

967

RECONNAISSANCE GEOLOGY OF THE REY CREEK PROPERTY

LODESTAR MINES LIMITED,

NICOLA MINING DIVISION

BRITISH COLUMBIA

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IN ATTACHED ENVELOPE:

1. S.W. EVANS (A.C.A. HOWE & ASSOCIATES LTD.) MAP - RECONNAISSANCE GEOLOGY REY CREEK PROPERTY. # 1
2
2. A.C.A. HOWE & ASSOCIATES LTD. INVOICE. ✓
3. O'REILLY AND CATSAND BASE-LINE INVOICE. ✓
4. CATSAND INVOICE AS GEOLOGIST'S HELPER. ✓
5. GRASSLANDS HOTEL (MERRITT) INVOICE RE CATSAND. ✓

INTRODUCTION

The survey was completed during June and July, 1966 from a base at Herritt, B. C. This preliminary geological program was designed to assess conditions and aid in laying out a planned exploration program for the mining claims.

The property is underlain by metamorphosed greenstones of the Nicola Group. The individual members of this complex series are difficult to define and it is hoped that the reasonably broad picture as outlined, will serve the purposes of the program.

Since economic mineralization elsewhere in the Nicola Group is in some instances associated with the limestones of the Group, special attention was paid to this rock type. No limestones, as such were recognized, but many of the rocks contain a large percentage of introduced calcite.

PROPERTY AND LOCATION

The Key Creek Property consists of 50 contiguous mining claims. They are:

- Yoc #1 to #20 inclusive
- Lucky #1 to #10 inclusive
- Zowie #1 to #20 inclusive

Located in the Nicola Mining Division the group is approximately 13 miles north of the Town of Herritt, along the east side of the Guichon Creek, Merritt Lake Valley. Access is provided by a good gravel road extending north from Highway 16 at a point about 2 miles west of Merritt.

The claim group is split into two sections by the Key Creek Valley that traverses the group in an east west direction. The Key Lake road and numerous old logging roads provide access to the claims, especially in the north section.

From the claim posts observed it is apparent that staking discrepancies exist. There are a number of overlapping situations and it is reasonable to expect that fractions may exist. For example the Initial Post for Lucky #4 is at the junction of claims Roc #19, #20 and Zowie #1. The Final Post for Lucky #4 was observed with the Final Post for Lucky #3 in the northwest corner of the property. Errors like this should be corrected, and it is recommended that a correct property plan be prepared and tied into any linecutting that is done on the property.

DESCRIPTION OF PROPERTY

The elevation of the main road near the Roy Creek Ranch is 3142 feet above sea level. The ground elevation rises in terraces of glacial till eastward from the road.

The north section of the property rises steeply from the Roy Creek channel to approximately 4000 feet then levels off over the greater portion of this section, rising gently to around 4500 feet. This area has been cut over and is now used as pasture by Roy Creek Ranch. There are numerous old lumbering roads and trails throughout the north section.

The south section of the property also rises steeply from the Roy Creek channel and is marked by two main heights of 4900 feet and 5000 feet that form a north-south spine in the south sector. The ground on the east side of this spine does not fall off too rapidly. The best access road in the south area is limited to the lower elevations. The section is well timbered and travel in the eastern portion is made difficult by thick growth and many windfalls.

The property is bounded by a Natural Gas Pipeline and a B.C. Electric Transmission line along the west side.

GENERAL GEOLOGY

The property is underlain by metamorphosed greenstones of the Nicola Group, Triassic Period, Mesozoic Era. Glacic-fluvial terrace deposits of boulder till cover the west portion of the property. Coast Intrusives of the Gulchon Creek Batholith underlie a large area west of the Gulchon Creek, Hanit Lake Valley.

The Nicola greenstones are extremely complex and difficult to differentiate to any marked degree. However on the Lodestar property we have accepted a main Basalt/Andesite division. (We know from field observations that interflows of basalts also lie within our andesite division and that hornblende porphyries are quite common.) Further we have attempted to divide the andesites into a porphyry and a breccia subdivision. The Basalt porphyries have been grouped, except where they are heavily impregnated with hercynite. Manganese stain is quite common to many of the rocks throughout the property.

