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10/86

GEOLOGY AND SOIL GEOCHEMISTRY  
DAYBREAK MINERAL CLAIM  
SLOCAN MINING DIVISION  
IDAHO PEAK AREA, SANDON, B.C.  
NTS 82 F/14 W  
LATITUDE 49°59'N, LONGITUDE 117°17'W

Locke B. Goldsmith, P.Eng.  
Consulting Geologist

October 26, 1985

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

14,024

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### MAPS:

(Pocket inside back cover)

GEOLOGY AND CLAIM MAP

SOIL GEOCHEMISTRY MAPS: SILVER  
LEAD  
ZINC

GEOLOGY AND SOIL GEOCHEMISTRY  
DAYBREAK MINERAL CLAIM  
SLOCAN MINING DIVISION  
IDAHO PEAK AREA, SANDON, B.C.  
NTS 82 F/14 W

SUMMARY

A calcite and sulphide-healed limestone breccia zone 1.5 metres wide trending 125° is present near the northeast side of the claim. An adit driven along the breccia is open at the portal but is partly filled with water. A character sample of mineralization taken from pits southwest of, and topographically above, the adit contains 29.5% Pb, 16.40% Zn, and 27.84 oz/ton Ag. Soil sampling did not detect other anomalous areas.

Geological mapping and sampling of the adit and the surface nearby together with detailed soil geochemistry are required. A cost of \$10,000 for the next Phase, and a total of \$70,000 in two Phases, is estimated.

## INTRODUCTION

The Daybreak claim, L 1464, Record Number 4951(12), is located on the north-east slope of a ridge joining Idaho Peak and Selkirk Mountain, some 5 km due east of the village of New Denver, B.C., in the Slocan Mining Division. Access is via paved Highway 31A east of New Denver for 8 km, thence southeasterly on a gravel road for 5 km to Sandon, and via a well marked dirt road which leads to the Idaho Peak Lookout. This road passes 350 metres south of the south tip of the claim. One branch departs at the Corinth mine workings and passes 200 m north of the north claim boundary. Elevations range between 1770 m (5000') in the northeast of the isolated fraction to 1985 m (6500') in the southwest portions of the property.

Nothing is recorded concerning the early history of the claim. It is not listed in Cairnes (1935) as being part of the Corinth mine which is located on claims adjacent to the east. The Alamo and Idaho mines are 1-2 km to the west, and the Queen Bess mine is 1 km to the north.

Dozer trenching has been done near the adit in recent years.

One kilometre of grid was established. Lines are 100 metres apart with stations at 50-metre intervals.

## GEOLOGY

Rocks in the vicinity are part of the Upper Triassic to Lower Jurassic Slocan Group, a series of argillites, limestones, shales, quartzites, and subordinate tuffaceous argillite and tuff beds. Predominant fold axes trend northwesterly. Axial planes dip both southwest and southeast. Important fault systems which provide open spaces for fissure fillings of economic mineralization trend northeasterly. Transverse fractures between the main faults also host ore deposits.

