE: Manganese, limonite and hematite aftered 66.5'-71.5' fragments of completely Kaplinized and leached dyle Blocks. Vuggy. Much black Sooty Min. 67-60:- gouge 69-71.5':- gouge. Much orange-brown limonite throughout section. . SAMPLE NO. 7234

#### HOLE No. AF86-10 PAGE Z OFZ

### DRILL HOLE LOG

COORDINATES ELEVATION DIP AZIMUTH SCALE

AZIMUTH	LOGGED BY
SCALE FOOTAGE	DESCRIPTION
71.5'-	DYKE BRECCIA. Tightly brecciated dyke; fragments have been completely leached, Kaolinized and carbonatized.  Light brown limonite stain is pervasive. Matrix 15 white carbonate.  72'-73'4":- gouge - with black Mn. and limonite
•	72'-73'4":- gouge - with black Mn. and limonite 9 Heration. 75.5'-77':- gouge- as above. 80-82!- gouge- as above. 84-85:- gouge- as above. 91-93:- limestone fragment. 93-95.5':- phyllite (graphitic) fragment.
102-	DYKE! Medium to fine grained Lightgrey. Abundant apple green micaceous mineral (fuschite?) possible green sericite. Widely spaced tiny quortz-eyes. Silicified throughout - carbonatized locally. Looks felsic, but most likely altered basic. Buff staining near narrow carbonate stringers, and fractures. Last 1' weakly brecciated.
117'	END & HOLE

πο	AZIMUTH	Vy STADIA	STADIA	HAIR	400	ANGLE	DIFF.	DIFF. ELEV.	И.1.	teration	STATION & SEMARES
-			Take	٧//	Ele.	chim.	ii feen	pros	2 . OL .	Tarky mray	the host end of trench
			401.0	ورج		the other	train	Value	w/ 5,000/	16- 1570.0	nehe A
0				Ĺ					<u> </u>	1473.0	DDH 8'
7	36043'		935	M	3 15	-21%0	-31-3	+34.4	1507.4		
	33043'		1005	М	2.45	-20 °00'	-32 1	-315		19.72.9	Trench 7 beride mader
	36°13′		34'	7	3.75	-20°22'	-11:1	- 14.9		19925	DOH 7
	3°00′		33	М	3.3	-17 %	-72	-12 5		14949	Contract track 6
	340°38′		37	M	36	- 3 %	-1.9	- 5.5		15019	Marker lanch 6
	308°54'		39	M	0.9	+2°00	114	10.2		1507.9	Morker level 5
			ပဝ					~1.3		1506.1	S. and timel 5
	120°48'	_	39	М	3.3	-14 00'	-9.2	-12.5.		1494.9	Bm# 1 Pock Sois gross
	134°03'		18	M	3.6	-12 00'	-37	- 1.3		1500.1	& road
	·240°23'		13 5	~	1.4			-1.4		1506.0	Seed freel 4
	271 •23'		32	M	1.7	_		-17		1505.7	centre troud 4
	27704(		53	M	13	+8°00'	+7.3	+60		1513.4	Maker level 4 .
	347003						+3.32'				penk
	50551						-0°30'				Co.c.
	17°04'						120461				SL 1. 1. 110

