GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL

AND

DRILLING REPORT

- ON THE -

RELAY CREEK PROPERTY
CLINTON MINING DIVISION, BRITISH COLUMBIA

- FOR -

BARRIER REEF RESOURCES LTD.

904 - 675 West Hastings Street
Vancouver, B. C.

V6B 1N2

COVERING:

RELAY #4, RELAY #5, RELAY #6, DASH #1,

Dash #2, Dash #3, Dash #4

WORK PERFORMED: JULY 1, 1982 TO DECEMBER 21, 1982

LOCATION:

(1), 51°11'N; 122°56'W

(2). NTS MAP 920/2W

(3). 90 KM NW OF LILLOOET, B. C.

PREPARED BY

# KERR, DAWSON & ASSOCIATES LTD.

#6 Nicola Place, 310 Nicola Street
Kamloops, B.C.

J. M. DAWSON, P. FNI

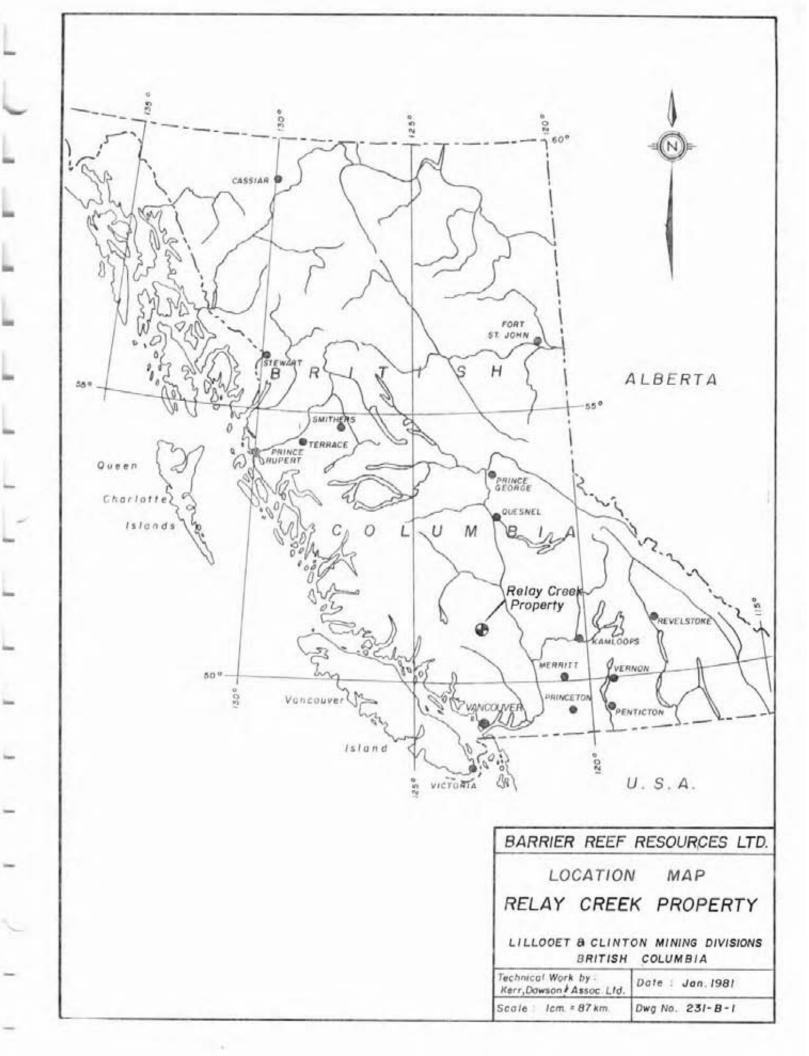
J. M. Dawson, P. Eng. December 21, 1982



# TABLE OF CONTENTS

														F	AGE NO.
INTRODUC	TION							•		•					1.
SUMMARY	AND (	CONCL	USI	ONS	•	•			•				•	•	1.
PROPERTY															3.
LOCATION	AND	ACCI	ess												3.
PHYS10GR	APHY	AND	VEC	ETAT:	ION						•				4.
HISTORY									•		•				4.
PROPERTY	GEO	LOGY							•		,				6.
MINERALI	ZATI	ON													10.
GEOCHEMI	STRY		•		٠										10.
INDUCED	POLA	R1ZA	rion	/RES	IST	VITY	SUI	RVEY						٠	11.
DRILLING	PRO	GRAM	ME		*							•		•	13.
ECONOM1 C	POT	ENTI	AL	•	٠									• 5	17.
							APP	ENDI	CES						

	- To - III - III - OC - V
Appendix A:	Description of Rock Geochemical Samples
Appendix B:	I. P. Data
Appendix C:	Drill Logs
Appendix D:	Personne1
Appendix E:	Statement of Expenditures
Appendix F:	Writer's Certificate
Appendix G:	Maps:
	-Figure 231B-1 - Location Map
	-Figure 231B-2 - Claim Map
	-Figure 231B-10 - Geochemical Plan - Gold
	-Figure 231B-11 - Detailed Geology of 'A' Anomaly
	-Figure 231B-12 - Geological Plan
	-Figure 231B-13 - Diamond Drill Hole
	Section R82-1,2,3
	-Figure 231B-14 - Diamond Drill Hole
	Section R82-4
	-Figure 231B-15 - Induced Polarization/Resistivity
	Survey



#### Introduction

This report describes the latest phase in a continuing exploration programme on the Relay Creek property.

Preliminary work in 1980 and 1981 outlined highly anomalous gold values in soils over large areas of the property, however significant assays in bedrock were only noted over very shallow widths.

Detailed geological, rock sampling and drilling programmes were carried out in an effort to locate the source of the anomalous gold in soils. Results are appended on maps accompanying this report.

### Summary and conclusions

- The Relay Creek property consists of 7 contiguous metric claims, aggregating 118 units located in moderate to steep terrain in the Yalakom River district of southwestern British Columbia. Access is by unimproved dirt road from the Lillooet-Goldbridge highway via Tyaughton Lake and Relay Creek.
- 2. Previous work dates back to 1970 when the property was first staked by Home Oil and partners. Geological and geochemical surveys and limited diamond drilling was done during 1971-1973 on porphyry type copper-molybdenum occurrences. In 1979 the southern part of the property was acquired by Clear Mines Ltd. and extensive geochemical and geophysical surveys were carried out. This work was not recorded and the claims lapsed in March, 1980. In 1979 and 1980 Barrier Reef Resources Ltd. staked the Dash and Relay claims and carried out geological and geochemical surveys as well as access road construction. In 1981, detailed geochemical and rock sampling was concentrated on the 'A' and 'B' anomalies. Four km of additional access road was constructed. In 1982 work was concentrated in the area of 'A' anomaly. Additional rock and soil sampling was performed. A limited induced polarization/resistivity survey was carried out and four diamond drill holes totalling 671 meters were drilled.

3. The property is underlain by late Mesozoic clastic sediments and lesser volcanics intruded by a swarm of small, irregular, 'Bendor' type porphyry sills and dikes. These intrusions are largely confined to a central zone of Taylor Creek rocks comprising intermediate bedded tuffs, volcanic wackes and fine clastics. This zone trends northwesterly and contains two major, linear, gold soil anomalies.

Gold mineralization occurs:

4.

- as relatively high grade (1-10 gms Au) values found in narrow quartz-carbonate and chalcedony veins.
- (2). in much wider zones of lower grade material (50-300 PPB) in and adjacent to pyritic and argillically altered feldspar porphyry intrusions.
- 5. Extensive sampling of soil and rock indicates that gold is concentrated in fine material so that values as high as 4800 PPB in soils are concentrated from anomalous but much lower grade (~200 PPB) bedrock.
- 6. From work performed to date, it would appear that the broad areas of anomalous gold in the altered intrusives are too low grade to permit bulk mining. Narrower zones of higher grade material are of such limited extent that further work on these is not warranted.

### Property

The Relay Creek property consists of 7 contiguous, metric claims totalling 118 units as follows:

Relay 'B' Group

Claim Name	Record No.	Tag No.	Expiry Date
Relay 4	1074	68607	July 23/86
Dash 1	376	47673	Aug. 10/85
Dash 3	378	47676	Aug. 10/86

Relay 'C' Group

Claim Name	Record No.	Tag No.	Expiry Date
Relay 5	1075	68608	July 23/86
Relay 6	1076	68609	July 23/86
Dash 2	377	47675	Aug. 10/84
Dash 4	379	47677	Aug. 10/87

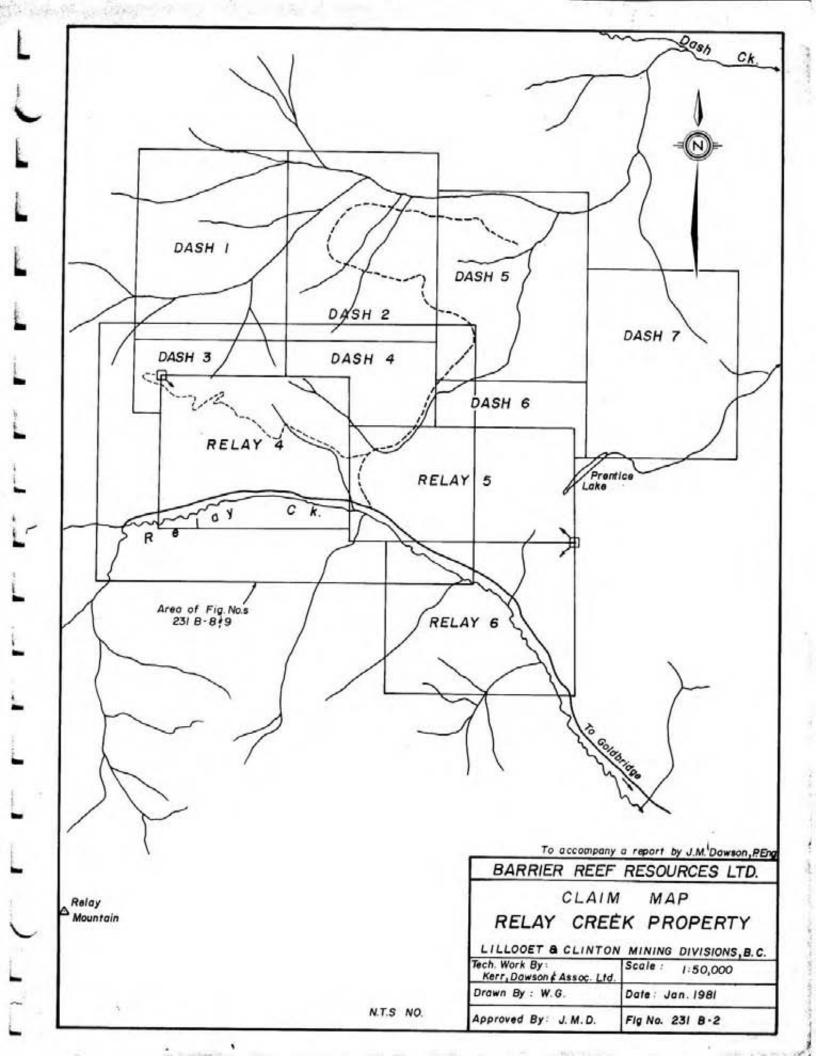
The registered owner of these claims is Barrier Reef Resources Ltd.

Disposition of these claims is shown on figure 231B-2.

### Location and Access

The property is located in southwestern British Columbia about  $40~\rm km$  north of Goldbridge and approximately  $90~\rm km$  northwest of Lillooet. Approximate geographic center of the property is at  $51^{\rm O}11^{\rm I}$  north latitude and  $122^{\rm O}56^{\rm I}$  west longitude.

Access is gained by road from the Lillooet-Goldbridge highway via the Tyaughton Lake road and the Relay Creek road. Road distance is about 60 km from Goldbridge and driving time is about 2 hours.



Drill access roads provide facile access to most parts of the claim block.

### Physiography and Vegetation

The property consists of a northwesterly-trending claim block covering parts of the headwaters of Relay Creek and Dash Creek drainages as well as the upland divide area between them. Topography is steep to moderate but there are no areas which cannot be traversed on foot. Elevations vary from more than 7700 feet a.s.l. on the crest of the ridge marking the divide, down to about 5500 feet a.s.l. along the valleys of Relay and Dash Creeks.

Areas above 6500 feet a.s.l. are usually bare with grassy meadows in the lower regions and talus covered areas on steeper slopes, particularly the south-facing slopes in the western half of the claim block. The lowermost areas are generally well treed with pine or on northern slopes, a denser growth of mature pine, fir and spruce.

#### History

Parts of the subject property were first staked in 1970 by Sheba Syndicate (Home Oil Ltd.) to cover a porphyry type copper-molybdenum occurrence along Relay Creek. From 1971 to 1973 geological, geochemical and geophysical surveys were carried out. In 1974, four shallow diamond drill holes aggregating about 1500 feet were bored.

The area now covered by the Relay claims was staked by Clear Mines Ltd. in 1979 and extensive exploration work including geological mapping, grid layout, geochemical soil sampling as well as magnetometer and induced polarization surveys was performed. This work was not recorded and the claims lapsed in the spring of 1980.

Barrier Reef Resources carried out regional geochemical exploration in the district in 1978 and 1979 and staked the Dash claims in August, 1979 and the Relay claims in April, 1980.

Geochemical soil and silt sampling programmes were carried out on the Dash claims in 1979 and 1980 and on the Relay claims in 1980 and 1981. Approximately 10 km of access road was constructed from Relay Creek to Dash Creek during 1980.

In 1981, detailed grids were laid out on parts of the Relay claims and detailed soil and rock geochemical sampling was performed. Four km of access road was constructed from Relay Creek to the center of Relay #4 claim.

The original Relay claims (#1 to #3 inc.) were abandoned and restaked as Relay #4, 5 and 6 in July, 1981.

In 1982, fill-in soil sampling and detailed geological mapping and rock sampling was carried out on the Relay 'A' anomaly. Four diamond drill holes totalling 671 meters were bored in August and September 1982.

### Property Geology

The Relay Property is predominantly underlain by steeply dipping volcanic and sedimentary strata of the Upper Cretaceous Taylor Creek Group. Within the area mapped this sequence has been complexly intruded by porphyritic dykes, sills and irregular plutons (Bendor Intrusions) of Eocene age.

Anomalous gold concentrations occur over broad zones within altered, pyritic, highly fractured segments of the Bendor Intrusions and in narrow veins, shear zones and silicified zones within and peripheral to the Bendor Intrusions.

### Taylor Creek Group

Within the map area, the Taylor Creek Group is comprised of medium to dark green, andesitic to basaltic tuffs and flows, agglomerate, volcanic wacke, mudstone, pebbly mudstone and conglomerate. These units generally strike north to northwest and dip steeply to the west or southwest.

#### Unit la

Unit la, which underlies most of the southeast quadrant of the map area, consists of medium to dark green, massive to thinly laminated, andesitic to basaltic tuffs with interbeds and lenses of medium to dark green volcanic wacke. Outcrops of green, porphyritic andesite (probable flows) locally are evident.

Most tuffs are massive and contain 5 to 40 percent shattered feldspar, pyroxene and hornblende crystals, up to 2 mm in size, within a very fine-grained, chloritic groundmass. Lapilli-size, angular to rounded, aphanitic volcanic fragments locally are evident. Some varieties display a compositional and/or textural banding.

The volcanic wacke is fine-to medium grained and poorly sorted. Fragments, which consist of feldspar, hornblende, pyroxene, finely crystal-line to aphanitic volcanics and locally quartz, are angular to subrounded. Graded bedding and flute cast structures commonly are evident.

#### Unit 1b

In the vicinity of Line 3+50 E, 2+25 S, the mafic tuffs characteristic of Unit la contain abundant interbeds of coarse agglomerate (Unit lb). The agglomerate contains 70 to 90 percent well-rounded, basaltic bombs, up to 20 cm in size, within a dark green, chlorite-rich groundmass.

#### Unit lc

A distinctive package of moderately to strongly sheared sedimentary rocks, mapped as Unit 1c, occurs along the west margin of an irregular stock of Bendor Porphyry in the east part of the map area and within one small area east of Line 3+50 E between 0+25 N and 0+60 N. Unit 1c includes dark green volcanic wacke, mudstone, pebbly mudstone and conglomerate. Although primary textures often are difficult to recognize they locally are well preserved within weaker sheared segments of the sequence.

#### Unit 1d

A small outcrop of conglomerate (Unit 1d) occurs about 8 meters east of 4+50 E, 2+45 S. The conglomerate contains well rounded pebbles and cobbles of a variety of lithologies (mostly volcanic).

#### Unit le

Small outcrops of hornfels (Unit le) occur within the southwest corner of the map area. The hornfels is dark grey to black, pyritic, hard and highly fractured. Knots of actinolite locally are evident.

#### Bendor Intrusions

Within the area mapped the Bendor Intrusions consist of a light grey to cream-colored feldspar porphyry phase, a grey hornblende-feldspar porphyry phase and a equigranular hornblende granodiorite phase. Although generally pyritic, these phases are relatively fresh and only weakly to moderately fractured. Locally, however, zones of intense fracturing and moderate to strong alteration are evident.

### Unit 2a

Unit 2a consists of a light grey to cream colored feldspar porphyry. The porphyry contains 60 to 80 percent, subhedral to euhedral phenocrysts of plagioclase and orthoclase, up to 1.5 cm in size, within a fine-grained, quartz-feldspar-hornblende±biotite groundmass. Pyrite commonly is present in amounts up to 5 percent.

### Unit 2b

Unit 2b is decisively more mafic than Unit 2a. The unit is K-spar poor and hornblende-rich ( 25-40 percent). Most varieties are porphyritic (plagioclase and hornblende phenocrysts) and have a medium to dark grey very finely crystalline groundmass.

#### Unit 2c

A few small outcrops of equigranular hornblende granodiorite (Unit 2c) occur near the south end of Line 1+00 W. The granodiorite contains about 40 percent plagioclase, 20 percent K-spar, 20 percent quartz and 15 percent hornblende with minor biotite. Pyrite is present in amounts between 1 and 3 percent.

#### Unit 2d

Zones of intense fracturing, shearing and moderate to strong alteration locally are developed within Units 2a and 2b. These zones, which have been designated as Unit 2d, are highly irregular in outline with generally sharp but locally gradational boundaries. All of the zones display a prominant, vertical shear or fracture direction which trends north to

north-northwest and a strong set of conjugate fractures which strike northeast and northwest. Other fracture sets locally are evident but generally less well developed. Most of the zones contain abundant coarsely crystalline carbonate veins and veinlets.

Alteration within Unit 2d consists of pervasive, moderate to strong kaolinization and locally, intense silicification. Silicified zones contain white, totally koalinized fragments within a totally silicified groundmass which locally contains finely disseminated pyrite and arsenopyrite in amounts up to 10 percent. Silicified zones are, however, minor and are restricted to small widely spaced lenses and pods and a few, narrow, northeast-trending tabular zones.

### Mineralization

Anomalous gold concentrations occur over broad zones within altered pyritic fractured segments of the Bendor Intrusions (Unit 2d) and in narrow veins, shear zones and silicified zones within and peripheral to the Bendor Intrusions. Although gold values with these zones typically are only in the 100 ppb - 300 ppb range, ore-grade values (up to 0.227 oz/ton) were obtained from a few narrow chalcedony veins and from a few pieces of rusty siliceous float.

Based on the nature of the mineralized veins (banded chalcedony and vuggy, coarsely crystalline carbonate), anomalous gold concentrations in the Relay area appear to be related to high level, hotspring-type hydrothermal activity.

