DIAMOND DRILLING AND PROSPECTING REPORT

ON THE

HUNTER GROUP

NEW WESTMINISTER MINING DIVISION 92H/5E & 6W 49 20' 121 32'

Owned By

L. Williams

and

C. Stephenson

BY

J.T. SHEARER, M.Sc.

Field work Completed between Oct. 1982 and Sept. 1983

October 8, 1983 Hope, B.C.

GEOLOGICAL BRANCH ASSESSMENT REPORT

11,656

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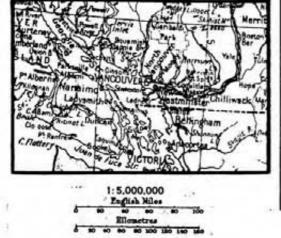
SUMMARY

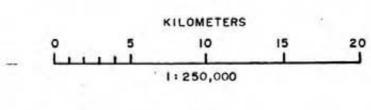
- (1) The Hunter Group consists of 50 units: Hunter II (12 units), Hunter III (18 units) and S.W.(20 units) owned by C. Stephenson and L. Williams. The claims are located 8 km. southwest of Hope, B.C.
- (2) A total of 394 feet (120.09m) of diamond drilling in 5 holes were completed, plus limited soil sampling and prospecting by the owners. Two years assessment is to be applied on the group for \$10,000 credit.
- (3) The claims are entirely underlain by diorite and tonalite phases of the Late Cretaceous Spuzzum Intrusions along the western margin of the Fraser River Graben.
- (4) Mineralized zones carrying gold in arsenopyrite similar to the nearby Aufeas Mine have not been found during the present exploration program. However alteration systems have been identified and further work is recommended.
- (5) The following recommendations have been made: (a) Airphoto compilation of linears and known fault-shear zones.

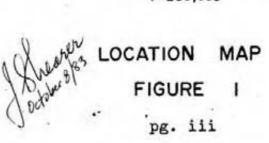
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- (b) Ground magnetometer orientation over alteration zones and Aufeas showings.
- (c) Organize daily log and notebook system.
- (d) Split and assay end part of diamond drillhole #2 for Au., As., Ag., & Hg., and extend hole #2 if possible for another 30m.
- (e) Prospect along the northwest corner of S.W. Claim in the vicinity of the magnetic low shown on the Aeromagnetic maps.









INTRODUCTION

Assessment work discussed in this report on the Hunter Group represents one facet of a continuing prospecting effort by C. Stephenson and L. Williams surrounding Mount Barr and adjacent areas. The Hunter and S.W. Claims were located to cover favourable ground near the old Aufeas gold showing on Wardle Creek.

The Aufeas Mine was first noted in the 1911* B.C. Minister of Mines Annual Report:

"On Silver Creek, about three miles from Hope, the <u>Jumbo</u> group was acquired early in the Summer from N.E. Holmgren by the Aufeas Gold Mining Company, of Hope. Two tunnels have been driven and 300 feet of open-cutting on a vein averaging 18 inches in width at the surface."

W.M. Brewer (1915) also writing in the Report of the B.C. Minister of Mines refers to three veins but only two were exposed at surface. Number 1 vein is oriented N. 85° E/40° SE and varies from 6 inches to 18 inches in width. A second vein (No.2), a few inches wide strikes parallel to No. 1 but dips 23° southeast and is exposed about 10 meters lower in elevation. The vein filling consists mainly of massive arsenopyrite with some chalcopyrite and pyrite. A small proportion of quartz gangue is present. Significant potential is recorded by Brewer (1915) on Page K 256 in describing work from a lower crosscut adit collared 30m below the surface outcrop of No. 2 vein:

^{*} refer to List of References on page 12

A second drift, about 400 feet in length, has been driven towards S. 60° W. (mag.) from the adit at a point 386 feet from the portal, along the hanging-wall of the second vein crosscut. There has been a drift driven towards N. 60° E. for a distance of about 40 feet along the foot-wall of this vein.

From a point in the long drift about 100 feet towards the south-west from the main adit, a crosscut has been driven for a distance of 58 feet in a north-west (mag.) direction, in which is exposed several narrow veins filled with quartz containing arsenopyrite and iron pyrite, and the granite rock between these narrow veins is so much altered and crushed as to resemble soft talcose gouge. Apparently the entire width of 58 feet might pay to concentrate, and if such treatment proved successful the mine could be operated as a low-grade proposition.

The exploration program carried out on the Hunter Group consisted of surface prospecting, limited soil sampling and five short diamond drill holes. The recent Statement of Exploration and Development has been filed to give 2 years coverage on Hunter II (12units), Hunter III (18 units) and S.W. (20units) aggregating \$10,000 of assessment credit.

Cairnes (1924) on page 171 comments that for future prospecting:

- A likely area for prospecting lies in the vicinity of Wardle Creek in those basic intrusives which have in this report been included with the Juassic bathoLithic rocks."
- The areas to the south of Wardle Creek, occurring in these older bathoLithic rocks, are considered more especially worthy of exploration."

LOCATION AND ACCESS

The Hunter Group is located 8 km. southwest of the town of Hope, (Figure 1), bounded by Silverhope Creek to the northeast, Hunter Creek to the southwest and the Trans-Canada Highway to the northwest(Figure 2). Topography rises very steeply from about 100m elevation to more rolling ridge crests above 1200m elevation.

3

Access to the drill sites on the southwest side of Hunter III claim is by a 7 km. gravel logging road along Hunter Creek, leaving the Trans-Canada Highway 11 km. west of Hope. Access to the S.W. Claim is via the paved Silver Lake road.

Logging in the Hunter Creek basin is controlled by Canfor Ltd. (under contract to Lineham Logging Ltd.). A returnable performance bond to Canfor was required during the diamond drill program.