πο	AZIMUTĤ	V2 STADIA	STADIA	HAIR	#OD	ANGLE	DIFF.	DIFF. ELEV.	н.т.	HEVATION	STATION & REMARKS
<u> </u>	256000		75	M	0.5	17000	+9.1	+ 8.6		1516.0	Molley Tical 3
大	45018		18	M	4.0	-3000	-0.9	14.9	1520.9		
_	38°00		11	М	3.1			-3.1		1517 8	Market Tropet 2
	57 002		31	M	3.8	-12.200'	-63	-/0 /			code touch 3
	72 *13'		<b>48</b> .	M	3.5	-880'	-6.6	-10-1			Signal lived 3
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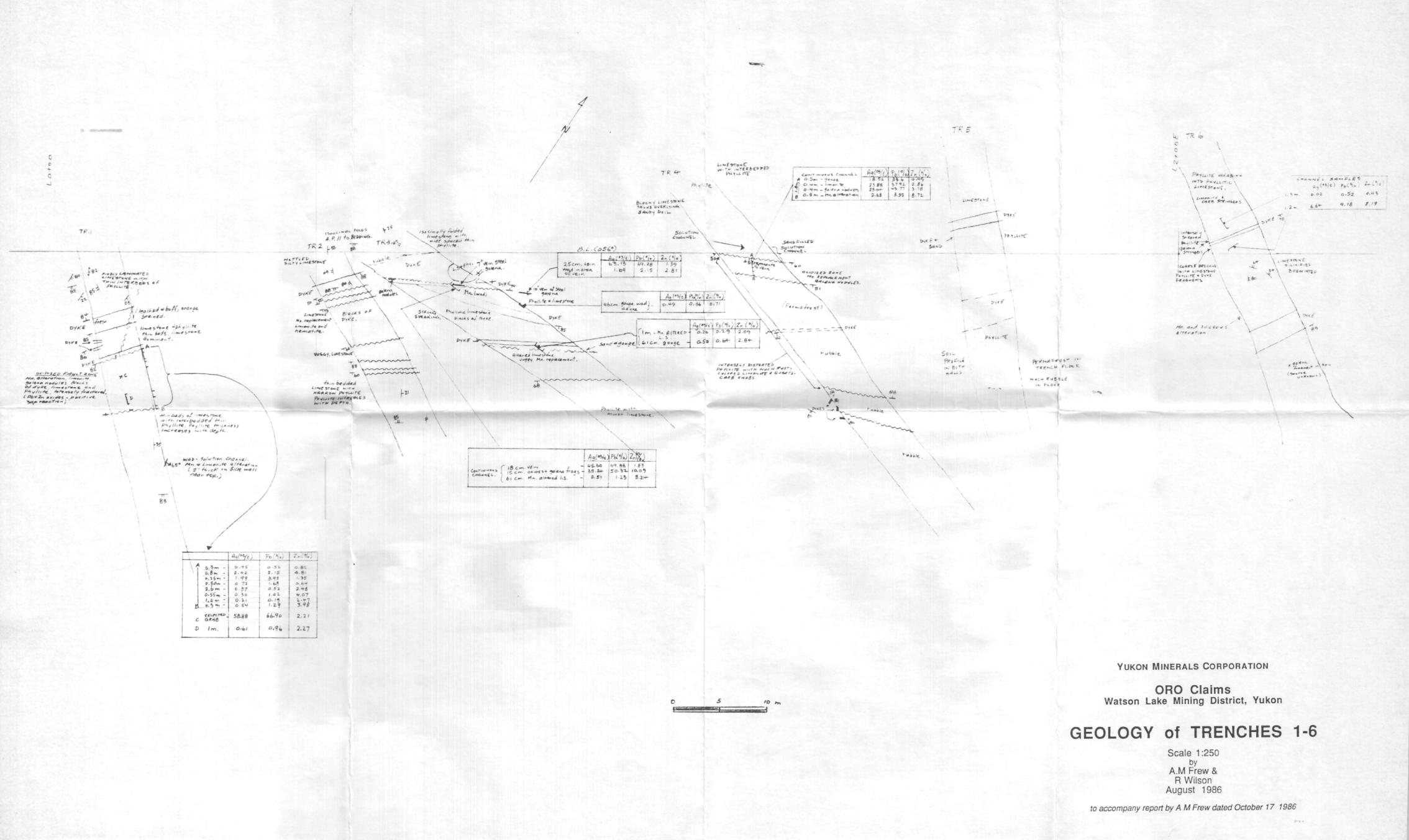
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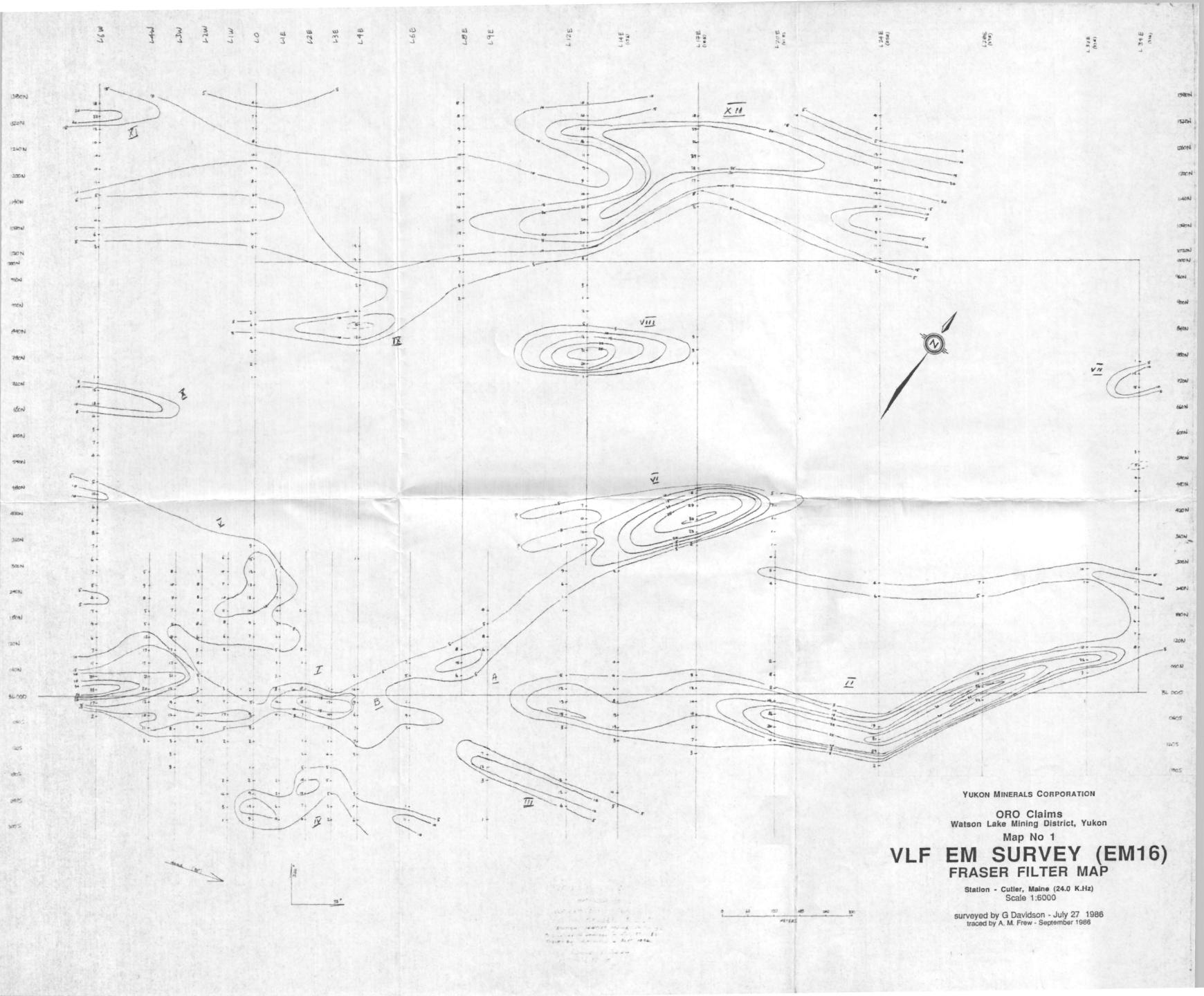
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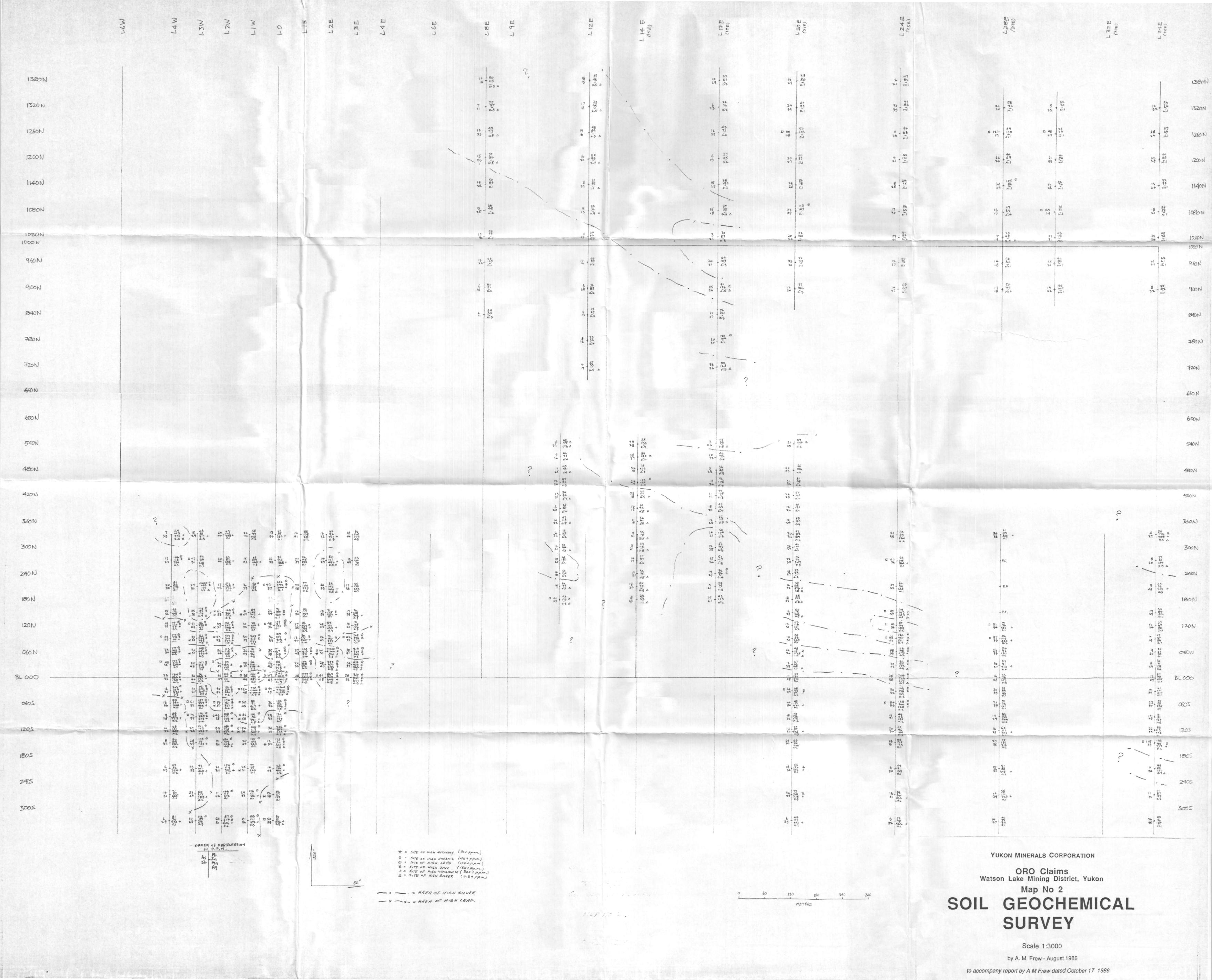
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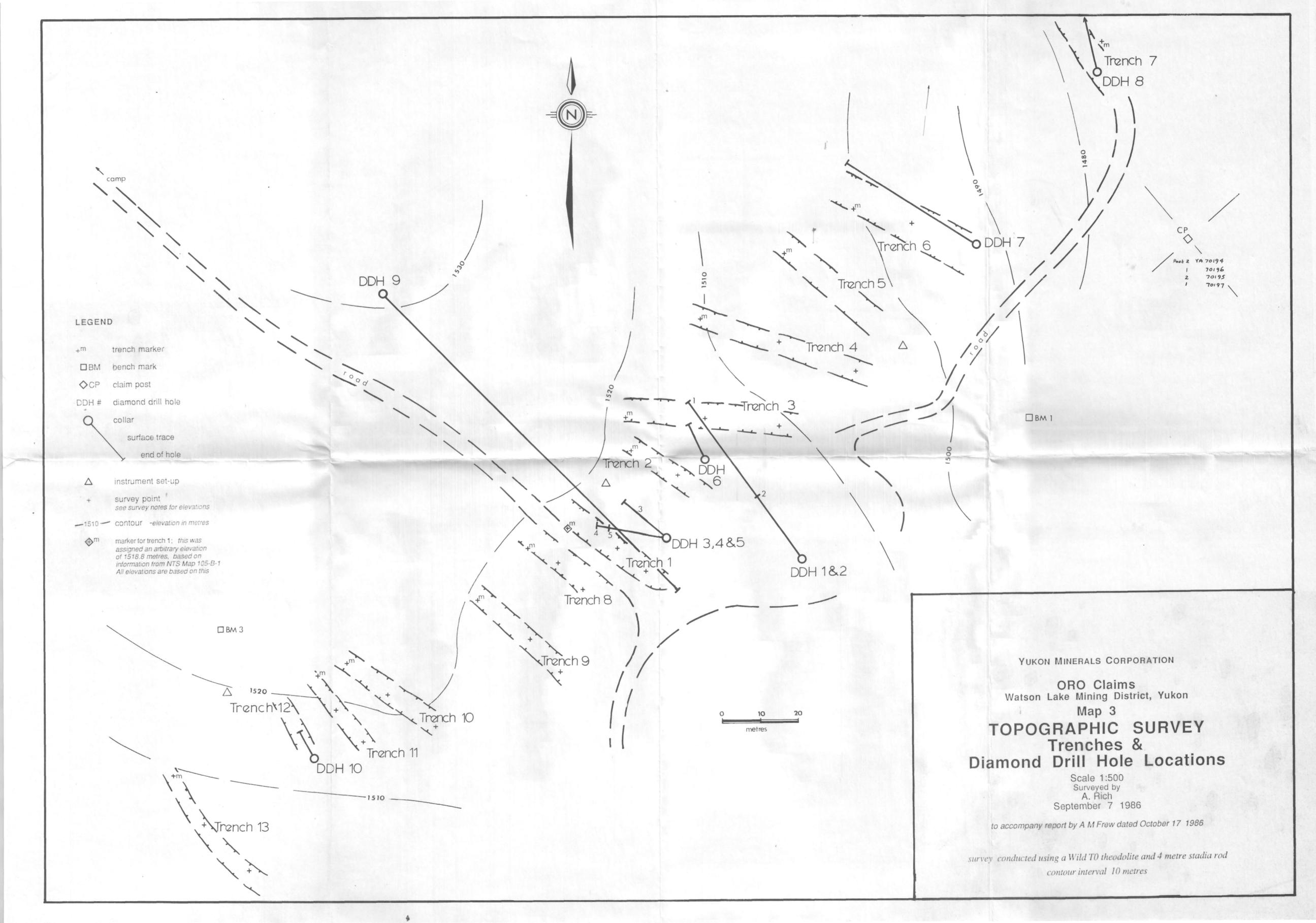
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# THIS IS AN OFFER

#### OFFERING MEMORANDUM

THIS IS AN OFFERING MEMORANDUM WHICH DESCRIBES THE BUSINESS AND AFFAIRS OF YUKON MINERALS CORPORATION, AN ALBERTA JUNIOR MINERAL RESOURCE CORPORATION WHOSE SHARES ARE LISTED AND POSTED FOR TRADING ON THE ALBERTA STOCK EXCHANGE, AND HAS BEEN PREPARED PRIMARILY FOR DELIVERY TO AND REVIEW BY SOPHISTICATED PURCHASERS SO AS TO ASSIST THOSE PURCHASERS TO MAKE AN INVESTMENT DECISION IN RESPECT OF SECURITIES BEING SOLD IN A DISTRIBUTION TO WHICH SECTION 81 OR 97 OF THE SECURITIES ACT (ALBERTA) WOULD APPLY BUT FOR THE AVAILABILITY OF ONE OR MORE OF THE EXEMPTIONS CONTAINED IN SECTION 107(1)(D) AND (R) OF THE SECURITIES ACT (ALBERTA) AND BY EXEMPTION UNDER THE LAWS OF THE YUKON TERRITORY.

This offering memorandum is for the use of only those persons to whom it is transmitted by the directors and officers of the Corporation or by any registrants on behalf of the Corporation and it is not to be reproduced or used, in whole or in part, for any other purpose. It is not and under no circumstances is to be construed as a public offering or advertisement of the securities referred to herein. It has not been reviewed by any Securities Commission or similar authority in Canada nor have such authorities in any way passed upon the merits of the securities referred to herein and any representations to the contrary is an offence. This document is an offering memorandum, not a prospectus.

June 30, 1986

#### YUKON MINERALS CORPORATION

a junior mineral resource corporation incorporated pursuant to the laws of the Province of Alberta

50 Units representing 8,000 Common Shares per Unit at a Subscription Price of \$6,000 per Unit

Subscription Price: \$6,000 per Unit at \$0.75 per Common Share Minimum Subscription Per Subscriber: One Unit of 8,000 Common Shares at an Aggregate Cost Per Subscriber of \$6,000.

Yukon Minerals Corporation ("Yukon Minerals" or the "Corporation"), through its directors and officers and through any investment dealer or broker-dealer registered in the Province of Alberta who are authorized by the Corporation to sell Units, offers, on a best efforts basis, a maximum of 50 Units representing 8,000 common shares (hereinafter referred to as the "Flow-Through Common Shares") per Unit and a minimum of 10 Units representing 8,000 Flow-Through Common Shares per Unit at a price per Unit of \$6,000. Each Subscriber must purchase a minimum of one Unit at a minimum aggregate cost of \$6,000.