### Geochemistry

Detailed sampling in 1981 outlined two broad areas of anomalous gold in soils. The stronger of these zones, the 'A' anomaly was further sampled to more clearly define its extent. An additional 178 soil samples were collected from the central part of 'A' grid. A total of 108 rock geochemical samples were also collected from 'A' anomaly (see figures 231B-11 and 231B-12).

Alpine soils or talus fines were collected at 50 meter intervals on fill-in lines and extentions of previous lines. Stations were marked with pickets and the appropriate grid co-ordinates. After collection, samples were stored and shipped in waterproof, kraft envelopes.

Soil samples were analysed for gold only in the Vancouver 'laboratories of Acme Analytical Ltd. Laboratory methodology involved fire assay extraction with analysis by atomic absorption.

A statistical analysis of the 1981 and 1982 data from 'A' anomaly was performed by calculating the mean and standard deviation and classifying the data into the following categories:

Background - 0 - Mean

Possibly Anomalous - Mean - (Mean + 1 Std. Dev.)

Probably Anomalous - (Mean + 1 Std. Dev.) - (Mean + 2 Std. Dev.)

Definitely Anomalous - > (Mean + 2 Std. Dev.)

The values were plotted on a 1:5000 scale basemap and appropriate categories of anomalous values contoured (see figure 231B-11).

Anomalous values outline two main northwest-trending zones the larger of which is approximately 1500 meters long by about 300 meters wide. Near its northwest end a smaller, northwesterly-trending lobe widens the main zone to about 700 meters (NE - SW). Both these zones correlate with areas of argillic and carbonate altered "Bendor-type' feldspar porphyry.

### Induced Polarization/Resistivity Survey

An induced polarization and resistivity survey was carried out on 'A' grid in an area where the highest values were obtained from soil and rock geochemistry. Specifically the survey was run along the base line between stations 1+00 W and 8+00 E and on line 1+00 N between stations 0+25 W and 5+00 E. Variable frequency I.P. equipment manufactured by Sabre Electronics was utilized for the survey.

The theory of induced polarization as applied in mining exploration is fully described in the literature. Briefly described, this phenomenon refers to the blocking action or capacitive-like effect of electronic conducting minerals in rock through which an electrical current is being passed. This blocking action creates a resistance to current flow which increases with the length of time that a d.c. current is allowed to flow.

Thus, assuming that appreciable conducting minerals are present, it can be seen that by varying the frequency of the transmitted current (i.e. varying the length of time that current is allowed to flow in any one direction) the apparent resistivity of the rock mass being tested will change. The percent change in apparent resistivity when measured at two frequencies is recorded as Percent Frequency Effect or P.F.E. For this survey frequencies of 10 Hz and 0.3 Hz were utilized.

### Method

A dipole-dipole electrode configuration was employed with an electrode separation of 25 meters. Readings were taken every 25 meters.

### Presentation of Results

In this report the results of the induced polarization and resistivity survey are presented and contoured in plan form (figures 231B-13 and 231B-14) at a scale of 1:2000. Values are plotted midway between the locations of current and potential electrodes.

In some situations the measured voltage at the low frequency setting (0.3 Hz) is too noisy to render a reliable F.E. reading. In this situation the symbol N/R is recorded on the data plot. A data plot followed by the symbol (N) indicates that the reading was noisy but considered reliable. Occasionally negative F.E. values are recorded (indicated in brackets () on the data plot). Small negative F.E. values fall within the range of instruments and/or operator error when little polarizable material is present within the groundmass being tested. Larger negative values may be a result of spurious electrical effects or unusual geological conditions.

#### Discussion of Results

Apparent resistivities within the area surveyed range from a high of 462 ohm-meters to a low of 69 ohm-meters. Background frequency effects range from less than 1 P.F.E. to about 2 P.F.E.

Anomalous to highly anomalous frequency effect values have been noted on both lines surveyed which locally correlate with zones of lower resistivity. Although the source of these anomalies has not been established, they probably reflect pyrite-rich phases of the Bendor Intrusions.

### Drilling Programme

A diamond drill programme was completed on the Relay claims during the period August 5 - September 20, 1982. The programme was completed by Core Drilling Ltd., of Clinton, B. C., using a Boyles 25 A drill rig. Four holes were completed, totalling 671.1 meters (2201 ft.). The following summarizes details of the programme:

Hole No.	Date Comm.	Date Comp.	Brg.	Angle	Depth
R82-1	Aug. 8/82	Aug. 16/82	120°	60°	198.2 m
R82-2	Aug. 18/82	Aug. 23/82	120°	60°	132.3 m
R82-3	Aug. 25/82	Sept. 3/82	120°	60°	196.7 m
R82-4	Sept. 14/82	Sept. 19/82	210°	60°	143.9 m
			TOT	AL	671.1 m

All drilling was completed with NQ wireline equipment. The core was placed in 20 ft. (6 m) wooden core trays and carted to the main base camp. All core was geologically logged, split, and sampled. Samples were collected at irregular intervals, ranging from 1.3 - 3.0 meters, largely being dependant upon geological features and contacts. One half of the core was placed in plastic sample bags, and shipped to Acme Analytical Laboratories Ltd. for gold geochemical analysis.

The samples were crushed and ground to -80 mesh. An aliquot of the sample was fired  $@600^\circ$  C, digested in hot aqua regia and gold content was determined by atomic absorption methods.

The remainder of the core was put back in the core tray, and is currently stored in the basement of a private home in Goldbridge.

Drill hole locations are indicated on the attached surface geological plan by G. Belik (Fig 231B-11). Two sections have been prepared to indicate geological interpretation of the various rock types, and indicate the presence of gold enriched zones (Figures 231B-14 and 231B-15) Diamond drill logs and assay data are shown as Appendix B.

### Discussion of Results.

All various rock-types as mapped by G. Belik on surface were encountered in the four drill holes.

### Taylor Creek Group

Generally a dark green, highly fractured and altered, finemedium grained andesite tuff. The rock is composed of small fragments,

1-3 mm in diameter, however local sections of coarse fragments up to 3 cm
were encountered. The matrix is a fine groundmass dominantly composed of
chlorite. Rusty fractures are abundant; angles to core axis show random
orientation. In addition to chlorite, epidote, quartz, carbonate and
serpentine are alteration minerals common to fractures.

Pyrite is a common accessory mineral disseminated throughout the rock in contents ranging ½ - 1 percent. Below the oxidized level (200-300') pyrite is abundant on fracture faces.

The contact zone of the Taylor Creek andesites is generally a highly altered and bleached zone ranging up to 5 meters thick. Alteration minerals include quartz, carbonates, sericite, and kaolinite.

### Bendor Porphyries

The rock in general is a variably altered, coarse grained feldspar porphyry. At least three intrusive phases of the feldspar porphyry were recognized in the drill core. The general rock is distinguished by an abundance of coarse plagioclase phenocrysts, up to 3 cm in diameter.

The degree of alteration is most variable ranging from very weakly to highly altered rock. Alteration includes kaolinite, sericite, quartz, minor K-feldspar and chlorite. In zones of extreme alteration, the phenocrysts have been totally altered to kaolinite, and appear as a creamy, light brown, soft groundmass.

Below the level of oxidation, sulphides (dominantly pyrite) are abundantly disseminated throughout the rock (1-3 percent). Chalcopyrite, molybdenite, stibnite, chalcocite, bornite, pyrrhotite, and arsenopyrite were also identified. Magnetite is also a common accessory mineral. The sulphides have been leached in the oxidized zone, giving the rock a distinct orange/brown colouration.

The drill holes encountered what is considered a very complex network of faults and shear zones. These faults generally occur at or near the contact of the andesite and feldspar porphyry, suggesting these are in fact fault contacts. Interpretation of the faults and rock contacts is therefore very confusing.

The main structural trend as mapped by G. Belik, is in a northwest direction, dipping steeply to the southwest. This feature is confirmed in the drilling, and was used as the main criteria for interpreting contacts, faults, and alteration zones on the cross-sections.

It is within the highly altered feldspar porphyry that significant zones of gold enrichment were encountered. The only economic ore-grade intersection was a 1.5 m zone in DDH R82-1.

11.6 - 13.1 m -- 10.3 g/T Au.

#### Other amonalous intersections are as follows:

R82-1				
	61.5 -	63.1 m	12	g/T
	88.7 -	90.9 m	22	g/T
	111.6 -	118.0 m	32	ġ/T
R82-2				
	8.8 -	17.1 m	.15	g/T
	30.5 -	35.4 m	.81	g/T
	43.9 -	59.8 m	.35	g/T
	120.4 -	122.3 m	.18	g/T
R82-3				
	22.3 -	24.7 m	.13	g/T
	43.3 -	49.4 m	.14	g/T
	111.3 -	-113.1 m	.13	g/T
	129.0 -	159.8 m	.45	g/T
	168.0 -	-172.3 m	.15	g/T
	186.2 -	-188.7 m	3.3	g/T
R82-4				
	111.9 -	-114.3 m	.45	g/T

Three distinct zones of gold enrichment can be interpreted on the main drill section. These zones range in thickness from 2 m to 30 m wide, and probably conform to the main northwest structural trend. On the section presented, the dip of these zones probably appears flatter than the actual dip.

In summary, the only ore-grade intersection encountered was 'very narrow. Although gold enrichment occurs over substantial widths, the gold content is much below potential economic grades. Unless higher grades of gold occur over substantial widths, the zones would be considered of no significance.

### Economic Potential

The large areas of anomalous soil values lead to speculation that a bulk tonnage mining situation might be feasible if enough material in the 1 to 2 gm Au/tonne could be delineated. Extensive rock chip sampling established that the bedrock from which this soil (talus fine) is derived, although anomalous (50 to 300 ppb), does not approach ore grade. Obviously there is some concentration of gold values in the fines since -80 mesh material is used in soil analysis.

Narrow zones of higher grade material are present in erratically distributed quartz carbonate zones however, most of these are narrow (0.3 to 1.5 m) and either pinch out or are faulted off over short distances.

There is still some limited potential for the discovery of further zones of both types of material however results do not warrant additional work at this time.

respectfully submitted,

KERR, DAWSON AND ASSOCIATES LTD.,

J. M. Dawson, P. Eng.

GEOLOGIST

J. M. DAWSON
BRITISH
COLUMBIA

Kamloops, B. C.

December 21, 1982

# APPENDIX A

Description of Rock Geochemical Samples

# DESCRIPTION OF ROCK GEOCHEMICAL SAMPLES

SAMPLE NO.		Au (PPB)
82BRR-1	Rusty siliceous float; sulphides totally	
	leached	0.227 oz/Ton
82BRR-2	Composite sample of moderately sheared and	
	kaolinized feldspar porphyry	20
82BRR-3	1.0 meter chip sample across strongly	
	kaolinized rusty feldspar porphyry; a few,	
	thin carbonate veins	10
82BRR-4	Grab sample of rusty strongly kaolized	
	porphyry	5
82BRR-5	Carbonate vein	105
82BRR-6	Composite sample of moderately sheared	
	fractured (crackled) feldspar porphyry;	
	moderate kaolinization	5
82BRR-7	Selected sample of rusty kaolinized poryhyry	5
82BRR-8	General sample of bleached, kaolinized porphyry	5
82BRR-9	Quartz float; vuggy with 1% pyrite	10
82BRR-10	Rusty, strongly sheared and fractured	
	porphyry; kaolinized	10
82BRR-11	General sample of bleached kaolinized porphyry	5
82BRR-12	General sample of bleached kaolinized porphyry;	
	rusty	5

SAMPLE NO.		Au (PPB)
82BRR-13	Rusty, white, drusy quartz from large float boulder	35
	bourder	33
82BRR-14	Float; strongly silicified, grey feldspar	
	porphyry; feldspars kaolinized; +7% finely	
	disseminated pyrite	30
82BRR-15	7 meter chip sample across unit lc	
22-23-22	3 cm carbonate vein $(\frac{331}{64^0} \text{ SW})$	12
82BRR-16	3 cm carbonate vein ( 64° SW)	5
82BRR-17	Dark, strongly silicified porphyry with	
	sulphides	530
82BRR-18	Strongly kaolinized, rusty feldspar porphyry	60
82BRR-19	Composite sample over 100 m <sup>2</sup> area of	
	kaolinized, sheared porphyry	140
82BRR-20	Weak to moderately sheared, moderately	
	kaolinized porphyry; patches of red and white	
	stain	25
82BRR-21	Vuggy, banded carbonate with pyrite	5
82BRR-22	Composite sample from carbonate vein zone	5
82BRR-23	Angular float; rusty weathering; pale grey	
	strongly silicified feldspar porphyry; feldspars	-1
	totally kaolinized; patches of jarosite and hem-	
	atite on fresh surface	55

SAMPLE NO.		Au (PPB)
82BRR-24	Silicified, pyritic ( +5%) thinly laminated	
	tuff	30
82BRR-25	Composite of 2.5 m shear zone	15
82BRR-26	Shear zone parallel to bedding	85
82BRR-27	Sample of one of several 6 cm - 12 cm	
	carbonate veins trending $\frac{350}{700}$ (parallel to	
	bedding.	250
82BRR-28	General sample of feldspar porphyry;	
	some varieties partly silicified and	
	kaolinized; pyritic	95
82BRR-29	Highly fractured and sheared Taylor Creek	5
82BRR-30	30 cm kaolinize shear trending $\frac{355}{75}$ E	80
82BRR-31	Highly fractured and sheared bendor porphyry	35
82BRR-32	15 cm shear cutting bendor porphyry	280
82BRR-33	Area of abundant angular float; pale grey	
	highly silicified porphyry (?); drusy;	
	abundant kaolinite and jarosite in matrix	0.097 oz/tor
82BRR-34	Area of abundant angular float; dark brown,	
	totally leached, cellular hematite/quartz	
	boxwork; originally a sulphide-rich vein	
	within strongly silicified and kaolinized	
	porphyry	0.207 oz/tor

SAMPLE NO.		Au (PPB)
82BRR-35	Rusty weathering, partly kaolinized feldspar	
	porphyry; 2% - 5% disseminated pyrite	260
82BRR-36	Light grey, dense carbonate	25
82BRR-37	Angular float; light grey, rusty, highly	
	silicified and strongly kaolinized porphyry (?)	50
82BRR-38	Composite sample of moderately kaolinized,	
	shattered feldspar porphyry	30
82BRR-39	Carbonate vein	165
82BRR-40	White, silicified and kaolinized porphyry; limonitic	480
82BRR-41	Composite sample over 20 m <sup>2</sup> area of rusty, kaolinized, partly silicified porphyry	205
82BRR-42	Selected sample of sheared, rusty, partly	1.5
	kaolinized porphyry	15
82BRR-43	2 m - 5 m vein zone; banded, drusy carbonate vein; fragment of kaolinized porphyry	5
82BRR-44	Same vein zone as 82BRR-43; banded chalcedony	5
82BRR-45	Buff/red, crackled and sheared, partly	
	kaolinized porphyry; abundant patches of	1
	hematite on weathered surfaces; 2% - 3%	
	disseminated pyrite.	215

-

SAMPLE NO.		Au (PPB)	
82BRR-46	10 cm - 15 cm sheared vein; primarily grey,		
	banded chalcedony; rusty weathering	0.080	oz/ton
82BRR-47	10 cm - 30 cm zone comprised of buff carbonate		
	and grey, banded chalcedony	10	
82BRR-48	Rusty weathering, porous, dense, siliceous		
	vein with kaolinite; about 3 m wide	760	
82BRR-49	Rusty, highly fractured, moderately kaolinized		
	porphyry with stockwork of carbonate veinlets	210	
82BRR-50	Vuggy, cellular, limonitic, altered porphyry;		
	abundant white stain	15	
82BRR-51	Highly silicified zone with finely disseminated		
	red hematite (primary); kaolinized fragments.	50	
82BRR-52	10 meter chip sample of altered porphyry		
	in vicinity of 82BRR-51	20	
82BRR-53	Composite of small zone (5 m x 3 m) of rusty		
	kaolinited porphyry (abundant white stain)		
	cut by carbonate veins and small silicified zones	150	
82BRR-54	1.5 m zone trending 23° of strongly kaolinized		
	rusty porphyry cut by numerous carbonate and		
	limonite veinlets; silicified sections	10	
22000 FF		· ·	
82BRR-55	Altered red (hematitic) porphyry; knots of		
	very fine-grained pyrite	65	

SAMPLE NO.		Au (PPB)
82BRR-56	10 meter chip sample of altered, buff-	
	colored porphyry; splotchy red appearance on	
	weathered surfaces; local white stain	330
82BRR-57	Composite sample of rusty, moderately	
	kaolinized porphyry	60
82BRR-58	Grab sample of rusty, moderately kaolinized	
	porphyry	205
82BRR-59	White, highly silicified porphyry; feldspars	
	totally kaolinized; rusty weathering	130
82BRR-60	Similar to 82BRR-59; some disseminated pyrite and	8
	arsenopyrite	205
82BRR-61	Light grey highly siliceous rock; 40% fragments	
	of totally kaolinized porphyry	130
82BRR-62	Light grey strongly silicified porphyry;	
	40% feldspar phenocrysts & fragments - totally	
	kaolinized; limonitic	30
82BRR-63	Light grey, partly silicified porphyry; 40%	
	white, totally kaolinized feldspar phenocrysts	
	and fragments.	150
82BRR-64	Grey, highly silicified and kaolinized	
	porphyry; 5% - 10% finely disseminated pyrite	
	and arsenopyrite	275

	Au (PPB)
Grey, strongly silicified porphyry with 70% white, kaolinized, feldspar phenocrysts and angular fragments; 1% - 2% finely disseminated pyrite and arsenopyrite	135
Zone, 2.5 m wide of totally silicified and kaolinized porphyry; finely disseminated	75
Zone, 2.0 m wide of partly silicified porphyry with ribs (60% of zone) of totally silicified porphyry; silicified ribs trending $\frac{40}{480}$ SW; sample a composite of whole zone	105
Composite of carbonate vein zone with silicified sections	260
Composite of strongly silicified zone with some carbonate veining	510
Selected sample of grey highly silicified porphyry (?) cut by white, irregular quartz veins; abundant arsenopyrite and unidentified grey to black metallic mineral along vein walls	3800
Sample from 2 narrow (6 cm + ) irregular silicified zones	4100
	white, kaolinized, feldspar phenocrysts and angular fragments; 1% - 2% finely disseminated pyrite and arsenopyrite  Zone, 2.5 m wide of totally silicified and kaolinized porphyry; finely disseminated pyrite and arsenopyrite  Zone, 2.0 m wide of partly silicified porphyry with ribs (60% of zone) of totally silicified porphyry; silicified ribs trending \(\frac{40}{480}\) SW; sample a composite of whole zone  Composite of carbonate vein zone with silicified sections  Composite of strongly silicified zone with some carbonate veining  Selected sample of grey highly silicified porphyry (?) cut by white, irregular quartz veins; abundant arsenopyrite and unidentified grey to black metallic mineral along vein walls  Sample from 2 narrow (6 cm \(^+\)) irregular

SAMPLE NO.		Au (PPB)
82BRR-73	Carbonate breccia; finely disseminated grey metallic mineral	20
82BRR-74	Crey, vuggy, challedonic vein; streaks and blebs of chalcopyrite; unidentified very fine grained grey metallic mineral	40
82BRR-75	Banded, Grey, carbonate/chalcedony vein material; abundant finely disseminated pyrite and grey metallic mineral	25
82BRR-76	Grey, dense, carbonate breccia	10
82BRR-77	Carbonate breccia; disseminated pyrite and grey metallic mineral; minor chalcopyrite	10
82BRR-78	Two parallel oxidized seams (3 cm +) separated by crushed kaolinized material; sample a composite of zone (*15 cm)	235
82BRR-79	60 cm zone with siliceous sections	5
82BRR-80	Sheared mafic tuffs; abundant white stain	5
82BRR-81	Pyritic, siliceous cherty tuff; carboante veinlets	80
82BRR-82	Sheared mafic tuff	5
82BRR-83	Limonitic, coarsely crystalline, banded, vuggy carbonate	5
82BRR-84	Moderately kaolinized porphyry	20

SAMPLE NO.		Au (PPB)
82BRR-85	Banded, limonitic quartz/carbonate vein; angular float	25
	angarar rroad	
82BRR-86	General sample of moderately kaolinized,	
	sheared porphyry	5
82BRR-87	General sample of altered porphyry; patchy	
	red staining	10
82BRR-88	Late-stage, kaolinized cross shear	10
92ppp 90	Could refer of all total floor and final a	
82BRR-89	Small piece of silicified float with finely disseminated pyrite	20
	disseminated pyrite	20
82BRR-90	30 cm, kaolinized, rusty cross shear	20
82BRR-91	2.0 meter shear zone	5
82BRR-92	Orange/brown - weathering, dense carbonate	
	with small knots of chalcedony	230
82BRR-93	Silicified Taylor Creek	5
82BRR-94	Brown, dense carbonate	10
82BRR-95	Moderately kaolinized, highly fractured	
	porphyry with numerous carbonate veins	60
82BRR-96	30 cm - 60 cm coarsely crystalline, banded,	ř.
	carbonate vein	30
82BRR-97	Composite sample of moderately kaolinized,	
	highly fractured porphyry; patchy red	
	appearance	5

SAMPLE NO.		Au (PPB)
82BRR-98	Silicified zone with carbonate; arsenopyrite	25
82BRR-99	Strongly kaolinized zone	85
82BRR-100	General sample of altered porphyry	
82BRR-101	Narrow carbonate/quartz (chalcedony) vein zone with sulphides; fragments of	
	kaolinized and silicified porphyry	160
82BRR-102	Rusty weathering strongly sheared and kaolinized porphyry; abundant jarosite	265
82BRR-103	Lense of strongly silicified porphyry; disseminated pyrite	6.5
82BRR-104	General sample of moderately kaolinized, strongly fractured porphyry	25
82BRR-105	Angular carbonate float	95
82BRR-106	Limonitic breccia	5
82BRR-107	Rusty kaolinized zone with carbonate and quartz	5
82BRR-108	Cream colored, rusty weathering dense	5
	Calbonate	

APPENDIX B

I. P. Data

## 1. P. DATA

CLIENT:

BARRIER REEF RESOURCES LTD.