PROPERTY, LIST OF CLAIMS

The following table lists the record data concerning the Hunter Group as illustrated on Figure 2:

TABLE 1 HUNTER GROUP, LIST OF CLAIMS

CLAIM NAME	HUNTER II	HUNTER III	S.W.
Number of units	12	18	20
Record Number	1589	1590	1549(g)
Date of location	Oct. 10/82	Oct.11/82	Sept. 14/82
Date of Recordin	g Oct.18/82	Oct.18/82	Sept.16/82
Expiry Date	Sept./85	Sept./85	Sept./85
* Owner	L. Williams	L. Williams	C. Stephenson

^{*} Using the assessment credits discussed in this report

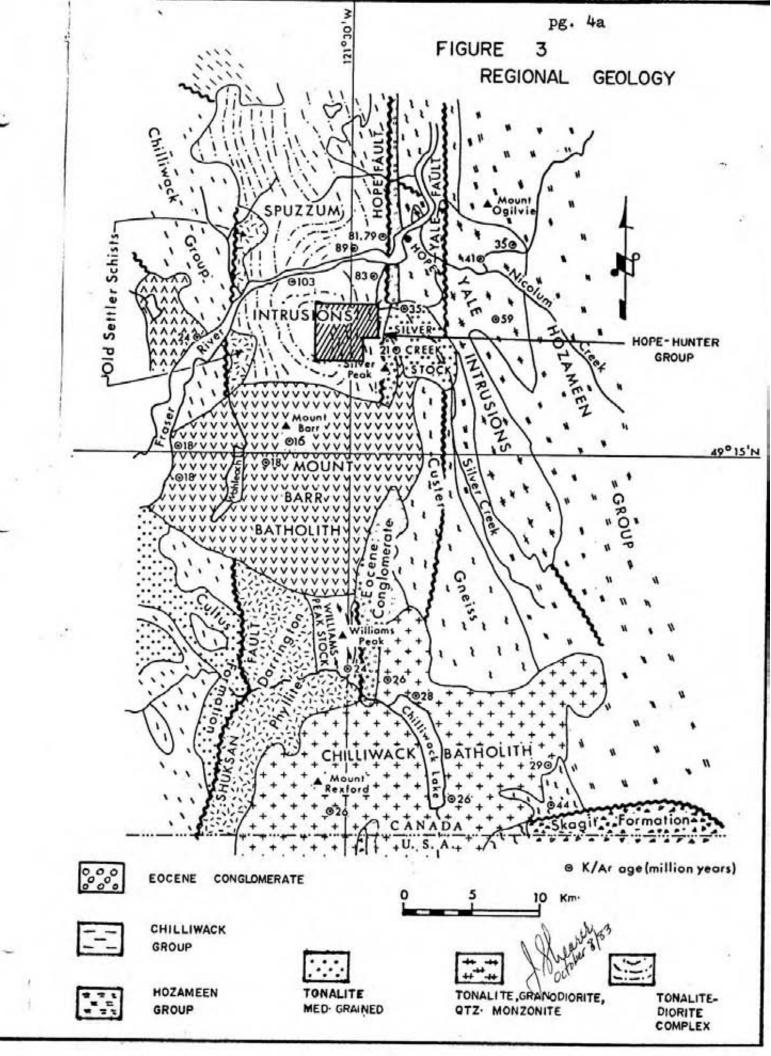
Fieldwork was conducted from October 1982 to September 1983 as tabulated in Appendix II. Two years assessment has been applied to all claims for \$10,000 credit as shown in Appendix I.

REGIONAL GEOLOGY

Cairnes (1944) compiled the regional geology of the Hope Area as Map 737A. This was revised by Monger (1970). The area around Hope encompasses the major tectonic boundary between the Coast Plutonic Complex and the Cascade Fold Belt. The most recent contribution to the regional geological setting is by Richards and McTaggart (1976), Figure 3.

Structurally the area lies within imbricate fault slices between the Yale and Hope Faults and the Shuksan Thrust to the west. The graben created by the Yale and Hope Faults is a major fault system that extends northward for many kilometers and controls the course of the Fraser River.

The intrusive evolution of the area is varied and complex. The Hunter Group is entirely underlain by Late Cretaceous Spuzzum Intrusions which range in age from 73 m.y. to 89 m.y. These are the oldest plutonic rocks of the region. The Yale Intrusions northeast of Hope are a group of stocks and sills that lie along a belt extending from 5 km. north of Yale southward to near the head of Silver Creek. This suite of rocks range from tonalite and granodiorite to quartz monzonite. All units of the Yale intrusions display some degree of



cataclastic foliation.

The Silver Creek Stock, 5 km. south of Hope, is about 25 km.² in area. It is composed of homogeneous and unfoliated meduim grained tonalite. Richards and McTaggart (1976) page 944, describe the stock as follows:

The stock intruded and metamorphosed Eccene conglomerate and has been intruded by the Miccene Mount Barr bathoLith. The walls of the stock appear to be vertical. A single K Ar. determination on hornblende gave an age of 35 m.y. Which is considered to be the time of emplacement of the stock. That the stock is epizonal is suggested by the high-temperature structural state of the alkali feldspar, fine grained margins, adjacent hornfels, and mid-Tertiary age."

Emplacement of the Mount Barr bathoLith has been dated at 21 m.y. (Richards and McTaggart 1976) and is exposed 3 km. south of the Hunter Group. The later phases of the Mount Barr batho-Lith at 16 m.y. represent the youngest major intrusive phase in the area.

LOCAL GEOLOGY AND PROSPECTING

The claims are underlain by diorite and tonalite of the Spuzzum intrusions (McTaggart and Thompson 1967). Two main units are distinguished: a central zoned diorite complex and a surrounding tonalite, Figure 5. The diorite is a fresh, mediumgrained rock consisting of bronze-brown hypersthene and black augite with variable hornblende. Biotite is a minor constituent and quartz was rarely identified in drill core.