	NUMBER OF UNITS	PRICE PER UNIT TO SUBSCRIBERS (1)	COMMISSION (2)	NET PROCEEDS TO CORPORATION (3)
Per Unit		\$ 6,000	\$ 600	\$ 5,400
Minimum Offering	10	\$ 60,000	\$ 6,000	\$ 54,000
Maximum Offering	50	\$300,000	\$30,000	\$270,000

All amounts are Canadian dollars unless otherwise indicated.

- (1) All proceeds from Subscriptions received by the Corporation on behalf of Subscribers will be held in a separate account and will not be commingled with any other monies. If by July 30, 1986 the Corporation receives and is prepared to accept Subscriptions for at least the Minimum Offering of at least 10 Units for an aggregate of at least \$60,000, then upon satisfying the conditions herein for the Minimum Closing, (namely, a closing which will occur if on or before July 30, 1986 Subscriptions are received for at least the Minimum Offering and the Minimum Closing Requirements), the aggregate proceeds from at least the Minimum Offering (together with such other proceeds from Subscriptions in excess of the Minimum Offering then in the hands of the Corporation) will be accepted by the Corporation. All proceeds from Subscriptions received by the Corporation after the Minimum Closing will be released to the Corporation immediately after the Corporation has accepted such Subscriptions.
- (2) A commission of 10% for each Subscription is payable only to those investment dealers or broker dealers registered in the Province of Alberta who are authorized by the Corporation to sell Units) for which they obtain a Subscription and for which Subscription Units are subsequently issued but no commissions will be paid to the directors and officers of the Corporation for Units which they sell.
- (3) Before deducting expenses of this offering memorandum estimated to be \$6,000.

The Flow-Through Common Shares offered hereby will be distributed to certain qualified Subscribers: the qualification of such Subscribers will be predicated upon the availability of one or more of the exemptions contained in Section 107(1)(d) and (r) of the Securities Act (Alberta) or of the laws of the Yukon Territory. Consequently, this offer for sale of the securities herein described is made pursuant to the terms and conditions of the exemptions as have been prescribed by the Securities Act (Alberta). See "Securities Act and Regulations - Filings". A holding period has been prescribed by the Securities Act (Alberta), during which period the securities acquired may not be sold.

These securities are highly speculative. The Flow-Through Common Shares are designed for persons who are prepared to accept the high risks inherent in the exploration of mineral claims and the Corporation has established neither proven nor probable reserves of ore on its mineral claims. The price of this offering was determined solely by the management of the Corporation and there is no market for the Flow-Through Common Shares offered hereunder or common shares of the Corporation and all Subscribers will be required to hold their securities for a minimum of twelve (12) months. See "Speculative Nature of the Securities" and "Securities Act and Regulations - Filings". Therefore, these Flow-Through Common Shares are not suited for Subscribers who may need to dispose of their investment in a timely manner. Moreover, Subscribers of the Units may be liabile for any damage arising from exploration work conducted on the mineral claims on their behalf. See "Liability and Indemnity of Subscribers".

The Flow-Through Common Shares are offered by the Corporation through the officers and directors of the Corporation and through any investment dealers or broker-dealers registered in the Province of Alberta who are authorized by the Corporation to sell Units on a "best efforts" basis, if, as and when issued, and subject to the acceptance by the Corporation of each Subscription. Minimum Closing will occur upon the receipt by the Corporation of a minimum amount of \$60,000 and should the minimum amount of \$60,000 not be reached by July 30, 1986, all proceeds will be returned to Subscribers, without interest or deduction.

To subscribe, a Subscriber must pay by cheque, made payable to the Corporation for the full amount of the Units for which the Subscriber wishes to subscribe and by completing the appropriate Subscription Agreement.

#### - 2 -

#### TABLE OF CONTENTS

	PAGE
THE CORPORATION	3
BUSINESS OF THE CORPORATION	3
History and Operations of the Corporation	3
ine Assignment of the Schellenberg Acquisition	
Agreement and the Oro Mineral Claims	3
THE FREW REPORT ON THE ORO MINERAL CLAIMS	4
Summary	4
Introduction	4
Figure No. 1 - Property Location	6
History	7
rnysiography and Vegetation	7
Property	7
Figure No. 2 - Oro Mineral Claims Man	8
Regional Geology	9
Property Geology	9
Observations	9
Figure No. 3 - Oro Mineral Claims - Regional Geology	10
Conclusions and Recommendations	12
Phase I	12
Phase II	12
Budget	12
MANAGEMENT AND KEY PERSONNEL	
THE OFFERING	13 14
Subscription Procedure	14
Minimum Closing Requirements	14
USE OF PROCEEDS	
CANADIAN INCOME TAX CONSEQUENCES	15 16
SECURITIES ACT AND REGULATIONS - FILINGS	
The Exemptions	19 20
Filings	21
Restrictions on Resale	21
DESCRIPTION OF SHARE CAPITAL	21
CAPITALIZATION	22
PRIOR SALES	22
PRINCIPAL SHAREHOLDERS	22
DIRECTORS AND OFFICERS	23
DIVIDEND POLICY	24
REMUNERATION OF DIRECTORS AND SENIOR OFFICERS	24
PIRECIORS! AND MANAGEMENT STOCK OPTIONS	25
'ROMOTERS	
SCROWED SECURITIES	25 25
ATERIAL CONTRACTS	
ONFLICTS OF INTEREST	26 26
PECULATIVE NATURE OF THE SECURITIES	
TABILITY AND INDEMNITY OF SUBSCRIBERS	27
NTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	27
RICE RANGE OF COMMON SHARES	28
UDITORS, TRANSFER AGENT AND REGISTRAR	28
INANCIAL STATEMENTS	28
URCHASER'S CONTRACTURAL RIGHTS	29
ERTIFICATES	34
	36

#### THE CORPORATION

Yukon Minerals Corporation ("Yukon Minerals" or the "Corporation") was incorporated as a distributing corporation by certificate of incorporation issued pursuant to the provisions of the Business Corporations Act (Alberta) on April 4, 1986.

The head office of the Corporation is located at 11003 - 84 Avenue, Edmonton, Alberta, T6G 0V6, and the registered office of the Corporation is 751 Esso Tower, 10060 lasper Avenue, Edmonton, Alberta, T51 2P4.

#### BUSINESS OF THE CORPORATION

History and Operations of the Corporation

The Corporation has not conducted any operations other than:

- (1) To issue by prospectus dated May 15, 1986 a maximum of 1,000,000 Common Shares at \$0.05 per Common Share for a total aggregate consideration of \$50.000:
- (2) to list and post its Common Shares for trading on the Alberta Stock Exchange;
- (3) to enter into discussions with industry partners and others and to search for mineral prospects; and
- (4) to enter into an agreement dated June 24, 1986 with Anthony Rich, Terence C. McCrory and William Preston (the "Assignment of the Schellenberg Acquisition Agreement") to acquire thirty (30) contiguous mineral claims located in the Watson Lake Mining District, Yukon Territory (the "Oro Mineral Claims") in exchange for Three Hundred Thousand (300,000) fully paid and non-assessable Common Shares of the Corporation, all of which Common Shares have been escrowed pursuant to an escrow agreement dated lune 24, 1986 (the "Escrowed Agreement"), the payment of \$10,000 to the Assignors on June 25, 1987 for monies expended on the Oro Mineral Claims and the assumption of all the terms and conditions contained in the Schellenberg Acquisition Agreement. Rich and McCrory are the Secretary-Treasurer and President of the Corporation and Rich. McCrory and Preston are directors. See "Interest of Management and Others in Material Transactions". The Oro Mineral Claims are the subject of an independent geological report prepared by Allan D. Frew ("Frew"), B.Sc., F.G.A.C. (the "Frew Report").

The Assignment of the Schellenberg Acquisition Agreement and the Oro Minerals Claims

By the Assignment of the Schellenberg Acquisition Agreement, the Corporation obtained an undivided 100% interest in thirty (30) contiguous mineral claims subject to the payment to Schellenberg of a 10% net profit interest and the requirement that the Corporation perform an aggregate of \$10,000 of work on the Oro Mineral Claims at the rate of \$5,000 per annum on or before September 10, 1986 and September 10, 1987 and, thereafter, \$5,000 per annum and the

payment of \$5,000 or the 10% net profits interest of production from the claims, whichever is greater on or before September 10, 1986 and September 10,

1987 and, thereafter, to pay the sum of \$5,000 per annum on each anniversary date of the agreement and the granting of an option to the Corporation to purchase 50% of the 10% net profit interest at any time for the sum of \$125,000.

The Assignors, pursuant to the terms of the Schellenberg Acquisition Agreement, paid \$7,500 on the execution of the agreement and performed such work thereon as was necessary to determine its potential. The Corporation in evaluating the Oro Mineral Claims engaged the services of Frew to provide a report to the Corporation so as to determine whether it should be acquired and such report recommended the acquisition of the Oro Mineral Claims.

### THE FREW REPORT ON THE ORO MINERAL CLAIMS

### Summary

Recently trenched structure on the Oro mineral property is seen to contain intriguing silver-lead mineralization which is similar to other major discoveries in this newly recognized silver-lead-zinc belt, which is known as the McCrory Silver Belt, in southeastern Yukon. Preliminary samples from one of the trenches assayed in excess of 45 oz/ton and 75% Pb.

Characteristic manganese oxide, "wad", is pervasive throughout the observed surface expression of a major fault structure which crosses the claims. This fault is seen to have a strike length of several kilometres, extending northeast-southwest across the entire width of the property. Surface features indicate the existence of other parallel fault structures.

In 1985, a silver-lead discovery was made on the property which lies immediately southeast of the Oro. This discovery has grades averaging 115 oz/ton Ag across 18 inches. Varying degrees of success are being achieved on other nearby discoveries in this new Silver Belt. These properties include the Meister of Getty Minerals and Regional Resources and the Wolf of PakMan Resources. The CMC property of Silver Hart Mines is proceeding towards production. Geological characterists of all these properties are much similar.

It is recommended that immediate consideration be given to acquisition of the Oro mineral claims and that an exploration program be implemented forthwith.

#### Introduction

In June 1986, Mr. Terence McCrory, President of the Corporation, requested Allan M. Frew, B.Sc., F.G.A.C., to assess the exploration merits and potential of the Oro Mineral Claims, Watson Lake Mining District, Yukon. This assessment involved a review of the available data, and a visual examination of the property which took place during a visit there on June 6, 1986.

The property represents excellent exploration possibilities by virtue of the existence of silver-lead-zinc mineralization contained within a major fault structure, and further by virtue of its being bounded to the east and south by

- 5 -

the Jack Claim Group, on which major high grade silver-lead-zinc discoveries were made in 1985. Certain similarities of geology exist as on properties in the general area, which properties are known as: the Meister, the Wolf, the Midway and Silver Hart, all of which are at varying stages of exploration and development.

Allan M. Frew, B.Sc., F.G.A.C. is familiar with the Jack Claim Group because of organizing and implementing the 1985 exploration program there, and being responsible for the resultant discoveries of silver-lead-zinc veins.