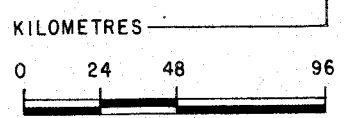
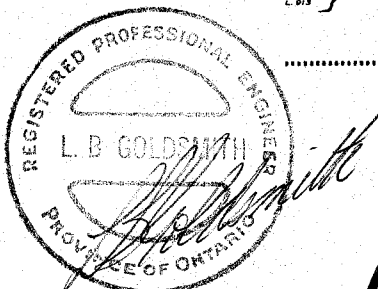
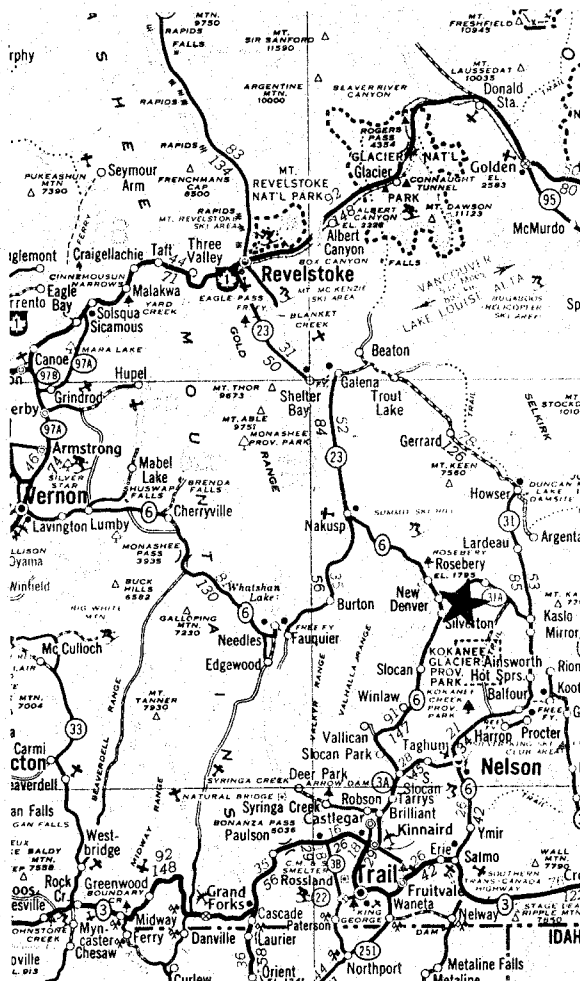
Limestone is the only rock type which was observed on the property.

## MINERALIZATION

A calcite and sulphide-filled breccia zone trending  $125^{\circ}$  with a steep dip in grey limestone is present at 2+37N 1+10E. Where exposed on surface the breccia appears to be at least 1.5 metres in true width, and can be traced through very

# SLOCAN MINING DIVISION

## Daybreak Claim L1464/4591(12) Idaho Peak, B.C.



### LOCATION MAP

To accompany OCTOBER 1985 report by  
LOCKE B. GOLDSMITH, P.Eng.

old intermittent pits and trenches for 40 metres southeast (upslope) whence it passes under overburden. Attitude of the zone is suggestive of a transverse fracture between major northeast-trending faults. An adit driven along the breccia is partly water-filled but accessible.

A character sample of massive and disseminated galena and sphalerite mineralization in breccia filling assayed 29.5% Pb, 16.4% Zn, and 27.84 oz/ton Ag.

### SOIL SAMPLING

Twenty-two samples were collected with a narrow, elongate spade from depths of 30-45 cm beneath organic debris. Analyses for lead-zinc-silver were completed by Chemex Labs Ltd. of North Vancouver, B.C.

Only two samples near the breccia zone have threshold quantities of lead and zinc. Samples at 1+00E 0+00 (1.5 ppm), 1+00E 1+00N (1.9 ppm), and 1+00E 4+35N (2.1 ppm) (possibly contamination from the road which leads to the Alamo mine) have low threshold silver values.

No clearly anomalous zone other than the breccia is indicated by the preliminary soil sampling but a small amount of resampling is required near the first two of the threshold silver values.

### CONCLUSIONS

Potentially economic concentrations of lead, zinc, and silver are hosted in a breccia zone. Extent of the mineralization should be determined.

### RECOMMENDATIONS

#### Phase 1

Surface and underground mapping and sampling of the mineralization should be completed. Soil sampling should be used to try to trace the subcrop to the southeast and northwest. Additional soil sampling should be completed in the southern portion of the claim. Dozer-backhoe trenching may be required.

**Phase 2**

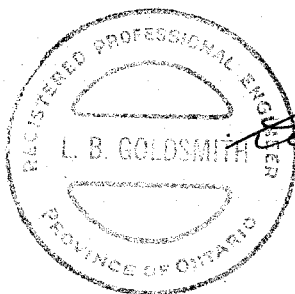
A programme of surface diamond drilling should be considered pending the completion of Phase 1.

**COST ESTIMATE**

A budget of \$10,000 should be available to complete Phase 1. Approximately \$60,000 should be available for diamond drilling.