Richards and McTaggart (1976) describe the dioritic complex as follows:

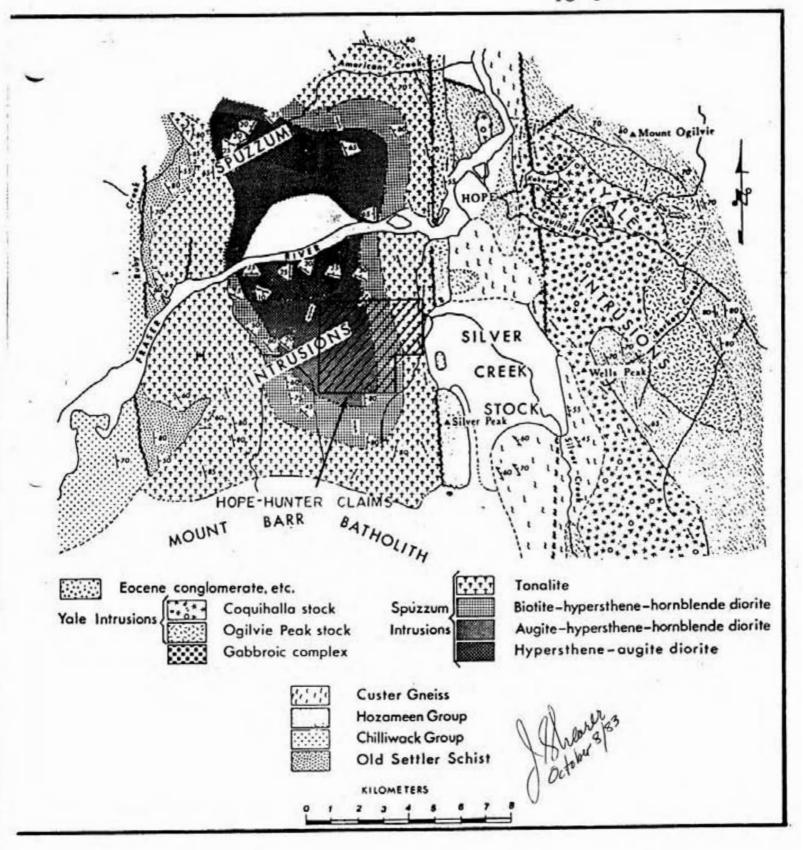


FIGURE 4 LOCAL GEOLOGY

The diorite complex is crudely zoned, with hypersthene-augite diorite (rarely norite) in its core regions and hypersthene-horn-blende diorite (rarely tonalite) at its margins. The mineralogical variation appears continous, but three varieties have been defined: hypersthene-augite-hornblende diorite and a marginal zone of biotite-hypersthene-hornblende diorite. Only a small chemical differences accompany the pronounced mineral-ogical variation."

Prospecting by C. Stephenson and L. Williams, as reported in Appendix V. Figure 6, has illustrated other structural features similiar to and parallel to the Aufeas veins. These faults slips are not as well mineralized as the Aufeas veins. Alteration in host rocks of the Aufeas are also similar to those altered rocks encountered in these fault slips drilled to date, which suggests mineralization at depth (see Appendix V Prospect #3.7 and drill sites 1&2.)

Irregular bodies of hornblendite are found in the marginal parts of the diorite complex. These ultramafic rocks show both sharp and gradational contacts with diorite and in some cases follow contacts or fractures that suggest a structural control.

The tonalite, surrounding the diorite, is medium-grained, with a planer alignment of hornblende and biotite grains.

Plagioclase, quartz, hornblende and biotite occur in about constant proportions throughout.

DIAMOND DRILLING

Diamond drill logs are contained in Appendix IV. Each hole was logged at a scale of 1:250 and core recovery measured. The diamond drill record sheet features as visual columns on the left of the scale: drilling interval, core recovery and box number. To the right of the scale column are alteration types and space for the normal written description. The location of each drill hole is shown on Figure 6.

No core has been split or sent for assay. However, the extremly chloritic zone encountered in Hole #2 from 28.50m to 37.80m at the end of the hole should be assayed for Au, As, Ag, and Hg. If possible, Hole #2 should be extended another 30m to further investigate this chlorite-calcite alteration zone. This alteration type appears similar to that described by Cairnes (1924) on page 149 at the Aufeas Mine:

"Though locally massive this rock is, in general, somewhat gneissoid. It has been sheared and mashed, and in the process fissures have been developed in which ore deposits occur. In part, and particularly where zones of shearing are pronounced, there is marked alteration to a finer-grained, and comparatively soft, greenish rock. Such a type is not noticeable on either side of and above the portal of the lower tunnel."

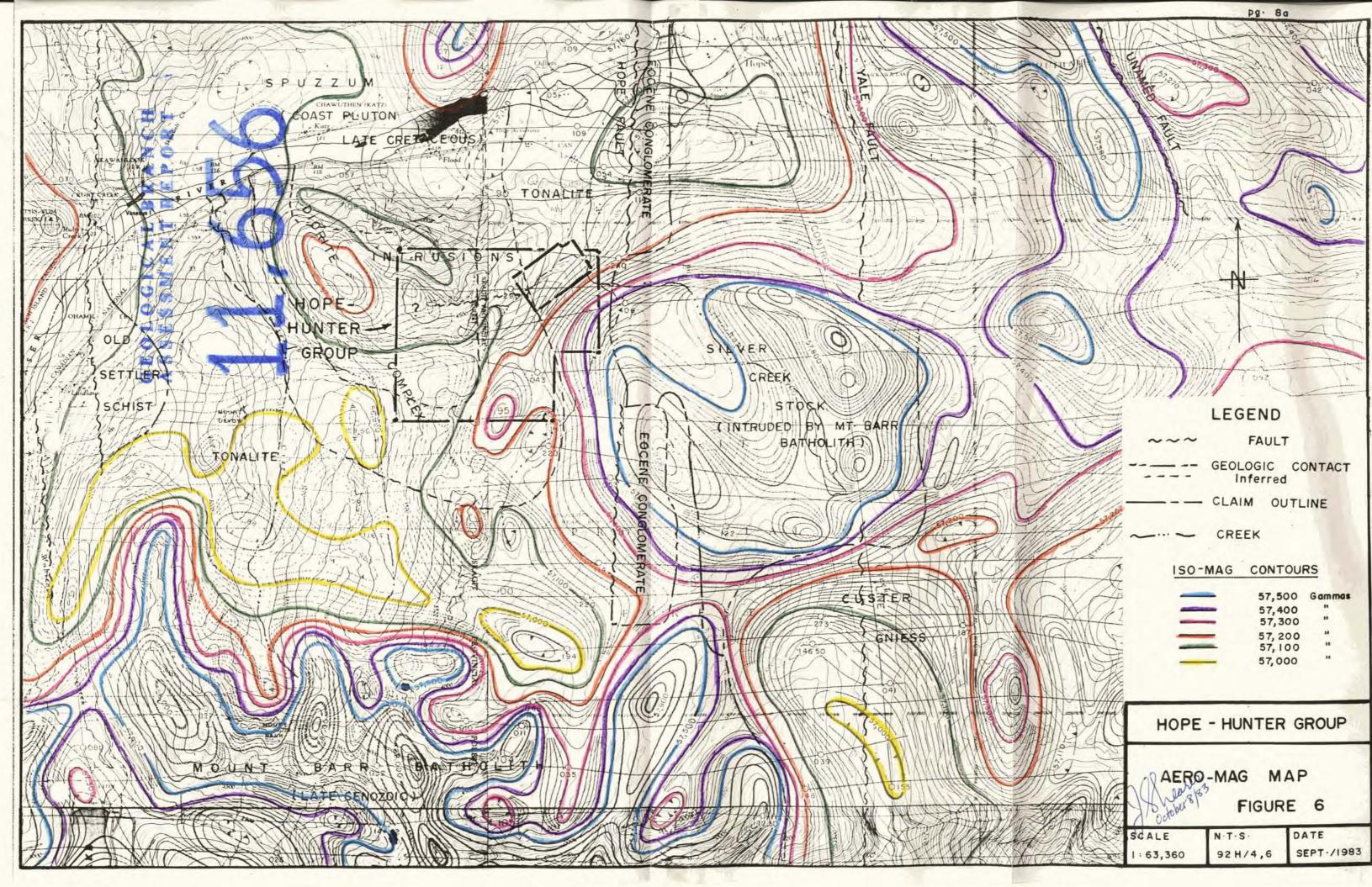
Core recovery in the short holes is very poor but is good in the two longer holes, #2 and #5. Drilling was done by a BBS-1 machine equipped to recover EX core 25mm in diameter.