1. Andesite Porphyry: Generally fine to medium grained, grey green, fractured, with variations in porphyritic intensity. Phenocrysts of quartz, white feldspar, and epidote with varying amounts of calcite, locally siliceous. A hornblende porphyry (after augite) is associated and is quite common to the property. Many of these types are shot through with blebs of red iron oxides.
2. Andesite Breccia: In general the andesite porphyries are closely associated with the fragmental types. The breccia zone is marked by varying quantities and varying sizes of cherty red fragments and basalt remnants. They are angular to rounded and vary in size from 1/2" to several inches.
3. Basalt Porphyry: Fine to coarse grained, brown, black, green, with quartz and white feldspar phenocrysts. Amygdaloidal types are common and usually contain minute specks of black quartz as well as chlorite epidote and calcite.

4. Basalt Porphyry: heavily impregnated with hematite.

STRUCTURAL GEOLOGY

There is a north-south trending shear zone traversing the group and a fault has been assumed. The Rey Creek valley is a very prominent east-west feature topographically but there is nothing to indicate any allied structural feature.

It has been almost impossible to obtain structural information on such things as flow attitudes so only a few of the main fracture trends are reported. (See Map)

MINERALIZATION

There are literally dozens of showings and prospects within the Nicola Group, in the Merritt map area. These vary from Mercury, tungsten, lead, zinc, copper, gold and silver. The recent success of Craigmont Mines (copper) where the Nicola limestones are the host rock illustrates the potential that exists within the Nicola Group.

There are four main locations on the Lodestar property where minor sulphide content was observed. A brief discussion follows:

LOCATION A) Andesite porphyry with fine grained disseminated pyrite and traces of chalcopyrite. There is a well developed oxidized zone over a 30 square foot area. The showing occurs in a bulldozed area of an old logging yard in the south east corner of claim Zowie #3.

LOCATION B) Approximately 350' south east of (A) similar, contains minor fine grained pyrite and traces chalcopyrite.

LOCATION C) This area lies within the sheared greenstones on claim Lucky #3 and traces of molybdenite were suspected.

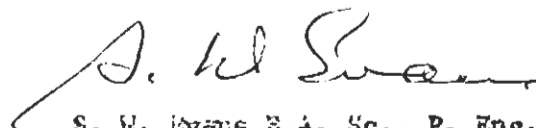
LOCATION D) Andesite porphyry, hard, medium grained, minor disseminated pyrite. The outcrop is at the corner of claims Lucky #7, #8, #9, #10 in the southern section of the property.

RECOMMENDATIONS AND CONCLUSIONS

The property lies within a belt that proliferates in mineral showings, and within which a substantial copper province is located. Although the mineral locations on the property are not too impressive they should be investigated further. The following recommendations are tabulated:

- a) Re-chain the baseline properly, and cut a grid at 400 foot intervals in the following areas.
 - 1) Complete northern section of the group
 - 2) Southern section east of the baseline
- b) Check staking, tie in with property plan completed from linecutting.
- c) Complete geochemical survey over line grid.
- d) Investigation of mineralized areas by bulldozing and or trenching.
- e) Geophysical follow-up to be based on results of the previous work.

Respectfully submitted



S. W. Evans B.A. Sc., P. Eng.
Mining Geologist

DATED July 15, 1966

Merritt, B. C.

VANCOUVER, B.C.

(604) 684-0923

A. C. A. HOWE & ASSOCIATES LTD.

Mining & Geological Consultants

SUITES 824-820 - 159 BAY ST., TORONTO 1, CANADA

TORONTO, ONT.

(416) 368-7041

March 21, 1967.

Lodestar Mines,
Suite 303, 540 Burrard Street,
Vancouver 1, B. C.