Results of Phase 1 should be compiled into an engineering report. Continuance to Phase 2 should be contingent upon receiving favourable conclusions and recommendations from an Engineer.

Respectfully submitted,



*Locke B. Goldsmith*  
Locke B. Goldsmith, P.Eng.  
Consulting Geologist

Vancouver, B.C.

October 26, 1985

## ENGINEER'S CERTIFICATE

LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 27 years.
4. I have authored the report entitled, "Geology and Soil Geochemistry, Daybreak Mineral Claim, Slocan Mining Division, Idaho Peak Area, Sandon, B.C." dated October 26, 1985. The report is based upon fieldwork and research supervised by the author.
5. I control, with associates, 100% of the property.
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.



Respectfully submitted,

*Locke B. Goldsmith*  
Locke B. Goldsmith, P.Eng.  
Consulting Geologist

Vancouver, B.C.

October 26, 1985



**REFERENCE**

Cairnes, C.E. 1935. Descriptions of Properties, Slocan Mining Camp, B.C.  
G.S.C. Memoir 184.

## COST STATEMENT, 1985 PROGRAMME

## 1. Personnel

L.B. Goldsmith, $\frac{1}{2}$ Oct. 2, $\frac{1}{4}$ Oct. 17, $\frac{3}{4}$ Oct. 26, total $1\frac{1}{2}$ days @ \$400/day	\$600.00	
G. Bennett, $\frac{1}{2}$ Oct. 2, total $\frac{1}{2}$ day @ \$220/day	<u>110.00</u>	
	710.00	\$ 710.00

## 2. Food, Accommodation

Total cost of \$16.70 $\div$ 1 man day = \$16.70/man/day		16.70
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## 3. Transportation

4x4 vehicle, $\frac{1}{2}$ day @ \$45/day	\$ 22.50	
52 km @ \$.30/km	15.60	
Gas	<u>3.70</u>	
	\$ 41.80	41.80

## 4. Analyses

22 soil samples and 1 assay cost \$123.85 $\div$ 23 = \$5.38/sample		123.85
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## 5. Report

Drafting, prints, typing, photocopies, materials		<u>294.60</u>
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Total		\$1,186.95
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APPENDIX

Gold F.A.-A.A. Combo Method ppb:

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO<sub>3</sub> and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit: 5 ppb

Copper, Lead, Zinc, Silver ppm:

1.0 gm sample is digested with perchloric-nitric acid (HClO<sub>4</sub>-HNO<sub>3</sub>) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques. Silver and lead are corrected for background absorption.

Detection limit: Copper, Zinc - 1 ppm  
Silver - 0.2 ppm  
Lead - 2 ppm

Arsenic ppm:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH<sub>4</sub> and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : GOLDSMITH, MR. L. B.

#301-1855 BALSAM STREET  
VANCOUVER, B.C.  
V6K 3M3

CERT. # : A8517105-001-A  
INVOICE # : 18517105  
DATE : 10-OCT-85  
P.O. # : NONE  
DAY

CC: L. B. GOLDSMITH

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm			
DAY 0+50E 2+62N	201	50	337	0.7	--	--	--
DAY 1+00E 0+00N	201	11	70	1.5	--	--	--
DAY 1+00E 0+50N	201	12	101	1.0	--	--	--
DAY 1+00E 1+00N	201	12	118	1.9	--	--	--
DAY 1+00E 1+50N	201	6	102	0.6	--	--	--
DAY 1_00E 2+00N	201	10	94	1.0	--	--	--
DAY 1+00E 2+50N	201	102	515	0.8	--	--	--
DAY 1+00E 3+00N	201	15	89	0.4	--	--	--
DAY 1+00E 3+50N	201	14	88	0.7	--	--	--
DAY 1+00E 4+00N	201	17	80	0.8	--	--	--
DAY 1+00E 4+35N	201	19	290	2.1	--	--	--
DAY 0+00	201	13	158	0.6	--	--	--
DAY 0+50N	203	27	193	0.5	--	--	--
DAY 1N	201	15	112	0.9	--	--	--
DAY 1+50N	201	8	104	0.6	--	--	--
DAY 2N	201	15	108	0.5	--	--	--
DAY 2+50N	201	11	86	0.6	--	--	--
DAY 3+50N	203	34	156	0.4	--	--	--
DAY 4N	201	32	96	0.5	--	--	--
DAY 4+50N	201	12	97	0.6	--	--	--
DAY 5N	201	27	68	0.8	--	--	--
DAY 5+50N	201	14	90	0.8	--	--	--

Certified by Hart Bichler



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ASSAY

TO : GOLDSMITH, MR. L. B.