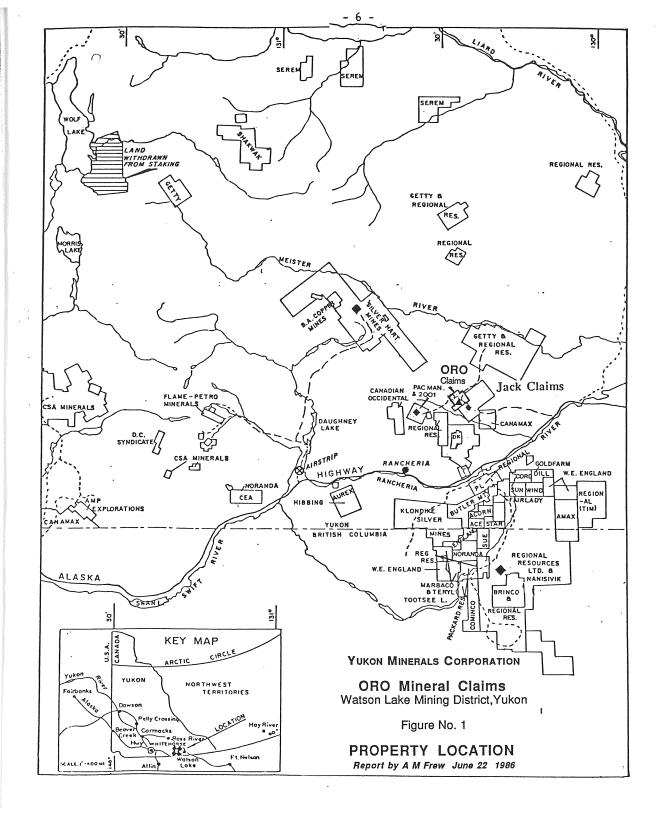
A program of exploration, and a budget for the evaluation of the Oro Mineral Claims is included with the following report.

#### Location and Access

The Oro Mineral Claims property is located on the north side, and near the headwaters, of Spencer Creek, within the Watson Lake Mining District of southeastern Yukon (Figure 1). More specificially, the centre of the property is situated at 60°12' North latitude and 130°27' West longitude. Access to the property can be achieved by means of a gravel bush road, which begins at mile 692 along the Alaska highway and runs in a general northwesterly direction along the north side of Spencer Creek. The distance to the centre of the property is approximately 27 km (16 miles) distance from the starting point at mile 692. The centre of the property is also approximately 14 km northeast of the settlement of Rancheria, which is at mile 710 on the Alaska highway (approximately 160 km., or 100 miles, west of Watson Lake).

The town of Watson lake is serviced, on a regular basis by Canadian Pacfic Airlines and has most services and amenities one would find in most large towns.

Rancheria has lodging accommodations and restaurant service available on a 24 hour basis. There is also a service station here, which, besides the routine supplies, offers limited mechanical repair.



#### - 7 -

#### History

It is not known exactly when mineralization was first discovered on the property. However, in 1969 an exploration program directed by P. Sevensma, uncovered silver, lead, zinc mineralization of which he stated "...an extremely encouraging assay was received from this narrow zone and together with its possibility of great length this becomes a showing of good merit". This mineralization assayed 42 oz/ton Ag and 65.5% Pb across 6 inches.

In 1984, Douglas Schellenberg of Watson Lake restaked the property and carried out a soil geochemical survey, along lines at 750 foot (228 m) spacings, parallel to the claim lines, with samples taken at 200 foot (60 m) intervals. The results indicated two widely spaced lead anomalies which had a general N 550E trend.

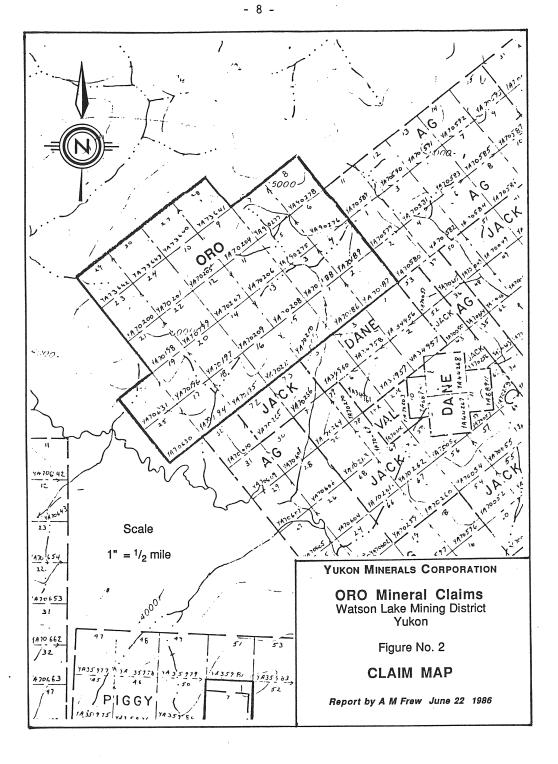
In September 1985, Anthony Rich, the Secretary-Treasurer of the Corporation, optioned the property from Schellenberg, and put in two D-8 tractor trenches. These trenches were on the same structure as the earlier showing, but the depth was limited by permafrost. They are approximately 100 feet apart and the most westerly trench is approximately 1,000 feet northeast of the original Sevensma showing.

### Physiography and Vegetation

The Oro Mineral Claims property is located over a high alpine to sub-alpine ridge, which occupies the western half of the property, and an inter-ridge valley which occupies the eastern half. The ridge is rounded to subdued, and mostly above tree-line. The lower slopes to the south, as well as the valley are tree covered. The vegetation consists of varying thicknesses of balsam, spruce, scrub conifers, alder and dwarf birch. Above the tree-line the vegetation is predominantly mosses and lichen with occasional isolated clumps of dwarf birch.

#### Property

The property is comprised of the Oro Mineral Claim Group, which consists of the 30 Yukon Quartz claims, which are a group of contiguous claims known as Oro 1-30 inclusive (Figure 2). They were optioned from Mr. Douglas Schellenberg by Anthony Rich in September 1985. All claims are in the Watson Lake Mining District on Mapsheet 105-B-1. Particulars are as follows:



Claim Name:	Grant Number:	Record Date:
Oro 1 - 4	YA 70186 - YA 70189	July 5, 1986
Oro 5 - 8	YA 90275 - YA 90278	September 13, 1986
Oro 9 - 14	YA 70204 - YA 70209	July 6, 1986
Oro 15, 16	YA 70210 - YA 70211	July 13, 1986
Oro 17 - 24	YA 70194 - YA 70201	July 5, 1986
Oro 25, 26	YA 70630 - YA 70631	October 3, 1986
Oro 27 - 30	YA 73640 - YA 73643	August 9, 1986

assessment work is presently being filed. This will maintain the claims in good standing until at least July 1987.

#### Regional Geology

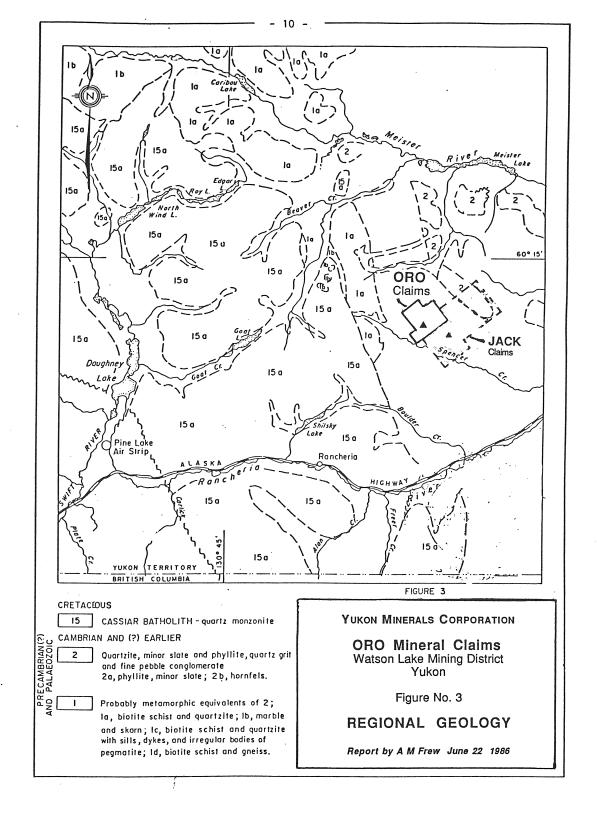
The geology of the general area, is dominated by the Cassiar Batholity, which is a north-westerly trending mass of mainly biotite quartz-monzonite and granodiorite of Jurassic/Cretaceous age. It intrudes Lower Cambrian to Devonian sediments and metasediments — G.S.C. publication, Map 10-1960, Wolf Lake Yukon, Sheet 105B, by Poole, Roddick and Green. The area appears to form major, nearly isoclinal, folds with numerous shears and tear faults which have a generally northeasterly trending orientation. The rocks underlying the Oro Mineral Claim Group belong to a Lower Cambrian age, limestone, ddolomite, slate and phyllite sequence. (Unit 3, map 10-1960).

#### Property Geology

There is very little known of the detailed geology of the immediate area of the property. It is underlain by Lower Cambrian age, calcarous phyllite, limestone and slate. In the area of the two trenches there is a basic volcanic dyke present, which is most likely associated with the mineralization. Also in the area of the trenches there is a major shear/fault zone which transects the complete width of the property from northeast to southwest. The mineralization occupies this fault and the width of the zone of alteration, mineralization and shearing was seen to vary from 4 feet in the east trench to 15 feet in the west trench. Accurate sampling was prevented by snow and permafrost.

#### Observations

There are several encouraging and significant aspects of the recently visited trench area. There is an abundance of manganese oxide (wad) in the immediate area which is very common on the Silver Hart property, some 16 miles to the north west. Wad is invariably associated with the silver-lead-zinc mineralization on the adjoining Jack Claim Group property. Much of the "wad" is seen to contain argentiferous galena.



"Manganese Dioxide sols and gels carry a negative charge and strongly absorb the positive silver ions to their surface"...so says R.W. Boyle in his Memoir, "The Geochemistry of Silver and its Deposits" — Geological Survey of Canada Bulletin No. 160 1968. Therefore, Frew suggests that it follows that argentiferous galena would attract the "wad" and act as a nucleus for its growth. The pervasion of wad in the area has been found to be indicative of silver-lead veins being present.

Dozer stripping of an area of wad on the Jack Claim Group revealed that once the leached surface was removed from the top of the structure, the fresh sulfides so exposed assayed an average of 115.1 oz Ag/ton, over 18 inches of vein width. The stripping in this case was over 10 feet in depth.