A thorough study of fault location and direction of shearing is advised before additional drilling is attempted. The areas of most intense faulting and most likely zones of vein concentration can be found by a combination of surface prospecting and airphoto interpretation.

AIRBORNE MAGNETICS

An airborne magnetic survey around the Hunter Group issued by the Department of Energy, Mines and Resources, Ottawa in 1972, Figure 6, illustrates many of the gedlogical features discussed under Regional Geology. Clearly evident is the circular outline of the Silver Creek Stock which impinges on the southeast corner of S.W. Claim. A subsidary local magnetic high occurs south of the S.W. Claim on the east side of Hunter III claim about Eureka Creek. The highly variable magnetic signature of the Mount Barr bartholith shows along the southedge of Figure 6. In contrast the Spuzzum Intrusions have a relatively featurless magnetic profile. Slightly higher magnetic response is suggested for the core zone of the dioritic pluton. An east-west elongate trough occurs along the northwest corner of S.W. Claim. This may reflect a fault which trends the same direction as the Aufeas veins and occurs near the 1200m elevation brek-in-Slope.

The results of the airborne survey demonstrate the potential usefullness of a comprehensive ground magmetometer grid.



GEOCHEMISTRY

Regional geochemical sampling released in 1982 for the Hope Map-Sheet show six samples around the Hunter Group. Samples were collected from water and stream sediment and analyized for 16 elements. The six relevent samples are shown below. Locations are plotted on Figure 5:

	1033	1034	3159	3160	3202	5055
Zn	33	70	30	22	18	130
Cu	20	103	17	30	36	44
Pb	1	3	1	1	2	9
Ni	14	29	20	13	15	9 24
Co	5	14	5	5	3	10
Ag	0.1	0.5	0.1	0.1	0.1	0.1
Mn	147	345	130	76	60	410
Fe	1.60	3.00	1.15	0.75	0.70	3.80
As	4.0	1000	3.5	2.0	2.0	21.5
Mo	1	1	1	1	1	2
W	1	1	1	1	1	1
Hg	30	90	30	30	50	40
U	1.5	1.0	2.5	0.5	0.5	8.0
Sb	0.4	1.8	0.1	0.1	0.1	1.8
Ph	7.8	7.9	7.1	6.5	7.4	7.3
Loc.	Eureka Creek	near Wardle Creek	Hunter Creek	W. of Wardle Creek	E.of Hunter Creek	Hunter Creek

Assay values in ppm except Fe%.

The sample from near Wardle Creek is highly anomalous in arsenic. Upper Hunter Creek may have higher arsenic and further sampling is recommended. No gold assays were run in this reconnaissance program.

Sixteen soil samples were collected along the roads near the diamond drill sites, Figure 5. These were assayed by atomic absorption at Vangeochemical Ltd., report No. 82-69-003, for Mo, Cu, Pb, An, Ag, Au and W. The results are tabulated below:

Element	Range	verage
Mo	1-2 ppm	4 .1.5 ppm
Cu	18-42 ppm	28 ppm
Pb	9-19 ppm	15 ppm
Zn	32-63 ppm	52 ppm
Ag	not detected-0.2 ppm	4 0.15 ppm
Au	not detected-10 ppb	4 10 ppb
W	not detected-10 ppm	4 5 ppm

These data do not exhibit anamalous values for any element.

Few of the samples collected have encouraging results, with exception of samples taken on prospect #7. These samples were assayed for Gold and Silver. This mineralized talcose fracture zone is on strike with the Aufeas and faults drilled on Sites 1&2.

835	Au	.012	oz/ton	Ag	0.30	oz/ton
836	Au	.008	oz/ton	Ag	0.36	oz/ton

CONCLUSIONS AND RECOMMENDATIONS

Preliminary exploration on the Hunter Group has consisted of surface prospecting plus limited soil geochemistry and diamond drilling in 5 short holes. The target has been narrow quartz-sulfide veins with significant gold values similar to those known at the nearby Aufeas Mine. A more attractive target may be the possibility of recognizing wider zones of gold mineralization as suggested by early work at the Aufeas where widths up to 58 feet (18m) have been regarded as potential concentration ore due to the alteration of sparsely mineralized rock intersected by numerous small ore veins.

