

10962-E208

WHITECLOUD

16728

PART 2

OF 9

GEOLOGICAL REPORT
WHITECLOUD

CLAIMS - WHITECLOUD 1865

NELSON MINING DISTRICT

N.T.S. - 82 F/3

Latitude - 49 degrees, 09 minutes
Longitude - 117 degrees, 08 minutes

Owner of claims - Goldrich Resources Inc.
1730, 40 West Georgia Street
Vancouver, B.C.
V6B 5A1

Operator of claims - Lightning Minerals Inc.
202, 7608 - 103 Street
Edmonton, Alberta
T6E 4Z8

Author - J. D. Ellerington

Date - November 11, 1987

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,728

1 Part 2 of 9

FILMED



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S) GEOLOGY	TOTAL COST \$ 722.16
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AUTHOR(S) J. ELLERINGTON SIGNATURE(S) *[Signature]*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED AUG. 21 / 87 YEAR OF WORK 1987

PROPERTY NAME(S) WHITECLOUD

COMMODITIES PRESENT

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION NELSON NTS 82 F/3

LATITUDE 49° 09' LONGITUDE 117° 08'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

WHITECLOUD 1865

OWNER(S)

(1) GOLDRICH RESOURCES INC. (2)

MAILING ADDRESS

1730, 40 WEST GEORGIA ST.
VAN COUVER, B.C., V6B 5A1

OPERATOR(S) (that is, Company paying for the work)

(1) LIGHTNING MINERALS INC. (2) TERRA MINES LTD

202, 7608 - 103 ST. ← SAME

MAILING ADDRESS

EDMONTON, Ab.
T6E 4Z8

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

ACTIVE FM: SEDIMENTS ORDOVICIAN
NELSON BATHOLITH CRETACEOUS

REFERENCES TO PREVIOUS WORK

G.S.C. MAP 1145A, GEOLOGY, SALMO, B.C.

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground	0.75 km ² 1:10000	WHITECLOUD	722.16
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)			
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			

TOTAL COST .. 722.16

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date	Rept. No.			Information Class

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GEOLOGICAL REPORT on WHITECLOUD CLAIM

I Introduction:

The Whitecloud claim is located in the Sheep Creek gold mining camp situated east of the village of Salmo in the Nelson Mining District. The area has received extensive exploration and development by various operators in the past.

The property is accessible by means of a gravel road along Sheep Creek for about 10 km from Highway 3 south of Salmo to the junction with the Nugget Creek road. A rough road branches off the Nugget Creek road to the south boundary of the property.

Vegetation ranges from heavy timber in the valleys to alpine meadow near mountain peaks. Elevations are from about 1500 metres to about 1750 metres above sea level.

Current operator of the property is Lightning Minerals Inc. (Terra Mines Limited) and current owner of the claims is Goldrich Resources Inc..

In 1987, Lightning Minerals Inc. initiated a program of exploration on the property. Emphasis was placed on making a general evaluation of the economic potential of the contact zone between intrusives and sediments thought to cross the property.

Geological mapping was carried out by C. Van Dyke on August 4, 7 & 9, 1987.

II Detailed Technical Data and Interpretation:

a. Geology:

A program of geological mapping was instigated with the objective of providing lithological and structural control for possible geophysical and geochemical programs in the future. There were basically two phases to the work. A reconnaissance phase was designed to familiarize the geologist with the geology of the area and a detailed phase to intensively cover the overburden and outcrop areas north of the Salmo Consolidated Mine.

i. Regional:

The Sheep Creek mining camp is situated in a succession of complexly folded Ordovician, Cambrian or Pre-Cambrian sediments. In the western part of the camp,