#301-1855 BALSAM STREET  
VANCOUVER, B.C.  
V6K 3M3

CERT. # : A8517106-001-A  
INVOICE # : I8517106  
DATE : 10-OCT-85  
P.O. # : NONE  
DAY

CC: L. B. GOLDSMITH

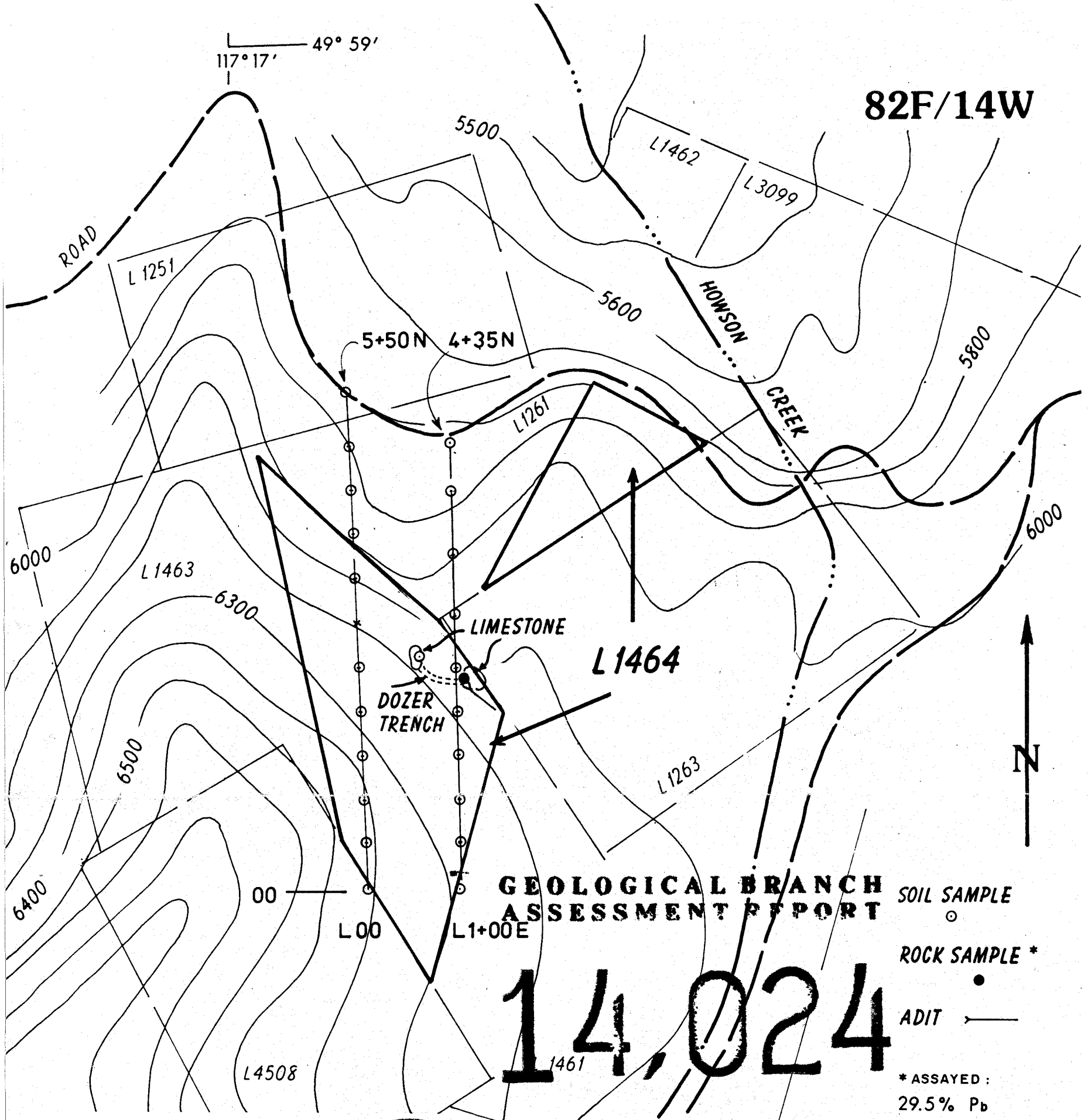
Sample description	Prep code	Pb %	Zn %	Ag FA oz/T			
1+10E 2+40N	207	29.50	16.40	27.84	--	--	--