PROPERTY:

RELAY

OPERATOR:

G. BELIK

FREQ'S USED:

10 Hz./0.3 Hz.

DATE:

July 13-14, 1982

# BASE LINE

Rx. Loc.	Tx. Loc.	Vernier Voltage	Voltage Scale	<u> </u>	F.E.	Cor. F.E.	$\rho_{a/2\overline{11}}$
O+25W	0+00W	324	ıv	76	3.5	1.5	106
0+00W	0+25E	712	1V	200	3.6	1.6	267
0+25E	0+50E	288	1V	80	4.2	2.2	270
0+50E	0±75E	235	1V	80	8.1	6.1	220
0+75E	1+00E	300	1V	80	7.5	5.5	281
1+00E	1+25E	240	17	100	6.0	4.0	180
1+25E	1+50E	960	100	64	4.5	2.5	112
1+50E	1+75E	125	1V	64	13.0	11.0	146
1+75E	2+00E	234	1V	100	8.4	6.4	175
2+00E	2+25E	125	10	80	4.8	2.8	117
2+25E	2+50E	183	1V	70	5.4	3.4	197
2+5GE	2+75E	226	1V	6é	7.5	5.5	257
2+75E	3+00E	89	14	64	3.9	2.4	104
3+00E	3+25E	111	10	84	2.0	0.5	99
3+25E	3+50E	586	100	60	4.5	2.0	73
3+50E	3+75E	616	100	58	4.2	2.7	80
3+75E	4+00E	233	1V	60	6.6	4.1	291
4+00E	4+25E	260	1V	52	6.3	3.8	375
4+25E	4+50E		Snow an	d ice		i	
4+50E	4+75E						
4+75E	5+00E		"				
5+00E	5+25E		**				
5+25E	5+50E	944	100	52	2.4	0.9	136
5+ 50E	5+75E	186	1V	60	6.6	4.1	232

I. P. DATA

Rx. Loc.	Tx. Loc.	Vernier Voltage	Voltage Scale	1	F.E.	Cor. F.E.	$\rho_{a/2\overline{11}}$
5+75E	6+00E	113	1v	76	4.8	3.3	112
6+00E	6+25E	157	1 <b>v</b>	100	7.5(N)	6.0	118
6+25E	6+50E	831	100	64	10.8(N)	9.3	97
6+50E	6+75E	834	100	58	6.0	4.5	108
6+75E	7+00E	153	1V	70	10.2(N)	8.7	164
7+00E	7+25E	106	1 V	40	6.6	5.1	199
7+25E	7+50E	94	1 V	40	7.8	6.3	176
7+50E	7475E	127	1V	70	6.3	5.1	136
7+75E	8+00E	133	1 V	90	10.5	9.0	111
8+00E	8+25E	237	1V	92	6.0	4.5	193

I.P. DATA

LINE 1+00 N

Rx Loc.	Tx. Loc.	Vernier Voltage	Voltage Scale	1	F.E.	Cor. F.E.	Pa/211	
0+25W	O+OOW	980	100	40	6.3	4.3	184	
0+00W	0+25W	126	ıv	36	15.0	13.0	263	
0+25E	O+50E	911	100	40	7.8	5.8	171	
0+50E	0+75E	696	100	52	N/R		100	
0+75E	1+00E	681	100	60	8.4	6.4	85	
1+00E	1+25E	185	1V	125	9.6	7.6	111	
1+25E	1+50E	737	100	80	13.0	11.0	69	
1+50E	1+75E ,	631	100	54	4.0(N)	2.0	88	
1+75E	2+00E	854	100	44	7.0	5.0	146	
2+00E	2+25E	106	1V	63	8.0	6.0	126	
2+25E	2+50E	130	1V	82	6.0	4.0	115	
2+50E	2+75E	100	1 <b>V</b>	90	5.4	3.4	83	
2+75E	3+00E	115	1V	82	5.9	3.9	105	
3+00E	3+25E	650	100	60	4.2	2.2	. 81	
3+25E	3+50E	691	100	64	3.5	1.5	81	
3+50E	3+75E	118	1V	90	3.2	1.2	98	
3+75E	4+00E	407	1V	66	8.4	6.4	462	
4+00E	4+25E	236	1V	60	9.6	7.6	295	
4+25E	4+50E	304	1V	80	5.7	3.7	285	
4+50E	4+75E	373	1V	86	5.5	3.5	325	

APPENDIX C

Drill Logs

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

	Р	ROPERTY	RELAY	HOLE NoR-82-	1
DIP AND	AZIMUTH 1	TEST rected	Core SizeNQ	Total Depth650(19817m	) Sheet No
Footage	Angle	Azimuth	Angle of Hole	% Recovery 92%  Elev. Collar  Latitude  Departure	Date Begun

DEPTH CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
	Casing to 16 feet - started coring at 8'					
3' - 16' 6½'	buff to orange brown feldspar porphyry, limonite					-
2.44m-4.88m 1.98m	staining of fractures common; feldspar phenocrysts up					
	to 8 mm - altered to buff or brown colour.	3276	9.5'	43		
		8 - 17½'	2.90m			
.6 - 17½' 1'	blue gray to orange brown stained feldspar porphyry.	2.44m-5.34m	n			
.88m-5.34m .30m						
. 7월 - 19 1'	blue gray to orange brown feldspar porphyry as before	3277	4.5'	31		
.34m-5.79m .30m	with scattered finer grain and accumulations of	17.5 - 22'	1.37m ·			
	chloritized biotite; minor disseminated grains of	5.34m-6.71	1			
	pyrite up to 2 mm in diameter.					
9 - 22 10"	blue gray, fairly fresh feldspar porphyry as before					
.79m-6.71m .25m	- some limonite staining adjacent to fractures.					
2 - 26 0	similar to last section	3278	41	27		
.71m-7.93m O	-		1.22m			
6 – 29 2"	similar to last section	3279	41	20		
.93m-8.84m .61m		(26 - 30)	1.22m			()
	A STATE OF THE STA	7.93m-8.84n				

Suite 1 - 219 Victorie St Kamloops, B.C

PROPERTY		RELAY HOLE No.	R-82-1		SHEET No2	of16
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)	
29 - 31	0	grades from blue gray fairly fresh porphyry to				
8.84m-9.	45m	progressively more altered. last 1' section is				
		bleached and kaolinized.				
31 - 34	2"	primarily altered feldspar porphyry; ground mass is	3280	41	52	
9.45m-10	.37m .05m	buff - white; feldspar phenocrysts are orange brown.	(30 - 34)	1.22m		
			9.15m-10.	37m		
34 - 38	7"	highly altered, buff to light brown feldspar porphyry:	3281	4.	210	
10.37m-1	1.59m	quite friable in part.		1.22m		
	-18m					
38 - 43	2'	similar to last section; limonite coated fractures	3282	5'	10300	
11.59m-1	3.11m	common.		1.52m		
	.61m					
43 - 45	8"	similar to last section				
13.11m-13	A STATE OF THE STA		3283	51	125	
45 - 48	0 · 20m	similar altered porphyry, however core is more	(43 - 48)	1.52m	1	
13.72m-1	4.63m	massive.	13.11m-14		ARE REPORTED	
48 - 51	9"	altered orange brown feldspar porphyry to 49 - grad-				
14.63m-15	7 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	ing to blue gray, fresh porphyry with some rusty				
	.23m	sections to 51.	3284	6'	50	
			(48 - 54)	1.83m		
51 - 54	4"	Partly altered and bleached feldspar porphyry - minor	14.63m-16	46m		
15.55m-16	6.46m	areas of fresh gray rock.				
	.10m					
54 - 59	1'	Similar to last section	3285	51	12	
16.46m-17	.99m .02m			1.52m		

Suite 1 - 219 Victoria St. Kamicops, B.C. Phone 374-0544

SHEET No.\_\_\_3 RELAY R-82-1 PROPERTY\_ HOLE No. CORE DEPTH DESCRIPTION SAMPLE No. of SAMPLE Au(PPB) 59 - 61 3286 51 Similar to last section. 39 17.99m-18.6m (59 - 64)1.52m 17.99m-19.51m 61 - 64 Similar to last section. 18.60m-19.51m 64 - 65 Similar to last section. 19.51m-19.82m 3287 61 36 65 - 70 primarily orange brown, altered feldspar porphyry; (64 - 70)1.83m 19.51m-21.34m 19.82m-21.34m @ 65.5, 4 mm quartz carbonate vein @ 30° to core axis 70 - 74Similar to last section; a number of limonite -41 3288 24 1.22m 21.34m-22.56m stained fractures at 10 to 20° to core axis. 74 - 76 Similar to last section; @ 74.5 a 1 cm quartz vein at 3289 61 18 22.56m-28.17m 30° to core axis. (74 - 80)1.83m 22.56m-24.39m 76 - 82 3290 51 Similar to last section. 22 1.52m 23.17m-25.00 (80 - 85)82 - 85 24.39m-25.91m Similar material to 84 feet - last 1 foot section is 25.00m-25.91m highly bleached and altered. 85 - 89 highly bleached, altered and limonite stained 3291 41 10 1.22m 25.91m-27.13m feldspar porphyry. - 15m 89 - 93buff to light brownish moderately altered porphyry 41 3292 47 grading to patchy, blue gray, relatively fresh 27.13m-28.35m 1.22m material near end of section; @ 89.5' a 3 mm quartz veinlet at 20° to core axis contains minor scattered

blebs of chalconvrite and molyhdenite

Suite 1 - 219 Victoria St. Kamloops, B.C.

DEPTH	CORE	DESCRIPTION	SAMPLE No.	of SAMPLE	Au(PPB)		
93 - 97	0	primarily light brown to buff, limonite stained,	3293	4'	18		_
28.35m-2	9.57m	feldspar porphyry; moderately altered.		1.22m			
97 - 101		Similar to last section	3294	4'	16		
29.57m-3	0.79m			1.22m			
101-103	14"	moderately to highly altered, bleached and friable					
30.79m-3	1.40m .36m	porphyry					
			3295	10'	35		-
103-105	18"	Similar to last section.	(101-111)	3.05m			_
31.40m-3	2.01m.46m		30.79m-33	.84m			-
105-109	18"	Similar to last section; limonite coatings on					
32.01m-3	3.23m .46m	fractures common.	-				-
109-111	12"	Similar to last section.					
33.23m-3							
111-113	2" 30m	Similar to last section.					
33.84m-3		OTHER CO. THE COURT	3296	51	13		
113-116	12"	Similar to last section.	(111-116)	1.52m			
34.45m-3	5.37m <sub>.30m</sub>		33.84m-35	.37m			
116-121	100	Similar to about 120 feet - last 1 foot section	3297	51	43		
35.37m-3	5.89m	appears to be silicified and contains fine grained		1.52m			
	. 20m	pyrite.					
121-124		buff to light brown argillicly altered feldspar					
36.89m-3	10 C C C C C C C C C C C C C C C C C C C	porphyry.	3298	7'	18		
	.15ш		(121-128)	2.13m			
124-128	16"	Similar to last section.	36.89m-39	.02m			
The second second second	9.02m 41m					76	

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

RELAY R-82-1 SHEET No. 5 of HOLE No. PROPERTY WIDTH CORE DEPTH DESCRIPTION SAMPLE No. of SAMPLE LOST Au(PPB) moderately altered, light orange brown porphyry, 128-134 22" 3299 61 14 39.02m-40.85m grading to blue gray, relatively fresh material. 1.83m 134-138 12" Similar to last section. 3300 36 40.85m-42.0/m 1.22m 30m 138-142 blue gray, fairly fresh material grading to orange 3301 41 38 42.07m-43.29m brown, argillicly altered porphyry in last 2 foot 1.22m section. 61 142-146 4.11 buff to orange brown, altered porphyry with minor 3302 15 43.29m-44.51m 1.83m sections of blue-gray fairly fresh material. (142 - 148)43.29m-45.12m 146-148 Similar to last section. 44.51m-45.12m 148-154 Similar to last section; fractures with thin 61 3303 18 45.12m-45.95m 1.83m limonite stains common. more highly altered, friable, bleached and limonite 154-157 3304 31 67 46.95m-47.87m stained porphyry; @ 156.5 a 2 cm carbonate vein at .91m 450 to core axis. 157-166 moderately altered feldspar porphyry; buff white 51 3305 62 47.87m-50.61m ground mass with orange-brown feldspar phenocrysts: (157 - 162)1.52m 47.87m-49.39m 3306 last 2 foot section contains patchy, blue gray 15 1m 1.52m relatively fresh material.

iuite i - 219 Victoria St. Kamloops, B.C. Phone 374-0544

RELAY HOLE No. R-82-1 SHEET No. \_\_\_ 6 \_\_\_\_ of \_\_\_\_ 16 PROPERTY\_\_\_ WIDTH CORE DEPTH DESCRIPTION SAMPLE No. of SAMPLE Au(PPB) LOST 31 altered buff to orange brown feldspar porphyry 3307 166-175 2'extra 16 50.61mcontaining appreciable fresh material in last 4 (167-170)core ?? .91m 3308m-51.83m 53.35m .61m foot section; @ 167'8" a 3 cm quartz vein or 13 lense with some disseminated pyrite; at 45° to (170-175)core axis. 51.83m-53.35m 175-181 blue gray to orange brown, limonite stained, fairly 3309 61 64 53.35m-55.18m 1.83m fresh, feldspar porphyry. 181-187 orange brown to blue gray, moderately altered feld-61 3310 67 55.18m-57.01m 1.83m spar porphyry. minor carbonate veining; scattered pyrite blebs up to 5 mm in diameter; between 184 and 185 is an irregular silicified section with scattered thin stringers of fine grained pyrite - appears to be almost parallel to core axis. 187-197 light gray to orange brown fairly fresh, feldspar 3311 51 38 57.01m-60.06m porphyry; disseminated blebs of pyrite common, (187 - 192)1.52m 3312m-58.54ms, average about 2 - 3 mm across; minor carbonate 33 veining; @ 191.5 a 1 cm quartz - carbonate vein with minor, fine grained pyrite @ 30° to core axis. 3313 51 22 (197-202)1.52m 60,06m-61.59m, 197-207 Similar to last section, minor quartz and quartz -120 60.06m-63.11m carbonate veining; @ from 203'3" to 203'7" quartz (202-207)1.52m stringers with minor small blebs of chalcopyrite and 61.59-63.1 molybdenite; @ 206'8" a 5 cm qtz stringer or lense with 1.5 cm layer of semimassive pyrite and arseno-

pyrite @ 300 to core axis.

