86-531-15159

D. L. COOKE AND ASSOCIATES LTD.
MINERAL EXPLORATION CONSULTANTS

06/87

ASSESSMENT REPORT ON THE GEOLOGY OF THE BLACK ROCK PROPERTY SALMO AREA, B.C.

Nelson Mining Division
N.T.S. 82 F / 3 E
Latitude: 49° 08' 07.5'
Longitude 117° 12' 13.1'

For

Owner/Operator. ST. JAMES'S MINERALS LTD.
212 - 475 Howe Street
Vancouver, B.C.
V6C 2B3

By

DAVID L. COOKE, Ph.D., P.Eng.
D.L. COOKE AND ASSOCIATES LTD.
800 - 675 West Hastings Street
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Work Done: June 9th - 15th, 1986

Report Date: September 19, 1986

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SUMMARY AND CONCLUSIONS

The Black Rock mineral claims cover known lead, zinc and silver mineralization with Cambrian limestones of the Laib Formation on the south side of Sheep Creek adjacent to the HB Mine property. Preliminary geological mapping uncovered new lead-zinc mineralization in float on the north side of Sheep Creek. Extensive diamond drilling by previous operators upslope from the area of mineralized float failed to intersect mineralization of similar character. The source of this mineralized float may be lower down in the valley than previously believed.

Further evaluation of this favourable area should consist initially of soil geochemistry, to be followed by trenching of anomalous areas. Diamond drilling should be considered when there is a better understanding of the source and/or dispersion pattern of the mineralized float and soil geochemical anomalies.

Soil samples collected from a grid area on the south side of Sheep Creek, and those from one contour line in the area of mineralized float are held in storage. These samples will be analyzed on completion of a grid sampling program to be conducted in September.

INTRODUCTION

Geological mapping and soil sampling were initiated on the Black rock property at the request of St. James's Minerals Ltd. The work consisted of the addition of 4.0 kilometres of lines to the existing grid, geological mapping and soil sampling south of Sheep Creek on the grid lines at 25 metre sample spacings. The work was done by geologists, D.L. Cooke, Ph.D., P.Eng. and R.U. Bruaset, B.Sc., during the period June 9th to June 15th, 1986. The geological data, line cutting and soil sampling are herein submitted for one year's assessment credits. Analytical results from the soil samples will be submitted in a subsequent report when completed.

