

ON THE

RAINBOW 5 AND 6 MINERAL CLAIMS,

TULAMEEN AREA

SIMILKAMEEN MINING DIVISION

LAT. 49° 34'. LONG.120° 48' 30"

BY

T.E. LISLE, P.ENG.

JANUARY 30, 2000

GEOLOGICAL SURVEY BRANCH ASSESSMENT PRECRE



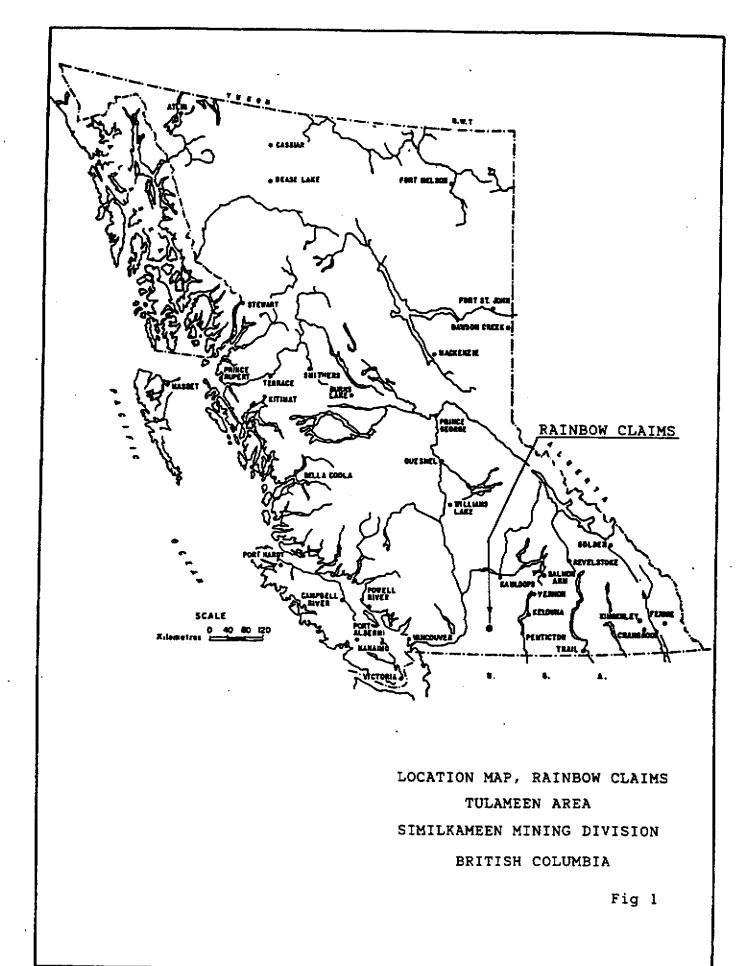


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INTRODUCTION

The writer, with colleague E. Ostensoe, P.Geo., in 1992 commenced a geological program to evaluate the mineral potential of Nicola Group rocks in the Tulameen area of south-central British Columbia. Several "Rainbow" claims were staked and work has continued since that date, supported in part by funds granted by the Prospectors Assistance Program of the Ministry of Energy and Mines.