TABLE OF FORMATIONS

MESOZOIC	CRETACEOUS (?) LOWER CRETACEOUS (?)	17	NELSON PLUTONIC ROCKS: granitic rocks; 17a, porphyritic granite; 17b, granite; 17c, granodiorite; 17d, quartz diorite	
	JURASSIC MIDDLE AND (?) UPPER JURASSIC UPPER ROSSLAND GROUP	15	Andesite, basalt, and latite flows and flow breccia, agglomerate; intercalated siltstone, argillite, and tuff	
	LOWER AND MIDDLE JURASSIC		HALL FORMATION: argillite, siltstone, shale, phyllite; 14a, carbonaceous siltstone and hornfels; 14b, includes abundant volcanic rocks	
	LOWER JURASSIC	13	ELISE FORMATION: andesite and basalt flows and flow breccia, agglomerate, augite porphyry; 13a, tuff, siltstone, and argillaceous quartzite; 13b, amphibolite	
	TRIASSIC (?) AND JURASSIC LOWER JURASSIC AND (?) OLDER	12	ARCHIBALD FORMATION: siltstone, argillite, argillaceous quartzite; minor tuff and lava locally abundant	
	PALAEOZOIC	ORDOVICIAN LOWER AND (?) MIDDLE ORDOVICIAN	9	ACTIVE FORMATION: black argillite and slate; 9a, grey limestone and argillaceous limestone; 9b, silicified argillite and limestone; 9c, dolomite, dolomite breccia, and limestone
CAMBRIAN MIDDLE CAMBRIAN		8	NELWAY FORMATION: cream weathering grey dolomite; limestone and argillite; 8a, limestone and calcareous argillite; 8b, dark and light grey dolomite; 8c, grey limestone	
LOWER CAMBRIAN		7	LAIB FORMATION: phyllite, argillite, schist, micaceous quartzite, and limestone; 7a, Reeves Member: grey limestone; minor dolomite; 7b, Emerald Member: black phyllite and argillite; 7c, upper Laib Formation: phyllite, schist, micaceous quartzite; minor limestone	
		6	RENO FORMATION: argillite, argillaceous quartzite; 6a, Truman Member: phyllite and argillite with limestone lenses	
		5	QUARTZITE RANGE FORMATION: white, green, and pinkish quartzite; 5a, Motherlode Member: white quartzite; minor argillite, grit and green schist; 5b, Nugget Member: white quartzite; argillaceous quartzite and argillite at base; 5c, Nevada Member: thin bedded argillaceous quartzite; white quartzite at top; 5d, argillaceous quartzite, probably equivalent to lower Nugget Member (5b)	
WINDERMERE (?)			THREE SISTERS FORMATION: green and grey grit and quartzite; minor conglomerate and green schist; 4a, conglomerate; 4b, chlorite schist; 4c, brown micaceous schist	
WINDERMERE		3	MONK FORMATION: green argillite and phyllite; 3a, conglomerate; 3b, limestone	
PROTEROZOIC			2	IRENE VOLCANIC FORMATION: greenstone; minor argillite near base; 2a, limestone
				TOBY FORMATION: conglomerate, minor argillite

