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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

LUNG 1 CLAIM RECORD NO. 1352 MAP SHEET 104K/9E

Latitude: 58°32'

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Longitude: 132°04'

ATLIN MINING DIVISION B.C.

by

J.M. PAUTLER JUNE 1982

Work done: July 14 - 17, 1981 June 22 - July 1, 1982 By: J.C. Stephen Explorations Ltd. Funded by: Newex Syndicate

GEOLOGICAL AND GEOCHEMICAL REPORT ON THE LUNG 1 CLAIM

RECORD NO. 1352 MAP SHEET 104K/9E

SUMMARY AND CONCLUSIONS

- LUNG 1 consists of 20 units and is located approximately 50 kms south east of Atlin B.C.
- The claim was staked in 1981 on the basis of anomalous gold and silver results from the Heart Peaks Formation exposed on the HART group, 6 kms to the north.
- A crew of 4 people spent 16 man days on the property between July 14 and July 17, 1981. A crew of 2 people spent 20 man days between June 22 and July 1, 1982
- 4. The claim mainly consists of Tertiary to Pleistocene Heart Peaks Formation, trachytes and related pyroclastic rocks and Level Mountain Group basalts. The property was mapped at a scale of 1:5,000 on an air photo enlargement in 1982.
- A total of nine rock and 28 soil/talus samples were collected in 1981. One rock sample, 1 soil and 77 talus samples were taken in 1982.
- 6. No significant geochemical results were obtained in 1981 and the property does not contain the pyrite mineralization, drusy quartz quartz veins and quartz breccias that are evident on the HART group. Thus no further work is proposed pending the 1982 results and further development on HART.

INTRODUCTION

The 20 unit LUNG 1 claim was staked in July 1981 on the basis of anomalous gold and silver results from the Heart Peaks Formation exposed on the HART Group, 6 kms to the north. The LUNG claim covers the southern exposure of the same formation which consists of brightly coloured rhyolites, trachytes and associated pyroclastic rocks.

Field work, which involved prospecting, geological mapping and rock and soil and talus geochemistry, was conducted in July 1981 and June 1982. A total of nine rock and 28 soil/talus samples were collected in 1981 and one rock, one soil and 77 talus samples in 1982

Most of the outcrop in the area is restricted to a major north easterly trending ridge which strikes east-west in the north east, curves to almost north-south in the central portion of the claim and trends north-easterly in the south west corner. The ridge which essentially divides the property in two, is steep and rugged. Elevation ranges from 4000 feet to 5500 feet.

The main ridge lies almost entirely above treeline. Vegetation in the lower regions consists of buckbrush, alders, balsam trees and shrubs Wildlife includes black bears, mountain sheep, marmots and ground squirrels.

Drainage is poorly developed, especially in the central portion of the property where swamps and ponds are abundant. The creeks that exist flow northwest and southeast in the northwest and southeast corners respectively.-

CLAIM REGISTER

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CLAIM	NO. OF UNITS	RECORD NO.	RECORD DATE	
LUNG 1	20	1352	July 22, 1982	

The LUNG claim and southern portion of the HART claim group is shown in Figure 1.



LOCATION AND ACCESS

The LUNG 1 claim is located 2.5 kms east of the junction of Tatsatua Creek with the Sheslay River, approximately 150 kms southeast of Atlin, B.C. (Refer to Figure 2) Latitude and longitude are 58°32' and 132°04'W.

Access was by helicopter from Atlin, B.C. Helicopter service is also available from Dease Lake.



REGIONAL GEOLOGY

The geological Survey of Canada has mapped the geology of the area at a scale of 1:250,000. This mapping is published as Map 1262A, Tulsequah and Juneau Map Sheet 104K.

The LUNG claim consists of porphynitic trachytes and related pyroclastic rocks of the Heart Peaks Formation of Tertiary -Pleistocene age and basaltic rocks of the Level Mountain Group. A Tongue of the columnar jointed basalt interfingers with the Heart Peaks Formation along the south face of that part of the major ridge which trends east-west. Stuhini Group rocks occur to the west of the claim.

PROPERTY GEOLOGY

Geological mapping of the property in 1982 was plotted on a 1:5000 air photo enlargement. (Map 1)

The Heart Peaks Formation is exposed along the south face of that part of the major ridge which trends east-west. Here, it interfingers with the Level Mountain basalt unit. It continues westward along this ridge and it curves southward. The formation is continuous west and northwest of this part of the ridge, where isolated pillars, (carrots), of fine pumice-like material occurs with darker scoriaceous lenses.

The Heart Peaks Formation on the LUNG claim is generally highly weathered and brightly coloured. The original rock appears to be a light to dark grey, aphanitic trachyte, commonly porphyritic with plagioclase and sometimes quartz phenocrysts. Associated lapilli tuffs and acid scoria are evident.

