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# CEDARMINE RESOURCES INC.

## GOLD-SILVER PROPERTY, TERRACE, BRITISH COLUMBIA

CEDARMINE RESOURCES INC. (ASE) Gold-Silver-Base metals property at Terrace, British Columbia has the potential of a new gold-silver polymetallic mining camp. The property has comparable supergene enriched mineral deposits to those documented from the Iskut River area north of Stewart, British Columbia. The mineral property is twelve miles from the Yellowhead highway and twenty-five miles (40 kilometres) northeast of Terrace. Terrace is 100 miles (170 kilometres) south of Stewart, British Columbia.

The property is 2184 acres in area and has produced 140 tons of handpicked ore in 1917. The ore graded:

> 10 tons at 33.5 oz./ton, silver; 42.2% copper. 130 tons at 25 oz./ton, silver; 20% copper; and 25%lead

Five tunnels and numerous pits have tested the old mineral showings. Recent exploration 1988-89 by Cedarmine Resources Inc., has discovered numerous supergene enriched brecciated mineral locations with gold-silver-base metal bearing zones striking hundreds of metres on surface. Rock chip samples have returned precious metal assays of 0.23 oz./ton gold, 131.6 oz./ton silver and base metal assays to 43% copper, 13% lead and 5% zinc.

The property has not been tested by present day geochemical, geophysical plus geological methods and remains virtually unexplored.

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CEDARMINE RESOURCES INC.

## GOLD-SILVER PROPERTY, TERRACE, BRITISH COLUMBIA

The Terrace property consists of 6 claims (36 complete units) situated in the Omineca Mining Division of British Columbia (Figure 1). The property area totals 2184 acres located twenty-five miles (40 kilometres) northeast of Terrace and 100 miles (170 kilometres) southeast of Stewart, British Columbia.

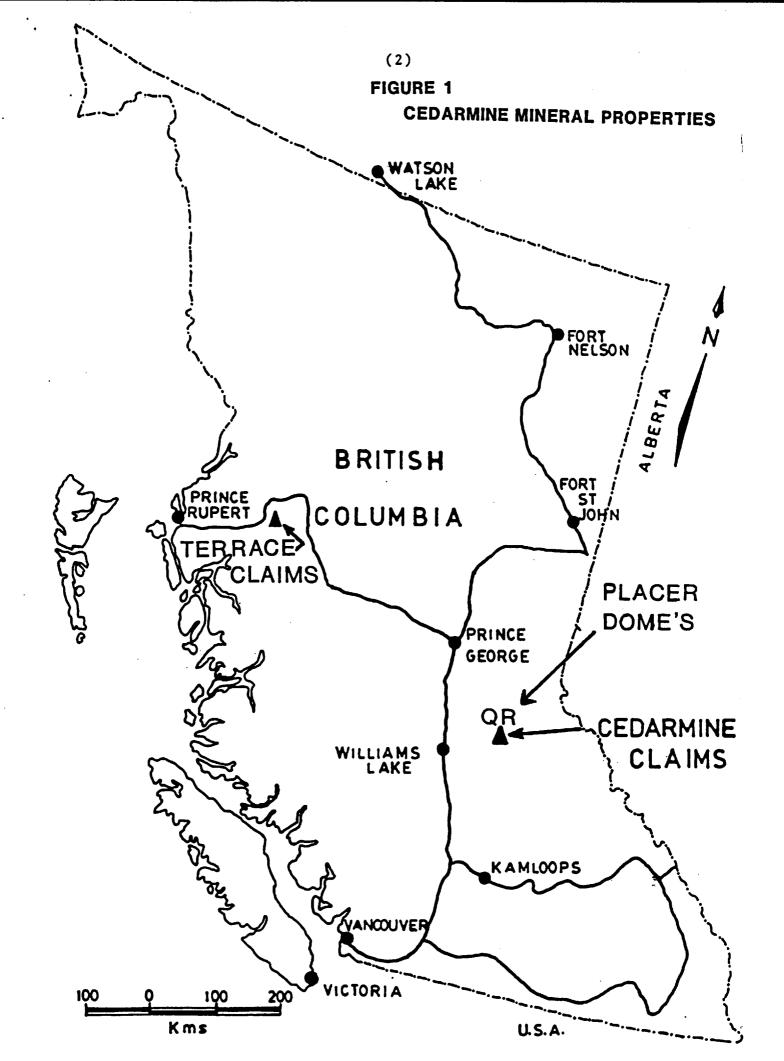
CLAIM	RECORD NUMBER	NUMBER OF UNITS	EXPIRY DATE	OWNERSHIP
TOP	9302	20	FEB. 18, 1991	100%
TREASURE	9301	12	FEB. 18, 1991	100%
ERIC	9805	1	AUG. 24, 1990	100%
GORD	9806	1	AUG. 24, 1990	100%
ED	9807	1	AUG. 24, 1990	100%
CARLSON	9808	1	AUG. 24, 1990	100%

## INTRODUCTION

The property is located on NTS map sheet 103-I/9E in the USK area, Omineca Mining Division of British Columbia (Figure 2 & 3a). The claims are all within twenty-five miles (40 kilometres) of Terrace and 100 miles (170 kilometres) of Stewart, British Columbia.