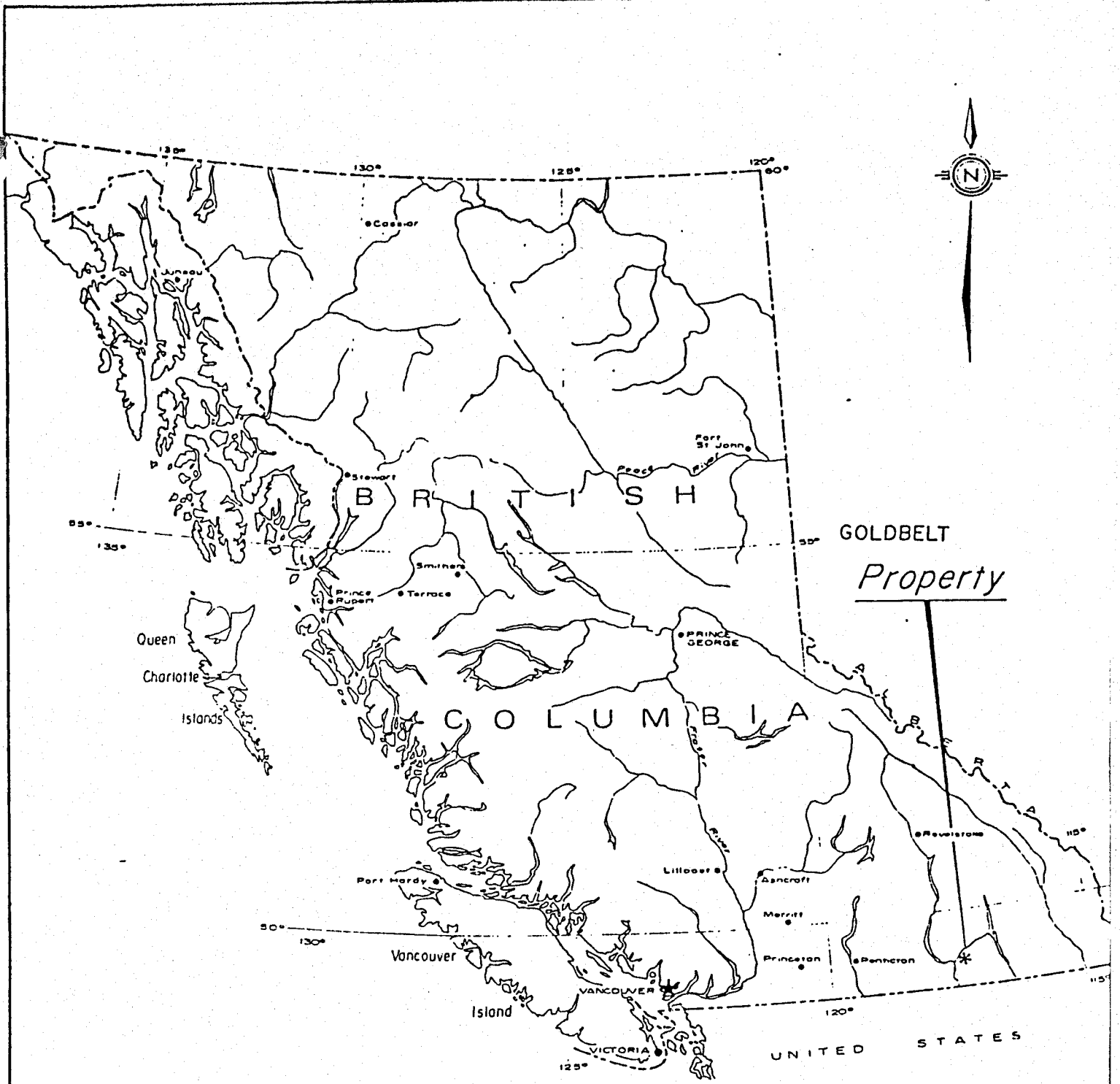
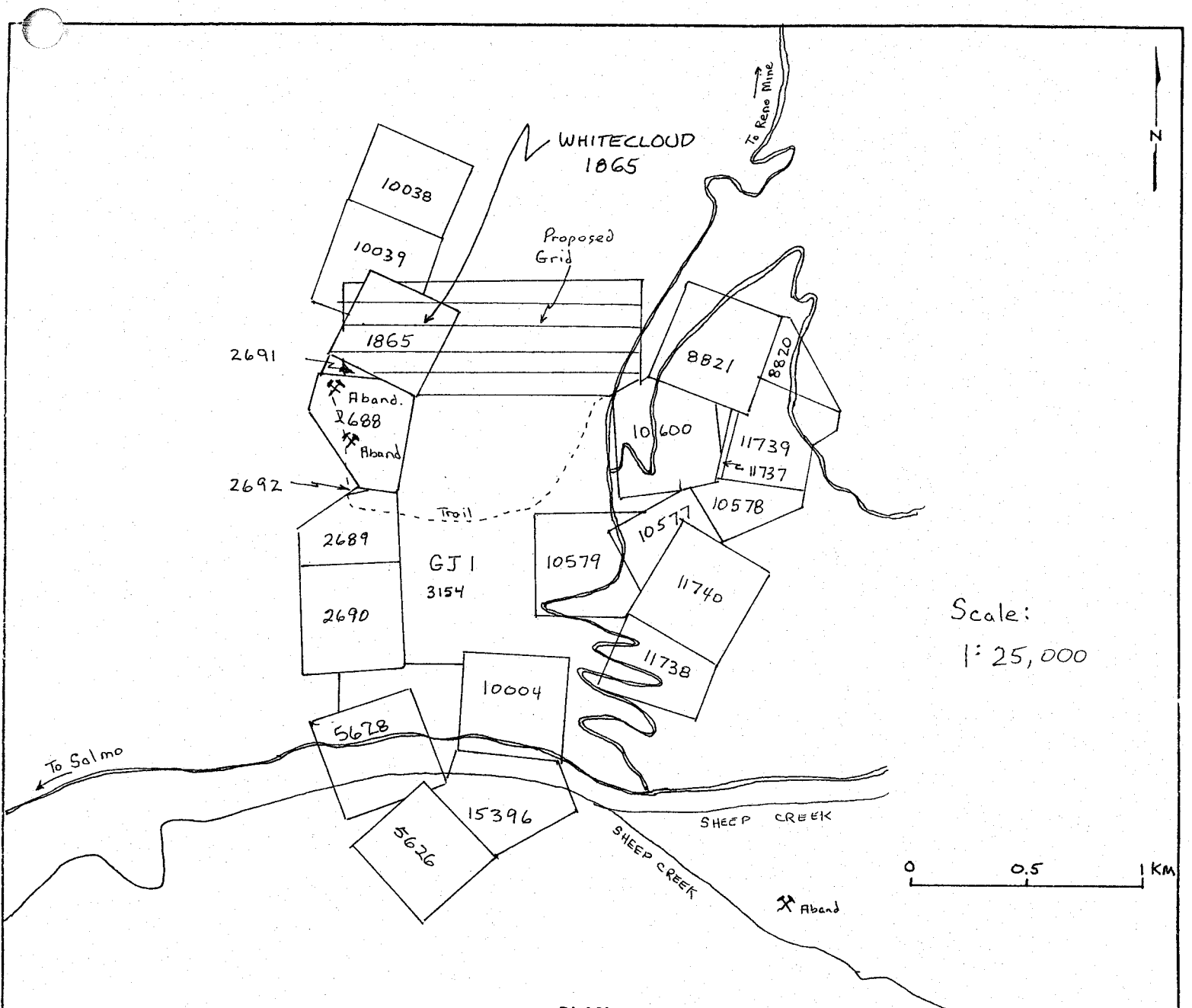