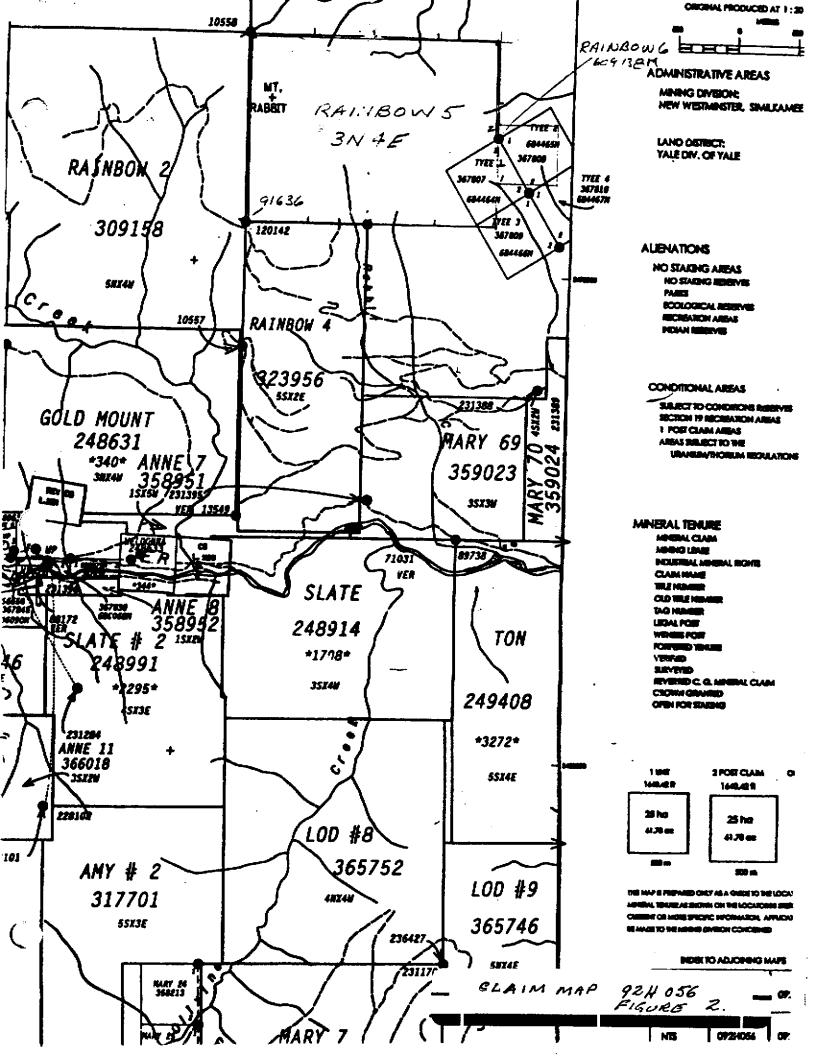
Many mining properties of merit have reverted in recent years to the Crown. In August, 1999 the writer staked the Rainbow 5 and 6 mineral claims to acquire a portion of the Redbird prospect, one of the oldest mineral locations in the district. Reconnaissance geological work was then undertaken in the period September 7 through 13, 1999.

Geological work in the area of the Rainbow claims by the present owners has been systematic: a grid of flagged east-west lines with 100 metre spacings has been used as a basis for outcrop mapping and, in some areas, for geochemical sampling and geophysical surveys. Initial work in 1999 in the former Redbird area established the layout of roads, trenches and other workings and recorded some details of rock types and mineralized occurrences. Data has been compiled in this report that includes maps that show approximate locations of surface features and outcroppings and early stage presentation of geology. This report, along with a statement of expenditures, will be submitted to the Ministry of Energy and Mines in support of an application for assessment work credits.

PROPERTY

The Rainbow project comprises the Rainbow 2, 3, 4, 5, and 6 mineral claims located in Similkameen Mining District and, as detailed below and illustrated in Figure 2, includes 59 claim units. The claims appear on mineral titles map #92H/056.

<u>Claim</u>	Units	Туре	Record No.	Record Date	Expiry Date
			_		
Rainbow 2	20	4 post	309158	May 6, 1992	May 6, 2001
Rainbow 3	16	4 post	309159	May 7, 1992	May 7, 2001
Rainbow 4	10	4 post	323956	Mar. 1, 1994	March. 1, 2001.
Rainbow 5	12	4 post	371269	Aug. 18, 1999	Aug. 18, 2000
Rainbow 6	1	2 post	371270	Aug. 20, 1999	Aug. 20, 2000



LOCATION, ACCESS AND PHYSIOGRAPHY

The Rainbow 5 and 6 mineral claims are located in Similkameen Mining Division of south-central British Columbia, 6 kilometres northwest of the village of Tulameen, in the vicinity of Mount Rabbitt (Figures 1 and 2). The number 1 post of Rainbow 6 claim is situated on the common claim line of Rainbow 5 and Rainbow 6 claims, at about latitude 49 degrees 34'05" north, and longitude 120 degrees 48' 30".