The claims are staked in the Hazelton Mountains adjacent to Legate Creek. Access to the claims may be gained by all-weather road (Highway 16) northeastward from Terrace along the Skeena River valley, then along a logging road southeastward 9 miles (14 kilometres) up Legate Creek valley to the property perimeter (Figure 2). Several trails, some dating back to the early 1900's, traverse the property from the creek valley to the timberline. Rapid access to the claims is gained by helicopter in 15 minutes from Terrace.

The topography varies in elevation from 600 to 1650 metres above sealevel in rugged terrain (Figure 3a). The vegetation cover is dense below the treeline at 1300 metres elevation with spruce,



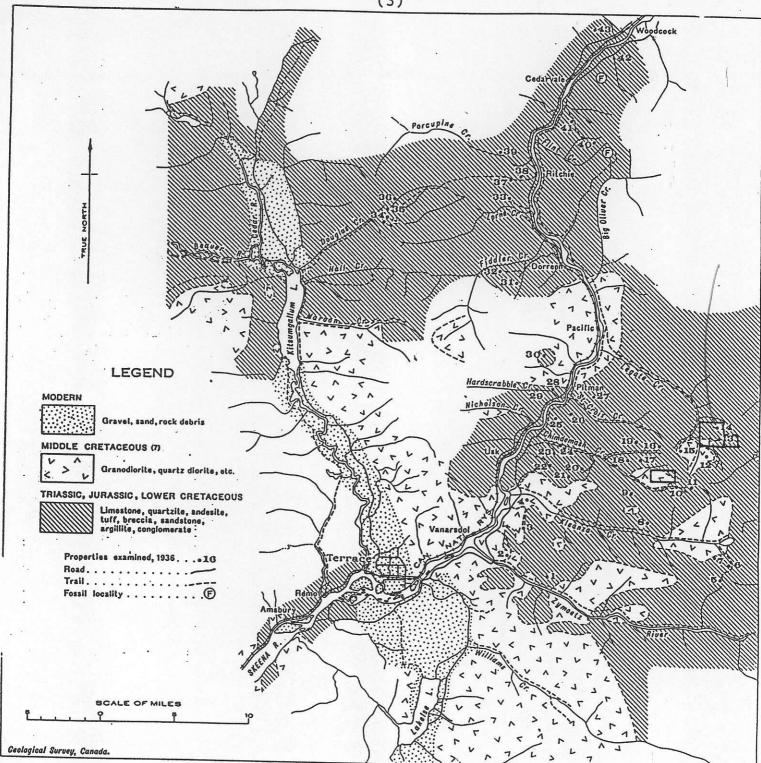
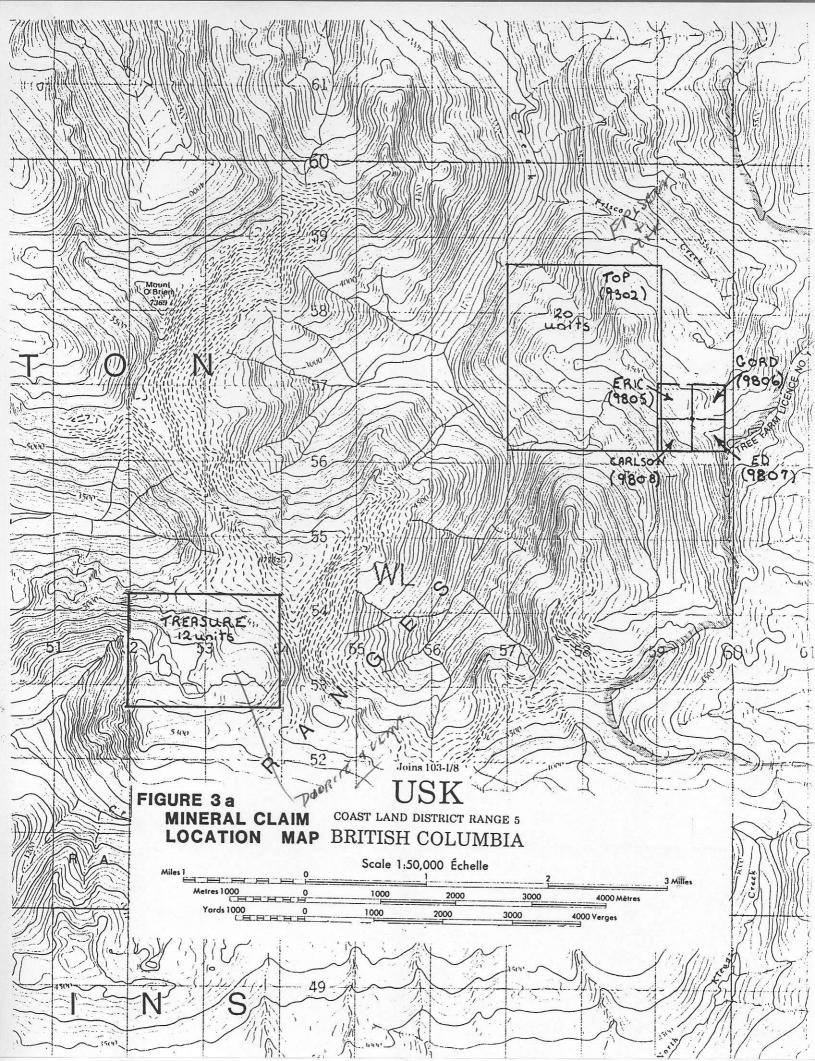