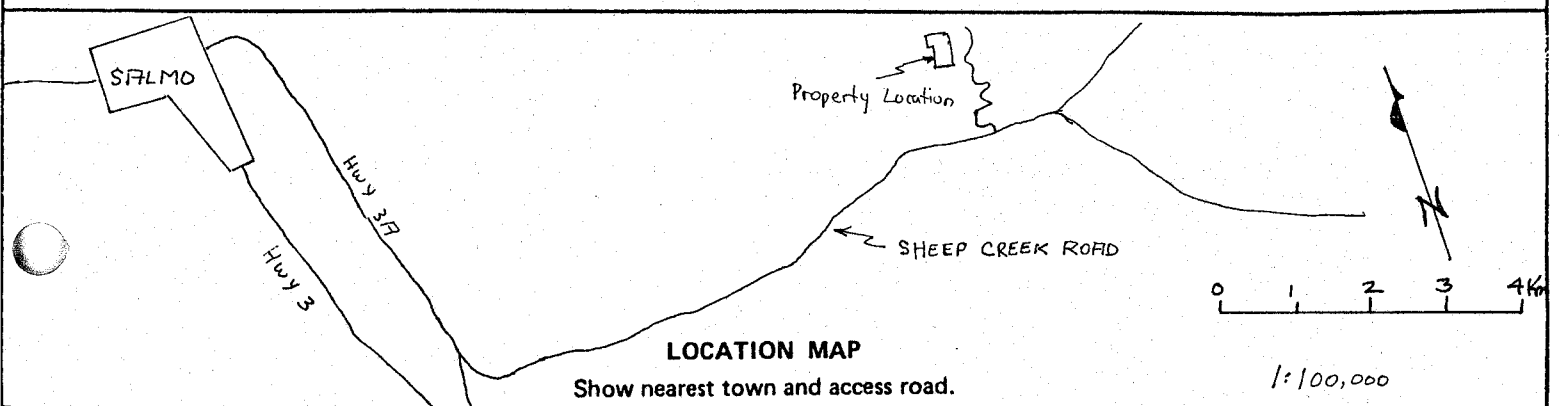