VOI rev. 4/85

Registered Assayer, Province of British Columbia

82F/14W

49° 59'  
117° 17'



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

SOIL SAMPLE

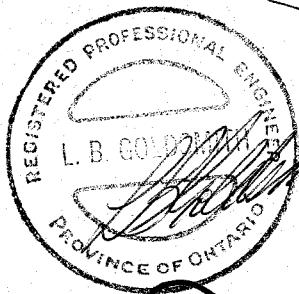
ROCK SAMPLE \*

ADIT

\* ASSAYED :  
29.5% Pb  
16.40 % Zn  
27.84 oz./ton Ag

**14,024**  
1461

**GEOLOGY  
with claims  
& assay**



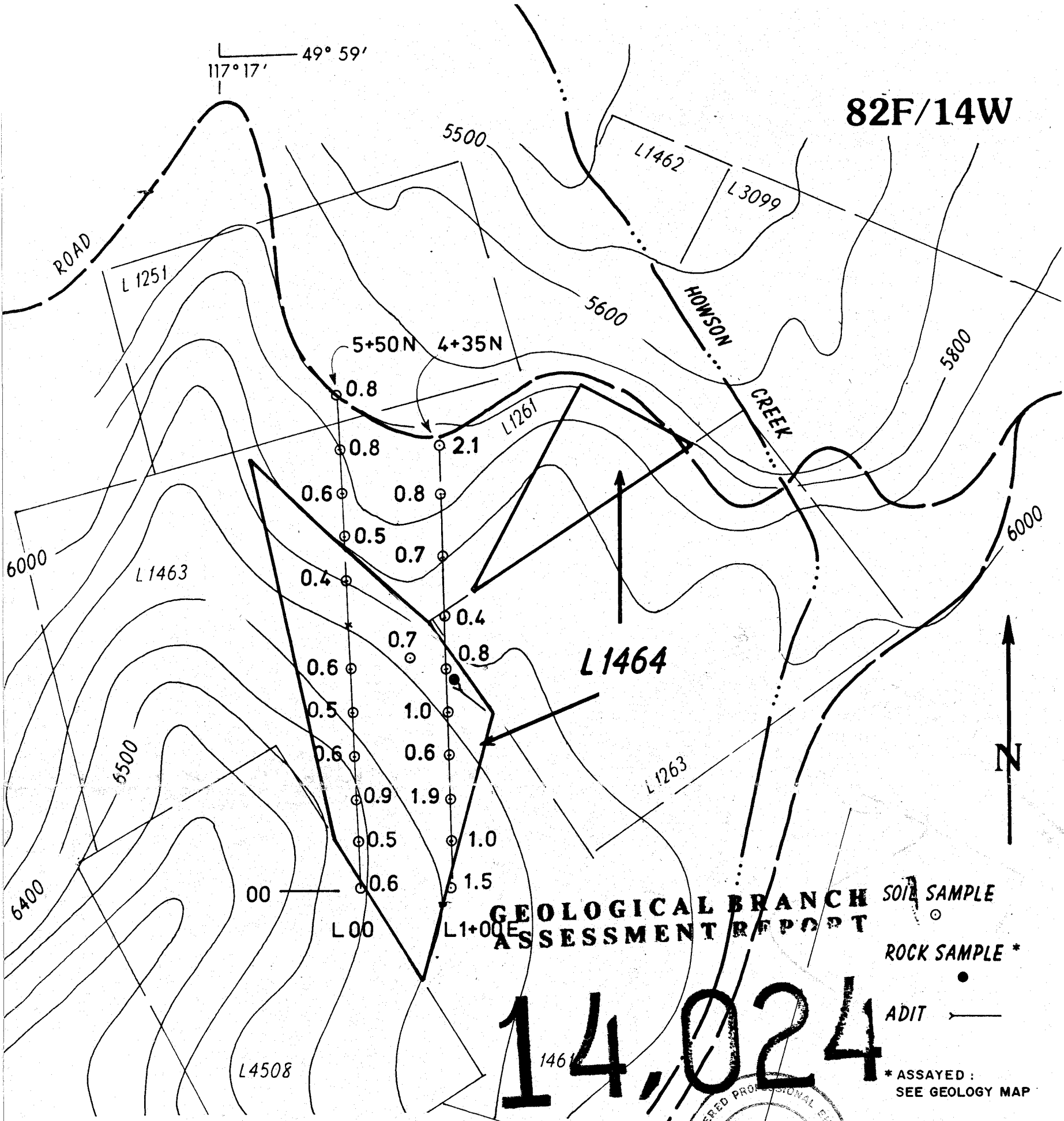
METRES  
0 50 100 250

**1:5000**

**Daybreak Claim  
L1464/4591(12)  
Idaho Peak, B.C.  
SLOCAN Mining Division**

To accompany OCTOBER 1985 report by  
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82F/14W



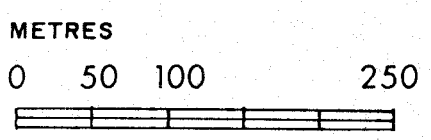
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