LOCATION AND ACCESS

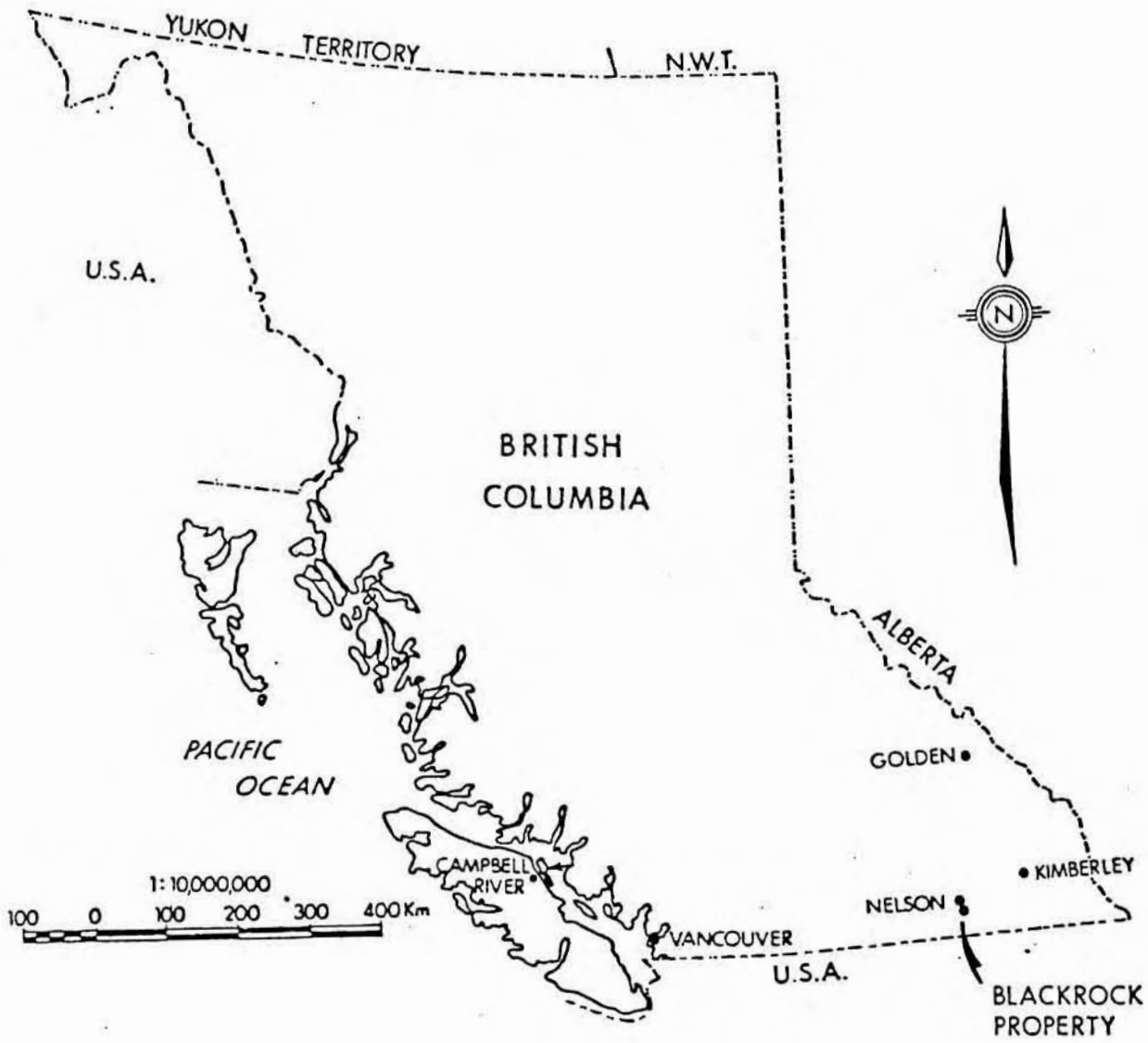
The claims are situated on Sheep Creek, 12 kilometres south of Salmo, B.C. (Figure 1). They lie on the western boundary of the HB Mine property, and immediately to the north of the Emerald Mine property. Elevations on the property range from 700 to 1500 metres. The area is well timbered with fir, pine and birch. Sheep Creek runs westerly across the northern third of the property.

Access is by paved highway, 10 kilometres south from Salmo, B.C. and then by 2 to 3 kilometres of good gravel roads east to the property. The northern section of the property is traversed in an east-west direction by the HB Mine road and the southern section of the Emerald Mine road, which runs from north to south.

PROPERTY

The Black Rock property (Figure 2) consists of the following 21 Crown granted and reverted Crown granted mineral claims:

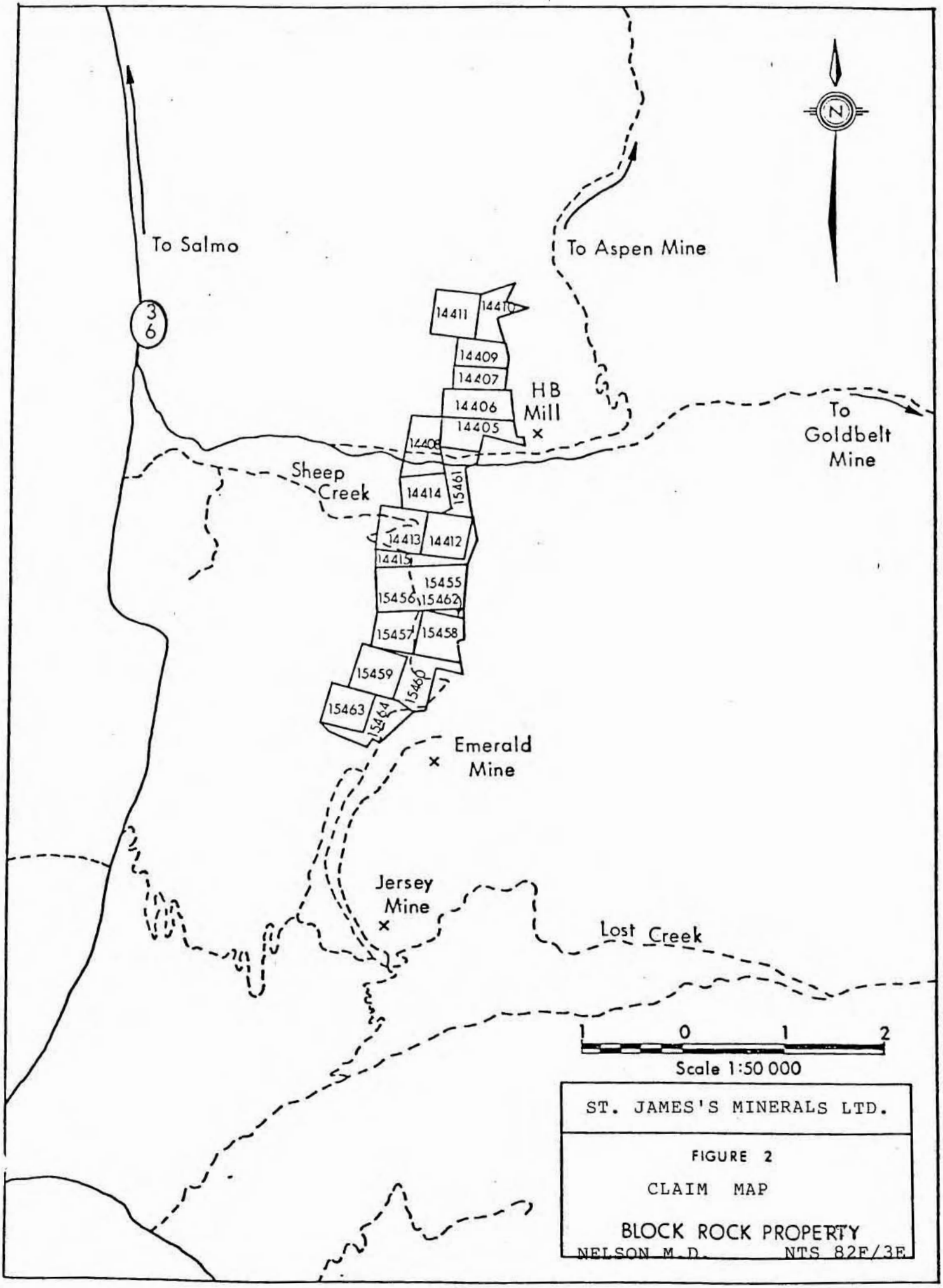
Name	Lot No.	Record No.	Month of Record
Black Rock No. 11 Fr.	14405	3183	June
Black Rock No. 12 Fr.	14406	3184	June
Black Rock No. 13 Fr.	14407	3185	June
Black Rock No. 10 Fr.	14408	3186	June
Black Rock No. 15 Fr.	14409	3187	June
Black Rock No. 16 Fr.	14410	3188	June
Black Rock No. 17 Fr.	14411	3189	June
Black Rock No. 5 Fr.	14412	3190	June
Black Rock No. 6 Fr.	14413	3191	June
Black Rock No. 7 Fr.	14414	3192	June
Black Rock Fraction	14415	3193	June
Black Rock No. 1	15455	3194	June
Black Rock No. 2	15456	3195	June
Black Rock No. 3	15457	3196	June
Black Rock No. 4	15458	3197	June
Black Rock No. 19 Fr.	15462	3197	June
Black Rock No. 8	15459	3198	June
Black Rock No. 9 Fr.	15460	3199	June
Black Rock No. 18 Fr.	15461	3200	June
Black Rock No. 20	15463	3201	June
Black Rock No. 21 Fr.	15464	3202	June



ST.JAMES'S MINERALS LTD.