FIG. 1
GOLDBELT MINES INC. (N.P.L.)
 SHEEP CREEK DISTRICT
 NELSON MINING DIVISION, B.C.
LOCATION MAP



PLAN

Indicate claim boundaries, permanent watercourses, access road and distance to nearest town, proposed surface disturbances including roads, test pits, trenches, portals, drill sites, and camp sites.



LOCATION MAP

Show nearest town and access road.

intrusives of the Cretaceous Nelson Batholith occur. Gold mineralization has primarily been found in quartz veins that cut massive quartzites of units referred to as the Nevada and Nugget Members of the Quartzite Range Formation. Table 1 summarizes the formations in the area.

ii. Property Geology:

During the summer of 1987, mapping and prospecting of the Whitecloud claim was carried out utilizing aerial photographs coupled with chain and compass traverses for control. Total area covered was 0.75 square kilometres.

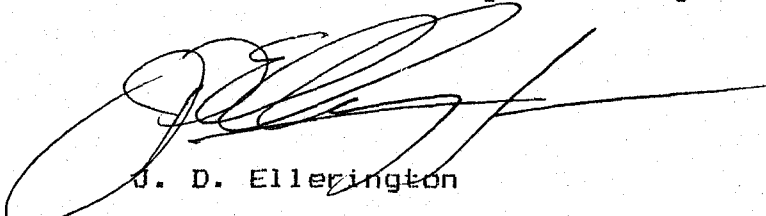
Relatively little outcrop was found on the claim, however, it was possible to reasonably delineate the contact zone between limestones of the Active Formation and granite of the Nelson Batholith. Boulder mapping played a role in the interpretation. Careful examination of the boulders and outcrops did not disclose any visibly apparent mineralization of an economic nature. The mapping did provide some structural information, particularly in the form of bedding orientations in the limestone and joint patterns in the granite. The limestones were distinctly laminated and exhibited high temperature alteration effects near the contact.

iii. Discussion of Results:

Mapping provided useful information on the nature of the rock formations on the claim, but did not indicate any economic potential that requires further work at this time.

III Recommendations:

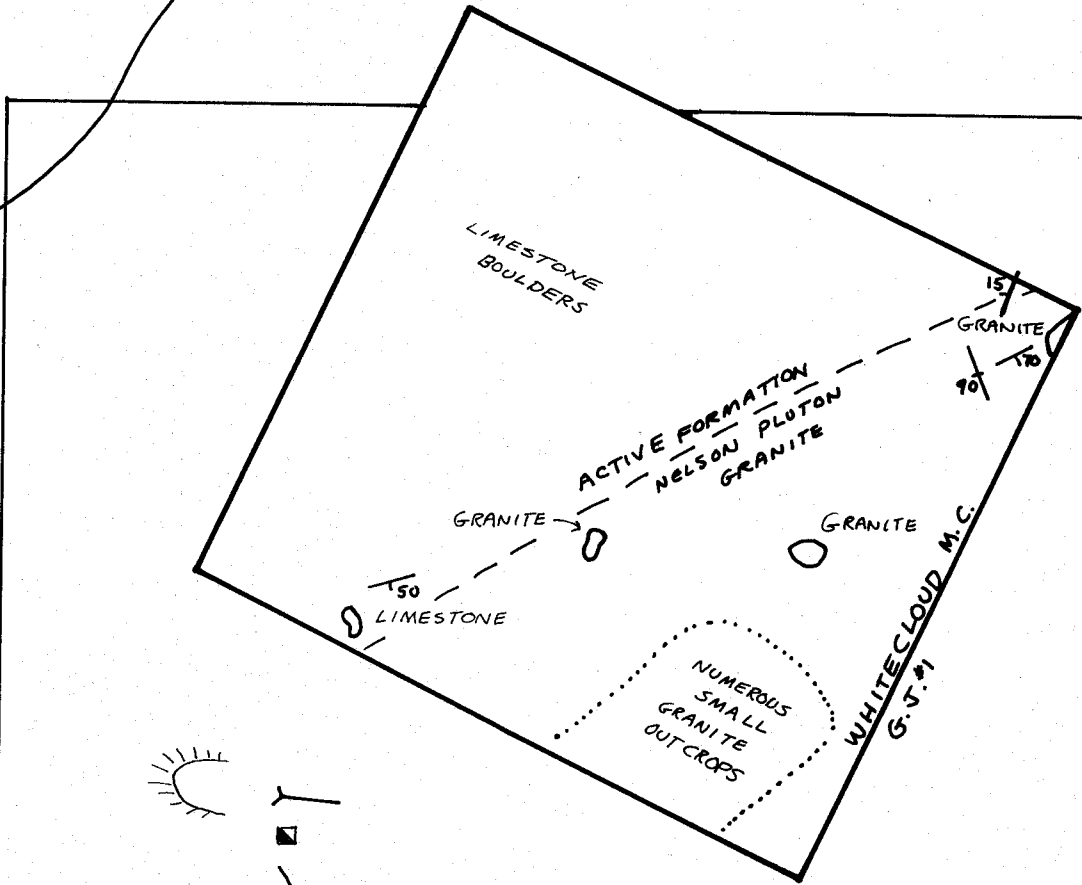
No further surface work is recommended for the Whitecloud claim at this time. Likely the most useful step to take in future would be a grid soil geochemical program.