Kamloops, B.C. Phone 374-0544

PROPERTY.		RELAY HOLE No	R-82-1		SHEET No	7	of	16
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)			
207-218	0	from 207 to 212 moderately altered orange brown	3315	5 '	40			
63.11m-6	.46m	feldspar porphyry; from 212 to 218 mottled blue gray	(207-212)	1.52m				

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)	
207-218	0	from 207 to 212 moderately altered orange brown	3315	51	40	
63.11m-6	.46m	feldspar porphyry; from 212 to 218 mottled blue gray	(207-212)	1.52m		
		and limonite stained feldspar porphyry - scattered	63:11-64.6 3316	3m	32	
		pyrite grains common; @ 207'10", thin quartz	(212-218)			
		stringer with trace of molybdenite.	64.63-66.4	6m		
218-227	0	fresh to moderately altered, feldspar porphyry;	3317	6'	38	
66.46-69	21m	limonite coatings on fractures common.	(218-224)	1.83m		
			66.46-68.2	9m		
227-230	0	fresh to weakly altered and limonite stained, feld-	3318	6'	90	
69.21-70	12m	spar porphyry.	(224-230)	1.83m		
			68.29-70.1	2m		
230-236	0	relatively fresh, blue gray feldspar porphyry; minor	3319	6'	23	
70.12-71.	95m	light limonite staining along fractures; no scattered		1.83m		
	1-11-2	pyrite blebs.				
236–244	0	Similar to last section.	3320	8'	18	
71.95-74.	39m			2.44m		
244-247	0	Similar to last section.	3321	51	5	
74.39-75.	30m		(244-249)	1.52m		
247-249	0	Similar to last section.	74.39-75.9	1-m		
75.30-75.	91m					
249-253	0	Similar to 249'8" then changes to weakly to moderately	3322	4'	35	
<del>75.91m-7</del> 7	.13m	argillicly altered porphyry - orange brown feldspars		1.22m		
		in a whitish groundmass, frequent limonite coated				-
		fractures.			-	 

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTY_		HOLE No.	R-82-1		SHEET No8_	of	_16
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
23.42.53.00	4"	Similar to last section.	3323	51	30		7 7
77.13-78	3.66m .10m	n		1.52m			
258-264	0	Similar to last section.	3324	6'	45		1
78.66-80	39m			1.83m			
264-269	0	Moderately to highly argillicly altered feldspar	3325	5'	15		
80.49-82	.01m	porphyry; limonite staining and coatings common.		1.52m			
	0	altered, orange brown porphyry to 271'6" from here to	19526	2.5'	70		
82.01-83	. 54m	274, relatively fresh blue gray to mottled light	(269-271.5	5) -76m			
		brown stained porphyry - minor scattered blebs of	82.01-82.7	7m			The second second
		pyrite; @ 269'2" a one cm quartz - carbonate vein with	19527		20		
		scattered fine blebs of molybdenite; trace chalco-	(271.5-280	))			
		pyrite.	82.77-85.3	7m			
274–280	0	relatively fresh, blue gray, feldspar porphyry with					+
Maria Maria San San San San San San San San San Sa	37m	frequent scattered blebs of pyrrhotite; previous	4				
253-258 77.13-78.66 258-264 78.66-80.39 264-269 80.49-82.01 269-274 82.01-83.54 83.54-85.37 280-285 85.37-86.89 285-291		sulphides described as pyrite are probably also					
		pyrrhotite.					
280-285	0	Similar to last section.	19528	5'	15		- 10712
85.37-86	. 89m			1.52m			
285-291	0	blue gray to mottled orange brown weakly altered	19529	6'	60		
86.89-88	.72m	feldspar porphyry; some thin limonitic seams on		1.83m			
77.13-78.66n 258-264		fractures.					
253-258		<u> </u>					
, <i>,</i>			1	4			

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTY\_\_\_\_\_\_\_ HOLE No.\_\_\_\_\_\_\_ R-82-1 SHEET No.\_\_\_\_\_\_ 9 16

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
291-296	3"	Similar to last section; some zones of more	19530	7'	220		
88.72-90	.24m .08m	moderately altered orange brown porphyry.	(291-298) 88.72-90.8	2.13m 5m			
296-302 <del>90.24-92</del>	0	Similar to last section to 298; from here to 302 -	19531	4' 1.22m	50		
70.24-72	.07111	moderately altered orange brown porphyry.	(298-302) 90.85-92.6				
302-309 <del>92.07-94</del>	0	Primarily moderately altered, orange brown porphyry;	19532	7' 2.13m	30		
92.07=94	21111	limonite coatings on fractures common.		2.11311			
309-313 <del>94.21-95</del>	0	Similar to last section.	19533	4' 1.22m	35		
313-318	0	Moderate to well altered, orange brown feldspar	19534	51	15		
95.43m-9	5.95m	porphyry.		1.52m			
318-327	0	Similar to last section - some scattered blebs of	19535	7'	30	-	
96.95-99	. /Om	pyrrhotite.	(318-325) 96.95.99.0 19536	2.13m 9m	45		
327-337	8"	Similar to last section to 229'6"; from here to end	(325-330)	1.52m	43		_
99.70-10	2.74m.20m	of section fairly fresh gray porphyry.	19537 100	61m, 7, 2.13m	30		
22.27	_	Dudanadly anny fresh foldony narahyawa assasianal	(330-337) 100-61-102 19538	-74m	20		
337-346 102.74-1	0 05.49m	Primarily gray, fresh feldspar porphyry; occasional small orange brown altered zones.	(337-342) 102.74-104	1.52m .27m			
346-356	0	Similar to last section to 350; from there to end of	19539 (342–350)	8' 2.44m	30		
105.49-1		section, orange brown altered material	104.27-106 19540	6'	30	-1-1-	
			(350-356)	1.83m			
	77-		106.71-108	.54m	-		

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 10 of 16 R-82-1 RELAY HOLE No. PROPERTY\_\_\_\_ WIDTH CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE Au(PPB) LOST from 356 to 361'6" moderately altered porphyry; from 19541 51 35 356-366 108.54-111.59m 1.52m (356 - 361)361'6" to 363'6" relatively fresh gray and mottled 108.54-110.06m 19542 5' material; from 363'6" to end, moderately altered 19542 45 1.52m orange brown porphyry with frequent limonite coatings (361-366) 110.06-111.59m on fractures. fresh to weakly altered feldspar porphyry; scattered 19543 51 415 366-376 111.59-114.63m 1.52m (366-371) 1. 111.59-113.11m blebs of pyrrhotite; frequent limonite - stained 25 19544 fractures. 113.11-114.63m (371 - 376)1.52m 19545 71 380 376-380 Similar to last section. 114.63-115.85m 2.13m (376 - 383)114.63-116.77m 19546 4' 450 Similar to last section to 383; from there to end of 380-387 115.85-117.99m 1.22m section mixed altered greenish grey tuff and hybrid-(383 - 387)116.77-117.99m ized feldspar porphyry (taylor Creek?); at 380'6" irregular quartz vein with trace of molybdenite; @ about 383' a quartz carbonate vein ~ 1 cm in diameter which runs practically down core axis. Mixed greenish gray Taylor Creek tuff and hybridized 19547 51 10 387-397 117.99-121.04m 1.52m (387 - 392)feldspar porphyry; several thin quartz carbonate 117.99-119.51m 5 veins and limonitic fractures run practically down 19548 51 119.51-121.04m (392-397) core axis. 1.52m 51 19549 5 397-407 from 397-402 primarily, greenish Taylor Creek tuff; 121.04-124.09 1.52m from 402 to 407 grayish hybridized, feldspar porphyry. (397-402) 121.04-122.56m

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)			
407-409	0	Mostly grayish, hybridized feldspar porphyry.	19550	5'	20			
124.09-1	24.70m		(402-409)	1.52m				
409-417		Primarily greenish Taylor Creek tuff; @ 414 there	122.56-124 19551	. 70m	25			
124.70-1	27.13m	is a 2 cm orange brown carbonate vein at 30° to core	(409-417)					
		axis.	124.70-127	.13m				-
417-422	1'	Greenish, fine grained Taylor Creek tuff, few	19552	5'	20			
127.13-1	28.66m .30m	quartz + carbonate stringers - generally at low angles to core axis.		1.52m				
422-428	0	Similar to last section, quartz + quartz carbonate	19553	6'	10			
128.66-1	30.49m	stringers generally ≤ 3mm low angles to core axis.		1.83m				
428-433	0	Similar to last section, greenish gray 'mud seam' @	19554	5'	5	•		
130.49-1	32.01m	429.5'. (approximately 5 cm wide - 30° to core axis.)		1.52m				
433–438	2'	Similar to last section, coarsely fragmental	19555	51	15			
132.01-1	33.54m	(agglomeritic) from 433' to 437'. Limonitic fault		1.52m				
		zone (?) from 434'-436' - largest core loss in this						
		area.						
438-447	121	Green-Gray, massive Taylor creek tuff & related	19556	91	20			
133.54-1	36.28m	fragmentals. Few quartz + carbonate stringers - most		2.74m				
		often ≤ 30° to core axis. Sulphides very rare.						
770		Limonite on fractures and veinlet surfaces still seen.						
				S. Carlotte			- 1	

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

12 R-82-1 16 RELAY HOLE No. \_\_\_\_ SHEET No .\_\_ PROPERTY\_\_\_ WIDTH CORE DESCRIPTION SAMPLE No. DEPTH of SAMPLE Au(PPB) LOST Similar to last section, two quartz - carbonate 19557 10' 10 447-457 136.28-1B9.33m 3.05m veinlets 3 - 5 mm wide, both ~20° to core axis. 41 Similar to last section; pyrite in fractured zone 19558 15 457-461 139.33-140.55m 1.22m with quartz & chlorite @ 459' - sulphides generally scarce, limonite fractures common. 19559 Similar to last section to 465'; from 465' to 466' 15 461-468 11 2.13m 140.55-142.68m section of pale gray hybridized feldspar porphyry. ·15m 466'- 468' - regular Taylor Creek tuff as above. 19560 61 5 468-472 Similar to 466' - 468' 142.68-143.90m 15 1.83m 472-474 Similar to last section. 143.90-144.51m 19561 41 5 Similar to last section. 474-477 2611 (474 - 478)1.22m 144.51-145.43m 15 144.51-145.73m Similar to last section, increased number of quartz - 19562 41 5 477-484 145.43-147.56m 1.22m carbonate veinlets from 478' - 482' - generally (478 - 482)145.73-146.95m irregular and ≤ 4 mm wide. 51 Similar to last section; 2 cm wide brecciated zone 19563 60 484-487 1.5' 147.56-148.48m 1.52m with scattered blebs of pyrite, phrrhotite. (482 - 487)146.95-148.48m Pyrrhotite often finely scattered throughout this rock type - more abundant than one led to believe.

Suite 219 Victorie St Kamloope, B.C

PROPERTY	RELAY	HOLE No.	R-82-1	SHEET No. 13	of	16

DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
487-497	0'	Green-gray brittle Taylor Creek tuff, few scattered	19564	8'	5		
148.48-1	51.52	quartz - carbonate veinlets - generally ≤ 30° to core	(487-495)	2.44m			
		axis. Rusty fractures and veinlets still quite	148.48-150	.91m			
		common. Minor fine grained pyrrhotite scattered					
		throughout.					
497-502	6" ±	Similar to last section	19565	91	5		
151.52-1	53.05m , s		(495-504)	2.74m			
502-504	1.5'	Similar to last section - core loss due to approaching	150.91-153	.66m			
153.05-1	53.66m .46m	fault zone.					
504-516	å,	Fault zone - very crumbly altered feldspar porphyry	19566	5'	5		
153.66-1		Comment of the Commen	(504-509)	1.52m			and the
	2.44m	quartz vein material € 1 cm wide. Some of veinlets	183696-155	. 18m	5		
		~10° to core axis. Quite likely that drill	(509-516)	2.13m			
		intersected fault at very low angle.	155.18-157	.32m		-	
516-518	6"	Bleached and moderately altered feldspar porphyry.	19568	2'	5		
157.32-1	57.93m	First 6" very altered and soft (edge of fault zone).		.61m			
	.15m	One branched quartz veinlet (1 cm wide) @ 5 - 10° to					
		core axis contains drusy cavities. Disseminated					
		pyrite noted throughout section.					
518-524	0	Bleached feldspar porphyry to 520'; 520' to 522'	19569	6'	15		
157.93-1	59.76m	green-gray hybridized feldspar porphyry; 522' to 524'		1.83m			
		pale brown - very "speckled" feldspar porphyry.					
		Minor pyrite noted in small quartz veinlets @ 40° to					

onen avic

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \_\_\_\_ R-82-1 SHEET No. 14 of RELAY PROPERTY\_\_\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE AugPPB) LOST Moderately well altered pale brown feldspar porphyry, 19570 15 524-531 2.13m 159.76-151.89m feldspars well kaolinized. Ouartz veinlets rare; 1 @ 45° to core axis. 1.51 Similar to last section; 531'8" to 532'2" - quartz 19571 61 85 531-537 161.89-163.72m carbonate vein - 250 to core axis. Vein brecciated, 1.83m weakly limonitic and contains local concentrations of fine grained silver metallic mineral (tetrahedrite?). Noting few solution cavities along some fractures. Similar to above except more limonitic & fractured. 537-540 163.72-164.63m 19572 6' 25 Similar to above - quite broken near end of section. (537 - 543)540-543 1.83 164.63-165.55m 163.72-165.55m . 3m 81 19573 543-547 Pale brown, mottled, moderately altered feldspar 15 2.44m 165.55-166.77m (543-551) porphyry. Pyrite altered to hematite, feldspar 165.55-167.99m argillized and chloritized? Limonite pervasive throughout matrix. 19574 21 35 547-553 Similar to above up to 551'; 551' to 552'6" - pale 166.77-168.60m .61m (551 - 553)green more massive and siliceous section - sharp 167.99-168.60m contact with above section. Quartz veinlet 50 to core axis; 5 cm wide, contains patches of pyrite, molybdenite, sphalerite.

, tree tree tree tree tree

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

R-82-1 SHEET No. 15 of 16 HOLE No. RELAY PROPERTY\_\_\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE LOST Au(PPB) 19575 31 20 Pale brown, moderately to well altered feldspar 553-556 .91m 168.60-169.51m porphyry, limonitic fractures. Fragment of quartz vein at end of section 100 to core axis with minor grains of gray metallic galena and/or tetrahedrite. 81 19576 Similar to above section. Few quartz veinlets at 25 556-564 1' 169.51-171.95m low angles to core axis. One at 461' contains blebs 2.44m of dark gray metallic - very fine grained. 19577 41 Similar to above section - only variation in color. 25 564-568 171.95-173.17m Rock seems to alternate from pale brown very 1.22m "speckled" feldspar porphyry to green-brown feldspar porphyry with pale green well altered phenocrysts. Limonitic fractures still common. Similar to last section. 568' - 570' more veined and 19578 568-577 60 173.17-175.91m siliceous - minor sulphides. Rest of section moder-2.74m ately altered pale brown feldspar porphyry. Similar to last section - quartz veinlets rare, 19579 10' 577-587 46" 30 175.91-178.96m 3.05m alteration moderate to strong. .15m Similar to last section. 587-591 178.96-180.18m 61 35 19580 1.83m Similar to last section, Quartz - carbonate - limonitid(587-593) 591-593 180.18-180.79m vein @ 592'; 20° to core axis; ~1.5 cm wide - minor 178.96-180,79m pyrite and hematite.

Suite 1 - 219 Victoria St. Kamloops, B.C.

PROPERTY.		RELAY HOLE No.	R-82-1		SHEET No	16	of	16
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)			
593-598	0	Similar to last section to 597'; more massive gray	19581	5'	20			
180.79-1	182.32m	green feldspar porphyry to end of section - contains		1.52m				
		minor pyrrhotite and few narrow quartz veinlets @ low						
		angles to core axis, weak alteration.				_		-
598-603	0	Pale gray, massive feldspar porphyry, minor pyrrhotite	. 19582	51	50			
182.32-1	183.84m	Limonite on fractures still seen. Few quartz veinlets	4	1.52m				
		observed 4 1 - 2 mm - generally low angles to core						
		axis. Weak alteration.				-		-
603-613	0	Similar to last section	19583	51	45			
183.84-1	86.89m		(603-608)	1.52m	S. Section Commission of the C			
			183.84-185 19584	37,	60			
			(608-613)	1.52m		- 400		
613-623	0	Similar to last section.	185,37-186	89,	25			
186.89-1	89.94m		(613-620)	2.13m				
623-633	0	Similar to last section.	186.89-189 19586	9.02m 7'	35			
189.94-1	92.99m		(620-627)	2.13m				1
633-642	0	Similar to last section.	189.02-191 19587	6'	25			
192.99-1	95.73m		(627-633)	1.83m				
642-650	0	Similar to last section, one pyrite coated fracture	191:16-192 19588	2.99m 7'	35			
195.73-1	98.17m	(15° - 20° to core axis) @ 649'6"	(633-640)	2.13m				
		-	192.99-195 19589	12m 10	30			
			(640-650)	3.05m		A-1 - 13		Mu man
			195.12-198	8.17m	B			
		END OF HOLE						

RELAY

Kamloops, B.C. Phone 374-0544

R-82-2

	PR	OPERTY	RELAY	HOLE NoR-82	-2
DIP AND	AZIMUTH T		Core SizeNQ	[1] T. C.	) Sheet No of 12
Footage	Angle	Azimuth	Angle of Hole	% Recovery 96%  Elev. Collar  Latitude  Departure	Date Begun August 18, 1982 Date Finished August 23, 1983 Core Stored At

DEPTH	CORE	DESCRIPTION	SAMPLE No.	of SAMPLE	Au(PPB)	4	_
0-10		Overburden (casing to 8')					
-3.05m							
10-13	6"	Light grey/creamish buff, highly oxidized feldspar					
.05-3.96m	.15m	porphyry. Rock moderately - highly broken &					
		shattered, fracture angles dominant @ 65 & 5° to core					 
		axis. Much limonite & rusting on fractures	19590	7'	95	,	
			(10-17)	2.13m			
13-16	6"	Same as above.	3.05-5.18				
.96-4.88m	.15m						
16-17	0	Same as above, clay & possible sericitic alteration		L.,			
.88-5.18m		not necessarily surfacial alteration.					
17-24	0	Buff coloured feldspar porphyry. Phenocrysts up to					
.18-7.32m	-	1 cm in diameter. Highly fractured, fractures in all	19591	7'	55		
		directions. Minor weathered pyrite noted. Secondary		2 - 13m			
		alteration mainly clay, some sericite.					
		-		Y			
24-29	10"	Feldspar porphyry, as above, rusty & oxidized.	19592	51	40		
.32-8.84m	.25m			1.52m			

Suite 1 - 219 Victoria St. Kamloops, B.C.