IN ACCOUNT WITH

A. C. A. HOWE & ASSOCIATES LTD.

Fee Payment -- S. Evans	1,337.15
Hotel and Meal incl.	<u>10.00</u>

1,347.15

Expenses as per attached

784.16

\$2,131.31

Advance less 1,000.00

\$1,131.31

1000.00
 816.26

 1816.26

AIR FARE less:	245.00
HOTEL	44.30
EXP. W. TIMMINS	75.75
	<u>172</u>
	\$ 816.26

Balanced
 Apr 10
 W. Timmins

To accompany geological report
by S.W. Evans on Rey Creek Property
Mamet Lake, Nicola M.D. dated July 15/66

To LODESTAR MINES LTD. June 3rd - 66

540 BURREARD ST - VANCOUVER.

Mel O'REILLY AND ANDY ADYIND
1018 Dominion, Vancouver
LABOUR ON CLAIMS

TO RUNNING NORTH - SOUTH
FLARE LINE, ON MAMMOT
LAKE CLAIMS;
FLAT RATE,

\$ 350.00

Received Sept 3rd/66
June
Mel O'Reilly

Contract for Base line Cutting for
Geological Reconnaissance

To accompany geological report by
S.W. Evans on Rey Creek Property,
Mammoth Lake, Nicola M.D. dated July 15/66

July 11th 1966

M Andy Cadant

Contract Labor.

In Account With Joe Hadstone, Minersha, N.P.L.

TERMS:

Contract Labor.

at Mamit Lake

16 days

@ \$12 dollars

per day

192.00

advanced

E. H. Lillis 20.00

Hadstone Minersha 100.00

120.00

Balance

By Cheque #42

72.00

Andrew Cadant

Helper for Geologist on Reconnaissance

To accompany geological report by S.W. Evans on Rey Creek Property, Mamit Lake, Nicola M.D. dated July 15/66

STATEMENT

JULY 8 1966

M. LEDESTAR MINES LTD (N.P.L.)
 SUITE 303 - 540 BURNING ST
 VANCOUVER B.C.

In a/c With
 Grasslands Hotel Ltd.
 BOX 939 - MERRITT, B.C.

TERMS





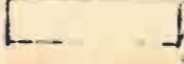






RE. ANDREW (KATSAND)			
1 SINGLE ROOM			
JULY 15 - JULY 15 (6 NLT)			126.00
PAY. A/c.			73.49
			199.49
Submitted with terms			
<i>[Signature]</i>			
GRASSLANDS HOTEL LTD.			