The following assays are of samples collected during the June 6, 1986 visit of Frew to the Oro property:

Sample No.	Location	Sample Description	Ag oz/ton	Au oz/ton	Pb %	Zn %	Mn %
ORO F2	east trench	limonite, contains frag- ments of galena, yellow stained	3.44	-	1.88	1.75	0.03
ORO F3	east trench	massive black wad, specks of galena	tr.	-	0.06	2.60	5.30
ORO F4	east trench	steel galena, l.s. inclus— ions, vuggy, limonite stain	48.66	-	71.45	1.15	-
ORO F5	east trench	similar	47.52	-	77.22	-	-
ORO F6	east trench	similar	47.42	<u>.</u>	75.73	-	-
ORO F7	west trench	"wad" much limonite stain, specs of galena	0.86	-	0.52	-	4.61
ORO F1	0 west trench	iron oxide, massive, dark maroon, vuggy	0.52	-	0.64	2.61	4.22
ORO F1	l west trench	limonite and wad	0.50	-	0.16	4.02	4.70
ORO F12	2 west trench	gouge from shear zone	0.56	-	0.26	0.71	0.11
ORO F1:	3 300 w. of w. trench	fine gr. siliceous, l.s. with much mariposite	0.04	tr.	0.03	0.03	-
ORO F1	5 300 w. of w. trench	silicified, rhyolitic(?) micro-stringers of qtz.	0.08	tr.	0.03	0.02	-

The structure containing the mineralization tested by the two trenches has an orientation of approximately  $N50^{\circ}E$ , and has a strike legnth of several kilometres, completely transecting the property. It appears to be near vertical in altitude.

There are several other depressions, which may be parallel structures; and these should be checked by geochemistry and trenching.

# Conclusions and Recommendations

Based on this writer's visit to the property, the encouraging structure and mineralization observed, and the similarity of geology to that of Jack Claim Group, Silver-Hart, Meister, Wolf and Midway, it is concluded that the Oro Mineral Claim Property warrants an immediate and extensive exploration program the results of which will in all likelihood produce additional discoveries of silver-lead-zinc veins of economic grade and tonnage.

The following program is recommended:

#### Phase I

Establish base line and grid. Clear base line with dozer. Conduct soil-geochemical and electromagnetic geophysical survey over grid, trenching, geological mapping and prospecting.

#### Phase II

Diamond drilling of anomalies resulting from Phase I. This should be at least 2000 feet of drilling with possibilities of up to 4000 feet if initial results are sufficiently encouraging.

#### Budget

#### Phase I

Dozer (D7 with ripper) clear beseline and trenching Establish grid (10 miles of cross-line) Soil sampling Assays (270 samples) Geophysics Geological mapping Prospecting Management & Supervision Field supplies Camp and kitchen equipment Food and expendibles Travel and accommodation Freight Office supplies	\$ 25,000 1,500 3,000 2,300 2,000 5,000 20,000 6,000 3,000 12,000 4,000 7,000 1,200 800
Contingencies (12%) Total Phase 1	\$ 92,800 11,136 \$103,936

Total Phase I	\$103,936
TOTAL THASE I	\$105,550

#### Phase II

.6 11	
Diamond drilling (2000 feet)	60,000
Management and supervision	3,750
Camp costs	1,500
Core logging and assays	5,000
Camp & kitchen costs	3,500
Freight	1,000
Travel and accommodation	5,000
	79,750
Contingencies (12%)	9,570
Total Phase II	89,320
Total Phase I & II	\$193,256

It is strongly recommended that Yukon Minerals Corporation implement the proposed program, as soon as possible, in order to take advantage of the short exploration season.

#### MANAGEMENT AND KEY PERSONNEL

Terence C. McCrory, 39, the President and Chief Executive Officer of the Corporation, has approximately 20 years experience in mineral resource exploration, development, prospecting and mineral exploration contracting. Mr. McCrory is the President of McCrory Holdings (Yukon) Ltd., a mineral exploration and contracting corporation, and is the co-discoverer of 4 metal deposits, namely, the Dupont Tin Deposit, Swift River, Yukon; the Silver Hart Silver Deposit, Rancheria, Yukon; the Claymore Silver Property, Swift River, Yukon and the Wolf Silver Deposit, Rancheria, Yukon.

Anthony Rich, B.Sc., P.Geol., 50, the Secretary-Treasurer and Chief Financial Officer of the Corporation, has approximately 21 years' experience in mineral resource exploration and development.

Anthony Rich's experience in the mineral resource exploration and development business has been gained through his association with junior natural resource corporations of which, in the majority of cases he was and is a promoter and President. Mr. Rich is currently the President and Chief Executive Officer of three junior mineral resource corporations, Claymore Resources Ltd. ("Claymore"), Sunrise Metals Corporation ("Sunrise"), and Rich Minerals Corporation, a junior mineral resource corporation. Claymore's and Sunrise's shares are listed and posted for trading on the Vancouver Stock Exchange. Claymore was established in 1970 and since that time Mr. Rich has been its President. Sunrise was incorporated in 1966 and Mr. Rich has only recently assumed the Presidency of the corporation.

Since Anthony Rich is the President and Chief Executive Officer of three mineral resource corporations and the Secretary-Treasurer of Yukon Minerals,

he proposes to devote 25% of his time to the administration of each of Claymore, Sunrise, Rich Minerals Corporation and Yukon Minerals.

William Preston, 48, a director of the Corporation, has approximately 16 years¹ experience in mineral resource exploration, development, prospecting and mineral exploration contracting. Mr. Preston is the Vice-President and Secretary-Treasurer of McCrory Holdings (Yukon) Ltd., a mineral exploration and contracting corporation, and is the co-discoverer of 4 metal deposits, namely, namely, the Dupont Tin Deposit, Swift River, Yukon; the Silver Hart Silver Deposit, Rancheria, Yukon; the Claymore Silver Property, Swift River, Yukon and the Wolf Silver Deposit, Rancheria, Yukon.

#### THE OFFERING

Yukon Minerals Corporation, through its directors, officers and through any investment dealer or broker-dealer registered in the Province of Alberta authorized by the Corporation to sell Units, offers, on a best efforts basis, a minimum of 10 Units and a maximum of 50 Units at a price per Unit of \$6,000. Each Subscriber must purchase a minimum of one Unit at a minimum aggregate cost of \$6,000.

The minimum number of Units offered hereunder is 10 Units, each consisting of 8,000 Flow-Through Common Shares, for a total of \$60,000 (the "Minimum Offering"). If the Minimum Offering of \$60,000 is not achieved by July 30, 1986 all funds raised will be returned to the respective Subscribers without interest or deduction. A commission of 10% for each Subscription is payable only to those investment dealers or broker-dealers registered in the Province of Alberta authorized by the Corporation to sell Units and for which they obtain a Subscription and for which Subscription Units are subsequently issued but no commissions will be paid to the directors and officers of the Corporation for Units which they sell.

#### Subscription Procedure

Each Subscriber must subscribe by delivering a cheque payable to the Corporation for the full amount of the Units for which the Subscriber has subscribed and by completing the appropriate Subscription Agreement.

Purchase of the Units is subject to the acceptance of the Subscription by the Corporation and compliance, in the opinion of counsel for the Corporation, with any applicable securities law in the Province of Alberta or the Yukon Territory. Accordingly, Subscribers for the Units may be required to sign documentation indicating the purchase of the Units by the Subscriber is on behalf of the Subscriber and that the Subscriber qualifies for the purpose of meeting the terms and conditions of the appropriate statutory exemption.

## Minimum Closing Requirements

If Subscriptions for at least the Minimum Offering of 10 Units for an aggregate subscription price of \$60,000 are received and the Corporation is satisfied as to the good standing of the mineral claims upon which the Corporation proposes to expend the proceeds from this offering by July 30, 1986, then the requirements (the "Minimum Closing Requirements") in respect of

- 16 -

the closing of at least the Minimum Offering will have been satisfied and closing in respect of at least the Minimum Offering (as well as all Subscriptions in excess of the Minimum Offering may be implemented).

Thereafter closing may be made in respect of each Subscription received as each Subscription is accepted by the Corporation, for a period of 6 months from the time of the first purchase, up to the Maximum Offering.

#### USE OF PROCEEDS

The gross proceeds to be received by the Corporation from the sale of the minimum of 10 Units and the maximum of 50 Units offered by this offering memorandum will amount to \$60,000 and \$300,000 respectively.

The following table indicates the uses to which the Corporation proposes to put the funds which it may receive from this offering.

		MINIMUM OFFERING	MAXIMUM OFFERING
Proce	eeds to the Corporation	\$60,000	\$300,000
[1]	Implementation of 50% of Phase I of recommended consultant's report. See "The Frew Report on the Oro Mineral Claims"	52,000	52,000
[2]	Implementation of the balance of Phase I of the recommended consultant's report. See "The Frew Report on the Oro Mineral Claims"		ŕ
[3]	Implementation of Phase II of the recommended consultant's report. See The Frew Report on the Oro Mineral		52,000
[4]	Claims*	6 000	90,000
[+]	Commissions, if any	6,000	30,000
[5]	Costs of Issue	2,000	6,000
[6]	Additional expenditures on Oro Mineral Claims, if warranted, or expenditures on other mineral claims which may subsequently be acquired by the Corporation	,	70,000
		\$60,000	\$300,000 ======

Although the above use of proceeds describes management's best present expectations, variations may be made in the expenditure of the net proceeds received based upon evaluation of drilling results from time to time during the exploration program on the mineral properties in which the Corporation has

an interest. If the Minimum Closing occurs and thereafter Subscriptions are accepted by the Corporation for Units between the Minimum Offering and the Maximum Offering, the Corporation will then use the proceeds realized therefrom for such of the above items under the heading of Maximum Offering as management considers to be in the best interests of the Corporation.

Until required for Yukon Minerals' purposes, the proceeds from this offering will be invested only in securities of, or those guaranteed by, the Government of Canada or the Government of the United States of America or any Province of Canada, or in certificates of deposit or interest-bearing accounts of Canadian chartered banks or trust companies, or the Alberta Treasury Branch, or in prime commercial paper, or a publicly traded money-market mutual fund.

#### CANADIAN INCOME TAX CONSEQUENCES

The following is, as of the date hereof, a fair and adequate summary of the income tax consequences arising under the Income Tax Act (Canada) (the "Act") and the Regulations thereunder to a Subscriber who is an individual and will be a resident of Canada for purposes of the Act on December 31, 1986 and who holds his Common Shares as capital property. This summary does not deal with the tax consequences to Subscribers who are traders or dealers referred to in subsection 66(5) of the Act and principal business corporations referred to in paragraph 66(15)(h) of the Act.

The Canadian income tax consequences of an investment in the Units vary according to the circumstances of each Subscriber and the manner in which Subscribers' funds and interest earned thereon are expended. It is not practical to comment on all aspects of the income tax consequences of an investment in the Units. These comments are for the purpose of providing general assistance only and are not intended to constitute a complete analysis of all the income tax consequences and should not be interpreted as legal or tax advice to any particular subscriber. Each Subscriber should obtain independent advice regarding the income tax consequences under federal and provincial tax legislation of subscribing for the Units, based on such subscriber's own particular circumstances.