FIGURE 1
BLACK ROCK PROPERTY

PROPERTY INDEX MAP
NELSON M.D. NTS 82F/ 3E


To Salmo
To Aspen Mine
N
3
6
14411
14410
14409
14407
14406
14405
14408
HB
Mill
To
Goldbelt
Mine
Sheep
Creek
14414
15461
14413
14412
14415
15455
15456
15462
15457
15458
15459
15460
15463
15464
Emerald
Mine
Jersey
Mine
Lost Creek
1 0 1 2
Scale 1:50 000
ST. JAMES'S MINERALS LTD.
FIGURE 2
CLAIM MAP
BLOCK ROCK PROPERTY
NELSON M.D. NTS 82F/3E

The claims are owned by St. James's Minerals Ltd., the wholly owned subsidiary of Source Resources Ltd.

HISTORY AND PREVIOUS WORK

The Black Rock property has been the subject of many exploration programs between 1947 and 1984. Copper gold mineralization was found on the property by J. Baxter in 1919. Cominco optioned the claims from L.R. Clubine and drilled three holes in 1947. American Zinc Co. drilled 17,000 to 18,000 feet in 34 holes during the period 1951 - 1953. Extensive trenching was done in 1959 without success by the same company to find the source of sulphide bearing boulders north of Sheep Creek. Soil sampling by Mentor Explorations Ltd. in 1979 outlined Pb-Zn anomalies north of Sheep Creek, but no bedrock was uncovered by test pits. In 1984 Greenwich Resources Ltd. did soil sampling, rock sampling and a test VLF-EM survey on the claims south of Sheep Creek.

REGIONAL GEOLOGY

The Black Rock claim group is located in the Nelson Map Area (West Half) and has been mapped and reported by Little, 1960 and 1964.

The property is underlain by units of the Cambrian Laib Formation and includes a variety of sedimentary rock types including phyllites, argillites, quartzites, limestones and schists.

Mineral potential of the Black Rock claim group is related to replacement silver-bearing base metal mineralization, contact metasomatic tungsten occurrence and gold-bearing vein structures. The property is conveniently located north of the Emerald mine which produced tungsten concentrates during the 1940's and 1950's and is west of the HB Mine which produced silver, lead and zinc up to the late 1960's. In addition, the property is peripheral to the Sheep Creek Gold Camp which is one of the most significant gold producing areas of southeastern British Columbia.

PROPERTY GEOLOGY

Soil cover is well developed, consequently rock exposures are limited mainly to steep valley sides, road cuts and rock units such as limestones which form resistant ridges throughout the area. The geology of the claims is characterized by one or more limestone units (Reeves limestone) interbedded with quartzites and phyllites (Figure 3). Several limestone units have been mapped on the north side of Sheep Creek. These are nearly vertical in dip and they occur within laminated phyllitic limestones and phyllites. Only a single grey limestone unit has been mapped on the south side of Sheep Creek, and it is not readily correlated with the limestones on the north side of the creek. Quartzite beds seem more common in the southern area. Minor amounts of skarn minerals are developed within the limestone and biotite hornfels of the sediments on both sides of the creeks. A small granitic intrusion occurs in the southwestern part of the property, and it accounts for the development of biotite hornfels in the sedimentary rocks in that area.

Recent road building by loggers near the confluence of Sheep and Annie Rooney Creeks has exposed a black limestone unit and associated quartzites and sediments. The trends appear to be north-south with near-vertical dips. A major fold in the limestone units is interpreted this new exposure is lithologically similar to that which occurs to the southwest on the Emerald Mine road.

MINERALIZATION

Minor sphalerite and galena mineralization was observed in a number of pits and trenches along the baseline between grid locations 1+00 and 3+00 south (Figure 3). Here the mineralization occurs as discrete blebs or irregular streaks and patches within the limestone. Rusty limonitic boxworks characterize the more massive areas of this mineralization. This mineralization appears to be fracture-controlled.