Figure 10. Index map of Terrace area, Coast district, British Columbia, showing position of properties described in memoir. 1, Providence group; 2, Excelsior group; 3, Victor group; 4, Golden 13, M. and K. group; 14, Frisco group; 15, Zona May group; 16, United St. Croix group; 17, Galena group; 18, Silver Basin group; 11, Silver Crown group; 12, M. and M. claims: hurst claims; 22, Bornite King group; 23, Toulou group; 24, Madden group; 25, St. Elmo group; 26, Bradle Bane group; 27, Algema group; 28, Dirtite group; 20, Continental group; 21, Single-group; 32, Prainore group; 33, Dry Kill placer group; 35, Bermaline group; 36, September group; 37, Canadian Swede group; 38, Buccaneer of the North claim; 30, Windfall group; 40, Seven Sisters group; 41, Ilughie group; 42, Whiskey Creek claims; 43, Gee Kid claim.

FIGURE 2 REGIONAL GEOLOGY



fir and pine trees commonly logged from this area.

Documented and discovered mineral occurrences are located above and below the timberline.

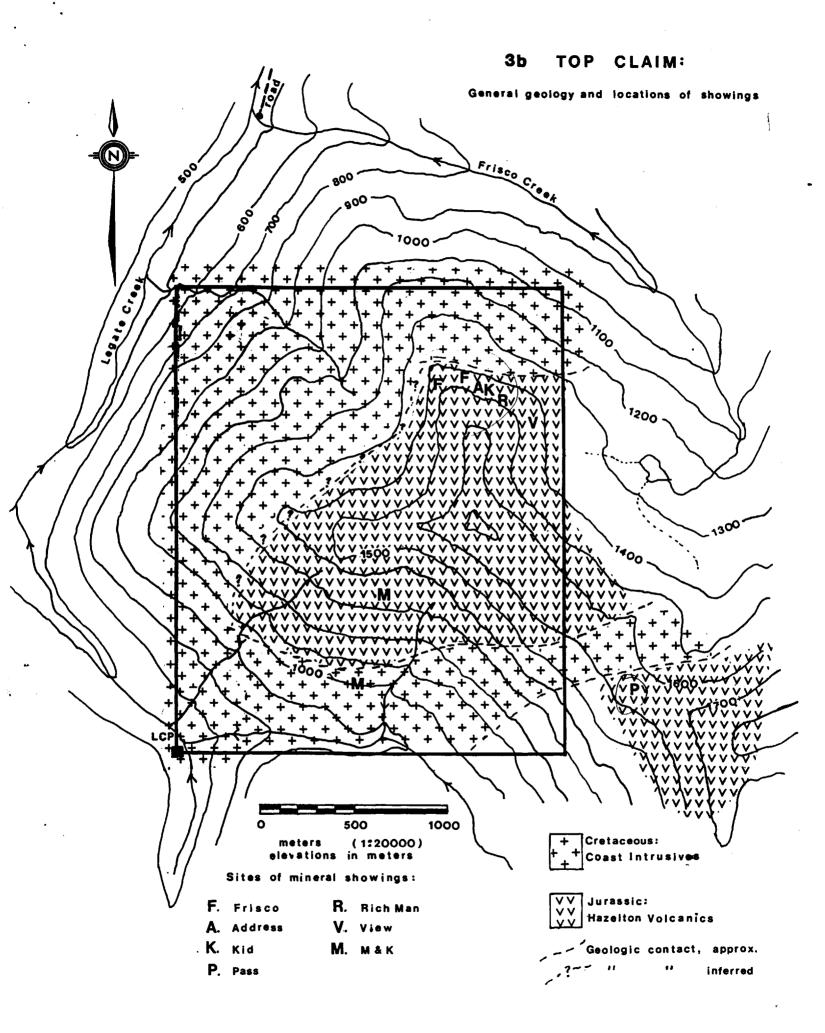
Published government reports describe some hygrade mining from two of the claim's locations; the Frisco and M & K showings with some ore (140 tons) shipped in 1917. The ore graded at 25 oz./ton silver, 20% copper and 25% lead, gold was not reported. None of the published reports available mention any work on the showings since 1930.