This summary is based upon the provisions of the Act, the Regulations thereunder, the Notice of Ways and Means Motion tabled on December 2, 1985 (the "December 2 Motion") concerning mining flow-through shares, the Notice of Ways and Means Motion tabled on December 4, 1985 (the "December 4 Motion") concerning the new minimum tax, the Notice of Ways and Means Motion tabled on February 26, 1986 (the "February 26 Motion") concerning flow-through shares and modifications to the new minimum tax and is based on an understanding of the current administrative practices of Revenue Canada, Taxation.

It has been assumed that the measures proposed in the December 2 Motion, the December 4 Motion and the February 26 Motion will be adopted in their present state, and that no further relevant amendments will be implemented. No assurance, however, can be given in this respect.

#### Canadian Exploration Expense ("CEE")

CEE includes any expense incurred for the purpose of determining the

existence, location, extent or quality of a mineral resource in Canada other than a Canadian development expense ("CDE") or an expense which relates to a mine which has come into production in reasonable commercial quantities or to an actual or potential extension of such a mine.

Pursuant to the February 26 Motion a Subscriber will be considered to have incurred CEE whereby a Subscriber's Funds, and interest earned thereon, is used to acquire Common Shares in a principal business corporation which agrees to expend these funds on Canadian Resource Expenses within the next 12 months and elects to renounce such expenses in favour of the Subscriber. The expenses so renounced shall be deemed for income tax purposes to have been incurred by the Subscriber at the time of reununciation and will be considered as being CEE incurred by him in that taxation year and will be added, in that taxation year, to his cumulative Canadian exploration expense ("CCEE") pool. A Subscriber may deduct for purposes of computing his income from all sources for a taxation year, up to 100% of the balance of his CCEE pool at the end of the taxation year. A Subscriber's CCEE pool is reduced by such deduction claimed by such Subscriber in respect of CEE and by the Subscriber's share of any amount of government, municipality or other public authority assistance or benefit which the Subscriber has received or is entitled to receive in respect of CEE incurred by the Subscriber after December 31, 1980, or that can reasonably be related to Canadian exploration activities after that date. To the extent that a Subscriber does not deduct the balance of his CCEE pool at the end of a taxation year, the balance will be carried forward and may be used in subsequent taxation years. In the event that the Subscriber's CCEE pool at the end of a taxation year is a negative amount, which may occur should he receive or become entitled to receive any government, municipality or other public authority assistance or benefit in that year which relates to CEE incurred in a prior year and which is not offset by adjustments to the CCEE pool which are unrelated to this offering, the negative amount must be included in the Subscriber's income for that taxation year and by virtue of such inclusion his CCEE pool immediately thereafter will have a nil balance.

While the Corporation has undertaken to use its best efforts to expend the Subscriber's funds and interest earned thereon on the Proposed Exploration Program outlined in this offering memorandum and believes that the expenditures will qualify as CEE incurred in the course of mineral exploration, no assurance can be given that Revenue Canada, Taxation, will agree with the Corporation's views.

In accordance with the Subscription Agreement the Corporation has agreed to renounce in favour of Subscribers those expenditures incurred on the Proposed Exploration Program.

# Mining Exploration Depletion Allowance ("MEDA")

For income tax purposes, a Subscriber will be entitled to deduct a mining exploration depletion allowance from his income from all sources to the extent of the lesser of:

(i) 25% of the Subscriber's net income for the year (after deducting CEE but computed on the assumption that no deductions were allowed for depletion of any kind) in excess of the aggregate amounts deducted by the Subscriber as earned depletion allowance, frontier

exploration allowance and supplementary depletion allowance (as these terms are defined in the Regulations under the Act); and

(ii) his mining exploration depletion base as at the end of the year (before deducting the MEDA for the year).

The mining exploration depletion base generally represents 33-1/3% of CEE (net of any government, municipality or other public authority, grants or assistance that the Subscriber has received or is entitled to, or at any time becomes entitled to, receive in respect of such CEE) incurred after April 19, 1983 in respect of a mineral resource situated in Canada computed without taking into account the CEE incurred to bring a mineral resource into production and certain overhead expenses.

The undeducted amount of the mining exploration depletion base may be deducted in subsequent taxation years subject to the same limitations.

### Interest Earned on Subscribers Funds

Interest earned by a Subscriber on Subscriber's funds will be included in his income according to the method adopted by him, or required by the Act to be used by him in computing income. The Corporation has undertaken to expend such interest in acquiring additional Common Shares at a price of \$0.75 per Common Share and to expend these proceeds on mineral exploration qualifying as CEE, as described under "Proposed Exploration Program", thus entitling the Subscriber to claim deductions in respect thereof as described herein.

# Interest Expense on Money Borrowed to Acquire Units

Interest expense incurred by the Subscriber on funds borrowed for the purpose of acquiring Units will generally be deductible in the year that it is paid or payable depending upon the method used to report their income, provided the Subscriber owns throughout the period during which the interest accrues, all the Units or Common Shares acquired with the borrowed funds.

#### Common Shares

Under the provisions of the Act, each Common Share issued to a Subscriber under this offering will be deemed to have a cost to that Subscriber of nil for purposes of determining its adjusted cost base.

Where a Subscriber owns or acquires Common Shares of the Corporation otherwise than under this offering, the adjusted cost base of each Common Share of the Corporation held by him as capital property, including Common Shares acquired pursuant to this offering, will, in general, be the average adjusted cost base to him of all such shares.

The CCEE pool and mining exploration depletion base of a Subscriber at the time of a disposition to him of any Common Share will remain with that Subscriber and will not be transferred to the person acquiring the Common Share.

Upon the disposition of a Common Share acquired under this offering by a Subscriber, a capital gain (or a capital loss) will be realized to the extent

#### Capital Gains Exemption

The Act provides for a lifetime capital gains exemption of up to \$500,000 (\$250,000 of taxable capital gains) for individuals. The exemption is provided by permitting an individual, other than a trust, a special deduction in computing taxable income. The exemption is being phased in gradually with the cumulative limit increasing over a 6 year period as follows: \$10,000 of taxable capital gains in 1985, \$25,000 in 1986, \$50,000 in 1987, \$100,000 in 1988, \$150,000 in 1989 and \$250,000 in 1990 and subsequent years. For an individual who has not exceeded his cumulative limit and is not subject to the minimum tax, it is possible that all or part of any capital gain realized by that individual will not be subject to tax under the Act. Capital gains eligible for the exemption will include those realized upon disposition of either Common Shares or Units. In order to benefit from this exemption, the individual must satisfy certain conditions including that he be, or be deemed to be, a resident in Canada throughout the year. In addition, net allowable capital losses realized after May 22, 1985 will no longer give rise to a deduction of up to \$2,000 against other income and, starting in 1985, taxable capital gains will no longer be eligible for the maximum annual deduction of \$1,000 in respect of Canadian source investment income.

### Minimum Tax on Individuals

The Minister of Finance tabled on December 4, 1985 a Notice of Ways and Means Motion introducing a minimum tax at the personal level effective January 1, 1986.

The December 4 Motion proposes amendments to the Act whereby, beginning with the 1986 taxation year, tax payable by individuals and by trusts other than mutual fund trusts will be the greater of the tax otherwise determined and an alternative minimum tax, certain deductions and credits otherwise available would be disallowed and certain amounts not otherwise included, such as one-half of net capital gains exempt under the \$500,000 lifetime capital gains exemption and the full amount of other net capital gains, would be included. The disallowed items would include the deductions for CEE and depletion and the dividend tax credit. Whether and to what extent the tax liability of a particular taxpayer would be increased by this measure will depend on the amount of his income, the sources from which it is derived, and the nature and amounts of any deductions he claims. Any additional tax payable for a year is to be recoverable to the extent that tax otherwise payable exceeds minimum tax for any of the seven following years or, with respect to the year of the taxpayer's death, for any of the preeding three years.

# SECURITIES ACT AND REGULATIONS - FILINGS

The securities offered through this offering memorandum, and not a prospectus, are done so in accordance with certain statutory exemptions contained in the Securities Act (Alberta) and by exemption under the laws of the Yukon Territory. The following is a brief summary of the securities legislation in Alberta as it affects this offering memorandum.

- 20 -

This offering of the Common Shares and Flow-Through Common Shares of the Corporation is made to certain qualified Subscribers resident in the Province of Alberta in accordance with and in compliance upon subsections (1)(d) and (1)(r) of Section 107 of the Securities Act (Alberta).

The general principles which underly Section 107 of the Securities Act (Alberta), is this: it permits a company to issue common shares or securities without the need to file a prospectus with the Alberta Securities Commission, if it issues its shares or securities in accordance with and in compliance upon the specific subsections of Section 107 (Alberta) upon which it relies and the Regulations to the Securities Act (Alberta).

#### The Exemptions

The \$97,000 Purchase:

Subsection (1)(d) of Section 107 provides that a prospectus is not required where the purchaser of the securities purchases as principal (not as an agent on behalf of others) where the purchase has an aggregate acquisition cost to the purchaser of not less than \$97,000;

The Government Incentive Security:

Subsection (1)(r) of Section 107 provides that a prospectus is not required where the company makes a trade in a "government incentive security" of the company's own issue if it (i) solicits no more than 75 prospective purchasers resulting in sales with no more than 50 purchasers; (ii) each purchaser purchases as principal; (iii) all purchases are made within a six-month period; (iv) each purchaser has access to information on the basis of which a prudent investor may make a reasoned judgment and is an investor who is, by virtue of his net worth and investment experience or by virtue of consultation with or advice from a person or company that (A) is not a promoter of the company whose shares are being offered and (B) is a registered dealer or advisor, able to evaluate the prospective investment on the basis of information respecting the investment presented to him by the company; (v) the offer and sale is not accompanied by any form of advertisement; (vi) no selling or promotional expenses have been paid or incurred in connection with the sale, except for professional services or for services provided by a registrant; and (vii) the distribution is the first made pursuant to this specific exemption.

The Alberta Securities Commission Notice, Designation of Government Incentive Securities, dated January 26, 1984, for the purpose of Section 107(1)(r) designates as a government incentive securities, units or interests in a person or company that is to carry out an oil, gas or mineral resource exploration or development program in respect of which expenses incurred will constitute Canadian exploration expense as defined in Section 66.6(6)(a) of the Income Tax Act (Canada); or Canadian development expense as defined in Section 66.2(5)(a) of the Income Tax Act (Canada).

[Note: The Flow-Through Common Shares is the first offering of the Corporation of "government incentive securities".]

CAPITALIZATION

- 22 -

On effecting these exempt transactions, the Corporation is obliged to file with the Alberta Securities Commission within 10 days from the date the transaction is effected a Report of the transaction in accordance with Form 20 of the Regulations and contemporaneously therewith 2 copies of the offering memorandum. Each Subscription Agreement for the purchase of the Corporation's Common Shares and Flow-Through Common Shares is accompanied with the appropriate forms required to be filed with the Alberta Securities Commission.