HOLE No. \_\_\_\_ R-82-2 SHEET No. 2 of 12 PROPERTY RELAY CORE DEPTH DESCRIPTION SAMPLE No. Au(PPB) of SAMPLE LOST 29-37' - Hard, massive, less altered & rusty feldspar 19593 130 29-40 2.51 porphyry. Fine flakes of biotite in white aphanitic (29 - 37)8.84-12.20m 2.44m ground mass. Phenocrysts up to 1.5 cm. Dominant .76m 8.84-11.28 fracture trend at 50, 300 & 450 to core axis. Massive lenses & blebs of sulphides (mainly pyrite) associated with 5 fracture trend. Sphalerite, or other dark brown/black mineral present. May in fact be small dyke intrusion. 37-40' - Very highly broken, soft, rusty, kaolinized feldspar porphyry. Possible fault zone. 270 Soft, broken, highly altered & rusty fault zone as 19594 51 40-42 (37-42)12.20-12.80 above. 1.52 .3m 11.28-12.80m Dark green, highly altered, soft, rusty volcanic 19595 51 42-47 1.51 15 (andesite) tuff. (Taylor Series) Carbonate veining 12.80-14.33m 1.52 @ 80° to core axis. .46m 41 195 Very soft silty, clay material, impossible to 19596 47-51 1.51 recognize original rock-type. Some fragments. 4.33-15.55m 1.22m Indication of intrusive nature. Believed part of . 46m major fault gouge. Part of fault gouge, as above. Some rocks indicate 19597 51 51-56 31 130 andesite tuff. Fractures at 0 - 5 to core axis. 5.55-17.D7m 1.52m .15m

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTY.		RELAY HOLE No.	R-82-2		SHEET No	3	of
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
56-64	4"	Taylor Creek Series; dark green, fine - medium	19598	8'	5		
7.07-19.	Committee of the commit	grained andesite tuff. 56 - 58' - rusty altered &		2.44m			
	. 10m	sheared. Some calcite stringers on fractures @ 30°					
		& 60° to core axis.					
64-70	1/21	Dark green andesite tuff, as above. Several fractures	19599	6'	10		
9.51-21.	34m	@ 0° to core axis. Rusting on fracture surfaces.		1.83m		1	
	.15m	Some minor sulphides disseminated throughout (pyrite?)		111111111111111111111111111111111111111			
70-75	0	Same andesite tuff as above.	19600	51	15		
1.34-22.	B7m			1.52m			
75-79	0	Green andesite tuff as above. Some minor disseminated	19601	4'	10		
22.87-24.	09m	pyrite. Fracture dominant @ 0° to core axis.		1,22m		-	_
79-85	0	Andesite tuff as above.	19602	5'	30		
24.09-25	91m			1.52m			
85-90	0	Dense, massive, unaltered andesite tuff. Considerable	19603	5'	25		
25.91-27	44m	content of disseminated pyrite (pyrrhotite?) through-		1.52m			
		out. 88-89' - Gouge zone. Rock very oxidized &					
		rusty.					
90-95	0	Andesite tuff, as above. From 92' on becoming	19604	5'	35		
27.44-28	96m	fractured & altered & rusty. Carbonate veins along		1.52m			
		fractures @ 30° to core axis.					-
					-		
						-	

Suite - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \_\_\_\_\_ R-82-2 SHEET No. 4 of 12 RELAY PROPERTY\_\_\_\_ WIDTH SAMPLE No. CORE DESCRIPTION DEPTH of SAMPLE Au(PPB) LOST 19605 51 30 95-100 95-97' - Altered andesite tuff, as above. 28.96-30.49m 1.52m 97-100' - Buff/pink, altered and rusty felsic .15m volcanic tuff. Fragments up to 2 mm. Rusty, calcareous veining along fractures @ 30° to core axis at 99.5' 71 140 Highly rusty & altered, buff/brown/pink felsic 19606 100-107 30.49-32.62m 2.13m volcanic tuff. Innumerable randomly orient incipient fractures filled with calcite & quartz. Manganese stain & dendritic growths along many fracture faces. 106'2" - brecciated impure quartz vein @ 45° to core axis. 107-112 Generally same felsic volcanic rock as described 19607 51 85 above. From 110-112 rock very ferruginous, soft and 32.62-34.15m 1.52m .15m gouged. 41 2200 112-116 Transition zone between volcanic tuff unit as above 19608 to feldspar porphyry below. Very highly gouged, 34.15-35.37m 1.22m possibly fault zone. Some fragments of feldspar porphyry. 115.5 - 116 - grey/green, fine grained volcanic? or dyke rock. 40 116-121 Medium-coarse grained, mainly rusty oxidized & 19609 51 altered feldspar porphyry. Occasional bleb of rela-35.37-36.89m 1.52m tively fresh unoxidized rock. Considerable pyrite disseminated throughout, some occasional flecks of

MoS2

Suite 1 - 219 Victoria St Kamloops, B.C

And the second s

R-82-2 RELAY SHEET No. \_\_\_\_ 5 \_\_\_ of \_\_\_ 12 HOLE No. PROPERTY\_ WIDTH SAMPLE No. DEPTH DESCRIPTION Au(PPB) LOST of SAMPLE Medium-coarse grained feldspar porphyry as above. 19610 91 121-130 25 Rusty in general, with occasional fresh zone. Pyrite 36.89-39 63m 2.74m & possibly MoS, throughout. General alteration includes kaolinite & sericite? 130-135 Altered & rusty feldspar porphyry as above. 19611 51 40 39.63-41 16m 1.52m 135-144 Altered & rusty feldspar porphyry. Rock becoming 19612 35 more dense & hard, possibly less altered. Alteration 41.16-43 90m 2.74m includes chlorite & some epidote? (propylitic?). Considerable content pyrite and/or pyrrhotite. Rusty, altered feldspar porphyry as above. Consid-61 144-150 19613 150 erable sulphides pyrite, pyrrhotite & chalcopyrite? 43.90-45.73m 1.83m 150-156 Feldspar porphyry, as above, however less altered 19614 125 45.73-47 56m 1.83m & rusty. Blebs & disseminations of pyrite throughout Feldspar porphyry 20% relatively fresh & unaltered. 19615 156-160 1200 Disseminated pyrite & chalcopyrite (some malachite) 47.56-48 78m 1.22m throughout. 159'3" - quartz carbonate vein @ 10° to core axis. 160-167 Moderately to highly altered & rusty feldspar 130 7. 19616 48.78-50.91m porphyry. Fine grained xenolith? @ 164'. Dominant 2.13m fractures @ 30° to core axis.

HOLE No. \_\_\_\_ R-82-2 SHEET No. 6 of 12 RELAY PROPERTY\_\_\_ CORE WIDTH SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) Feldspar porphyry as above, considerable manganese 19617 167-173 185 50.91-52.74m 1.83m staining on fractures. Secondary calcite fillings & crystals on fractures @ 250 to core axis. Feldspar porphyry as above. Several small quartz 51 19618 173-181 125 52.74-55 18m veinlets @ 60° to core axis with MoSo. Manganese 1.52m staining abundant. 181-186 Feldspar porphyry as above with MoS2, possible 19619 51 370 55.18-56.71m 1.52m stibnite & arsenopyrite. 220 Feldspar porphyry as above. Pyrite & possibly 19620 186-191 arsenopyrite on fractures. Considerable manganese 56.71-58 23m 1.52m staining. Dominant fractures @ 0 - 300 to core axis. 51 540 Feldspar porphyry, much less altered than previous 19621 191-196 section, gradational to end of section. Alteration 58.23-59 76m 1.52m confined to selvages and fracture planes. Fractures at 30° & 40° to core axis. Pyrite still abundant in fresh rock. Minor MoS, & chalcopyrite. 51 30 Fresh relatively unaltered feldspar porphyry as above 19622 196-201 59.76-61 28m 1.52m Some clay, & chloritic alteration widespread. 19623 51 201-206 Feldspar porphyry, becoming gradationally more 40 altered and rusty towards end of section. Fracture 61.28-62 80m 1.52m faces generally very altered & rusty @ 30° to core axis.

#### RERR-PANJUM & ADJULIATED LID. - DIAMUND DRILL RECURL

Kamloops, B.C.

R-82-2 SHEET No. 7 of RELAY HOLE No. PROPERTY WIDTH of SAMPLE CORE SAMPLE No. Au(PPB) DEPTH DESCRIPTION LOST Variably altered feldspar porphyr. Alteration 206-211 19624 45 62-80-64 33m apparently confined to selvages of fractures @ 10-20° 1.52m to core axis. Pyrite disseminated throughout & along incipient fractures @ 75° to core axis. Unidentified black mineral (sphalerite?) at end of section. 211-220 Variably altered feldspar porphyry as above ~ 50% 19625 91 85 altered. Pyrite & chalcopyrite disseminated through-64.33-67.07m 2.74m out, pyrite in fractures at 70 - 75° to core axis. 220-225 Variably altered feldspar as above. Less dissemin-19626 51 60 ated pyrite &/or pyrrhotite. Unidentified black 67.07-68.60m 1.52m (cubic) mineral, magnetite?. Fractures 0° & 35° to core axis. Variably altered feldspar porphyry as above. Pyrite 19627 225-230 51 40 68.60-70.12m &/or pyrrhotite still common. Pale green mineral -1.52m apatite along fracture selvages. 230~235 Feldspar porphyry as above. Disseminated pyrite, 19628 51 20 70.12-71.65m minor pyrrhotite. Calcite & gypsum filled limonitic 1.52m fractures @ 10° to core axis. Moderate kaolinization of feldspar. 235-240 Feldspar porphyry, quite fresh & unaltered except on 19629 35 5' 71.65-73.17m fracture selvages. Slight greyish/green tinge. Weak 1.52m chloritic alteration of biotite or hornblende. Pyrite

cubes & fine-grained blebs.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. R-82-2 PROPERTY\_\_\_\_ RELAY SHEET No. 8 of 12 CORE WIDTH SAMPLE No. DEPTH DESCRIPTION of SAMPLE LOST Au(PPB) Moderate-Highly altered feldspar porphyry with con-35 240-247 11 19630 siderable limonite on fractures dominant @ 30° & 80° 73.17-75 30m 2.13m . 15m to core axis. Sulphides ( ~1%) disseminated throughout (pyrite - stibnite?) . 244 - 245 Brecciated zone with high limonite & secondary quartz - carbonate. 247-252 Generally weakly - moderately altered feldspar 50 19631 51 porphyry. Pyrite throughout. Chlorite & manganese 75.30-76 83m 1.52m on fracture surfaces. 249-250 Altered & rusty zone fracture @ 60° to core. 252-257 Weak - moderately altered feldspar porphyry to 254'. 55 19632 76.83-78.35m 254-257 Rusty altered porphyry with quartz carbonate 1.52m stringers. Abundant pyrite & stibnite? @ 253'. Moderately altered feldspar porphyry. Variably rusty | 19633 257-262 30 51 zones, generally associated with fractures. Incip-78.35-79 88m 1.52m ient fractures contain black mineral & pyrite. Malachite associated with this suggests chalcocite (note unidentified black mineral referred to previously). Calcite & gypsum on fractures @ 30° to core axis. 262-267 35 Weak-moderately altered feldspar porphyry (grey). 51 19634 79.88-81.40m Black mineral (chalcocite?) & pyrite throughout 1.52m zone (~ 1%)

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 9 R-82-2 RELAY 12 HOLE No. \_\_\_\_ PROPERTY\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE LOST Au(PPR) 50 Grey feldspar porphyry as above, increasing alteration 19635 267-272 51 towards end of section. Light green mineral gives 81.40-82.93m 1.52m green tinge to rock (apatite?). Pyrite disseminated & on fracture faces up to 2%. 272-277 Grey/green feldspar porphyry, zone of high oxidation 19636 51 40 & rusting from 272-275'. Pyrite ~1 - 2%. 82.93-84.45m 1.52m Feldspar porphyry as above, becoming more altered & 277-282 51 19637 10 84.45-85 98m 1.52m rusty. 282-289 Feldspar porphyry, very hard and unaltered, becoming 19638 7. 45 finer grained and more altered towards end of section. 85.98-88-11m 2.13m 287-289 Hybrid phase of porphyry almost grading into volcanics below at contact. Pyrite & black mineral throughout section. 289-298 Dark grey/green andesite tuff (Taylor Ck. Series). 19639 91 15 Fragments up to 3 mm. Rusting on fracture faces 88.11-90.85m 2.74m @ 35° to core axis. Disseminated pyrite throughout. 290-291 Fault gouge - very soft & ground rock. 297-298 Rock becomes very soft to fault zone below. 298-307 15' Major fault and gouge zone. All soft sand mud & clay. 19640 91 50 Mixed chips of andesite tuff & feldspar porphyry. 90.85-93.60m 2.74m .46m 298-301 Rusty ground chips. 301-302 Feldspar porhyry (rock). 302-303 Grey/Green St/Clay (volc.?). 303-307 Brown sand.

Suite 1 · 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \_\_\_\_\_ R-82-2 RELAY SHEET No. 10 of \_ PROPERTY\_\_\_\_

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
307-314	0	Very hard silicified zone. Original rock difficult	19641	7'	95		
93.60-95	73	to distinguish, however is very fine grained.		2.13m			
		Original porphyry texture not present. Disseminated					
		sulphides (mainly pyrite) throughout. Rusty on					
		fracture faces.					
314-319	1/2	Very soft sand and mud. Believed part of major fault	19642	51	10		western for the latest services
95.73-97	.15m	zone & gouge. Material brown and rusty.		1.52m			
319–324	0	Andesite tuff - weakly - moderately altered.	19643	51	5		
97.26-98	78m	Alteration mainly chlorite. Fine disseminated		1.52m		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
		sulphides throughout (pyrite), appreciably lower					
		content. Very soft, sheared & brecciated near fault					
		contact @ 319'. Rock very fractured, dominant trend					
		65 - 75° to core axis.					
	- III			*			
324-329	0	Andesite tuff, as above. Very highly fractured @ 30°	19644	5'	5		
98.78-10	0.3	& 70° to core axis.		1.52m			
329-334	<u>اج</u> ا	Blocky & fractured andesite tuff, as above. Noted	19645	51	20		
100.3-10		higher degree of fracturing in all angles to core.		1.52m			
	.15m						
334-342	0	Fine - medium grained andesite tuff, much less	19646	8'	5		
101.83-1	04.27m	fractured & more massive than above. Sections		2.44m			
		become very fine grained in part.					
	-						
							1

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

RELAY HOLE No. R-82-2 SHEET No. 11 of 12 PROPERTY\_ WIDTH CORE DESCRIPTION SAMPLE No. DEPTH of SAMPLE Au(PPB) LOST 342-348 Dark grey/green andesite tuff, as above, becoming 19647 61 30 104.27-106.10m more fractured at many various angles to core. 1.83m Carbonate veins & stringers along fractures, dominant at 0 - 10° fractures. Rust coatings on fractures. 348-355 Andesite tuff, becoming very fragmental up to 2 cm 19648 71 10 diameter. Fractures dominant at 0 - 100 to core axis 106.10-108.23m 2.13m 19649 355-362 Andesite tuff, as above, 359-360 - fault zone. 71 25 108.23-110.37m 2.13m 362-370 Andesite tuff, as above. Weak - moderate alteration, 19650 81 20 110.37-112.80m 2.44m very massive & dense, low fracture density. Some calcite stringers & veinlets. 370-378 Andesite tuff as above, well fractured with occasional 19651 81 10 112.80-115.24m 2.44m calcite vein. 378-383 Major fault & gouge zone. Core entirely brown, rusty 19652 10 115.24-116.77m mud and clay. Original rock unidentified. 1.52m 383-388 Same fault zone as above with clay & mud, however 19653 51 15 116.77-118.29m 1.52m zones & chips of competent rock, 383-384 Quartzcarbonate zone - minor disseminated sulphides (pyrite) 384-386 Highly altered rock appearing to be originally feldspar porphyry. Carbonate (quartz?) veinlets throughout.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTY		RELAY HOLE No.	R-82-2		SHEET No	12	of	12	-
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)				
388-395	0	Very blockly, well fractured andesite tuff. Dominant	19654	7'	75				
118.29-1	20.43m	fracture trend appears to be ~30° to core axis.		2.13m					
		Limonite on fracture faces. Some fractures contain							
<u></u>		calcite.							
395-401	0	Blocky, fractured andesite tuff, as above.	19655	6'	185	-		-	
120.43-1		Blocky, Iractured andesite turt, as above.	17055	1.83m	100				
401~410	2'	Blocky andesite tuff to 408', 408 - 410 Hybridized	19656	91	45				
122.26-1		tuff or feldspar porphyry.		2.74m					
410-415		410-412 Sand & mud. Fault Zone. 412-415 Blocky	19657	5'	25			-	
125.0-12	.15m	andesite tuff.		1.52m					
415-420	0	Fractured & blocky green andesite tuff. Dominant	19658	51	5			-	
126.52-1	28.05m	fracture trend @ 10 - 20° to core axis.		1.52m					
420-427	0	Hard, dense, massive & fresh andesite tuff.	19659	7'	10				-
128.05-1	30.18	Inumerable calcite stringers & veinlets along fracture	es	2.13m					
		@ 30° & 70° to core axis. Disseminated pyrite ≤ 1%						1	7
		throughout. 420-421 Sand & gouge material. May be				CHARLET CO			
		cave from above.							
427-434	0	Andesite tuff, as above, with calcite veinlets.	19660	7'	10			-	
130.18-1	32.32m	A TOWN TO THE TOWN A THE STREET STREE	V. 300 Serv.	2.13m				1	
4341		END OF HOLE (Hole terminated due to lack of				-797			
132.32m		circulation & caving.							

PROPERTY.....RELAY

Suite 1 – 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. ..... R-82-3

DII AILO	AZIMUTH 1	ected	Core SizeNQ	Total Depth645 (196.45m)	Sheet No 1 of 7
Footage	Angle	Azimuth	Angle of Hole 60°		Logged by J.R. Kerr Date Begun August 25, 1982
			Claim	Elev. Collar	Date Finished Sept. 3, 1982
			Section 0+25E 0+35N	Latitude	
			Bearing 120°	Departure	Core Stored At Goldbridge, B. C

DEPTH	CORE	DESCRIPTION	SAMPLE No.	of SAMPLE	Au(PPB)			
)-9		Overburden (Casing reamed to 35')						
-2.74								-
9-18	31/2	Moderate - Highly altered variable grey to orange/	19661	91	35			
.74-5.49m	1.07m	brown weathered feldspar porphyry. Alteration includes		2.74m			`	
		kaolinite & sericite of feldspar phenocrysts. Pyrite				-1		
		and/or pyrrhotite disseminated throughout. Dominant						-
		fracture trend ~10° to core axis.					-	-
18-25	2½'	Feldspar porphyry, as above, becoming fine grained	19662	71	15			
5.49-7.62m	1.91m	towards end of section & contact (hybrid phase?) Rock		2.13m				
		very shattered & broken, with considerable lost core.					-	-
25-31	2½'	Grey/green highly fractured & very blocky andesite	19663	6'	30			
.62-9.45m	1.19m	tuff. Rock very hard, silicified, massive & dense,		1.83m				
-		with pyrite as disseminations and coated on fracture		7.7	0-75 - E-0			
		faces.						
31-38	15'	Green andesite tuff, as last section. Rock well	19664	7'	50			
9.45-11.59	m	fractured, dominant trends 0 & 25° to core axis.		2.13m				) T
	.46m		- AATHEN				1	

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

RELAY HOLE No. \_\_\_\_\_R-82-3 SHEET No. \_\_\_\_2 PROPERTY\_ SAMPLE No. DESCRIPTION DEPTH of SAMPLE LOST Au(PPB) 30 38-46 Andesite tuff as above, very blocky & fractured, 19665 dominant 0 - 15° to core. 11.59-14.02m 2.44m 70 71 Massive, hard, dense andesite tuff, fragments up to 46-53 19666 14.02-16.16m 2.13m 1 cm. diameter. Some very fine grained phases. Minor rusting on fractures, some calcite - Dominant trend 0° & 30° to core axis. 15 53-58 19667 Hard, dense andesite tuff as above. 51 16.16-17.68m 1.52m 35 Andesite tuff, becoming highly fractured and soft 58-65 19668 towards end of section. Fractures dominant at 17.68-19.82m 2.13m 00 & 300 to core axis. Some disseminated pyrite. 63-65 Possible fault zone. 10 65-73 Variably mixed hybridized feldspar porphyry & andesite 19669 tuff. Rock generally soft & fractured. Pink & green 19.82-22.26m 2.44m .46m coloured. some carbonate veins - quartz @ 30° to core axis. 73-81 141 Mainly soft, altered, well fractured andesite tuff. 19670 81 130 22.26-24.70m 2.44m 73-77 Very soft gouge & breccia zone. Highly rusted. . 46m 81-88 Variably altered andesite tuff, becoming hybridized 19671 71 5 towards end of section. Contact @ 88' quite gradational. 24.70-26.83m 2.13m Rock in general very blocky & fractured, trend 0 - 30 to core axis. 86-87 quartz-carbonate veining @ 30° to

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 3 of 17 R-82-3 RELAY HOLE No. PROPERTY\_\_\_\_ CORE WIDTH DEPTH SAMPLE No. DESCRIPTION of SAMPLE Au(PPB) LOST 19672 61 Orange brown, highly altered and oxidized feldspar 0' 88-94 15 porphyry. Feldspar phenocrysts altered to kaolinite & 26.83-28.66m 1.83m sericite. Chlorite blebs indicate total alteration of mafics. Brown altered feldspar probably iron rusting in kaolinite. Sulphides disseminated in fresher rock. Pyrite plus black mineral (chalcocite?) Fractures 0 - 20° to core axis. Mainly grey moderately altered feldspar porphyry. 19673 61 94-100 20 Feldspar phenocrysts quite fresh. Minor rusting along 28.66-30.49m 1.82m fracture selvages. Dominant fractures @ 20° - 30° to core. Disseminated sulphides throughout. Mainly grey weakly-moderately altered feldspar 19674 7' 100-107 15 porphyry as above. 103-105 More highly altered & 30.49-32.62m 2.13m rusty zone. Grey moderately altered feldspar porphyry. Minor clay 19675 107-115 15 & sericite alteration of feldspar phenocrysts. 32.62-35.1m 2.44m Rusting on fracture faces @ 30° to core axis. Disseminated sulphides throughout (mainly pyrite, however black mineral common). Variably altered feldspar porphyry. 115-117 Weak -19676 61 115-121 25 moderately altered, blue/grey in colour. Fresh feld-35.1-36.9m 1.83m spar phenocrysts. 117-121 Rusty Moderate - highly altered. Fracture trend in several directions 0°, 20°, 45° & 70°