#### REGIONAL GEOLOGY

The property lies in the contact zone between andesitic volcanics and marine clastics of the Jurassic Hazelton Group and Cretaceous granitic rocks of the Coastal Intrusives. The former group outcrops over a wide area encompassing the claims and the latter extends west to the coast (Figure 2). The contact is quite irregular, with a number of spatially substantial stocks and apophyses of intrusive rock extending into the local volcanic terrane. Precious and base metal occurrences from north of Stewart to south of Terrace are closely related to the contacts of various intrusive bodies and the hosting volcanics or metasediments.

#### PROPERTY GEOLOGY

The property contains a wedge of Hazelton andesitic volcanics underlain by an apophysis of Coastal Intrusive quartz diorite and related sills (Figure 3b). Ground and helicopter mapping in 1988 delineated a 5 to 15 metre wide diorite sill extending many hundreds of metres along the bedding planes of the host volcanics (Figure 4). The sill is extensive with a wide alteration zone and appears to originate from the underlying and adjacent diorite stock. Copper, lead, zinc, silver and gold mineralization occur at numerous sites (showings) which are within the contact zone of volcanic rocks and intrusive stocks, sills and dykes.



#### PROPERTY HISTORY

The property received limited prospecting, exploration and production during the early 1900's (1915 to 1929). The mountainous area between Frisco Creek and Legate Creek received most of the exploration and development activity. Two mineralized localities, the Frisco and M & K showings, are highlighted in the provincial and federal geological reports (Figure 2 & 3b).

The Frisco showing is about one kilometre north of the M & K showing at an elevation of approximately 1450 metres. Two adits were drifted on the Frisco showing into an enriched, mineralized alteration zone within the hanging wall of a large diorite sill. Ten tons of handpicked ore was shipped in 1917 from these adits with the resultant grade of gold, trace; silver, 33.5 oz/ton and copper 42.2%. The two adits apparently are in the enriched zone for all of their 14 metre (45 foot) respective lengths based on the available historical literature.

The M & K showing is on the southfacing slope of the ridge while the Frisco showing is on the northfacing slope. The M & K showing produced 130 tons of shipped hygrade ore collected directly from the talus slope. The ore ocurred as blocks of broken vein mineralization composed of massive sulphides including chalcopyrite, bornite, sphalerite and galena. The grade of the shipped ore was 25 oz./ten silver, 20% copper and 25% lead with gold and zinc not reported. Numerous open cuts in talus plus three adits were drifted along shear zones in the volcanics to detect the bedrock source of mineralization with limited success. The M & K area also had a lower showing with trenches along a '' well-mineralized fissure in diorite '' for a total length of 30 metres (100 feet). A heavily mineralized grab sample of vein material collected in 1925 assayed gold, 0.20 oz./ton; silver, 28 oz./ton; copper, 0.7%; lead, 22.5% and zinc 11%.

The historical data on the property is described in:

British Columbia Minister of Mines Reports; 1917, p. 100101; 1925, p. 128-129; 1928, p. 148-149 and 1929, p. 153.

Geological Survey of Canada Summary Report 1925A, p. 111.

Geological Survey of Canada Memoir 212 by E.D. Kindle, 1937.

Geological Survey of Canada Memoir 329 by S. Duffell and
J. G. Souther, 1964.

#### CURRENT EXPLORATION RESULTS

Seven mineral sites (showings) were mapped, prospected, sampled and assayed during the 1988 field program on the TOP claim (Figure 3b). Five of the showings occur on the northfacing slope along Frisco Creek. From west to east the showings are the; Frisco, Address, Kid, Richman and View. On the southfacing mountain slope bordering the eastern branch of Legate Creek is the M & K showing and streddling the mountain ridge at the eastern flank of the TOP claim is the Pass showing.

#### FRISCO SHOWING

The Frisco showing consists of a sulphide rich quartz breccia zone located on the hanging wall of a large quartz porphry sill. The sill is near conformable with the volcanics and both strike west of north and dip northeast. The site is accessed by an old pack trail that leads by switchbacks to two adits developed in 1917. Ten tons of handpicked ore was shipped in 1917 and contained 33.5 oz./ton silver and 42.2% copper per ton. The showing was sampled in 1988 with the results illustrated in Figure 4.

## ADDRESS SHOWING

Located 100 metres east of the Frisco showing and 50 metres higher in elevation are several subparallel mineralized breccia veins. The veins consist of bands and lenses of andesite breccia mineralized with bornite, chalcopyrite, malachite and azurite. The veins parallel the volcanics bedding at strike  $060^{\circ}$  East and dip  $25^{\circ}$  Southwest. The footwall of the mineralized veins is a rusty-weathering fine grained quartz-feldspar porphry or aplite stock, a probable extension of the '' Frisco Showing '' sill. The strike length of the mineralized veins is 75 metres. Chip samples were collected at 5 metre intervals along the mineralized veins with the results plotted in Figure 5.

### KID SHOWING

Approximately 200 metres east of the Address showing and paralleling Frisco Creek on the northfacing slope is the Kid showing.