The Rainbow claims are located in an area of former mineral exploration and logging activity. Access is from Tulameen, B.C., by way of the Lawless Creek forestry road to 5 kilometres, the Rabbitt Mountain road, 5 kilometres, and a 3 kilometre branch road westerly to the Redbird workings.

The claims are on the eastern flank of Rabbitt Mountain at elevations from 1220 to 1500 metres. Parts of the area have been logged but thick stands of spruce, fir, balsam and cedar remain and a few large yellow pine trees are present.

HISTORY

The mining history of the Tulameen area is documented in government publications and in more than 120 technical reports that have been filed for assessment work purposes. Early prospectors were attracted to the Tulameen area by discoveries of platinum in gravels of streams that drain the Tulameen ultramafic complex, and of coarse gold in those and several other streams. Substantial reserves of low-grade magnetite have been found on Lodestone Mountain a few kilometres south of the town.

Mineral occurrences in rocks close to the Tulameen ultramafic complex contain copper, zinc, lead, silver and gold. Of particular interest are those with stratiform or VMS characteristics that are present in Nicola Group felsic volcanic rocks. These include the Redbird and Cousin Jack prospects located respectively on, and northeast of, Rabbitt Mountain.

GSC Memoir 26, Geology and Mineral Deposits of the Tulameen District, B. C. by Charles Camsell, in 1913 presented the first comprehensive geological map of the Tulameen area and highlighted the presence of several small granitic stocks intrusive into the Nicola Group rocks in the vicinity of the present Rainbow project Ì

claims. Additional important background information is contained in assessment reports by Lisle and Ostensoe and the following reports: #944, #3398, #8411, #9902, #10,266, #10,657, #13,396, #14,098, #14,158, #15,315, #15,993, #24,215 and #24,961.

1999 WORK PROGRAM

The following geological mapping work was completed on the Rainbow 5 and 6 mineral claims during 1999:

Grid lines	-10.5 line kms.
Reconnaissance geological mapping	- 5.5 line kms.
Mapping on roads	 - 3.1 line kms.

REGIONAL GEOLOGY

The Nicola Group in southern British Columbia is part of a linear, northwesterly trending Corilleran belt of volcanic and sedimentary rocks that developed in an Upper Triassic island arc setting. The Group is, in the Princeton-Merritt area, a westward-younging assemblage that comprises:

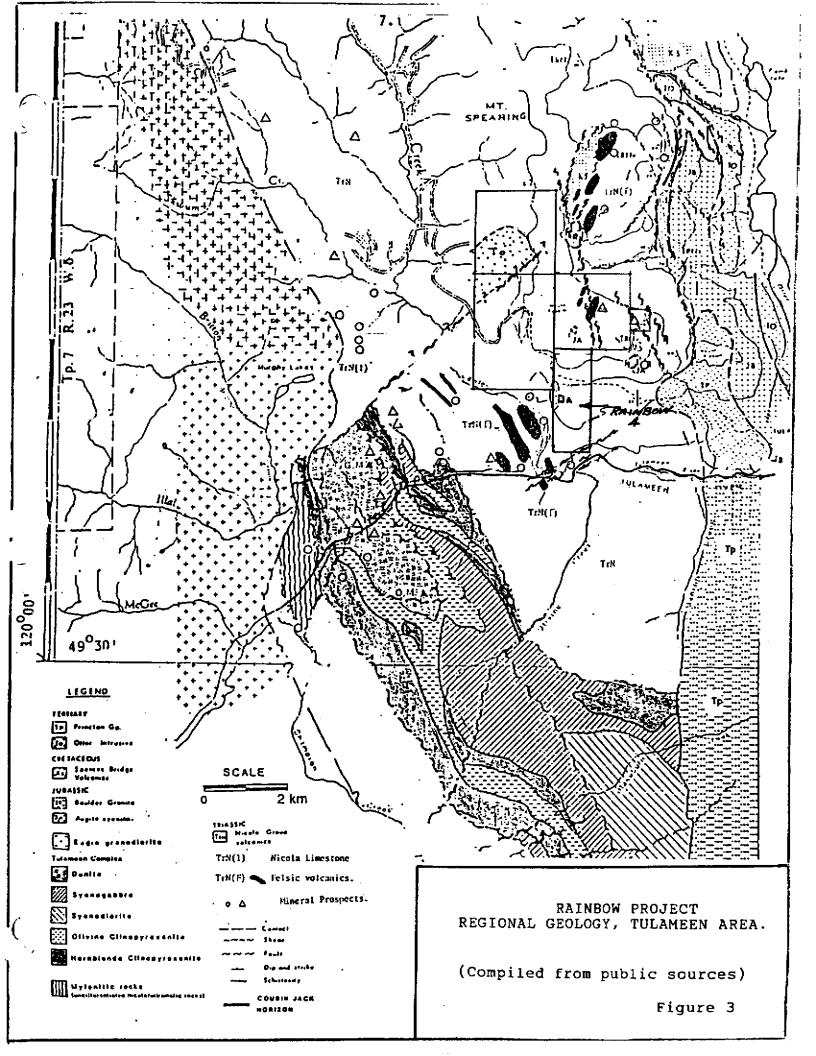
(a) an eastern belt of alkalic and calc-alkalic submarine volcanic rocks, lahar deposits, basaltic flows, and high-level syenite stocks.

(b) a central belt of alkalic and calc-alkalic subaerial and submarine assemblages of andesite, basalt and co-magmatic intrusions of diorite and syenite, and breccia, conglomerate and lahar deposits.

(c) a western belt of calc-alkalic flow and pyroclastic rocks that range in compositionfromandesite to rhyolite, with minor interbedded limestone, volcanic conglomerate, sandstone and argillite. This assemblage appears to underlie much of the Tulameen area.

West of Tulameen, the Nicola Group is bounded by the syntectonic Eagle Granodiorite of apparent upper Jurassic age. Both the Eagle granodiorite and amphibolitized Nicola Group rocks dip westerly along a regionally developed northwest foliation. Several small intrusions in the Tulameen area include the Boulder granite of Late Triassic to Early Jurassic age, the Late Triassic Tulameen Ultramafic Complex, and the Tertiary Otter granite. ż

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All older rock units are disrupted by faults that trend northwesterly with the regional trend or by Tertiary (Eocene?) northeasterly faults with right lateral and vertical displacement. A northeast fault that also terminates the Tulameen ultramafic complex, trends northeasterly through the Rainbow claims to the Otter granite stock.

Figure 3 illustrates some of the features of the regional geology in the vicinity of Tulameen.

Nicola Group volcanic rocks and related intrusions in south-central British Columbia are host to several world-class mineral deposits including copper-gold porphyries at Princeton and Kamloops; copper-molybdenum porphyries at Highland Valley; and the large copper-iron skarn deposit at Merritt. The formation is also host to a large number of prospects, including those at Tulameen, that continue to be evaluated.

GEOLOGY OF THE RAINBOW CLAIMS

Abermin Corporation and related companies, during the 1980s, carried out extensive geological, geochemical and geophysical surveys in the area between Tulameen River in the south and Elliot Creek in the north that includes most of the known polymetallic mineral occurrences in Nicola Group rocks, including the Redbird prospect on the present Rainbow 5 and 6 claims. Geological work suggested that the Nicola Group in this area is divisible into (a) a lower basaltic unit with minor argillite, (b) a middle andesitic unit and (c) remnants of an upper felsic unit dominated by dacite and rhyolite. Known mineral ocurrences appeared to be spatially related to the felsic units.