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

RELAY R-82-3 SHEET No. 4 of 17 HOLE No. \_\_\_\_ PROPERTY\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) LOST 5 121-126 Variably altered & rusty feldspar porphyry as above. 19677 36.9-38.4m Feldspar crystals altered in part to kaolinite & 1.52m sericite. 10 126-131 Variably altered feldspar porphyry, as above. Fine 19678 51 38.4-39.9m sulphides (mainly pyrite) disseminated throughout. 1.52m 30 Weakly - moderately altered feldspar porphyry. 19679 61 131-137 Rusting & oxidation confined to fractures. Dissemin-39.9-41.8m 1.83m ated pyrite & minor chalcopyrite & pyrrhotite throughout. Fractures dominant @ 20° & 75° to core 50 Fresh, massive, dense, weakly altered feldspar 51 137-142 19680 41.8-43.Bm porphyry. Disseminated sulphides. 1.52m Weakly altered feldspar porphyry. Disseminated 115 142-147 19681 51 sulphides throughout, Fractures @ 0°, 20° & 65° to 43.3-44.8m 1.52m core axis. 30 147-152 Fresh, unaltered feldspar porphyry, as above. 19682 44.8-46.3m 1.52m 125 Feldspar porphyry, more highly altered and rusty than 19683 51 152-157 46.3-47.9m above. 156' Highly fractured fault? zone. 1.52m

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 5 of RELAY R - 82 - 3HOLE No. PROPERTY\_ WIDTH SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) LOST Moderately altered feldspar porphyry as above, rusty 19684 51 157-162 300 47.9-49.4m 1.52m 162-170 Moderately altered feldspar porphyry as above. 19685 81 0 45 166-168 Highly fractured & very limonitic. 165'-1" 49.4-51.8m 2.44m carbonate vein @ 40° to core axis. 6" Dark green, altered & rusty andesite tuff. Manganese 61 170-176 19686 stain on fracture faces, dominant trend 0 - 200 to 51.8-53.7m 1.83m .15m core. Noted lack of sulphides (leached out?) Alteration mainly chlorite. Deep orange, brown mud & sand with 1/4 - 1/2" 21 176-178 0 19687 53.7-54.3m carbonate stringers. Probably a major fault zone. 61m Highly altered & fractured andesite tuff. Dissemin-91 178-187 19688 15 54.3-57.0m .15m ated pyrite & minor chalcopyrite. Manganese stain & 2.74m some calcite strings on fracture faces. Fractures randomly oreinted at many angles to core. Generally soft highly altered & bleached andesite tuff. 19689 71 187-194 Secondary quartz-carbonate veinlets. Very rusty & 57.0-59.1m .3m 2.13m oxidized. 190-191 Secondary silicified zone @ 35° to core axis. Dark green, altered andesite tuff. Alteration gener-61 19690 194-200 ally high chlorite, however secondary calcite veins 59.1-61.0m 1.83m common @ 30° to core.

Suite

Kamloops, B.C. Phone 374-0544

PROPERTY		RELAY HOLE No.	R-82-3		SHEET No	6of	17
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
200-207	0	Moderately chloritized hard, dense andesite tuff,	19691	7'	25		
1.0-63.1m		silicified throughout. Disseminated pyrite - 1%		2.13m			
		calcite on fractures @ 25 - 30° to core.					
		203-205 - shear zone with quartz carbonate @ 35° to					
		core axis.					
207–215	0	Chloritized andesite tuff as above. Becoming rusty &	19692	8'	5		
3.1-65.6m		well fractured @ 20° & 45° to core axis.		2.44m			
215-223	0	Andesite tuff, as above, perhaps less fractured & more	19693	8'	5		
5.6-68.Cm		massive and dense.		2.44m			
223-228	0	Massive dense, altered andesite tuff. Fractures @	19694	5'	20		
68.0-69.5m		10 - 15° to core axis.		1.52m			
228-235	6"	Andesite tuff, more highly fractured and rusty than	19695	7'	10		
9.5-71.6m	.15m	above. Strong chlorite alteration with minor pyrite		2.13m			
		& calcite veins. 228-231 Very broken rock. Fault zone.					
235-241	0	Andesite tuff, as above. Dominant fractures @ 0 - 5°	19696	6'	20		
1,6-73.5m		to core axis. Minor disseminated pyrite.		1.83m			
241-247	0	Grey, moderately altered feldspar porphyry, with rust-	19697	6'	35		
3.5-75.3m	7	ing & oxidation along fracture selvages. Rock becomes		1.83m			-
		more highly altered & rusty towards end of section.  Quartz-carbonate veins @ 40° to core axis, dominant					
		244-247, carrying massive blebs of pyrite & pyrrhotite	•				

Contact @ 241' very sharp & well defined @ 350 to core axis.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

The part of the contract of th

HOLE No. \_\_\_\_ R-82-3 SHEET No. 7 of 17 RELAY PROPERTY\_\_\_\_ WIDTH CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE Au(PPB) LOST Orange/brown, highly altered & rusty feldspar porphyry 19698 247-253 35 Feldspar phenocrysts altered to clay then stained 75.3-77. lm 1.83m rust from oxidation of sulphides. Manganese, thick limonite & some calcite on fracture faces. Highly altered feldspar porphyry as above. 19699 51 253-258 50 77.1-78.7m 1.52m 51 Buff/pink fragmental volcanic tuff. Either bleached 19700 258-263 40 andesite tuff, or separate felsic volcanic unit. 78.7-80.1m 1.52m Fragments up to 2 cm. diameter. Thread veins and stringers of quartz-carbonate veins in many random directions. Heavy limonite stain on fractures & throughout rock. Dark green, fragmental, hard, dense & massive 7' 263-270 19701 20 andesite tuff, with numerous calcite veins. Consider-80.1-82.Bm 2.13m able chlorite alteration & widespread silicification. Local purple alteration as blotches in rock (iron). Pyrite as fillings in fractures & blebs in rock mass. Fractures at 10°, 55° & 70° to core axis. Andesite tuff, as above, with numerous calcite 19702 71 10 270-277 strings, dominant @ 200 to core axis. Rock becomes 82.3-84.5m .15m 2.13m more fractured towards end of section, 275-277 -Sheared & broken fault zone.

I, IIIIIIIIIIIIIII

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. R-82-3 SHEET No. 8 of 17 RELAY PROPERTY\_\_\_\_ WIDTH DEPTH DESCRIPTION SAMPLE No. of SAMPLE LOST Au(PPB) 19703 277-284 Very fractured & shattered andesite tuff, fractures 70 oriented in all directions. Calcite veins common. 84.5-86.6m 2.13m 281.5 - 283 Bleached & highly altered volcanic tuff. 284-291 Highly fractured andesite tuff as above. Dominant 19704 7' 75 calcite replacement @ 288'. General calcite veins @ 86.6-88.7m 2.13m 30° & 70° to core axis. Rock in general very rusty. Andesite tuff, highly fractured as above to 295. 19705 6' 291-297 20 Massive and dense. 295-297 Disseminated pyrite 88.7-90.5m 1.83m throughout. 297-301 Hard, massive, dense, chloritized andesite 19706 71 297-304 0 15 tuff. 301-304 Soft, more altered, well fractured 90.5-92.7m 2.13m andesite tuff. Sulphides disseminated throughout section. Calcite along incipient fractures @ 200 to core axis. 304-310 Hard, massive dense andesite tuff, with numerous 19707 61 25 calcite strings. Rock in general only weakly altered. 92.7-94.5m 1.83m Some fresh hornblende crystals. Disseminated sulphides Relatively unaltered andesite tuff, as above, however 19708 6' 310-316 15 more highly fractured, dominant trends @ 10 & 60° to 94.5-96.3m 1.83m core axis. Sulphides present however less abundant than previous sections.

Suite 1 - 219 Victoria St. Kamioops, B.C.

SHEET No. 9 of 17 HOLE No. \_\_\_\_ R=82=3 RELAY PROPERTY\_ CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE Au(PPB) LOST Mainly highly altered and well fractured andesite 316-324 19709 5 tuff as above, main fracture trends @ 30 & 100 to 96.3-98.8m 2.44m core axis. Minor ( 41%) pyrite disseminated through out. Occasional calcite veinlet. Andesite tuff, as above. 324-332 19710 20 98.8-101 2m 2.44m Andesite tuff, becoming very massive, dense and 19711 332-340 10 unaltered towards end of section. Sulphides present 2.44m 101.2 103.7m in trace content. Fractures, where present dominant @ 10° to core axis. (Note 8" cave material not sample ) 19712 340-349 Massive, dense andesite tuff, as above. Noticeable 35 lack of sulphides. Last foot of section fractured & 103.7-106.4m 2.74m rusty, with calcite stringers from 347-349. 349-356 Generally very soft, muddy, highly altered rock of 19713 71 20 106.4-108.5m .15m volcanic origin (felsic or bleached andesite tuff). 2.13m Fragments discernible in relatively competent rock. Carbonate stringers throughout. 354-355 Dominant carbonate veins (some quartz) @ 550 to core axis. Rock in general very oxidized & rusty. 356-365 Highly altered rock of volcanic origin, as above. 19714 15 108.5-111.3m 2.74m .61m

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \$-82-3 SHEET No. 10 of 17 RELAY PROPERTY..... WIDTH CORE SAMPLE No. DESCRIPTION DEPTH Au(PPB) of SAMPLE LOST 365-371 Highly altered fragmental rock, original rock type 19715 130 unknown. Very angular fragments of feldspar porphyry 111.3-113.1m 1.83m & other sources in fine sheared matrix. Possible recemented fault breccia contact of andesite above & feldspar porphyry below. Shear plane @ 30° to core axis. Rock in general is hard, massive very weakly altered 19716 71 371-378 70 113.1-115.2m feldspar (quartz) porphyry. Biotite crystals totally 2.13m unaltered. Only minor pyrite disseminated in rock. Fracture zones from 371-373', 375-376' & 378' show alteration and rusting along fracture selvages. Fracture trends 10 . 10 & 70 to core axis. 378-385 Variably altered quartz-feldspar porphyry. Definite 71 30 115.2-117.4m quartz phenocrysts recognized. Alteration includes 2.13m chloritization of hornblende & kaolinization of feldspar. General rusting and oxidation along fractures and in areas of more intense alteration. 385-391 Generally dense, massive, weakly altered quartz-19718 61 20 117.4-119.2m feldspar porphyry. Disseimated sulphides & magnetite? 1.83m 19719 B91-397 Fresh, massive, dense feldspar porphyry, Lacking 60 quartz phenocrysts as previous section. Weakly fractured 1.83m 119.2-121.0m @ 30° to core axis. Some rusting on fractures. Pyrite & magnetite disseminated throughout. Pyrite smeared on some fractures.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. \_\_\_\_11\_\_\_\_of \_\_17\_ HOLE No. R-82-3 RELAY PROPERTY\_\_\_\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH Au(PPB) of SAMPLE LOST Fresh, massive & weakly altered feldspar porphyry as 19720 35 397-404 0 above. 2.13m 121.0-128.2m Fresh, massive, very weakly altered feldspar porphyry 19721 7. 404-411 20 123.2-125.3m as above. Appears to have higher content disseminated 2.13m pyrite and coatings on fractures. 411-417 Massive, very weakly altered feldspar porphyry as 19722 61 15 125.3-127.1m above. Pyrite abundant as disseminations & smears on 1.83m fracture faces @ 30 & 70° to core axis. At 417 fracture zone has considerable rusting & alteration. 417-423 Variably altered feldspar porphyry (moderately). 19723 7. 40 Kaolinite alteration of feldspar phenocrysts & minor 2.13m 127.1-129.0m chlorite alteration of mafics. Rock more highly fractured, trends 20°, 45° & 70° to core axis. Rusting dominant, generally confined to fracture selvages. Aquamarine alteration of plagioclase dominant ~ 420'. Disseminated pyrite & unidentified black mineral (magnetite or chalcocite?) throughout. 51 Moderately - highly altered feldspar porphyry. 19724 230 423-428 129.0-130.5m Moderately fractured with oxidation along fracture 1.52m selvages. Disseminated pyrite & black mineral in less oxidized material.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

R-82-3 SHEET No. 12 of 17 RELAY HOLE No. \_\_\_\_\_ PROPERTY\_ CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE LOST Au(PPB) Highly sheared & fractured feldspar porphyry. Some 41 428-432 19725 330 carbonate (quartz?) veining. Probably fault zone, 130.5-131.7m 1.22m appears @ 30° to core axis. 432-441 91 Variably altered feldspar porphyry. 432-434 Bleached 3176 1300 highly kaolinized feldspar porphyry. Aquamarine 131.7-134.5m 2.74m alteration colour of feldspar phenocrysts. 434-441 Moderately kaolinized feldspar porphyry. High content of pyrite & magnetite? as disseminations, blebs and smears on fractures throughout section. Dominant fracture trends 0° & 30° to core axis. Moderately altered feldspar porphyry with abundant 441-446 51 3177 25 134.5-136.0m blebs & disseminations of pyrite (2 - 3%) 1.52m Well fractured, highly altered feldspar porphyry. 41 446-450 3178 310 Limonite stain throughout section. Fractures @ 5 - 10 136.0-137.2m 1.22m & 30° to core axis. 450-456 Weakly - moderately altered, grey, massive dense 3179 61 95 137.2-139.0m feldspar porphyry. Pyrite & pyrrhotite disseminated 1.83m throughout section. Noted absence of black mineral (magnetite?). Fractures @ 00 to core axis.

territian territies

uite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. RELAY R-82-3 SHEET No. 13 of 17 PROPERTY\_\_\_ WIDTH CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE LOST Au(PPB) 456-462 Moderately altered feldspar porphyry becoming rusty 3180 70 139.0-140.9m and oxidized towards end of section. Slight greenish 1.83m tinge to rock. Disseminated pyrite, pyrrhotite & magnetite? throughout. Fractures @ 20° & 70° to core axis. 462-468 0 Moderately - highly altered feldspar porphyry, 3181 61 265 140.9-142.7m noticeable kaolinization of feldspar phenocrysts. 1.83m Massive blebs of pyrite and magnetite & also pyrite as fine disseminations throughout rock. General 30% rusting of rock. 468-474 0 Moderately - highly altered quartz-feldspar porphyry. 330 61 142.7-144.5m Large quartz phenocrysts noted in section. Rock in 1.83m general quite bleached, with disseminated pyrite & magnetite. 474-480 Moderately - highly altered buff/grey quartz feldspar | 3183 61 640 144.5-146.3m porphyry. Some green tinge alteration to feldspar 1.83m phenocrysts. Quartz phenocrysts still common. Fractures trend 10° & 60° to core axis. 480-487 Variable moderately to highly altered quartz feldspar 3184 7 1 750 146.3-148.5m 2.13m porphyry, becoming highly altered towards end of section. Disseminated pyrite, pyrrhotite & magnetite throughout section. Fractures 0 - 10°, 45° & 60° to core axis. Limonite & some pyrite smeared on fractures

Suite 1 - 219 Victoria St Kamloops, B.C

RELAY R-82-3 SHEET No. 14 of 17 PROPERTY. HOLE No. \_\_\_\_\_ CORE WIDTH DEPTH DESCRIPTION SAMPLE No. LOST of SAMPLE Au(PPB) 487-494 Variable moderate to highly altered, well fractured 3185 7' 1500 feldspar porphyry. Some quartz phenocrysts. Alteration 148.5-150.6m 2.13m apparently becoming argillic with chlorite & epidote? Pyrite, magnetite & pyrrhotite abundant as blebs & disseminations. Fractures dominant 00 to core axis. 494-500 Moderately altered feldspar prophyry. Chlorite 305 3186 61 alteration of hornblende dominant. Pyrite & magnetite 150.6-152.4m 1.83m disseminated throughout. Aquamarine alteration of feldspar 495-496. 500-505 Moderately altered feldspar porphyry, feldspar 440 3187 51 152.4-154.0m becoming bleached & kaolinized towards end of section. 1.52m Fine thin veinlets of pyrite, calcite and unknown black mineral along incipient fractures @ 150 to core axis @ 499'. Pyrite & magnetite disseminated throughout. . 505-511 Very highly altered & bleached feldspar porphyry. 775 3188 61 All feldspar phenocrysts & groundmass altered to 154.0-15\$.8m 1.83m kaolinite. Sulphides oxidized providing a buff/brown tinge to rock. Thin veins & fractures @ 10° to core axis. 511-516 Highly altered & bleached feldspar porphyry as above. 165 3189 51 Fractures @ 10 - 200 to core axis. 155.8-157.3m 1.52m

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \_\_\_\_\_ R-82-3 SHEET No. 15 of 17 RELAY PROPERTY\_ WIDTH SAMPLE No. CORE DEPTH DESCRIPTION of SAMPLE Au(PPB) LOST Very soft, highly altered, sheared and fractured 3190 120 516-524 feldspar porphyry. Rock in general is very rusty & 157.3-159.8m 2.44m oxidized. Dominant fracture trends 0 - 30° to core axis. 524-531 Fine - medium grained intrusive rock with large 3191 71 5 159.8-161.9m angular fragments up to 2 cm diameter (some identified 2.13m as rock of previous section.) Believed later dyke rock than feldspar porphyry. Pyrite disseminated throughout. Moderate alteration. 71 Fine - medium grained intrusive rock, with angular 3192 25 531-538 fragments as previous section. Disseminated sulphides 2.13m 161.9-164.0m throughout. 90 538-544 Weak - moderately altered feldspar porphyry, Minor 3193 61 164.0-165.9m 1.83m oxidation. Fresh pyrite on fractures & disseminated throughout. Definite to distinguish contact with rock described above, however fragments do not exist in this section and feldspar phenocrysts are large. 544-551 Weak - moderately altered, well fractured feldspar 3194 71 55 165.9-16B.Om 2.13m porphyry as above. Fracture trend dominant @ 0 - 100 & 60° to core axis. Pyrite disseminated throughout and on fracture faces. 7. Gray, massive unaltered feldspar porphyry, occasional 3195 140 551-558 0 2.13m 168.0-170.1m rusty zone.