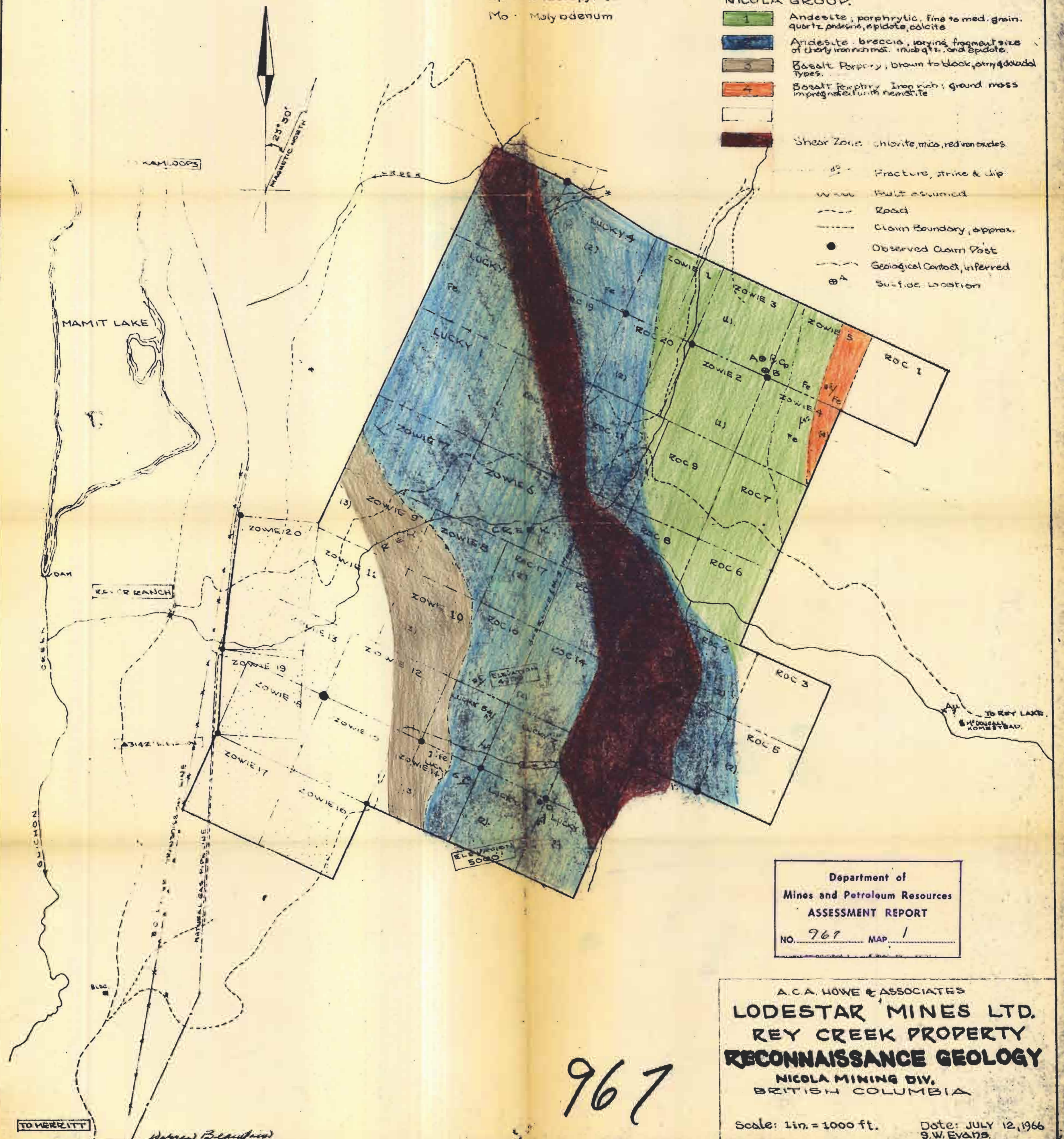
Accommodation for Katsand only available if
 ledestar mines paid hotel expenses - This
 explains why Katsand was paid only
 \$12.00 daily

To accompany geological report by S.W. Evans
 on Rey Creek Property, Mamut Lake, Nicola M.D. dated July 15/66

LEGEND

Fe : iron oxide
 Py : pyrite
 Cp : chalcopyrite
 Mo : Molybdenum

-  Glacial Boulder Till
- MESOZOIC : TRIASSIC : NICOLA GROUP.**
-  1 Andesite, porphyritic, fine to med. grain, quartz, andesine, epidote, calcite
-  2 Andesite breccia, varying fragment size of cherty iron rich mat. much quartz, and epidote.
-  3 Basalt Porphyry, brown to black, string of dolerite types.
-  4 Basalt porphyry, iron rich, ground mass impregnated with hematite
-  5
-  Shear Zone: chlorite, mica, red iron oxides.
-  - - - Fracture, strike & dip
-  ~ ~ ~ Fault assumed
-  - - - Road
-  ····· Claim Boundary, approx.
-  • Observed Claim Post
-  - · - · - Geological Contact, inferred
-  ⊙ A Surface location



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 967 MAP 1

A.C.A. HOWE & ASSOCIATES
LODESTAR MINES LTD.
 REY CREEK PROPERTY
RECONNAISSANCE GEOLOGY
 NICOLA MINING DIV.
 BRITISH COLUMBIA

Scale: 1 in. = 1000 ft. Date: JULY 12, 1966
 S.W. EVANS

967

TOWERZITT
 Warren Blundell
 Lower Nicola

An. ①
Br. volcanics, generally ②
Andesitic marble



LODESTAR MINES LTD
REY CREEK GROUP
NICOLA MINING DIVISION
B.C.
(KAM LOOPS DISTRICT)
967
S.W.E. JUNE/JULY 1966