Work in the 1990s by Lisle and Ostensoe, mainly west of the Abermin survey area, also identified felsic units and in two locations, (a) El Alemein and (b) a large gossan exposure located at 9 km on the Lawless Creek road, confirmed the association of mineralization with those units. The structure in the latter area was found to be complex and consequently neither the distribution nor origin of these units was determined. Attempts to subdivide the Nicola Group rocks into discrete units that could be used to reveal both structure and stratigraphy, due to numerous variations in lithology over narrow widths, met with limited success.

RESULTS OF 1999 WORK

Map 4 of this report illustrates results obtained from reconnaissance geological mapping in the Rainbow 5 and 6 claims. An assemblage of Nicola group tuffaceous rocks with minor flows, and small Tertiary age Otter granite intrusions was mapped on grid lines and road exposures. A strong northwesterly (315 degrees) lithologic and structural grain was identified. Surficial glacial striations are oriented southwesterly.

Rocks shown as unit "7b" on Map 4 are tuff breccias of widespread occurrence. They have a dark fine-grained green groundmass that supports pale felsic clasts of highly variable size and shape. Finer grained variations of this unit tend to be gradational into other tuffaceous members. A coarse dacite breccia in the vicinity of the Redbird mineral zone requires further definition.

Narrow mafic magnetic dykes that were recognized on Rainbow 3 claim west of the Redbird prospect area are thought to be related to the Tertiary assemblage. 1999 mapping in the Redbird area identified numerous outcroppings of similar material (unit 1), possibly implying a widening northerly trending zone that traverses the dominant northwesterly trend. The Redbird exposures locally contain lapilli-sized felsic clasts but the distribution is suggestive of a flow: The size, shape and origin of this unit should be studied with the objective of determining its age and its relationship to the mineralization.

A narrow, two to five metre wide, northwest trending pyritized rhyolite layer is evident on the west side of the coarsely fragmental unit where it outcrops at the switchback on the road. Several outcrops of similar rocks, provisionally mapped as dacite or dacite tuff, are present 400 to 500 metres to the southwest. These are in proximity to a strong northwest silicified zone with width of a few tens of metres that is distinguished by hematite, limonite and manganese staining.

A Tertiary age Otter granite dyke or sill occurs in the eastern part of the map area where it is locally associated with feldspar porphyry. The distribution of this unit has not been defined but it appears to crosscut the mafic unit and Nicola Group rocks. Mineralization on the Redbird prospect has been described in detail (Appendix 3). The overall structure suggests a stratiform control but the moderate amount of quartz in some of the mineral zones may be indicative of hydrothermal origins. A separate strongly expressed silicified zone occurs on the Rainbow 5 claim a few hundred metres west of the Redbird trenches: its significance is unknown but it may be one of a series of narrow mineralized horizons within a common trend.

SUMMARY AND CONCLUSIONS

A program of reconnaissance mapping was completed on the Rainbow 5 and 6 mineral claims located a few kilometres northwest of Tulameen in southern British Columbia during September, 1999. Work was focused in the area surrounding the well-known Redbird copper, silver, gold, lead and zinc prospect and established the general geological setting of that and nearby prospects.

The British Columbia Department of Mines database, including assessment reports, will provide much background technical information and may permit correlation of the geology with geochemical and geophysical data. At the very least, additional technical surveys are required to better elaborate the significance of the various mineral showings in and near the Redbird area.

RECOMMENDATIONS

It is recommended that

(a) the geology of the Redbird and adjacent prospects be mapped at scale 1:2500.

(b) existing geochemical and geophysical data be combined with geological information

(c) in-fill geochemical and geophysical surveys be expanded to better define areas of economic mineral potential.

T. E. Lisle, P. Eng.

APPENDIX 1

Statement of Expenditures.

Wages. T. E. Lisle.	August 16 (1/2),18,19, 20,21. September 7, 8, 9, 10, 11, 12, 13. 11.5 days at \$250	2,875.00
E.A Ostensoe.	As Above.	2,875.00
Truck Rental	11.5 days at \$50.00	575.00
Gasoline	64.10 + 29.00 + 103.68	196.78
Food and Accommodati	on. 11.5 days at \$50.00/day times 2	1,150.00
Report.		250. 00
Map. 2 days at 250.0	0	500. 00
		<u> </u>
<u>Total</u>		<u>\$8,421.78</u>

T. E. Lisle, P. Eng.

January 30, 2,000

APPENDIX 2

Qualifications

The following persons carried out the field investigations described in this report.