Kamloops, B.C

PROPERTY\_\_\_\_\_\_ HOLE No.\_\_\_\_\_ R-82-3 SHEET No.\_\_\_\_ 16 of \_\_\_17

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)		
558-565	0	Massive unaltered feldspar porphyry. Some local	3196	7'	160		
170.1-17	2.3m	alteration along fractures @ 563-564. Dominant fractu	e	2.13m			
		trends 5° & 30° to core axis. Very minor content					
		( <b>∠</b> ½ %) disseminated pyrite.			-	_	+-
565-572	0	Generally massive weakly altered feldspar porphyry	3197	7'	40		
172.3-174	4.4m	as above. From 569-571 clay alteration associated		2.13m			
		with fractures @ 10 - 30° to core axis. Pyrite					
		disseminated & on fracture faces.					_
572-579	0	Massive unaltered feldspar porphyry as above.	3198	7'	5		
174.4-176	. 5m	Alteration & rusting associated with fractures @ 579'		2.13m			
		Fracture trends 5 - 10° to core axis.					
579-587	0	Massive unaltered feldspar porphyry. Disseminated	3199	8'	30		
176.5-179	. Om	sulphides. 579-581 Minor alteration associated with		2.44m			
		fractures. Heavy limonite on fractures @ 45° to core					
		axis.					
587-595	0	Generally gray massive unaltered feldspar porphyry as	3200	8'	5		
179.0-181	. 4m	above. 589-592 Pink/buff weathered and altered dyke		2.44m			
7 245-04 VIII DV-14-1		rock, or bleached xenolith of volcanics. Fragmental					
		rock.				_	_
595-603	0	Moderately altered feldspar porphyry with noted	3201	8'	850		
181.4-183	.8m	kaolinization of feldspar phenocrysts. Dominant fracts	re	2.44m			
		0 - 5° to core axis, filled with calcite, pyrite, pyri	hotite	C)(N=0.1/k2/2)			

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

ROPERTY_		RELAY HOLE No.	R-82-3		SHEET No.	17	of	17
DEPTH	CORE	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)			
03-611	0	Moderately - highly altered feldspar porphyry.	3202	8'	80			
183.8-186	. 3m	Feldspar phenocrysts highly bleached, with green tinge		2.44m				
		locally. Sulphides as disseminations & along fracture	s					
		throughout.						
11-619	0	Moderately altered feldspar porphyry. Bleaching of	3203	8'	3300			
86.3-188	. 7m	feldspar due to kaolinite. Fractures 0 - 100 to core		2.44m				
		axis carry limonite, pyrite, pyrrhotite & arsenopyrite						
		Calcite veins @ 10° to core axis.						
19-628	0	Moderately altered feldspar porphyry as above.	3204	91	20			1
88.7-19	.5m	Kaolinization of feldspar phenocrysts. General purply/		2.74m				
		green tinge to rock due to alteration of phenocrysts		2000,000				
		& rock mass. Disseminated sulphides throughout.						
		Calcite veins @ 45° to core axis.						+
28-636	0	Grey, massive, dense, hard feldspar porphyry. Minor	3205	8'	20			+
91.5-193	.9m	disseminated pyrite.		2.44m				-
36-645	0	Grey, massive dense unaltered feldspar porphyry to	3206	91	25			
93.9-196	.6m	643'. Increasing alteration of feldspar phenocrysts		2.74m				
		along fractures @ 70° to core axis to 645' end of hole						
		•						
45'		END OF HOLE.						
96.6m								
								+-

Suite 1 – 218 Victoria St. Karninops, B.C. Phone 374-0544

	P	ROPERTY	RELAY	HOLE No.	82-4		
DIP ANI	D AZIMUTH Cor	TEST	Core SizeNQ	Total Depth 472' (143.9m)	Sheet No1 of11		
Footage	Angle	Azimuth	Claim	Latitude Date Begun Sept. 14, 198			
DEPTH	CORE		DESCRIPTION	SAMPLE No. WIDTH of SAMPLE Au (	PPB)		

DEPTH	CORE	DESCRIPTION	SAMPLE No	of SAMPLE	Au(PPB)			
-15		Overburden (Casing to 16')		104				
-4.6m			-				1	
5-22	0	Moderately - highly altered feldspar porphyry, feldsp	ar 3207	7!	5		-	
.6-6.7m		phenocrysts altered to acquamarine clay mineral,		-2.13m				
		sericite & clay alteration widespread. Rusting						
	V	confined to selvages of fractures @ 10° & 70° to core						
		axis. Pyrite, minor chalcopyrite & magnetite						
		disseminated throughout.						
2-30	0	Feldspar porphyry, much less altered than above,	3208	8'	5			
7-9.1m		becoming fresh towards end of section. Rusting only		2.44m				
		along fractures @ 30° & 70° to core axis. Disseminate	ed					
		sulphides throughout (pyrite and/or pyrrhotite).						
0-37	0	Feldspar porphyry as above. Sulphide content apprec-	- 3209	7'	5			-
.1-11.3m		ably higher. Alteration only weak - moderate.		2.13m				
7-44	0	Feldspar porphyry, as above, weakly - moderately	3210	7'	6		+-	-
		altered with 2 - 3% content pyrrhotite & pyrite.	3210		1		1	
11.3-13.4	m	Becoming more fractured towards end of section, with		2.13m				
		rusting along fractures, dominant @ 35° & 10° to core	- uto		1	-	+	

( IIIIII to the text

SHEET No. 2 of 11 HOLE No. \_\_\_\_\_R82-4 RELAY PROPERTY\_\_\_ WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) Variably altered feldspar porphyry ranging from weak 44-52 3211 13.4-15.9m to moderate - high. Rock is much more highly 2.44m fractured throughout section, dominant fracture trend ranging 0 - 30° to core axis. Sulphides abundant in unleached rock. 52-60 Weakly - moderately altered feldspar porphyry, becoming 3212 81 15.9-18.3m more highly altered towards end of section. Dissem-2.44m inated sulphides throughout. Less fractured rock, therefore less oxidized. Moderate - highly altered feldspar porphyry, sulphides 71 3213 60-67

dominant throughout. Weak oxidation, confined to 18.3-20. 2.13m fractures. Contact @ 67' very sharp & well defined @ 40 - 45° to core axis. 67-73 Dark green, highly altered, fragmental, very soft 3214 61 5 andesite breccia (tuff?). Rock quite heavily oxidized 20.4-22.3m 1.83m & well fractured, dominant @ 450 to core axis. 67-68 - Rock sheared & very oxidized @ contact zone √40° to core axis. 70' - Small 1" dyke? feldspar porphyry. Altered andesite breccia, as above, fragments up to 73-80 3215 71 5 3 cm. diameter. 22-3-24 2.13m 75 - 76.5' - Rusty shear or fault @ 30° to core axis.

Most of rock totally oxidized to rusty orange/brown.

Suite 1 - 219 Victoria St. Karnloops, B.C. Phone 374-0544

SHEET No. 3 of \_\_\_ R82-4 RELAY HOLE No. PROPERTY\_ CORE WIDTH SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) Dark green, highly fractured andesite tuff, rock 5 3216 80-87 24.4-26.5m 2.13m intensely fractured between 81 - 83 ft. Increasing shearing & alteration toward contact @ 87'. 51 3217 5 Major fault zone, all measured angles indicate 87-92 @ 60 - 70° to core axis. Original rock not positively 26.5-28.0m 1.52m identified however probably Taylor Creek volcanics. 87.5-89' - Quartz-carbonate zone @ 60° to core axis. 61 Major fault zone. Except for zone 93 - 94 rock 3218 5 92 - 9828.0-29.9m 1.83m totally gouged mud & clay. Rock very highly altered and oxidized. 93-94 - Highly altered andesite. Dark green, rusty, highly altered andesite breccia, 3219 5 98-105 up to 2 cm. Randomly oriented sheared fractures 29.9-32 Om 2.13 throughout zone. Very highly altered contact phase of andesite breccia 51 3220 5 105-110 32.0-33.bm 1.52m Highly sheared & very soft rock. Trends @ 40 - 450 to core axis. Contact @ 110' very sharp & well defined. Rock generally rusty. 3221 7 . 5 Very highly altered (silicified) feldspar porphyry. 110-117 Porphyry texture completely destroyed. Thread 33.5-35.7m 2.13m fractures filled with sulphides (pyrite?) and magnetite.

Suite 1 - 219 Victoria St. Kamloops, B.C.

SHEET No. 4 PROPERTY\_\_\_\_ RELAY WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au (PPB) LOST Very highly altered feldspar porphyry as above. 71 117-124 1.5' 3222 5 Porphyry texture discernible in some rock. 35.7-37.8m .46m 2.13 122.5-123.5 - Quartz-carbonate zone. Fractures @ 45-50° to core axis. Very highly altered hybrid rock, probably mostly of 71 124-131 3223 5 37.8-39.9m feldspar porphyry origin. Original texture not 2.13m discernible. Very rusty gouged & sheared in part. 125-127'- Highly sheared & gouged fault zone. 128'- 6" quartz/carbonate zone. 131-139 Very highly altered feldspar porphyry, alteration 3224 81 5 39.9-42.4m gradationally varying from quartz/carbonate at 2.44m beginning of section to sericite/clay alteration @ end of section. Thin vein stringers & clots of sulphides (pyrite & pyrrhotite), especially dominant 135 - 137'. Fractures dominant 45 - 50° to core axis. 131-132.5' - quartz/carbonate vein @ 50° to core axis. Moderately - highly altered feldspar porphyry. Rock 71 139-146 3225 5 becoming quite massive & dense with few fractures. 42.4-44.5m 2.13m One dominant rusty fracture @ 146' @ 0 - 50 to core axis. Alteration includes silicification, sericite, minor clay & pale green mineral. Sulphides as disseminations & fracture fillings.

Suite 1 - 219 Victoria St. Kamloops, B.C.

HOLE No. \_\_\_\_\_ R82-4 SHEET No. 5 of 11 RELAY PROPERTY\_\_\_ WIDTH CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE Au(PPB) Moderate - highly altered feldspar porphyry as above. 3226 146-154 2.44m 44.5-47.0m Sulphides still abundant. Moderate - highly altered feldspar porphyry, clay 3227 71 5 154-161 alteration becoming more abundant. Chlorite alteration 2.13m 47.0-49.1m present, dominant along fracture faces. Sulphides persistent as thin veins & disseminations. 71 Moderate - highly altered feldspar porphyry as above, 3228 55 161-168 2.13m possibly becoming less altered towards end of section. 49.1-51.2m Fractures rusty & dominant 60 - 70° to core axis. Variably moderate - highly altered feldspar porphyry. 71 10 168-175 Slight green tinge due to green alteration of feldspar 2.13m 51.2-53.4m phenocrysts. Black mineral (magnetite?) & pyrite disseminated throughout. Moderate - highly altered feldspar porphyry as above. 81 15 175-183 2.44m 53.4-55.8m Strong bleaching of feldspar phenocrysts. Sulphides & magnetite disseminated throughout. Very highly altered, rusty and fractured feldspar 71 3231 25 183-190 porphyry. Alteration abundant clay, however noticeable 2.13m 55.8-57.9m chlorite. Fractures in many directions, however dominant ~10 - 200 to core axis. Sulphides leached out.

Suite 1 - 219 Victoria St Kamloops, B.C

THE RESERVE THE PROPERTY OF TH

SHEET No. 6 of 11 HOLE No. \_\_\_\_\_\_R82\_4 RELAY PROPERTY\_ CORE SAMPLE No. DESCRIPTION Au(PPB) DEPTH of SAMPLE LOST 10 Hybrid contact zone, very highly altered volcanics 3232 7' 190-197 1.5' & feldspar porphyry. Barite/calcite veins & pods @ 57.9-60. m .46m 2.13m 10° to core axis. 5 197-205 0.51 Highly altered volcanic breccia, fragments up to 3 cm. 3233 81 60.1-62.5m .15m diameter. Alteration clay & chlorite. Rusting 2.44m moderate. 201.5-202.51 bleached shear zones. 204.5-205' 5 81 205-213 3234 Dark green, highly altered, volcanic breccia. Large fragments up to 5 cm. diameter. Calcite stringers 62.5-64.9m 2.44m present. Noted lack of sulphides, however rusting indicates possible leaching. Dark green highly altered volcanic breccia as above. 81 213-221 3235 64.9-67.4m Dominant fractures 5° & 70° to core axis. 2.44m 213.5' - Small shear zone. 5 221-229 Dark green andesite breccia, becoming less altered 81 3236 than previous section. 67.4-69.8m 2.44m 229-237 Moderately altered dark green volcanic breccia 81 3237 69.8-72.3m 2.44m (andesite) as above. Numerous calcite stringers and veinlets.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 7 R82-4 RELAY HOLE No. PROPERTY\_ WIDTH CORE SAMPLE No. DEPTH DESCRIPTION of SAMPLE Au (PPB) LOST Moderately altered volcanic breccia as above. 3238 5 237-243 1.83m Calcite stringers & veins & minor pyrite. 72.3-74.1 61 Highly altered volcanic breccia, becoming higher 3239 5 243-249 fractured & more altered than above. Fractures in all 1.83m 74.1-75.90 directions, however dominant 0 - 30° to core axis. 61 Very highly altered, sheared, soft, gouged volcanic 3240 249-255 rock. Probably major fault zone. 1.83m 75.9-77.1m 254-255' - Carbonate veining @ 40 - 45° to core axis. Zone has purplish colour. 81 Grey/green altered volcanic breccia. Fragments 3241 255-263 2.44m 77.7-80.2m occasionally large however not as abundant. Minor disseminated pyrite. Rusting on fractures dominant ~10° to core axis. 8' 3242 Grey/green volcanic breccia, highly altered. 5 263-271 267-270' - Highly bleached & somewhat sheared zone. 2.44m 80.2-82.6m Carbonate veins @ 50° to core axis. Many fractures contain smears & fillings of pyrite and/or marcasite. 81 Grey/green andesite tuff or breccia. Large fragments 3243 5 271-279 as previous sections are not present. Alteration 2.44m 82.6-85.1m includes clay & chlorite. Minor disseminated pyrite, with smears on fractures. 279' - Fracture (rusty) @ 0° to core axis.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTYRELAY	HOLE No.	SHEET No. 8 of 11
---------------	----------	-------------------

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE	Au(PPB)	
279-287	0	Grey/green very weatherly altered andesite.	3244	8'	35	
85.1-87.	óm	Hornblende laths present in zones of coarser grains.		2.44m		
		Rock generally dense & massive with calcite veinlets				 
		along incipient fractures, common ~ 20° to core axis.				
		Pyrite as disseminations & along fractures.				
287-295	0	Andesite, becoming quite highly altered towards end of	3245	8'	5	
37.5-89.	m	section. Rock becoming more highly fractured,		2,44m		-
		dominant @ 10 & 70 to core axis. Calcite stringers				
295–303	0	Variably altered andesite, with random fractures.	3246	8'	5.	
89.9-92.4	<b>·</b> m	Calcite stringers. Minor pyrite throughout.		2.44m		
303-311	0	Weak - moderately altered andesite, noticeably lacking	3247	8'	10	
92.4-94.8	Sm.	calcite stringers. Disseminated pyrite in minor		2.44m		
		content.				
311-319	0	Weak - moderately altered andesite, becoming very	3248	81	5	
94.8-97.3	m	fresh & unaltered towards end of section. Minor		2.44m		
		disseminated pyrite.				
319-327	0	Fresh, unaltered, massive andesite with occasional	3249	8'	5	
97.3-99.7	m	fragment. Very few fractures.		2.44m		
		319.5 - 320' - 6" zone of silicification & fracturing.				
		Appreciable content of pyrite as blebs & clots.				

uite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

PROPERTY\_\_\_\_ HOLE No. \_\_\_\_\_\_R82-4 SHEET No. 9 of 11 RELAY WIDTH SAMPLE No. CORE DEPTH DESCRIPTION of SAMPLE Au (PPB) LOST 3250 81 327-335 Fresh unaltered andesite, as above. 2.44m 99.7-102 1m 81 Fresh unaltered andesite, as above, becoming more 56401 335-343 2.44m 102.1-104.6m highly fractured @ 50 & 500 to core axis. Rusting on fractures. 8' Dense, massive, fresh, andesite breccia or tuff. 56402 343-351 2.44m 104.6-107.0 Occasional calcite stringers. Major fractures @ 350' @ 0° to core axis. Minor disseminated pyrite. Andesite tuff, as above, however becoming highly 8' 351-359 56403 fractured & altered, fractures dominant @ 0° & 45° 2.44m 107.0-109.5m to core axis. Very highly fractured andesite tuff, alteration mainly 56404 8' 359-367 10 2.44m 109.5-111.9m chlorite, however some bleaching due to clay. All fractures very rusty, & oriented in several directions however appear dominant @ 00 & 500 to core axis. Minor sulphides disseminated in fresh rock. 2" carbonate & bleached zone @ 366' @ 200 to core axis. Very highly altered & fractured andesite tuff as above, 56405 8' 367-375 425 111.9-114.3m 2.44m 2 zones of carbonate veining @ 373' & 374-375'. Zones both 3-4" wide. Sulphides in each zone, including galena, sphalerite, possibly tetrahedrite, arsenopyrite & stibnite. Zones @ 15 - 20° to core axis.

tillititie tere

uite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

SHEET No. 10 HOLE No. \_\_\_\_\_ R82-4 RELAY PROPERTY\_\_\_ WIDTH of SAMPLE CORE SAMPLE No. DESCRIPTION DEPTH Au(PPB) Very highly altered, fractured & bleached andesite, 56406 375-383 becoming slightly less altered towards end of section 2.44m 114.3-116.7m Dominant fractures @ 450 to core axis. 71 Moderate - highly altered andesite tuff. 56407 383-390 388-390' - Highly gouged, altered & sheared fault 2.13m 116.7-118.9m zone @ 100 to core axis. Andesite tuff, much less altered & fractured as above 56408 81 390-398 2.44m Considerable content fine disseminated pyrite 118.9-121.3m throughout. Calcite & limonite on fractures @ 15° & 500 to core axis. 81 Massive, dense, weakly altered andesite tuff or 5 56409 398-406 2.44m 121.3-123.8m breccia. Fractures trend @ 20°. 50° & 70° to core axis, with calcite & limonite. Pyrite disseminated throughout. 81 Massive, dense weakly altered andesite tuff, becoming 56410 406-414 more highly fractured towards end of section. 2.44m 123.8-126.2m 81 10 MAJOR FAULT ZONE. Very soft, highly sheared, faulted 414-422 56411 2.44m & altered volcanic rock. Some bleaching (clay alter-126.2-128.7m ation). Towards end of section, 420-422, carbonate veining @ 45 - 50° to core axis. Probably reflects angle of fault.

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. \_\_\_\_\_ R82-4 SHEET No. 11 of \_\_\_ RELAY PROPERTY..... WIDTH CORE SAMPLE No. DESCRIPTION DEPTH of SAMPLE Au(PPB) LOST Dense, massive, unaltered andesite tuff. Very few 56412 81 422-430 fractures @ 30° & 50° to core axis. Very minor 128.7-131.1m 2 44m sulphides disseminated throughout. 430-438 Grey/green fine grained andesite, very weakly altered 56413 8' massive & dense. Some disseminated sulphides. 2.44m 131.1-138.5m Massive grey/green andesite, as above. Fractures @ 81 438-446 56414 133.5-136.0m 2.44m 30° & 50° to core axis. Massive, hard andesite, as above. Becoming more 56415 446-454 densely fractured, trends 10°, 30° & 70° to core axis 2.44m 136\_0\_138\_4m Massive, dense andesite, very highly fractured, trends 56416 81 454-462 138.4-140.9m 2.44m 10, 30, 50 & 70° to core axis. Some zones show weak - moderate alteration. Massive, hard, unaltered andesite as above. Very 10' 5 462-472 56417 3.05m 140.9-141.9m highly fractured, trending 0°, 30°, 50° & 70° to core axis. 4721 END OF HOLE (Hole terminated due to stuck rods. 143.9m Blasted, leaving core barrel & bit in hole).