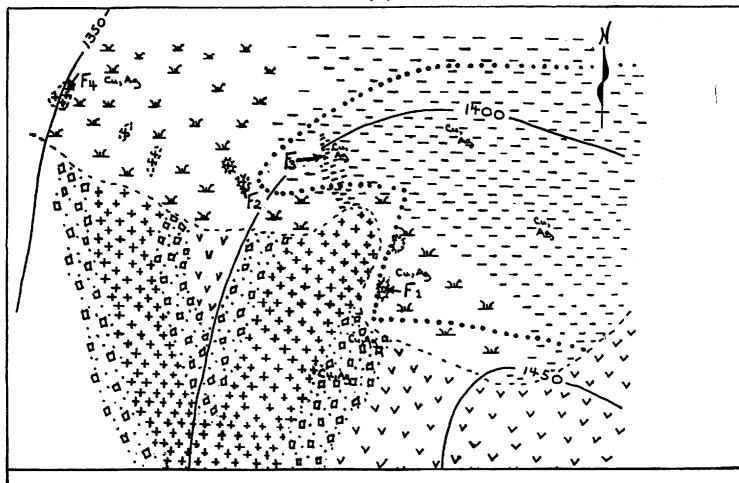
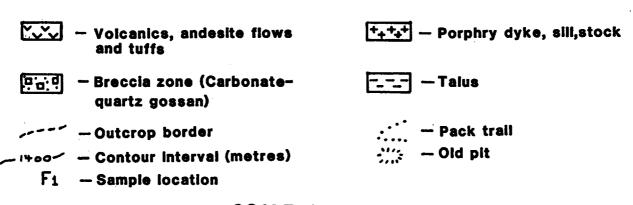


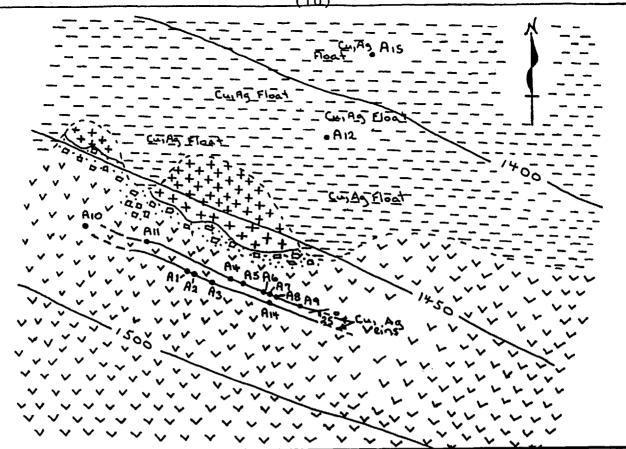
FIGURE 4 PLAN VIEW FRISCO SHOWING



# SCALE: 1:1000 50m 25 0 10 20 30 40 50m

## ASSAYS:

SAMPLE TY	PE WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)	CU(%)	PB(%)
F2 Trend F3 Outc:	s Grab ched Dyke rop Grab c Chip 0.5	0.004 0.002 0.006 0.002	4.17 0.30 9.69 1.48	7.2 0.3 6.1 1.05	0.5 0.01 1.9 0.01



## FIGURE 5 PLAN VIEW ADDRESS SHOWING

## **LEGEND**

## **SCALE 1:1000**

25

50m

0 10 20 30 40 50m

l									
١	ASSAYS:			4 W ( OR / MON )	10(07/TON)	CU(%)	PB(%)	ZN(%)_	
l	SAMPLE	TYPE	WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)				
ı	A1	Chip(vein)	1.0	0.002	11.45	7.1	0.03	0.05	
۱	A 2	Chip(vein)	0.5	0.022	23.62	9.1	0.02	0.10	
l	A3	Chip(vein)	1.0	0.002	2.87	2.4	0.01	0.03	
l			1.0	0.013	19.96	9.5	0.01	0.04	
۱	A 4	Chip(vein)		0.007	4.92	4.1	0.01	0.05	
l	A 5	Chip(vein)	1.1				0.01	0.02	
١	A6	Chip(vein)	0.5	0.006	6.26	9.4			
ı	A7	Grab(trench)	1.0	0.019	37.83	19.8	0.04	0.03	
Ì	A8	Chip(vein)	0.5	0.002	9.68	5.6	0.01	0.02	
	A9	Chip(vein)	0.5	0.013	3.21	2.0	0.21	0.02	
Ì		<b>-</b> ·	0.5			-			
	A10	Grab(talus)		0.006		43.2	0.56	5.21	
Ì	A11	Chip(vein)	1.0	0.013	19.90	10.02	0.04	0.07	
	A12	Grab(talus)		0.002	8.28	9.4	3.97	1.34	

Mineralized talus increased in abundance with increasing elevation to the base of outcropping volcanics. Talus samples were collected for analysis with the following results (Figure 6):

SAMPLE	TYPE	WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)	<u>CU(%)</u>	PB(%)	ZN(%)
K 1	Grab(suboutcro	p)	0.002	0.11	2.40	0.18	0.20
K 2	Grab(suboutcro	p)	0.068	0.26	5.12	1.26	0.81
KЗ	Grab(talus)		0.002	0.50	0.70	0.41	0.49
K4	Grab(talus)	<del>-</del> -	0.002	0.66	1.07	0.37	0.64