SOIL SAMPLE ○  
 ROCK SAMPLE \* ●  
 ADIT ———→

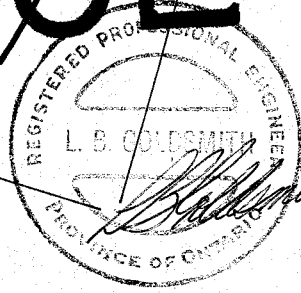
14,024

\* ASSAYED :  
SEE GEOLOGY MAP

# GEOCHEMISTRY SILVER ppm



1 : 5000

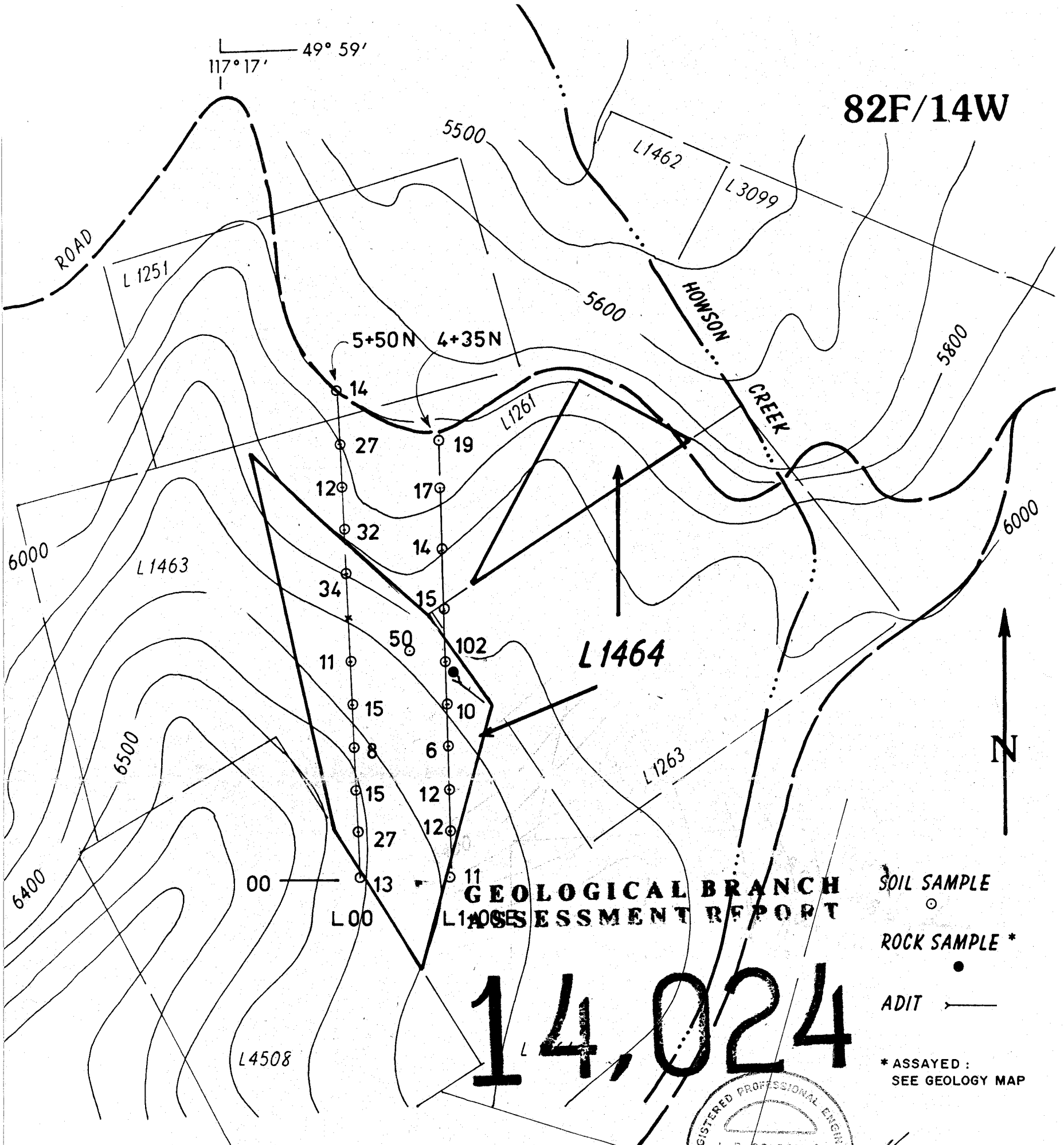


**Daybreak Claim**  
**L1464/4591(12)**  
**Idaho Peak, B.C.**  
**SLOCAN Mining Division**

To accompany OCTOBER 1985 report by  
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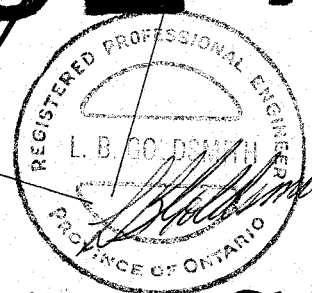
82F/14W



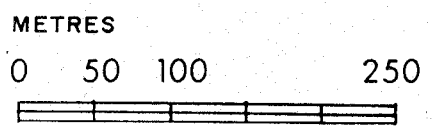
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**14,024**