No new zones of mineralization have been discovered as a result of the present exploration program. However, the bottom 9.3m of intensely chlorite-calcite altered core in Hole #2 should be split and assayed for Au, Ag and Hg. If possible, Hole #2 should be extended another 30m to further investigate this zone on the possibility of associated quartz-sulfide veining.

An airphoto compliation is recommended in conjunction with surface prospecting to locate faults and shear zones that may be reflected by air-linears. An airborne magnetic low near the northwest corner of S.W. Claim should be checked in detail. Orientation ground magnetometer lines should be run over the Aufeas veins and fault zones found on the Hunter Group. The future of the property depends on an orderly daily log and notebook system being implemented to facilitate the correlation of significant observation made by different workers and to build a dependable data base.

Respectfully submitted

J.T. Shearer, M.Sc., FGAC

REFERENCES

British Columbia Minister of Mines, Annual Report: Aufeas Property (Camrock)

1911, p 184; 1912 p 187. 1913 p 219; 1914 p 363; 1915 p 255; 1918 p 240; 1924 p 139; 1937 p A40; 1938 p A38; 1939 p 86; 1940 p 28; 1967 p 65.

Cairnes C.E. 1921 Coquihalla Area, British Columbia Geological Surv. Canada, Sum. Rept. 1920, Pt A. pp 23-41

> 1924a Reconnaissance of Silver Creek, Skagit and Similkameen Rivers, Yale District B.C. Geol. Surv. Canada, Sum. Rept. 1923, Pt A, pp 46-80

1924b Coquihalla Area, British Columbia Geol. Surv. Canada, Memoir 139, 187pp

1944 Hope Area Geological Survey of Canada, Map 737A 1"=4miles, one sheet

Department of Energy, Mines and Resources, Ottawa
Airborne Magnetic Survey, Maps 8533G(92H/3),
8534G (92H/6), 8537G (92H/4), 8538G (92H/5)

Geological Survey of Canada, 1982 Open File 865, National Geochemical Reconnaissance 1:250,000 Map Series 1 Map & Data File

McTaggart K.C. and Thompson R.M.

1967, Geology of part of the Northern Cascades in Southern British Columbia. Canadian Jour. Earth Sci., Vol. 4, pp 1199-1228

Monger, J.W.H. 1970 Hope Map-Area, West Half, British Columbia Geol. Surv. Canada, Paper 69-47 75pp

Richards, T.A., and McTaggart, K.C.

1976 Granitic rocks of the southern Coast Plutonic Complex and Northern Cascades of British Columbia Geol. Soc. Amer. Bulletin, V87, pp 935-953.

APPENDIX I

Statement of Costs

HUNTER GROUP

September 1983

Field work carried out between Oct. 1982 and 1983

SUMMARY OF COSTS TOTAL DRILLING 120.09 METERS

ITEM	COST	TOTAL
DD Shack	\$ 596.94	\$ 596.94
DD & Cat Fuel (200gals.@\$2.00 / gal.)	400.00	
DD Supplies	1334.81	
Labour (54 days @ \$75.00/day)	4350.00	5684.81
Road work (25 cat hours @ \$75.,	/hr. 1875.00	
Expenses	888.10	2763.10
Mobilization (Total Cost)	225.00	225.00
Vehicle Expense Gas (1615 mi. @ \$.30/mi.) Oil Parts Insurance (4 yrs. premium	484.50 44.20 1387.00) 254.00	2169.70
Maps, Photos & Publications	115.25	115.25
Report Prep & Reproduction	300.00	300.00
Core Logging	400.00	400.00
Total Direct Drill Cost (\$ 105.38/ meter)	12,654.80	12,654.80
Drafting 3 2/3 days @ \$75./day	275.00	
Vehicle Expense (Prospecting) (800 mi. @ \$.30/ mi.)	240.00	
Tags & Equipment Expense	85.00	
Field Time (24 days @ \$75./day) 1800.00	2400.00
Geochemistry (appro. \$12.58/ sample, 26 samples)	327.00	327.00
Trucking (cat Demob.)	155.00	
Trnching (3 cat hrs. @ \$75./hr	.) 225.00	
Cleanup & Ditching (2 cat hrs. \$75./hr.)	@ 150.00	530.00

APPENDIX II

List of Personnel

And

Dates Worked

HUNTER GROUP

APPENDIX II

LIST OF PERSONNEL AND DATES WORKED

(1) R.K. Burton P.O. Box 2069, Hope, B.C. VOX 1L0

Dates worked: 1983, Aug. 1,21; Sept. 5,11

Experience: 1981 Graduate of Northern Alberta Institute of Technology in Mining Technology

> 3 years working experience with Geological Consulting & Mining Companies

(2) C. Stephenson 63411 Trans Canada Highway Silver Creek

P.O. Box 914, Hope, B.C. VOX 1LO

Dates worked: (Date not recorded, month only.)

1982, Oct. 6 days Nov. 6 days

Dec. 4 days 1983 June 10 days

July 6 days Aug. 4 days

Sept. 4 days Total 40 days

Experience: 4 years diamond drilling and self

employed prospecting. Heavy equipment operator

(3) L. Williams P.O. Box 2168
Hope, B.C. VOX 1L0

Dates worked: (Date not recorded, month & days only)

1982 Oct. 8 days

Nov. 10 days Dec. 6 days

Dec. 6 days 1983 June 4 days

July 10 days

Sept. 2 days Total 42 days

Experience: 20 years mining, diamond drilling and self employed prospecting

APPENDIX III

Statement

Of

Qualifications

J.T. Shearer M.Sc., FGAC

APPENDIX III

STATEMENT OF QUALIFICATIONS

I, Johan T. Shearer, of the Town of Hope in the Province of British Columbia, hereby certify that:

- (1) I obtained a B.Sc. in Honors Geology from the University of British Columbia in 1973 and a M.Sc. in Mineral Exploration from Imperial College, University of London in 1977.
- (2) I have worked continuously in mineral exploration since 1973 for such companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd. and Carolin Mines Ltd.
- (3) I am a Fellow of the Geological Association of Canada.
- (4) I have no interest in the Hunter Group nor do I expect to receive any in the future.
- (5) This report is based on personally logging diamond drill core from the Hunter Group and a review of all data gathered to date which was supplied by C. Stephenson and L. Williams.