## RICHMAN SHOWING

Located approximately 90 metres east of the Kid showing at 1395 metres elevation is a tetrahedrite mineralized quartz vein with a banded appearance. The vein has a width varying from 2 to 20 centimetres and crosscuts volcanics with a strike of 100° East and dipping 60° South. Numerous additional veins and veinlets occur at varying attitudes to the main vein with lessor amounts of chalcopyrite and tetrahedrite mineralization. The mineralized quartz veins occur spatially over 15 metres above a massive quartz porphry dike or sill complex thats partially concealed by talus. Several chip and grab samples were collected on the main vein and subsidiary veins yielding the results illustrated in Figure 7.

## VIEW SHOWING

The View showing is approximately 200 metres east of the Richman showing on the easternmost side of the TOP claim. A spatially small showing (8 x 5 metres) at elevation 1505 metres, it occurs in steep outcrop. Sulphide minerals include pyrite and mainly chalcopyrite in quartz veins and chloritized shear zones that crosscut dark green andesitic volcanics with common malachite and azurite stained fractures (Figure 8).

## M & K SHOWING

Located on the southfacing slope of the TOP claim mountain ridge approximately 1 kilometre south of the Frisco showing is the

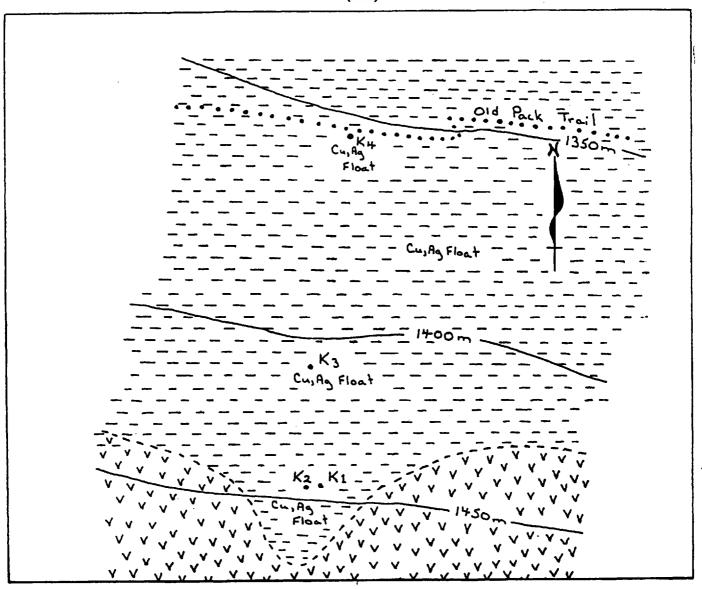
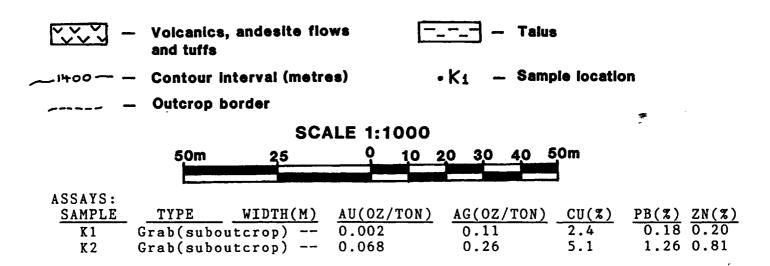


FIGURE 6 PLAN VIEW KID SHOWING
LEGEND



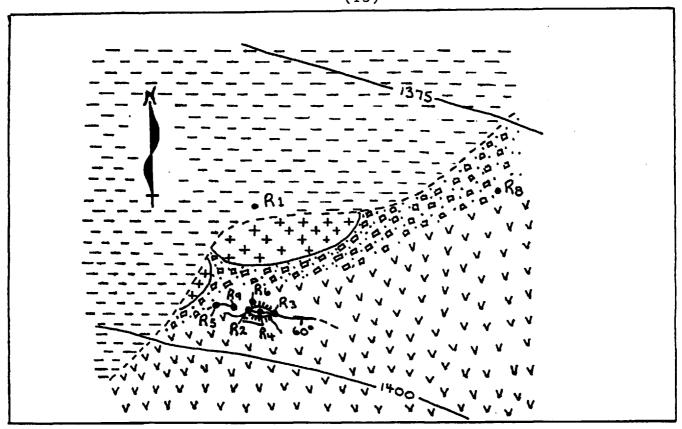
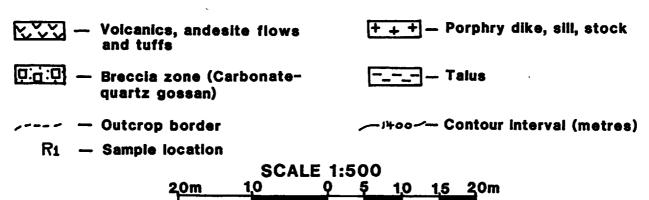