#### Restrictions on Resale

The Holding Period

The Common Shares and Flow-Through Common Shares acquired pursuant to this offering are subject to restrictions on resale in accordance with the provisions of Section 109 of the Securities Act (Alberta). Subscribers must be aware that pursuant to these restrictions, Subscribers will not be entitled to resell the Common Shares and Flow-Through Common Shares acquired hereunder for a period of twelve (12) months following closing or the date upon which the Corporation becomes a reporting issuer, whichever is later.

It is not practical to comment on all aspects of securities legislation affecting this offering of Common Shares and Flow-Through Common Shares. Each prospective Subscriber should satisfy himself regarding the securities regulations of Alberta by obtaining such advice from his own legal advisor.

#### DESCRIPTION OF SHARE CAPITAL

The Corporation is authorized to issue 50,000,000 Common Shares without nominal or par value, of which as at June 30, 1986 3,050,000 were issued and outstanding as fully paid and non-assessable and 300,000 were reserved under a directors' and management stock option plan. See "Directors' and Management Stock Options".

The holders of the Common Shares are entitled to dividends as and when declared by the board of directors, to one vote per share at meetings of shareholders of the Corporation and, upon liquidation, to receive such assets of the Corporation as are distributable to the holders of the Common Shares. All of the Common Shares to be outstanding on completion of this offering will be fully paid and non-assessable.

				OUTSTANDING AS AT JUNE 30, 1986 AFTER	OUTSTANDING AS AT JUNE 30, 1986 AFTER
CAPITAL	AÙTHORIZED	OUTSTANDING AS AT APRIL 28, 1986	OUTSTANDING AS AT JUNE 30, 1986	GIVING EFFECT TO THE MAXIMUM OFFERING OF THIS ISSUE	GIVING EFFECT TO THE MINIMUM OFFERING OF THIS ISSUE
Commo n	50,000,000	\$57,500 (1,750,000 shares)	\$107,500 (3,050,000 shares)	\$407,500 (3,450,000 shares)	\$167,500 (3,130,000 shares)

(1) The Corporation has reserved an aggregate of 300,000 Common Shares for a Directors' and Management Stock Option Plan. As at June 30, 1986, the Corporation has granted options for an aggregate of 100,000 Common Shares under the Directors' and Management Stock Option Plan. See "Directors' and Management Stock Options".

#### PRIOR SALES

Since the date of incorporation of the Corporation, 3,050,000 Common Shares have been issued as follows:

DATE	NUMBER OF SHARES	ISSUE PRICE PER SHARE	AGGREGATE ISSUE PRICE	NATURE OF CONSIDERATION RECEIVED
April 4, 1986	750,000	\$0.01	\$ 7,500	Cash
April 16, 1986	1,000,000	\$0.05	\$50,000	Cash
June 11, 1986	1,000,000	\$0.05	\$50,000	Cash
June 24, 1986	300,000 3,050,000 ======		\$107,500 ======	Assignment of Schellenberg Acquisition Agreement

See "Directors' and Management Stock Options" and "The Assignment of the Schellenberg Acquisition Agreement and the Oro Minerals Claims".

#### PRINCIPAL SHAREHOLDERS

The following table lists those persons who own of record or who are known to the Corporation to own beneficially, directly or indirectly, more than 10% of the issued and outstanding Common Shares of the Corporation as at June 30, 1986.

(1) Without taking into account the Flow-Through Common Shares that each principal holder of securities may purchase from this issue of Flow-Through Common Shares.

662,500

beneficial

and

William Preston

Whitehorse, Yukon

of record

beneficial

As at June 30, 1986, the 2,175,000 Common Shares beneficially owned or controlled, directly or indirectly, by all directors and officers as a group prior to giving effect to this issue represented 71.31% of the issued and outstanding Common Shares of the Corporation and will represent approximately 63.04% after giving effect to the issue of the Maximum Offering and approximately 69.49% if only the Minimum Offering is achieved.

### DIRECTORS AND OFFICERS

The following are the names and municipalities of residence of the directors and officers of the Corporation, their positions and offices with the Corporation and their principal occupations during the last five years:

NAME AND MUNICIPALITY OF RESIDENCE	OFFICE	PRESENT OCCUPATION AND POSITIONS DURING THE LAST FIVE YEARS
Terence Clifford McCrory Whitehorse, Yukon	President, Chief Executive Officer and Director	President, McCrory Holdings (Yukon) Ltd., (a mineral exploration and contracting corporation).
*Anthony Rich, B.Sc., P.Geol. Edmonton, Alberta	Secretary—Treasurer and Director	President, Claymore Resources Ltd., (a mineral exploration and development corporation), Sunrise Metals Corporation (a mineral exploration corporation), and Rich Minerals Corporation (a junior exploration corporation).

NAME AND MUNICIPALITY OF RESIDENCE OFFICE		PRESENT OCCUPATION AND POSITIONS DURING THE LAST FIVE YEARS	
*William Preston Whitehorse, Yukon contracting corporation	Director	Vice-President and Secretary- Treasurer, McCrory Holdings (Yukon) Ltd. (a mineral exploration and	
*D. Sean Flanagan, B.Sc., M.D. Edmonton, Alberta	Director	Medical Doctor and prior thereto, a student of medicine, University of Alberta, Edmonton.	

<sup>\*</sup> Member of the Audit Committee

21.17%

19.20%

21.72%

#### DIVIDEND POLICY

No dividends have been paid on any shares of the Corporation since the date of its incorporation and it is not contemplated that any dividends will be paid in the immediate future or foreseeable future.

### REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

The following table sets out the aggregate remuneration paid by the Corporation to its directors and officers for its financial period from incorporation, April 4, 1986, to April 28, 1986:

	_	Nature of Remuneration		
	From Office of Employment (Aggregate)	Cost of Pension Benefits (Aggregate)	Other (Aggregate)	
Directors (Total number 4)	NIL	NIL	NIL	
Senior Officers (2)	NIL	NIL	NIL	

No remuneration or fees are to be paid to any officer of the Corporation for the period April 28, 1986 to December 31, 1986. No remuneration is to be paid to directors in their capacity as directors.

The Corporation has signed directors' and management stock option agreements. See "Directors' and Management Stock Options".

#### DIRECTORS! AND MANAGEMENT STOCK OPTIONS

Pursuant to a resolution of the board of directors of the Corporation dated April 28, 1986, the Corporation offered a stock option plan to its directors and management. As at June 30, 1986 the Corporation has signed stock option agreements with its directors and managers as follows:

NAME	NUMBER OF COMMON SHARES UNDER OPTION	EXERCISE PRICE PER COMMON SHARE	EXPIRY DATE
Anthony Rich	25,000	\$0.05	April 28, 1991
Terence C. McCrory	25,000	\$0.05	April 28, 1991
William Preston	25,000	\$0.05	April 28, 1991
D. Sean Flanagan	25,000	\$0.05	April 28, 1991

An additional 200,000 Common Shares have been reserved for possible future stock option agreements with new directors or managers as they join the Corporation.

#### **PROMOTERS**

Terence C. McCrory, Anthony Rich and William Preston may be considered to be the promoters of the Corporation in that they took the initiative in founding and organizing the Corporation. Terence C. McCrory and Anthony Rich are officers and directors of the Corporation and William Preston is a director of the Corporation.

Terence C. McCrory subscribed for and received 187,500 Common Shares of the Corporation at a price of \$0.01 per share for an aggregate consideration of \$1,875 and 400.000 Common Shares of the Corporation at a price of \$0.05 per share for an aggregate consideration of \$20,000, and assigned the Schellenberg Acquisition Agreement to the Corporation in exchange for 75,000 Common Shares; Anthony Rich subscribed for and received 375,000 Common Shares of the Corporation at a price of \$0.01 per share for an aggregate consideration of \$3,750 and 324,000 Common Shares of the Corporation at a price of \$0.05 per share for an aggregate consideration of \$16,200, and assigned the Schellenberg Acquisition Agreement in exchange for 150,000 Common Shares; and William Preston subscribed for and received 187,500 Common Shares of the Corporation at a price of \$0.01 per share for an aggregate consideration of \$1,875 and 400,000 Common Shares of the Corporation at a price of \$0.05 per share for an aggregate consideration of \$20,000, and assigned the Schellenberg Acquisition Agreement in exchange for 75,000 Common Shares; which in aggregate represented 71.28% of the issued and outstanding shares at June 30, 1986 and will represent 63.01% of the outstanding shares after giving effect to the issue of the Maximum Offering. See "Prior Sales", "Principal Shareholders" and "Interest of Management and Others in Material Transactions".

#### ESCROWED SECURITIES

The following table sets out as at June 30, 1986 the number of securities of

the Corporation, which to the knowledge of the Corporation, are to be held in escrow:

Common Shares	1,050,000	34.43%	33.55%	30.44%
DESIGNATION OF CLASS	NUMBER OF SECURITIES HELD IN ESCROW	PERCENTAGE OF CLASS BEFORE THE OFFERING	PERCENTAGE OF CLASS AFTER THE MINIMUM OFFERING	PERCENTAGE OF CLASS AFTER THE MAXIMUM OFFERING

The shares of Terence C. McCrory, Anthony Rich and William Preston will be deposited with The Royal Trust Company, 500 Royal Trust Tower, Edmonton Centre, Edmonton, Alberta, T5J 2Z2, pursuant to two escrow agreements (the "Escrow Agreements") dated April 28, 1986 and June 24, 1986. The Escrow Agreements require the written consent of the Director of the Alberta Securities Commission and the Vice-President, Alberta Stock Exchange, for the shares to be released from escrow. See "Prior Sales" and "Promoters".

### MATERIAL CONTRACTS

The Corporation has not entered into any contracts material to investors in the Common Shares within the two years prior to the date hereof, other than contracts in the ordinary course of business, except:

- Directors' and Management Stock Option Agreements. See "Directors' and Management Stock Options".
- Escrow Agreements. See "Escrowed Securities".
- 3. Assignment of Schellenberg Acquisition Agreement. See "History and Operations of the Corporation" and ""The Assignment of the Schellenberg Acquisition Agreement and the Oro Minerals Claims".

Copies of these agreements will be available for inspection at the registered office of the Corporation, 751 Esso Tower, 10060 Jasper Avenue, Edmonton, Alberta, during ordinary business hours while the securities offered by this offering memorandum are in the course of distribution and for a period of 30 days thereafter.

### CONFLICTS OF INTEREST

There are potential conflicts of interest to which some of the directors and officers of the Corporation will be subject in connection with the operations of the Corporation. Some of the directors and officers are engaged and will continue to be engaged in the search for mineral resource properties on their own behalf and on behalf of other corporations, and situations may arise where some of the directors and officers will be in direct competition with the Corporation. Conflicts, if any, will be subject to the procedures and remedies under the Business Corporations Act (Alberta).