Dated at Hope, British Columbia October 8, 1983

T. Shearer, M.Sc., FGAC

APPENDIX IV

Diamond Drill

Logs

HUNTER GROUP

Recoling Corrected -43.0						
Reoding -42°	or.	ks				
	y color.	blocks		1		1
COLLAR	ENDE DIORITE:	den blocks No wooden				
Purpose Comment	O-EOH HYPERSTHENE-AUGITE-HORNBLENDE Hypidiomorhic granular greenish-light Chloritic shearing 1.90-2.05 Rubble of 5.00(cave) Mylonitic shearing at 6.10-6.50 Some calcite but also other white min	9.14m= 30 feet EOH? SAY 30 FEET- 1 box only no wooden Depth of Hole very uncertain. No				
GEOLOGY			Transcription of the second			
MINERAL			- Comment on the comment			
FRACTURING	-1-1-1-1-1	-				
MYLONITIC SHEARING.	* *					-
CALCITE	11111					
4	4.0					
1 : 250	40	9 - 2	وَلْنَاءَ وَلَوْ		\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7 46°F
SOX No.			4			
% CORE # 1% RECOVERED # 1%		***				
INTERVAL blocks	NO WOODEN BLOCKS					

Length 9.14m(30ft.) Bearing N20°E Dip420	Controctor Williams & Stephenson Core EXT Stored Silver Creek Cosing NA	J. T. SHEARER
Dep NA	Location 63411 Trans.Canada Hwy.	Hunter HS-1
Elev _975m	Silver Creek	Project _ Hunter Group
O B. Thickness S	tarted Nov. 5/82 Finished Nov. 15/82	Com Hunter III
	forted Fnished	Page 1 of 1

RE ± 1% VERED ± 1% ING Wooden VAL blocks	250 No.		HEARING ALCITE	YLON ITIG	CTURING	ERAL	DLOGY	
	-2-	,	5.	1	-		1=	Minor BIOTITE near top of Internal to 2. Bionor AUGITE Light green-Light grey color, hypidiomorphic granular texture. mylonitic shearing @ 3.50 600 toCA
	2 + 4 7 - 7 72 - 8		<u>' ''</u>	i		- Itierote and a	+	-5.30 Larger Mylonitic zone 16cm wide. calcite-qtz. veinlet vuggy at 5.45 reddish streaks could be rhodonite 6.35 chlorite frags.(digested clasts.) Slight suggestion of gniessic texture 6.00-6.50
85 4.6	6 = 5 5				- was some		 	11.24-12.71 DYKE: Fine grained, sparsely porphyritic with 1 mm. anhedral salt+pepper, Diabasic much coarse
68 - 80	15 - 16 - 15 - 15 - 15 - 15 - 15 - 15 -		113				<u> </u>	12.71-37.80 HORNBLENDE-HYPERSTHENE DIORITE: minor Augite Dyke at 14.05-14.07 Wyloritic shearing 14.65-14.90, broken core 15.05.
	-18 -20 -21 -22		XIIIIII (IIIIII)		KANN		1	Myloritic shearing 15.60, Funky-porous rock 16.00-17.5 chl. fracture weathered. White matrix to 17.68, Definitely greenish cast 17.68-20.00, also FeO on Fract. calcite rich. Lucoxeene at 18.30
	23 -23					2	+;	Fe0 on Fractures
27.74 7.72	25 -27 -28 -29		Hillert	×× ×	88.3		_+	ric at
	2 2 2 3 4 3 4 3 4 3 4 3 4 3 4 4 4 4 4 4		1/1/1/1		VXXXXXXXX		+ + +	(shattered) 29.60- EXTREMELY CHIORITIC 29.60-37.80 (EDH) Short section are up to 80% chlorite 33.80-34.00 very sheared calcite filled shears mainly subparallel to core axis core very shattered
34.58 17 0 37.80 75 37.80 EOH EOH EOH	37.80 - 37 EAH EOH		111	XXX	222			FEND OF HOLE 37.80m (124feet)

Length 37.80m	Contractor Williams & Stephenson	TT SHEARERNING
Bearing N 150E	Core EXT Stored Silver Creek	J. 1 . 1 . 10 . 8 /8 /
DID46°	Casing NA	() Sociolor
Lat. NA	Logged by J.S. Date Sept. 5, 1983	8/1 00
Dep. NA	Location 63411 Trans. Canada Hwy.	Hole No Hole #2,5TN-
Elev _975m	- Silver Creek	Project Hunter Group
O B. Thickness 0	Storted Nov. 20/82 Finished Dec. 15/82	Claim Hunter III
BR Thickness 37.80m	Storted Nov. 20/82 Finished Dec. 15/82	Page _1 of _1

SURVEY: Angle Reading Cornered COLLAR -650	rphic), some chl	ontains abundant calcite. 700+50toCA, brownish biotite. initial part of Hole.							
Bacring Reading 655°	orphic), Biotite at 1.0 some chlorite alterate sheared zone, in Biotitignment, if shearing, 25	abundant calcite. oCA, brownish biotite part of Hole.							
Besting DT ODT mp	orphic), Biotite a some chlorite alc	abundant calci oCA, brownish bi part of Hole.							
	orphic), Bio some chlor c sheared zon ignment if	abundant oCA,brown part of			:		•		
12	40 000	1 7 E							
Purpose Comment CoLLAR CoLLAR OL1 03 HVDEDSMHENE HODNELENDE ALICITER	anular mosaic mm Hbl and Pla xLs moderatel 1.93 short o	Shearing or se surfaces petic than	6.40 END OF HOLE (21ft.)	· Fa					
GEOLOGY						Tarded deal			
	£ 315								
CO S TO THE REST OF	スケスシード								
MYLONITIC SHEARING	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\								
MYLONITIC SHEARING CALCITE								100	
SCALE 5	- 0 w 4 0		= Y:	2 P F S	5 5 7 5 6	42722	8.58 a.u.	75 B B B	8 8 e
BOX No.	- 1				1-1-1-1		4-1-1-1		
% CORE # 1%	52 53								
INTERVAL blocks	153 F 97								