1) Thomas E. Lisle, P. Eng. Geologist, (UBC, 1964).

-Extensive exploration in all phases of mineral exploration, principally in western and northern North America.

- Member 08528 of the Association of Professional Engineers and Geoscientists of British Columbia.

- Fellow, Geological Association of Canada.

-Member, Canadian Institute of Mining and Metallurgy.

- Co-owner of Rainbow 2-6 mineral claims. Worked intermittently on Rainbow claims 1993 to 1999.

- Prepared this report for assessment purposes.

2) Erik A Ostensoe, P. Geo. Geologist, (UBC, 1960).

- More than 30 years experience in mineral exploration principally in western and northern North America.

- Member 18727 of the Association of Professional Engineers and Geoscientists of British Columbia.

- Co owner of the Rainbow 2-6 mineral claims and worked intermittently on the claims from 1992 to 1999.

APPENDIX 3

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MINFILE. REDBIRD PROSPECT

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MINFILE / pc MASTER REPORT GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE:	38
REPORT:	RGEN0100

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MINFILE NUMBER:	092HNE020		" NATIONA	L MINERAL INVENTOR	Y: 092H10 Cu3
NAME(S):	RED BIRD, LODE, SP SHAMROCK, JOHN X, RABBITT, LLOYD GEO	FEDERATION COPPER	MINES,		
NTS MAP: LATITUDE: LONGITUDE: ELEVATION: LOCATION ACCURACY:	1400 Metres Within 500M Sample site 6578 (a	nd 4 kilometres ni	Underground tres east-southeast o orthwest of Tulameen	EASTIN of the summit	
COMMODITIES:	Copper	Silver	Gold	Zinc	Lead
INERALS SIGNIFICANT: ASSOCIATED:		Chalcopyrit e	Sphalerite	Galena	
ALTERATION:	Silica Hematite	Sericite	Chalcocite	Malachite	Azurite
ALTERATION TYPE: MINERALIZATION AGE:	Silicific'n	Sericitic	Oxidation		
EPOSIT CHARACTER: CLASSIFICATION:		Disseminated	Stratiform		
DIMENSION:	1200 x 3 Sulphide horizon.	Metres	STRIKE/DIP: 360/	'45W TREN	ID/PLUNGE:
IOST ROCK DOMINANT HOST ROCK:	Metavolcanic				
STRATIGRAPHIC_AGE	GROUP Nicola		fined Formation	IGNEOUS/MET/	MORPHIC/OTHER
	Andesitic Dacitic E Andesitic Dacitic T Andesite Dacite Greenstone Flow Greenstone Siliceous Schist Sericitic Schist				
EOLOGICAL SETTING TECTONIC BELT: TERRANE: METAMORPHIC TYPE:	Quesnel	RELAT	PHYS IONSHIP:	IOGRAPHIC AREA: TH GRADE: Gr	ompson Plateau eenschist
INVENTORY					
ORE ZONE:	CATEGORY: Assay/ana SAMPLE TYPE: Chip COMMODITY	GRAD			
	Silver Gold Copper Across 1.07 metres. Minister of Mines A	02	.0000 Grams per ton .6900 Grams per ton .4000 Per cent	ne ne	
APSULE GEOLOGY	The Red Bird p Rabbitt, approximat kilometres northwes The area is pr and tuffs, with min Triassic Nicola Gro greenschist facies. various angles sout	rospect outcrops ely 2 kilometres t of Tulameen. imarily underlain or intercalated f up. These rocks They generally hwest.	along the east flank east of its summit a by andesitic to dac lows (greenstone) of are metamorphosed up strike northwest and and lensoidal sulph	nd 4.5 itic breccias the Upper to dip at	
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CAPSULE GEOLOGY

Mineralization consists mostly of pyrite, with lesser chalcopyrite and minor sphalerite and galena. Secondary minerals include chalcocite, malachite, azurite and hematite. The sulphides are massive to poorly banded to disseminated or as stringers, in a gangue of sericite schist and massive to blebby quartz. Chalcopyrite, sphalerite and galena occur interstitially or as blebs.