- SOIL SAMPLE ○
- ROCK SAMPLE \*
- ADIT —
- \* ASSAYED :  
SEE GEOLOGY MAP



**GEOCHEMISTRY  
LEAD ppm**

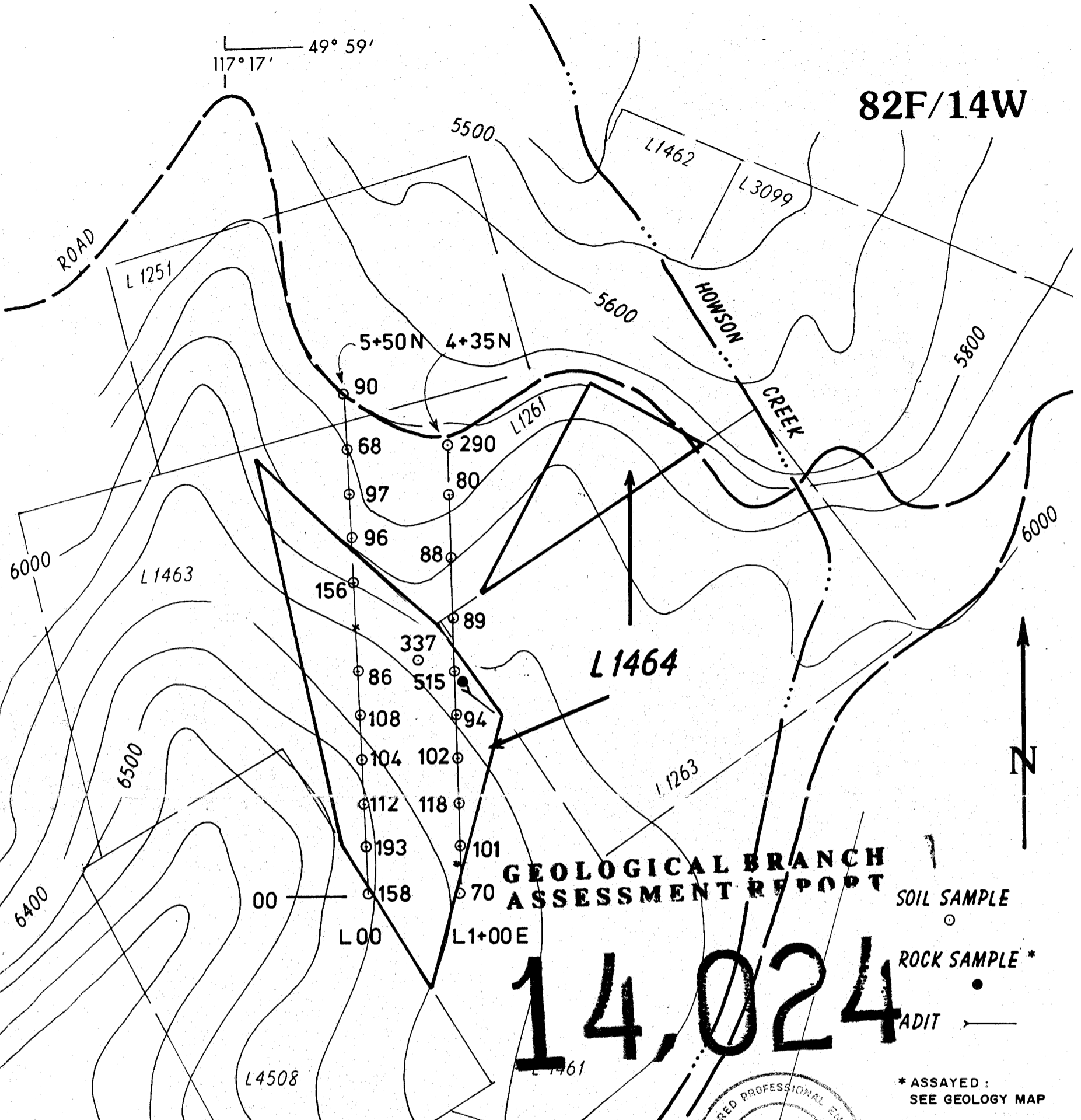


**1:5000**

**Daybreak Claim  
L1464/4591(12)  
Idaho Peak, B.C.  
SLOCAN Mining Division**

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82F/14W



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

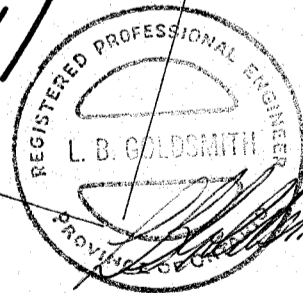
SOIL SAMPLE

ROCK SAMPLE \*

ADIT

\* ASSAYED :  
SEE GEOLOGY MAP

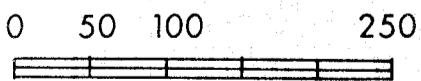
14,024



**GEOCHEMISTRY**

**ZINC ppm**

METRES



**1 : 5000**

**Daybreak Claim  
L1464/4591(12)  
Idaho Peak, B.C.**

**SLOCAN Mining Division**

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