The sulphides found in float on the north side of Sheep Creek are of two types. That which occurs higher up on the hill consists of sphalerite and galena cementing silicified limestone breccia. The mineralization float found at lower elevations occurs in layers within recrystallized and silicified limestone. The sphalerite and galena layers alternate with layers of wollastonite, interpreted as skarn mineralization.

RECOMMENDATIONS

The grid on the south side of Sheep Creek should be extended to the north and east to cover the limestone occurrences near the confluence of Annie Rooney Creek. Geological mapping and soil sampling in this area will evaluate the area for lead and zinc mineralization. Soil sampling of the covered area with mineralized float north of Sheep Creek is recommended along east-west grid or contour lines. Any anomalous areas defined by soil sampling will warrant evaluation by trenching and diamond drilling.

Report by
D.L. COOKE AND ASSOCIATES LTD.

David L. Cooke, Ph.D., P.Eng.
September 19, 1986

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D.L. COOKE

REFERENCES

British Columbia Dept. of Mines and Petroleum Resources
Mineral Inventory Data. To include:
1. BCDM Open File (maps)
2. BCDM MMAR: 1947, p. 163; 1950, p. 128; 1951, p. 139; 1952, p. 147; 1953, p. 117.

Fyles, J.T. and Hewlett, C.G., 1959.
Stratigraphy and Structure of the Salmo Lead-Zinc Area. British Columbia Dept. of Mines, Bulletin No. 41, p. 104-5.

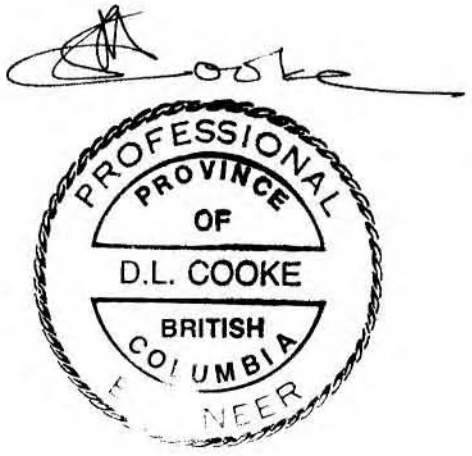
Little, H.W., 1960.
Nelson Map Area (West Half) British Columbia (82F W1/2).
Geological Survey of Canada Memoir 308.

Little, H.W., 1964.
Geological Survey of Canada Map 1145A.

APPENDIX I

STATEMENT OF EXPENDITURES

Costs	Linecutting	Geological Mapping	Geochemical Sampling	Total
Salaries:				
Dr. D.L. Cooke: 7 days @ $250		$ 1,750.00		$1,750.00
Geologist assisting: 7 days $200			$ 1,400.00	1,400.00
Jack Denny:				
Linecutting: 2 days @ $150	$ 300.00			300.00
Transport:				
2 Castlegar / returns		191.40	191.40	382.80
4 wheel drive, 7 days, gas & ins.		257.50	257.50	515.00
Greyhound - geochem. samples (Min-En Lab)			45.00	45.00
Equipment & map		21.42	30.10	51.52
Accommodation & food	30.00	172.90	173.00	375.90
	$ 330.00	$ 2,393.22	$ 2,097.00	$4,820.22



APPENDIX II

STATEMENT OF QUALIFICATIONS

I, DAVID LAWRENCE COOKE, of the Municipality of Surrey in the Province of British Columbia, hereby certify:

1. That I am a Consulting Geologist, residing at 16331 Bell Road, Surrey, B.C., V3S 1J9, with a business office at 800 - 675 West Hastings Street, Vancouver, B.C., V6B 1N2.

2. That I graduated with a B.Sc. degree in Geology from the University of New Brunswick in 1959, and with a M.A. degree and Ph.D. degree in Geology from the University of Toronto in 1961 and 1966 respectively.