J. D. Ellerington



HEDGEHOG CK.



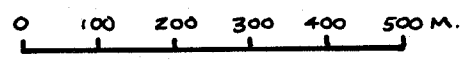
SALMO CONSOLIDATED MINES



ROAD TO NARBET CK.



WHITECLOUD 1865 GEOLOGY



REFERENCES

Geological Survey of Canada

1965: Geology, Salmo, B.C., 1:63,360; Map 1145A

Matthews, W.H.

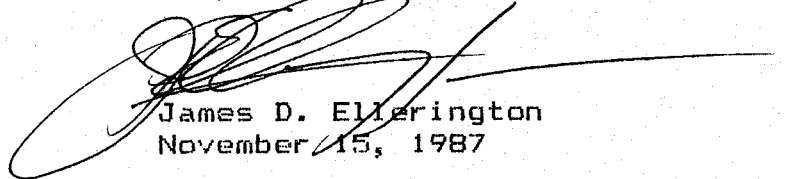
1953: Geology of the Sheep Creek Camp; B.C. Department of Mines, Bulletin No. 31.

STATEMENT OF QUALIFICATIONS

I, James Ellerington, do hereby certify that:

1. I am a geologist employed by Lightning Minerals Inc., 202, 7608 - 103 Street, Edmonton, Alberta, T6E 4Z8.
2. I am a graduate of the University of Alberta with a BSc Degree in Geology (1967).
3. I have practised my profession since graduation. My previous employers include: Great Plains Development of Canada Ltd., United Keno Hill Mines Ltd., Eldorado Nuclear Ltd., Saskatchewan Mining Development Corporation and Terra Mines Ltd..
4. This report is based on field exploration work carried out in the fall of 1987. Research of government reports was also involved.
5. I have no interest, directly or indirectly in the property described in the report.

Respectfully submitted



James D. Ellerington
November 15, 1987

APPENDIX 1

ITEMIZED COST STATEMENT

Wages for Field Work:

C. Van Dyke (geologist)	2 days @	120 \$	240.00
F. O'Grady (supervisor)	0.2 days	150	30.00
	Add 4% holiday pay		10.80
	Add 20% burden		56.16
	(office, benefits)		

TOTAL WAGES FOR FIELD WORK 336.96

Wages for Report Preparation:

J. Ellerington (geologist)	1 day	150	150.00
	Add 4% holiday pay		6.00
	Add 20% burden		31.20
	(office, benefits)		

TOTAL WAGES FOR REPORT PREP. 187.20

TOTAL WAGES 424.16

Food and Accomodation:

3.2 man days at \$40/day 128.00

Transportation:

Rental of 4X4 truck, mileage, gas, oil, repairs
2 days at \$75.00/day 150.00

Misc. Supplies 20.00

TOTAL EXPENDITURES \$ 722.16

LABOUR DISTRIBUTION

MONTH AUGUST, 1987

EMPLOYEE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
FIELD, M.										D	D	D	D	D			D	D	D	D	D											
FORSYTHE, S.			C	C	C	C				B	B	B	B	B		B	B	B	B	B	B		B	B	B	B	D	D		D	R	
HANNIGAN, P.	G	G	G	G	G																											
HITCHINS, A.	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	G	D	D	D
HITCHINS, B.																																
LOUNSBURY, P.																														C	V	
MACLEAN, C.										V	V	V	M	V	V		V	V	V	V	V			V	M	V	V	V		V		
MEYER, R.																								V	V	D	V	V	V	V	V	V
TOMASZEWSKI, G.	D	D	D							D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
VAN DYKE, C.	G	G	G	2	G	G	2	G	2	1	1	1	1	D	G	B	B	B	B	G	G											
WEST, J.																																
WINTERBURN, B.										9	9	9	9	9		9	9		9	9		9	9	9	9	9	9	9	9	9	9	9
CLOUTHIER, G.																																
ELLERINGTON, J.			G	B	B	B	B	B	B	B	B	B												B	B	R	R	C	C	C	C	R
O'GRADY, F.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

B	BAYONNE	1	BUSTER
C	GEOCHEMISTRY	2	WHITE CLOUD
D	DRILL	3	BERR
G	GEOLOGY	4	ECLIPSE
L	LINES	5	GOLDBELT / GAMBLE
M	MAGNETOMETER		
O	OTHER		
R	RENO 1		
S	SUPERVISION		
V	VLF	9	SURVEY