Length 6.40m(21ft Bearing N 45 ⁰ W Dip -65 ⁰	Controctor Williams & Stephenson Core EXT Stored Silver Creek Cosing NA	J. T SHEARER
Lot. NA Dep. NA Elev 965m	Logged by J.S. Dore Sept. 5, 1983 Location 63411 Trans. Canada Hwy. Silver Creek	Hole No STN 2-Hole 3
O.B. Thickness O	Started Finished June 20/83	Page 1 of 1

£	61	
Somethad	sty, dio	pri-
Peoding - 10°	rust rust	all pi
Bearing	tremly rus	ng .
COLLAR	E- AUGITE DIORITE of Hole-extremly ornblende-hypersth d rehealed frac. r	1 /p/ / /
Purpose Comment	Slightly more malic than top of Hole #3 First 3 core fragments at top of Hole-extremly rusty, Iron oxides MnO 3.20-6.40 chloritic sheared Hornblende-hypersthene diorite calcite rich, shattered rehealed frac. non magnetic	6.40-7.62, very oxidized, very calcitemany features obliterated in places. SHOULD BE ASSAYED. Fault gauge at EOH 7.62 END OF HOLE (no wooden block at e
GEOLOGY		
MINERAL	3 3	
FRACTURING	2 至	
Z CHLORITE	17/1/17	
SHERRING.		
NYLONITIC SHEARING. CALCITE	11/1	
SCALE 1 : 250	10ders	
BOX No.		<u> </u>
% CORE ±/		

Length $7.62m(25ft.$ Bearing N 00 Dip = -70°	Contractor Williams & Stephenson Core EXT Stored Silver Creek Casing NA	J. T SHEARER 83
Lat. NA Dep. NA Elev 965m	Logged by J.S. Dore Sept. 13.1983 Location 63411 Trans.Canada Hwy. Silver Creek	Hole No 2,STN-Hole 4
O B. Thickness	Storted June 25/83 Finished July 4/83 Storted Finished	Claim Hunter III

RE	B	ALTERATIO	SATION	FF		GI	Purpose Feeting Read	Reading Cornected
CORE ±/	: <u>250</u> 0x No.	CALCITE	CHLORITE MYLONITIC SHEARING	RACTURING	INERAL	EOLOGY	Comment	(1 -
-	-E	9.2	1	1'		-	ORNBLENDE DIOR	TTE
34.	- 0 6 4		111/11	n Mari			ide largely altered to chl., trace of inhedral. tractures 900 to CA, dominate stic. fractures 900 to GA, dominate gestion of partly digested fragments	Biotite 5.60
27 28	1:0		THE STATE OF THE S				Sronze - 2010 more gafayage oring at 30° toch at 8 trace of pyrite at 7.99: Shearing at 30° toch at 8	more
18.59 33 17.59 47		0		111	111		chloritic slicken sides at 11,00 More fractures with bleached envelopes 12,50 + down Also containing calcite-quartz	0 + down
16 84.8 10 C	1 1 1	10		11			Chlorite films on fracture planes	
7 32 54	6-7-7-	0		11	, ,	-	rubbly core at 20 42-23.47 47% core loss chloritic-MnO slicken sides parallel to core axis	axis
22 25	1			,)		and the same	er	
	262	n .		1 44	. 44		- Broken core 27.80-28.19	
24.44 24.44 25.55 26.55	1 E St 25 E St 25 E	o 10	深//	BH			Partly digested fragments darker, at 33.00 very fractured beginning at 33.80-, core broken 33.80-39.62 chlorite coating slicken sides, shearing 45 to CA throughout	ken
33.48 33.48 58.83	3.9	Q.	77711,			-		

Bearing N 90°E	Core EXT	Stored Silver Creek - U	SHEARER 8 83
DIP43.5 LotNA		Date September 5, 1983	1
Dep. NA Elev 965	Creek	rans.Canada Hwy,Silver	Project Hunter Group
O.B. Thickness	Storted July 5	Finished July 5	Claim Hunter III
BR Thickness 53.95	Storted	Finished	Page 1_ of _2_

Comeched	F.	
3 Os Con	ich ich	
Reading - Ag	okite sulfides coloured toCA.	
	CA.	
9	ENDE DIUNITE: (CON 5-41.88. Irregulary ps No sulfides, honey coloured. few 60° toCA. CA. end of hole, much end of hole, much i., lighter zones	
	d v v v	
Collar Collar	U-59.95 HYPERSTHENE - AUGITE - HORNBLENDE DIONITE: (CON'T. Lighter coloured sections 41.50,41.75-41.88. Irregular quartz vein 10 to CA. Chlorite wraps No sulfides, trace of pyrite and brown sphalerite honey coloured. - regularly jointed 70-80° to CA., a few 60° to CA. epidote filled fract.at 46.90, 20° to CA. Lots of chl. replacing mafics near end of hole, much more than tact 100ft. chl. on fract., lighter zones 30° to CA. some biotite at EOH	
5 1 1 1 1 1	ERSTHENE - AUGITE - HORNBL ourge sections 41.50,41.7 10 to CA. Chlorite wra rite and brown sphalerite jointed 70-80° to CA., a led fract.at 46.90, 20° to lact 100ft. chl. on fract some biotite at EOH	
	ori o c 90.	_
	to of the safe	‡
	ng at.	(177ft.)
	d d b d ct.	<u> </u>
	d so to an ote of tra fra fra fra fra fra fra fra fra fra f	53.95ш
	Lite 1001 1001 1001 1001 1001 1001 1001 10	The state of the s
	r colour vein 10 of pyrit larly jo e filled of chl.	OF HOLE
	95 HYP er colling of py gularly of fill of fill of chan toch.	H
2 2	rtz rtz se c seul	
Purpose	Lighter coloured sections quartz vein 10 to CA. Clarace of pyrite and brown radiote filled fract.at 4 epidote filled fract.at 4 more than tact 100ft. chang more than tact some biotite 300 toCA. some biotite	END
4.0	PHOP I.O	
GEOLOGY		
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FRACTURING Z CHLORITE		
CALCITE CALCITE	/// /XXXX)	
CALCITE		
AL		
SCALE 1: 250	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	\$
SOX No.		
% CORE ±1%	1 0 1 1 1 00 1 0	
INTERVAL BUCKS	4 9 N B 9	