Trenching and tunnelling are largely confined to three zones, the Red Bird, Spokane-Motherlode and Shamrock. At the Shamrock zone, the most northerly set of workings, massive sulphides including pyrite and chalcopyrite, are exposed discontinuously for 150 metres. The horizon is 1 to 2.5 metres thick here. A sample taken across 1.8 metres assayed trace gold, 3.4 grams per tonne silver and 0.4 per cent copper (Minister of Mines Annual Report 1913, page 235). To the south at the Ped Bird workings, two adjacent sulphide

To the south, at the Red Bird workings, two adjacent sulphide lenses, each up to 0.4 metre thick and 5 metres long, occur near the portal of a 120-metre long adit. A sample taken across a true width of 1.07 metres assayed 0.69 gram per tonne gold, 27 grams per tonne silver and 2.4 per cent copper (Ninister of Mines Annual Report 1913, page 235). A second chip sample of the footwall sericite schist analysed 0.828 per cent copper, 0.034 per cent lead, 0.065 per cent zinc and 15.6 grams per tonne silver over a thickness of 1.8 metres (Assessment Report 13396, assay certificate, sample 56276).

Farther south, at the Spokane-Motherlode workings, the sulphide horizon continues south for 200 metres. A sample of sorted ore from a trench assayed trace gold, 21 grams per tonne silver and 2.46 per cent copper (Minister of Mines Annual Report 1928, page 269). A chip sample across 0.5 metre of cherty silica with sulphides assayed 0.29 per cent copper and 4.8 grams per tonne silver (Assessment Report 13396, assay certificate, sample 6572).

per cent copper and 4.0 grams per come sitter trasessment report 13396, assay certificate, sample 6572). This occurrence was prospected as early as 1913, and was extensively tunnelled and trenched between 1928 and 1932. The deposit was more recently worked by Copper Mountain Consolidated Ltd. between 1962 and 1968, who completed trenching, geophysical surveys and 381 metres of diamond drilling in five holes. Northern Lights Resources Ltd., Kenam Resources Ltd., and Ventures Vest Minerals Ltd. conducted additional geophysical, geological and geochemical surveys between 1978 and 1980. Similar but more intensive surface exploration was conducted by Britan Resources Ltd. and Abermin Corporation between 1982 and 1986.

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EMPR ASS RPT 1156, 1651, 7064, *7710, *8411, 10777, *13396, *15315
EMPR PF (Collishaw, R. (April 21, 1964): Letter to J.M. Carr (see 092HSE106); Collishaw, R. (Aug. 15, 1964): Letter to J.M. Carr; Collishaw, R. (1964): An Appreciation of the Situation Respecting the Mineralization at the Lode Mineral Claims, report to directors, Copper Mountain Consolidated Ltd., 3 pages; Hedley, M.S. (1937): Special Report on Lloyd George Property (see 092HNE021); Brican Resources Ltd. (1988): Statement of Material Facts No. 77/B8, Vancouver Stock Exchange, page 18)
GSC MEN 26, p. 161; 263, p. 96
GSC MAP 46A; 888A; 889A; 1386A; 41-1989
EMR NP CORPFILE (Federation Copper Mines Ltd.)
CJES Vol. 24, pp. 2521-2536 (1987)

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<u>LEGEND</u>

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7 Tuff. a) Fine Grained.
b) Augite Crystal Tuff.
c) Plagioclase Crystal Tuff.
d) Tuff Breccia and Breccia.
e) Undifferentiated <u>SCALE</u> 200 300 400 metres 1:5,000

TULAMEEN

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