## SPECULATIVE NATURE OF THE SECURITIES

These securities are highly speculative and there is no market for the Common Shares of the Corporation. The Flow-Through Common Shares are designed for persons who are prepared to accept the high risks inherent in the exploration of mineral claims and the Corporation has established neither proven nor probable reserves of ore on its mineral claims. The price of this offering was determined solely by the management of the Corporation and there is no market for the Flow-Through Common Shares offered hereunder or common shares of the Corporation and all Subscribers will be required to hold their securities for a minimum of twelve (12) months. See "Securities Act and Regulations - Filings". Therefore, these Flow-Through Common Shares are not suited for Subscribers who may need to dispose of their investment in a timely manner. Moreover, Subscribers of the Units may be liabile for any damage arising from exploration work conducted on the mineral claims on their behalf. See "Liability and Indemnity of Subscribers".

Subscribers should consider certain risk factors when evaluating the Flow-Through Common Shares. Exploration and development of mineral claims is highly speculative and necessarily involves substantial risks. There is no assurance that the expenditures made by the Corporation in the exploration work proposed on its mineral claims will result in any discoveries of commercial ore.

The Corporation's mineral operations will be subject to Government Legislation policies and controls relating to prospecting, development, production, environmental protection, mining taxes and labour standards. In addition, the profitability of a particular mining prospect will be affected by the market for precious metals, which entails the assessment of many factors, some of which include changing production costs; the supply and demand for precious metals; the rate of inflation; the inventory of precious metal producing corporations; the political environment and changes in international investment patterns.

The mining industry has been subject to increasing government controls and regulation in recent years. The industry is highly competitive and the Corporation will be required to compete in the future directly with other corporations that may have greater resources. The Corporation may become subject to liability for cave-ins and other hazards against which it cannot insure or against which it may elect not to insure because of high premium costs or other reasons. Payment of such liabilities would reduce funds available for acquisition of mineral prospects or exploration and development.

## LIABILITY AND INDEMNITY OF SUBSCRIBERS

As a result of the fact that exploration expenditures are being incurred on behalf of Subscribers by the Corporation, Subscribers may be directly liable for any liabilities arising from operations relating to such expenditures. The Corporation has agreed to indemnify the Subscribers against any such liabilities and has agreed to carry insurance on behalf of the Subscribers covering all risks related to the incurrence of resource expenditures, including public liability coverage to a maximum of \$1,000,000 per occurrence.

The Corporation's ability to perform the obligation to indemnify Subscribers in excess of insurance coverage is dependent upon the Corporation having sufficient unencumbered net assets for such purpose.

# INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Terence C. McCrory, Anthony Rich, William Preston and D. Sean Flanagan have options to acquire 25,000 Common Shares each under a Directors' and Management Stock Option Plan with the Corporation. See "Directors' and Management Stock Options".

Terence C. McCrory assigned the Schellenberg Acquisition Agreement to the Corporation in exchange for 75,000 Common Shares; Anthony Rich assigned the Schellenberg Acquisition Agreement in exchange for 150,000 Common Shares; and William Preston assigned the Schellenberg Acquisition Agreement in exchange for 75,000 Common Shares. See "Prior Sales" and "The Assignment of the Schellenberg Acquisition Agreement".

# PRICE RANGE OF COMMON SHARES

The Common Shares are listed on the Alberta Stock Exchange. The following table sets forth the high and low sale prices, and the volumes traded for the Common Shares for the month of June, 1986.

HIGH	LOW	VOLUME	
\$0.55	\$0.25	149,200	

# AUDITORS, TRANSFER AGENT AND REGISTRAR

The auditors of the Corporation are Sax Zimmel Stewart & Co., Chartered Accountants, 12316 - 107 Avenue, Edmonton, Alberta, T5M 1Z1.

The Royal Trust Company, through its principal offices at Edmonton and Calgary, Alberta, is the transfer agent and registrar for the Common Shares.



- 29 -

## AUDITORS' REPORT

TO THE SHAREHOLDERS OF YUKON MINERALS CORPORATION

We have examined the balance sheet of Yukon Minerals Corporation as at April 28, 1986 and the statement of changes in financial position for the period April 4, 1986 (Incorporation Date) to April 28, 1986. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at April 28, 1986 and the changes in its financial position for the period April 4, 1986 (Incorporation Date) to April 28, 1986 in accordance with generally accepted accounting principles applied on a consistent basis.

Edmonton, Alberta April 29, 1986 San Zimmel Stewart Kh CHARTERED ACCOUNTANTS

/		
(	YUKON MINERALS CORPORATION	
•	BALANCE SHEET	Statement 1
	APRIL 28, 1986	
	ASSETS	
CURRENT ASSETS	160.19	
Cash		
ODCANTZAZZA		\$ 57,500
ORGANIZATION COSTS - No	te 3	¥ 07,500
		1,483
		\$ 58,983
		<del>4</del> 30, 303
	LIABILITIES	
CURRENT LIABILITIES		
Accounts payable		
		<b>\$</b> 1,483
	CHARMINA	
CHARE CARRE	SHAREHOLDERS' EQUITY	
SHARE CAPITAL - Note 5 Authorized:		
50,000,000 no nan yar		
Issued:	ue common voting shares	
1,750,000 common sha	res	
Total Shareholders'		57,500
onar chorders.	-Eguity	67 F00
		57,500
		\$ 58,983
APPROVED BY THE BOARD:		
0/21	<b>*</b>	
Direc		
X My (M) Dinec	tor	

Statement	2
Statement	2

# STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE PERIOD FROM DATE OF INCORPORATION.

YUKON MINERALS CORPORATION

APRIL 4, 1986 TO APRIL 28, 1986

SOURCES OF WORKING CAPITAL Issuance of share capital

\$ 57,500

USES OF WORKING CAPITAL Organization costs

1,483

INCREASE IN WORKING CAPITAL FOR THE PERIOD, AND WORKING CAPITAL. AT END OF PERIOD

\$ 56,017

- 32 -

# YUKON MINERAL CORPORATIONS NOTES TO THE BALANCE SHEET APRIL 28, 1986

## NOTE 1 - Incorporation

The company was incorporated under the provisions of the Business Corporations Act of Alberta on April 4, 1986.

# NOTE 2 - Nature of Operations

To April 28, 1986, the company has been involved in securing financing necessary to establish a business of identifying and evaluating mineral resource prospects, primarily gold and silver, in Canada and the United States, and, when identified, the acquisition of or participation in. such mineral resource properties.

The economic feasibility of these ventures is uncertain.

# NOTE 3 - Significant Accounting Policies

These financial statements have been prepared in accordance with generally accepted accounting principles, and reflect the following accounting policy:

# (1) Organization Costs

Costs involved in organizing the company, and in arranging financing, have been capitalized, and will be amortized against future operations.

# NOTE 4 - Related Party Transactions

Three directors of the company received 750,000 shares on April 4, 1986 for a consideration of \$ 7,500. These shares are subject to escrow restrictions (Note 5(c)).

- 33 -

# YUKON MINERALS CORPORATION NOTES TO THE BALANCE SHEET APRIL 28, 1986

# NOTE 5 - Share Capital

(a) The company has agreed to issue and sell a minimum subscription issue of 500,000 common shares, to a maximum subscription of 1,000,000 common shares, at 5 cents per share. The net proceeds to the company of the minimum subscription are estimated to be \$ 25,000 before deducting expenses of this issue estimated at \$ 7,000. The net proceeds to the company of the maximum subscription are estimated to be \$ 50,000, before deducting expenses of this issue estimated to be \$ 7,000. There are no commissions, but the agent will be reimbursed for direct out-of-pocket expenses estimated to be no more than \$ 3,500.

This offering is not underwritten. It is on a best-efforts basis.

- Pursuant to an April 28, 1986 agreement, the corporation has established a Directors' and Management Stock Option Plan. The agreement allows four individuals to purchase 25,000 shares each, at 5 cents per share until the expiry date of April 28, 1991. An additional 200,000 common shares have been reserved for possible future stock option agreements with new directors or managers.
- (c) The company has issued 750,000 common shares, which are held in escrow and may not be traded prior to receiving approval from the Alberta Securities Commission.

# NOTE 6 - Subsequent Events

Also see Note 5(b) for possible share issuances based on options in

# NOTE 7 - Continuing Operations

The company's continuing operations are dependent upon the establishment of a profitable business involving identifying and evaluating mineral resource prospects, and, when identified, the acquisition of, or participation in (obtaining a working interest in) such mineral resource

#### PURCHASER'S CONTRACTUAL RIGHTS

Section 1(i)(e) of the Regulations, made pursuant to Section 196 of the Securities Act (Alberta) provide, in effect, that:

- (a) a purchaser of a security has, in addition to any other right or remedy available at law, a contractual right of action against an issuer for rescission or damages, which right is available to a purchaser to whom an offering memorandum has been delivered by or on behalf of the seller of securities referred to in the offering memorandum. If the offering memorandum contains a misrepresentation, which right of action is exercisable on notice given to the issuer not later than ninety (90) days after the date on which payment was made for the securities or after the initial payment, where payments subsequent to the initial payment are made pursuant to a contractual commitment assumed prior to, or concurrently with, the initial payment.
- (b) if an offering memorandum contains a misrepresentation, a purchaser who purchases a security offered thereby during the period of distribution shall be deemed to have relied on such misrepresentation and.
  - has a right of action, subject to the limitations set forth in the Act, for damages against,
    - (i) the issuer or a selling security holder on whose behalf the distribution is made,
    - (ii) the seller of the securities referred to in the offering memorandum,
    - (iii) every director of the issuer at the time the offering memorandum was filed.
    - (iv) every person or company whose consent has been filed pursuant to a requirement of the Regulations under the Act but only with respect to reports, opinions or statements made by them, and
    - (v) every other person or company who signed the offering memorandum.

but no action to enforce this right can be commenced by a purchaser more than the earlier of ninety (90) days after the purchaser first had knowledge of the facts giving rise to the cause of action or one (1) year after the date of the transaction that gave rise to the cause of action, or

if the purchaser purchased the security from a person or company referred to in item 1(i) or 1(ii) above or from the seller of the securities referred to in the offering memorandum, he may elect to exercise a right of rescission against the person, company or seller, in which case he shall have no right of action for damages against that person, company, or seller, but no action to enforce this right can be commenced by a purchaser more than ninety (90) days after the date of the transaction that gave rise to the cause of action.

The contractual right of action is in addition to any other right or remedy available at law to the purchaser.

June 30, 1986

### CERTIFICATE OF THE CORPORATION

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this offering memorandum as required by Part 8 of the Securities Act (Alberta) and the Regulations thereunder.

YUKON MINERALS CORPORATION

TERENCE C. McCRORY CHIEF EXECUTIVE OFFICER

ANTHONY RICH

CHIEF FINANCIAL OFFICER

ON BEHALF OF THE BOARD OF DIRECTORS

DIRECTOR

DIRECTOR

### CERTIFICATE OF PROMOTERS

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this offering memorandum as required by Part 8 of the Securities Act (Alberta) and the Regulations thereunder.

TERENCE C. McCRORY

ANTHONY RICH