Bearing NOOO E	Core EXT Stored Silver Creek	J. T. SHEARER
Dip430 Lot NA Dep NA	Logged by J.S. Date Sept. 5, 1983	Hole No Hole #5, STN-2
Elev -965	Silver Creek	Project Hunter Group
	red Finished July 5	Coom Hunter III

ANGLE Comed		cin	1	-	;			:
Reading - 450		TE: Shearing	re .	:		:		į
960110		Chloritic s		:				
COLLAR		chlorite. Chlorage at 4.50 c	ossible t					
Purpose	100	Augite partly replaced by chlorite. Chl	irlines 600to CA. HOLE 5.18? (17feet					
GEOLOGY		1		1111	بانييا		1111	
MINERAL						7014		
FRACTURING								
Z CHLORITE								
MVLONITIC SHEARING		35						
CALCITE								
SCALE	- 0	N 44	6 F E 9 1	= 222	0 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	25 4 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	28878	38 83 8 8 38 8 34 8
BOX No.		1	1 1 1 1 1 1 1			4 1 12 1 18 42	La balanta	Court do
% CORE ±/%	-					7.00		
DRILLING Wooden	1	-						

	The state of the s
Contractor Williams & Stephenson Core EXT StoredSilver Creek Cosing 8 ft.	J.T SHEARER R3
Logged by J.S. Date Sept. 13/83	Hole No NEG Hole NEG
Silver Creek	Project Hunter Group
red Oct 25/82 Finished Nov. 5/82	Claim Hunter III
Tede Finished	Page 1of 1
	Core EXT StoredSilver Creek Cosing 8 ft. Logged by J.S. Date Sept. 13/83 Location 63411 Trans.Canada Hwy. Silver Creek red Oct. 25/82 Finished Nov. 5/82

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APPENDIX V

Prospecting

Report

Ву

L. Williams

And

C. Stephenson

PROSPECTING REPORT: For the Hunter Group, From Oct.10, 1982 to Sept. 16, 1983

Submitted by: Mr. Cal Stephenson

The Hope Hunter Claim straddles a rather rugged portion of the Skagit Range. More than 3/4 of the property is of high relief above 900m elevation.

The experience of our drilling program has shown us, the difficulty in gaining and maintaining access to our claims. This is especially apparent in the winter and spring break up months. Our future work will more likely be restricted to the summer and fall months.

Seven areas were prospected and will be discussed seperately below. Easch of the seven prospected areas will be refered to by Number & are located on Figure 5. The traverse used to gain access to these prospects are also plotted with the exception of those areas accessed by road (See Legend Figure #5)

PROSPECT 1

A trench was found, located and mapped. This trench was worked years ago, we have no record of when it was excavated. This trench is in a conglomerate rock near the contact with the diorite of the Spuzzum Intrusives.

No Assays were assayed, although this area is of great interest and will be a priority in future exploration.

2 man days were spent on this prospect.

PROSPECT 2

We located and mapped the conglomerate contact and traced it over a distance of 300 meters. This is a suspected fault contact similar to that of the Hope fault to the East of our claim. The actual fault was not located due to overburden.

2 Man days were spent on this prospect.

PROSPECT 3

We located sulfide stringers (AsPy, Py) parallel to the Aufeas viens (Strike N77E) mapped and sampled. Followed up on strike. We spent six man days on this prospect. Stringer fault bound in altered Quartz Diorite. Spuzzum Intrusive type rock.

Description	Sample	Au oz./ton	Ag oz./ton
Sulfides (AsPy,Py)	61	.002	trace
Rust in Footwall	62	.002	trace

PROSPECT 4

Prospected Alteration zones above Aufeas. Collected many rock samples, assayed only 3 samples.

Description	Sample	Au oz./ton	Ag oz./ton
Float in creek Oxidized silicified rock	482	1.348	0.37
Mineralized mafic Dyke	481	trace	0.20
Alteration zone adjacent	480	trace	trace
Four man days spent on th	is prospect		

PROSPECT 5

Prospected along road and intermitted stream bed above road,

Sampled 2 faults parallel to Aufeas Vein.

Fault A 1 ft. wide, rust slip, minor mineralization

6" wide, rust slip, Assay not recieved at time of Fault B report writing

Two man days were spent on this prospect.

PROSPECT 6

Spent two days tracing down possible structures related to the Aufeas veins. No trace of Aufeas veins outcroping in creek i km. south of Wardle Creek. We encountered very steep terrain and only covered 1 km. in one day's hike. In many places we required a rope to reach the creek bed to get good exposure. Located metamorphic gniessic rock. This indicates a regional metamorphism due to the proximity of the Silver Creek Stock which intrudes the Spuzzum Intrusive Plutonic rocks.

Five rock samples collected No Assay done.

PROSPECT 7

We collected two samples near the creek in prospect 7. Assays were anamolous in gold and silver.

This minerilized talcose chloritic slip was later drilled above this site and was intersected by drilling on Site #2. We collared to close to this zone and lost most of our core due to broken rock conditions.

Four man days work on this prospect.

CONCLUSIONS

Geologic information was lacking in our prospecting, due to the inaccessibility of much of our ground. Most of our time was spent trying to get to different areas and so little time was actually spent prospecting. Many areas on the west end of our claim only offer rock exposure in the road cuts. At an early stage, it was decided to use the tools of our trade and start a small drilling program to gain valuable geologic information.

It has become apparent that due to the inaccessibility and high relief of a great potion of our claims, better access around our claim will be required. To aid in following the recommendations of this report, as advised by Mr.J. Shearer, the use of a fly camp and the building of more roads will greatly improve the effeciency of any future prospecting on our claims.

Respectfully Submitted

Cal Stephenson

Cal. STile as