FIGURE 7 **PLAN VIEW RICHMAN SHOWING** 



ASSAYS: SAMPLE R1

TYPE	WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)	CU(%)	PB(%)	ZN(%)
Grab(talus)		0.052	39.53	3.13	$\overline{0.12}$	0.50
Chip(vein)	1.0	0.005	4.03	0.21	0.01	0.06
Chip(vein)	1.0	0.002	0.63	0.32	0.03	0.03
Chip(vein)	0.2	0.060	104.79	6.10	0.14	1.10
Chip(vein)	0.1	0.036	51.09	4.50	0.08	0.80
O 1 ( 1 )		0.016	/1 50	0 00	0 01	0 01

R 2	Chip(vein) 1.0	0.005	4.03	0.21	0.01	0.06
R3	Chip(vein) 1.0	0.002	0.63	0.32	0.03	0.03
R4	Chip(vein) 0.2	0.060	104.79	6.10	0.14	1.10
R 5	Chip(vein) 0.1	0.036	51.09	4.50	0.08	0.80
R6	Grab(talus)	0.016	41.59	0.08	0.01	0.01
R8	Chip(footwall)	0.002	0.18	0.08	0.01	0.01
R9	Chip(vein) 0.2	0.231	131.58	4.97	0.03	0.67

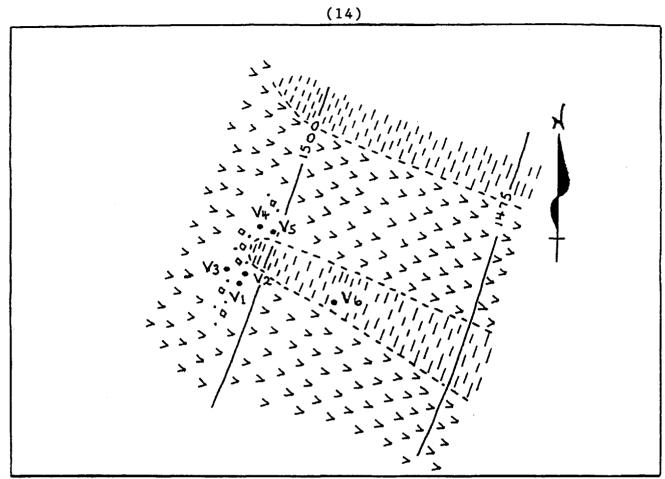


FIGURE 8 PLAN VIEW VIEW SHOWING

~,~, <b>~</b> ,	Voicanics, andesite flows and tuffs	<b>Ģ∶ġ∶ġ</b> :	Breccia zone (Carbonate- quartz gossan)
1500-	Contour interval (metres)	===	Talus

# **SCALE 1:500**

ASSAYS:						
SAMPLE	TYPE	WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)	CU(%)	PB(%)
V1	Chip(vein)	1.0	0.002	0.53	5.02	0.36
V 2	Grab(vein)	0.2	0.002	0.94	5.30	0.38
V 3	Chip(vein)	1.5	0.002	0.25	2.91	1.12
V4	Chip(vein)	0.3	0.002	0.04	0.46	0.09
<b>V</b> 5	Chip(vein)	0.2	0.002	0.47	3.02	0.44
V 6	Grab(talus)		0.002	0.53	5.90	0.29

M & K showing. The showing faces the eastern branch of Legate Creek and occurs between 1403 and 1480 metres elevation on a steep slope. The M & K showing was the site of considerable interest from 1915 to 1928 with numerous trenches and adits excavated to discover the source to hygrade ore mined from talus. One hundred and thirty tons of hand picked talus ore was shipped from the showing in 1917 grading: 25 oz/ton silver; 20% copper and 25% lead. The mineralization appears associated with a vein system that subparallels the slope of the mountainside. Prospecting reveals that the volcanic bedding planes are isoclinally folded on the southern part of the mountainslope, vein system and volcanic beds are all subparallel. Limited exploration in 1988 examined this area at 1440 metres elevetion (Figure 9).

A '' lower showing '' hosted by diorite at 1067 metres elevation was documented in government reports to 1937. Although not examined in 1988, this showing was reported as '' a well-mineralized fissure in diorite '' for a length of 30 metres and a variable width from 0.5 to 1 metres. The fissure contained quartz, chalcopyrite, galena and some tetrahedrite with one heavily mineralized sample collected in 1925 grading: 0.20 oz/ton, gold; 28 oz/ton, silver; 0.7%, copper; 22.5%, lead and 11.0%, zinc.

## PASS SHOWING

The PASS showing contains a quartz-carbonate bearing hybrid breccia zone at the contact between a diorite sill and host volcanics. The mineralized area appears as a rubble bearing rusty gossan that that commonly contains malachite and azurite stains on fracture surfaces. Several old pits were found along the strike of the showing that exposed fresh unweathered mineralized rock. The old pits occur as small clusters spaced on the flanks of the ridge approximately 120 metres apart. Rock chip, grab and float grab samples were collected along the ridge and within the pits tox indicate the quality of mineralization. Fresh mineralized surfaces contained disseminated to massive chalcopyrite, pyrite, hematite plus disseminated galena. Results are illustrated in Figure 10.