### APPENDIX D

Personnel

### PERSONNEL

J.	M. Dawson, P. Eng.	Geologist	July 24, 25, 26, 27, 29, 30, 1982
			Aug. 4, 7, 8, 10, 11, 12, 13, 1982
			September 10, 27, 1982
			November 22, 29, 1982
			December 17, 19, 20, 1982
			20 days
J.	R. Kerr, P. Eng.	Geologist	August 17 - 31, 1982
			September 1 - 6, 10, 13 - 21, 1982
			October 14, 1982
			December 17, 1982
			31 days
G.	Belik, M. Sc.	Geologist	December 17, 18, 19, 1982
		-355/	3 days
W.	Gruenwald, B. Sc.	Geologist	August 13 - 18, 23, 1982
		400,4040; <b>=</b> 70730-7.	October 18, 1982
		€	December 3, 16, 17, 20, 1982
			12 days
м.	Dawson	Prospector	July 30, 1982
			August 6, 13, 18, 22, 1982
			5 days
R.	Henderson	Prospector	August 13 - 18, 1982
			6 days
В	Dawson	Field Asst.	July 25, 26, 27, 28, 30, 1982
			August 6, 13, 18, 23, 26, 1982
			September 3 - 13, 1982
			21 days
М.	Yanciv	Field Asst.	July 26, 27, 1982
			2 days

### APPENDIX E

Statement of Expenditures

### STATEMENT OF EXPENDITURES

### LABOUR

J.	M. Dawson, P. Eng.		
	20 days @ \$300/day	\$6	000.00
J.	R. Kerr, P. Eng.		
	31 days @ \$300/day	9	300.00
G.	Belik, M. Sc.		
	3 days @ \$300/day		900.00
w.	Gruenwald, B. Sc.		
	12 days @ \$240/day	2	880.00
м.	Dawson		
	5 days @ \$200/day	1	000.00
R.	Henderson		
	6 days @ \$160/day		960.00
В.	Dawson		
	21 days @ \$130/day		260.00

\$ 24 030.00

#### STATEMENT OF EXPENDITURES

balance	forward			\$ 24 030.00
EXPENSES	AND DISBURSEMENTS			
(a)	Assays and analyses	\$3	714.95	
(b)	Tractor and skidder rental	6	198.00	
(c)	Contract diamond drilling	63	853.36	
(d)	Truck Rental	3	180.40	
(e)	Room and board	2	175.60	
(f)	Field equipment and supplies		361.75	
(g)	Freight		377.25	
(h)	Telephone, xerox, secretarial blueprints, binding, and office supplies	•	466.65	
	Company of the Compan			\$ 80 327.96
		то	TAL	\$104_357.96

### APPENDIX F

Writer's Certificate

### JAMES M. DAWSON, P. ENG.

Geological Engineer

#206 - 310 NICOLA STREET . KAMLOOPS, B.C. V2C 2P5 . TELEPHONE (604) 374-0544

#### Certificate

I, JAMES M. DAWSON OF KAMLOOPS, BRITISH COLUMBIA DO HEREBY CERTIFY THAT:

- I am a geologist employed by Kerr, Dawson and Associates Ltd., of Suite 206, # 310 Nicola Street, Kamloops, B. C.
- (2) I am a graduate of the Memorial University of Newfoundland -B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a member of the Association of Professional Engineers of British Columbia. I have practiced my profession for 19 years.
- (3). I am the author of this report which is based on an exploration programme carried out on the Relay Creek property under my direct supervision.

KERR, DAWSON AND ASSOCIATES LTD.

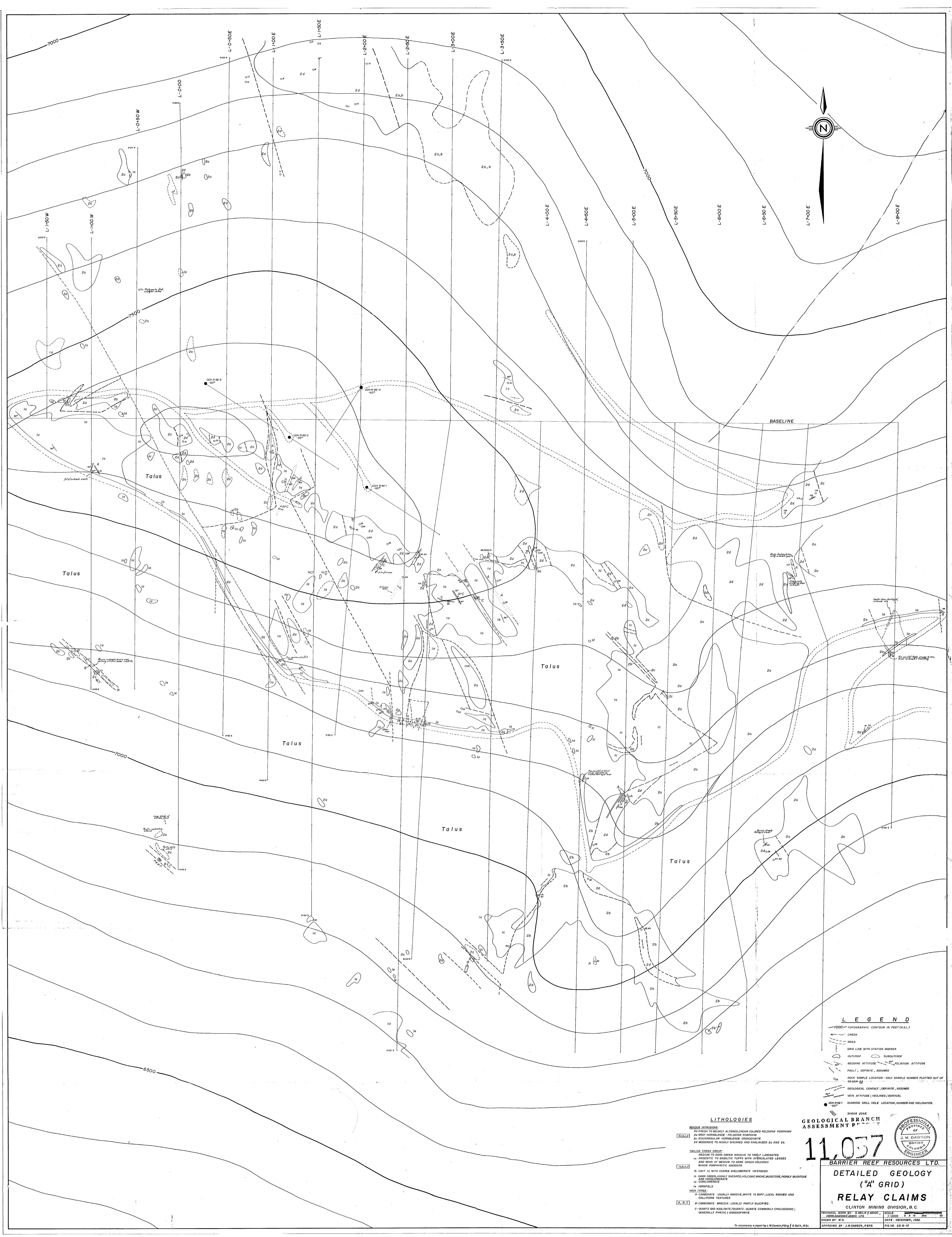
J. M. DAWSON
BRITISH
COLUMBIA

J. M. Dawson, P. Eng.

GEOLOGIST.

Kamloops, B. C.

December 21, 1982



CLINTON MINING DIVISION, B. C.

Scale:

Date: Dec. 1982.

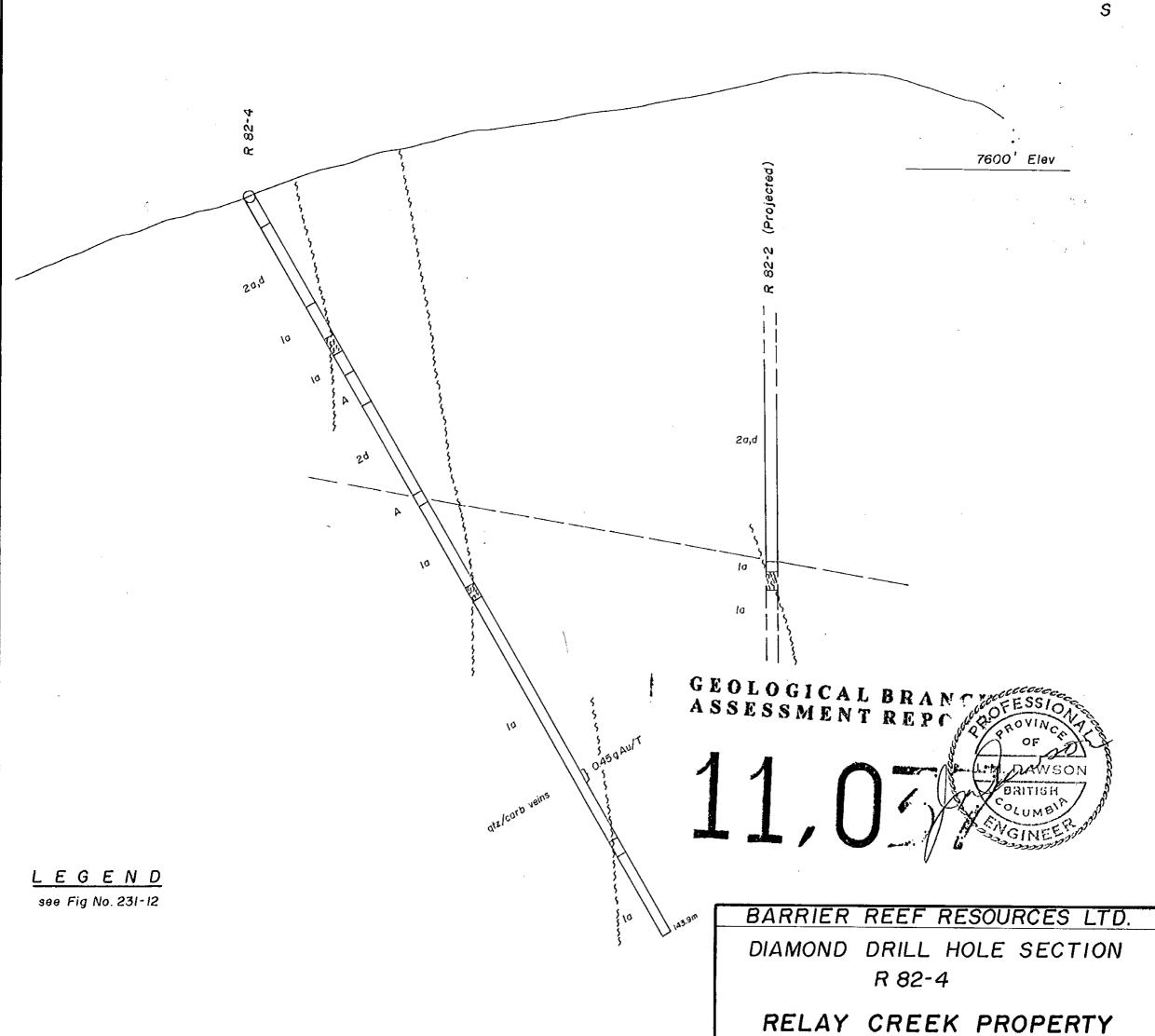
Fig. No. 231-B-13

1:600

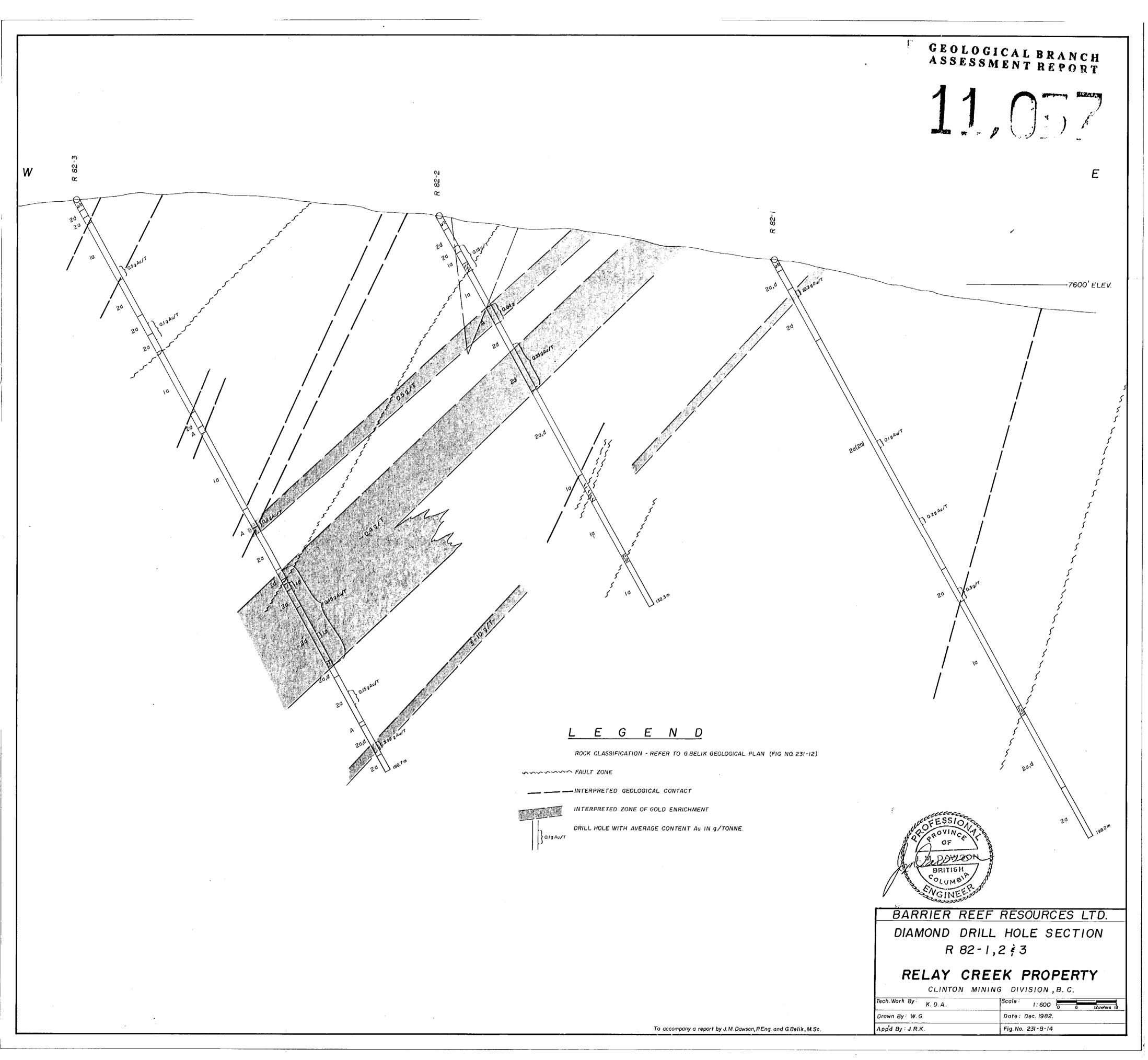
Tech. Work By

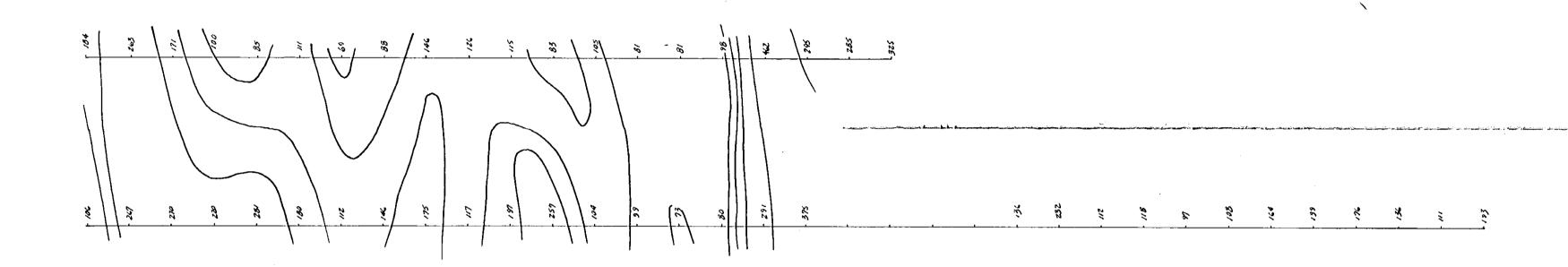
Drawn By: W.G.

Appd By: J.R.K.



To accompany a report by J.M.Dawson, P.Eng & G.Belik, M.Sc.





BARRIER REEF RESOURCES LTD.
INDUCED POLARIZATION
RESISTIVITY SURVEY

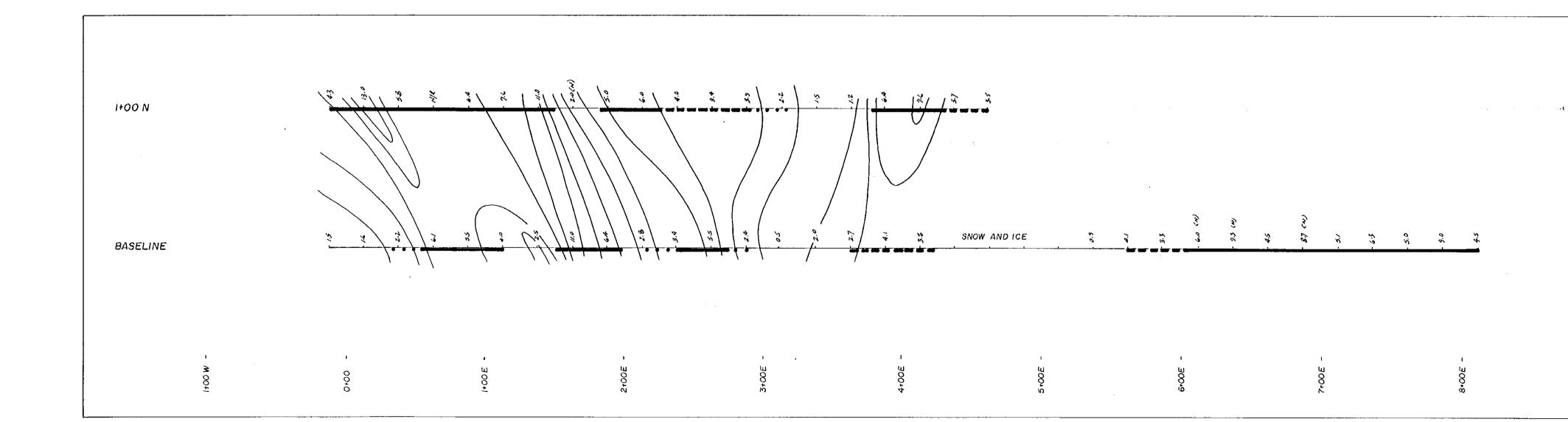
PLAN OF RESISTIVITY RESULTS (OHM-METERS)
n = 1

25 METER DIPOLE - DIPOLE ARRAY

CONTOURS AT LOGARITHMIC INTERVALS
10,15,20,30,50,75,100....

11,03/

GEOLOGICAL BRANCE ASSESSMENT REPORT



# SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE PROBABLE

POSSIBLE ·······

BARRIER REEF RESOURCES LTD.

INDUCED POLARIZATION

RESISTIVITY SURVEY

PLAN OF F.E. RESULTS

n = 1 25 METER DIPOLE - DIPOLE ARRAY

CONTOUR INTERVALS: 2.0,3.0,5.0,7.5,10.0,15.0



FIGURE NO. 231 8-15