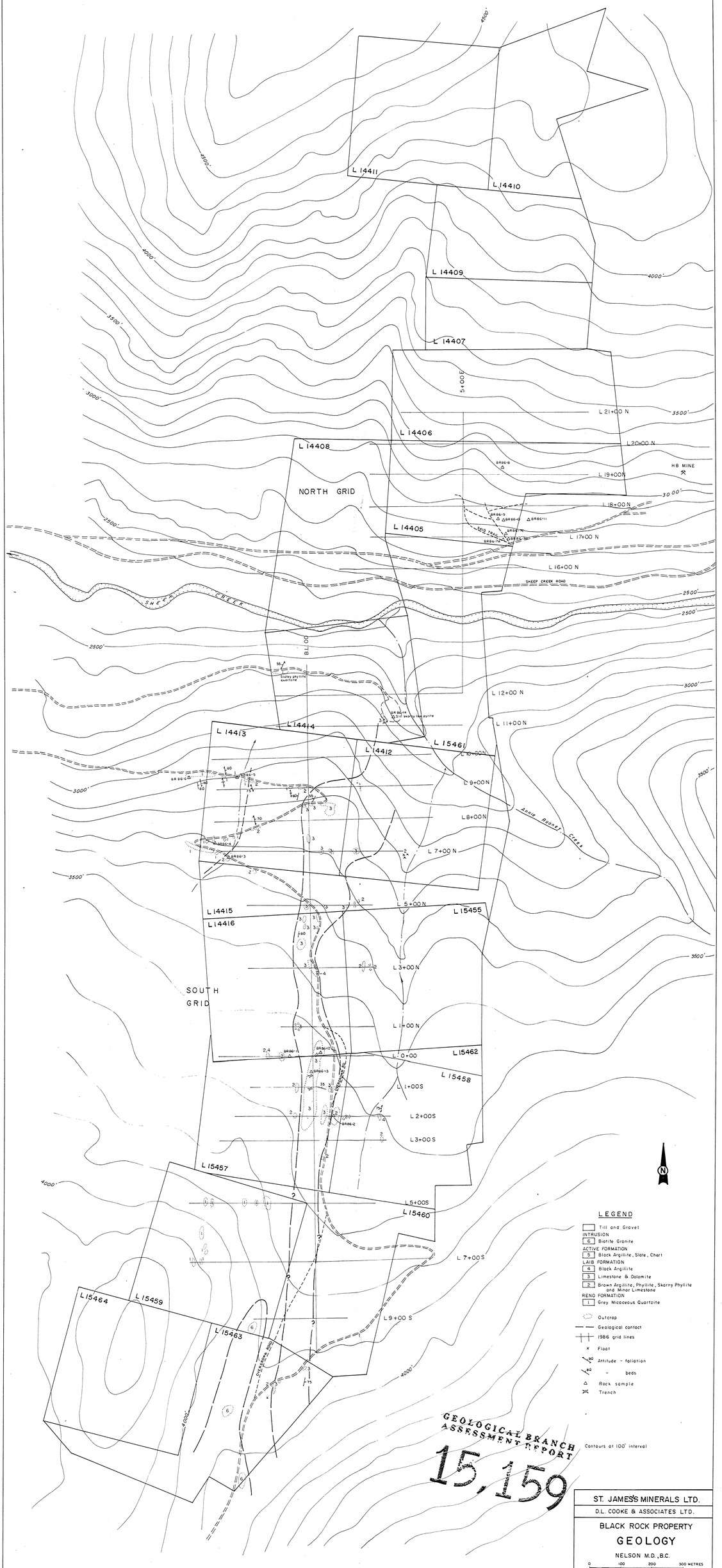
3. That I have practised my profession as an exploration geologist from 1959 to the present time in Canada, the U.S.A., Mexico, the Caribbean and South America.

4. That I am a Registered Member of the Association of Professional Engineers of the Province of British Columbia.

5. That I carried out the 1986 program on the Black Rock claims, and am the author of this report.

DAVID L. COOKE, PH.D., P.ENG.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D.L. COOKE



ST. JAMES'S MINERALS LTD.

D.L. COOKE & ASSOCIATES LTD.

BLACK ROCK PROPERTY

GEOLOGY

NELSON M.D., B.C.

0 100 200 300 METRES

SCALE 1:5000	DATE: AUGUST 1986
N.T.S. 82F-3E	FIGURE No. 3

CHONG