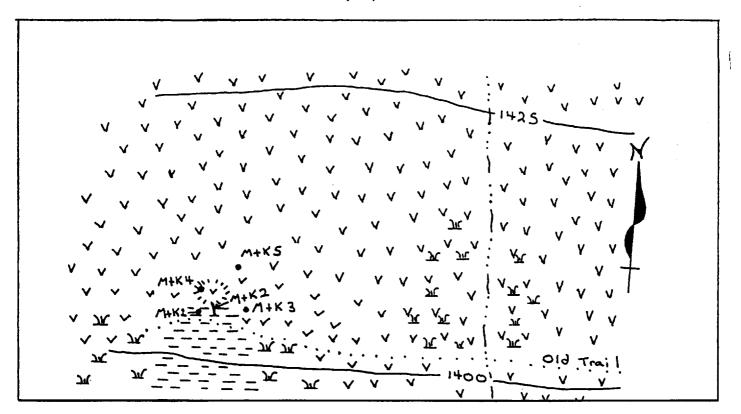
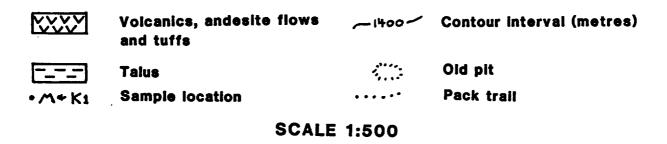


FIGURE 9 PLAN VIEW M&K SHOWING



## ASSAYS:

SAMPLE	TYPE	WIDTH(M)	AU(OZ/TON)	AG(OZ/TON)	<u>CU(%)</u>	<u>PB(%)</u>	<u>ZN(%)</u>
M&K1 M&K2 M&K3 M&K4 M&K5	Grab(float) Grab(subouter Grab(float) Chip(vein) Grab(float)	op)2.0  0.5	0.020 0.003 0.012 0.018 0.002	18.82 4.88 5.48 1.01 0.82	• •	13.00 • 0.67 2.10 1.72 0.20	1.08 0.40 0.21

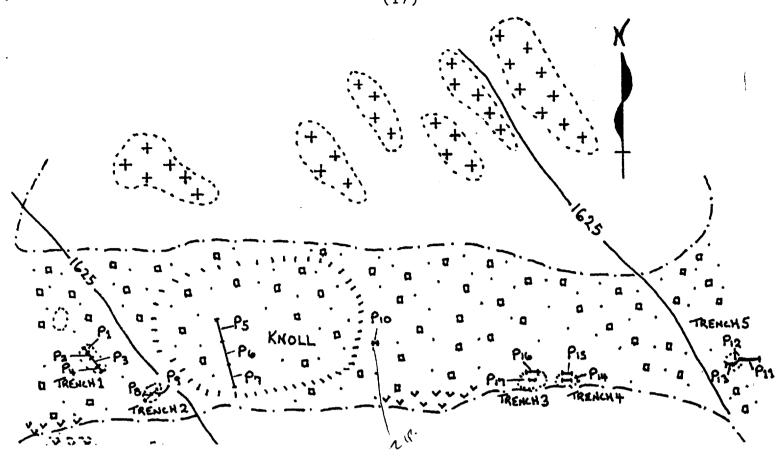
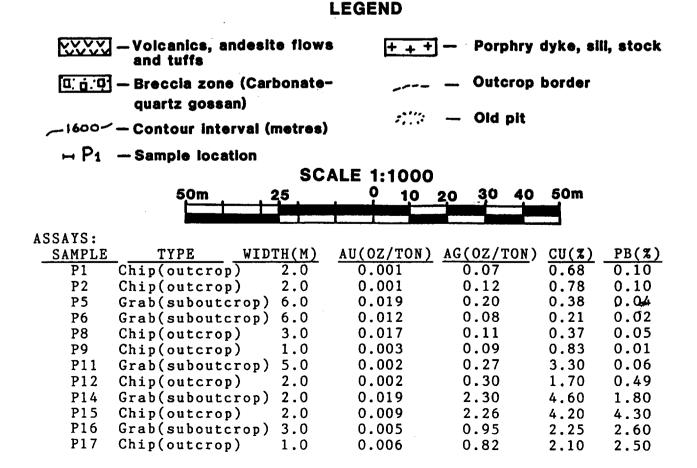


FIGURE 10 PLAN VIEW PASS SHOWING



## OVERVIEW

Historical plus current exploration and development activity describe a highly mineralized gold-silver-base metals property. The claims have been trenched and drifted but lack conventional geochemical, geophysical and diamond drill testing. Ore grade and disseminated metal horizons are documented at numerous locations on the property, some to 25 metres in thickness, with areally local and widespread geological controls. The claims are easily accessed from Terrace, British Columbia with exceptionally favourable mining logistics.