LEGEND

- 3 (a) Volcanic Sandstone, very friable, cream to yellow color, volcanic fragments up to 1 cm.
 (b) Volcanic Conglomerate, volcanic fragments up to medium boulders.
- 2 Basalt: grey-black, fine grained, reddish brown weathering, generally porphyritic with clear plagioclase phenocrysts. (a) columnar,
 - (a) corumnar,
 - (b) poorly defined pillows,
 - (c) vesicular,
 - (d) scoriae to scoracious pumice.
- Trachyte: light to dark grey, porphyritic with quartz and plagioclase phenocrysts.
 - (a) pumice like acid scoriae,
 - (b) lapilli tuff, vesicular in places,
 - (c) agglomerate,
 - (d) fine pumice like with scoracious lenses.

The basalts display extensive columnar jointing where they are exposed in the northeast part of the property. The tongue of basalt that interfingers with the Heart Peaks Formation seems to indicate contemporaneous eruption of the trachyte and early basalt flows. The basalt does not appear to be a sill.

The basalts are commonly vesicular, and contain clear plagioclase and olivine phenocrysts and acicular to spheroidal calcite. Red to yellow scoraceous material occurs as layers within the columnar and vesicular flows. The basalt does not exhibit good columnar jointing on the western part of the property. Poorly defined pillows are evident below the trachyte on the east side of the main ridge where it trends north to northeast.

An agglomerate with felsic fragments and a dark matrix is exposed on a ridge south of the main ridge. It is overlain by the same pumice-like rock of which the carrots are composed.

Well layered volcanic sandstone and conglomerate occur along the northerly trending ridge which hosts the carrots. These are difficult to distinguish from the pumice-like and scoraceous pyroclastic rocks. A relative age is also difficult to determine. In places it overlies the basalt unit and in one locality a basaltic dyke cut through it.

MINERALIZATION

The LUNG 1 claim does not contain the pyrite mineralization, drusy quartz, quartz veins and quartz breccias which are evident on the HART group. Very minor amounts of sphalerite were observed in some of the trachytic rocks at the point where the major east-west ridge curves southward. Botryoidal psilomelane was abundant in cavities in both the trachytic and basaltic units.

GEOCHEMISTRY

The reconnaissance soil, talus and rock geochemical sampling that was completed in 1981 was generally widely spaced and did not yield significant results. Refer to Figure 3. Eight talus lines were completed in 1982 and further reconnaissance sampling conducted. However, the 1982 results have not as yet been received. Sample locations are plotted on Map 1. The range of the 1981 results are tabulated below:

TABLE 1

RANGE OF 1981 GEOCHEMICAL RESULTS

Sample Type	<u>Au (ppb</u>)	Ag (ppm)	<u>As (ppm)</u>	Hg (ppm)	<u>Zn (ppm)</u>
Soils	<10	0.1- 0.2	4 - 24	20 - 50	-
Talus	<10 - 20	0.1	4 - 230	10 - 60	-
Rock	<10 - 10	0.1 - 0.3	2 - 5	20 - 45	15 - 480

SOIL AND TALUS

A total of 28 soil and talus samples were collected in 1981 and analyzed for Au, Ag, As and HG. In 1982 the soil and talus samples were all analyzed for Au, Ag, As and Zn.

The finest material on the talus slope was used for the talus samples. The soil samples were collected from the 'B' horizon at an average depth of 10 cm, using a rock hammer. Samples were placed in a Kraft bag and sent to base camp where they were dried and sifted to -35 mesh. The samples were then sent to Chemex Labs, 212 Brooksbank Avenue, North Vancouver, B.C., for analysis. In the lab both the soil and talus samples were first pulverized to 100 mesh. The gold content was determined by aqua-regia digestion and chemical extraction followed by atomic absorption. Ppm Ag and As were determined by perchloric-nitric acid digestion and atomic absorption analyses.

<u>Results</u>

Two talus samples taken along the east slope of the north-south part of the main ridge yielded gold values of 20 ppb. One of these values was associated with a 230 ppm arsenic result and the sample taken beneath an outcrop of rusty trachyte. One other talus sample from the same north-south ridge ran 20 ppb gold. However, this is still below the reproducability of gold values.

ROCK

Ten rock samples were collected and all analyzed for Au, Ag, and As. A few samples were analyzed for Zn. The rock samples were sent to Chemex Labs, North Vancouver for analysis. The procedure is outlined in Appendix II.

No anomalous Au, Ag or As vlaues were obtained. One sample from the east slope of the north-south ridge returned a 480 ppm Zn value. The rock consisted of fine grained botryoidal psilimelane with calcite and very minor sphalerite and occurred within the trachyte unit.

CONCLUSIONS AND RECOMMENDATIONS

Prospecting, geological mapping and rock, soil and talus sampling was carried out on the property in July 1981 and June 1982. A total of \$

No further work is presently proposed on the LUNG claim due to the lack of significant results. However, assessment work will be filed to hold it pending the 1982 results and development on HART.

APPENDIXI

SAMPLE DATA SHEETS

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APPENDIX III

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Jean Pautler, am a graduate of the Honours Bachelor of Science program at Laurentian University, Sudbury, Ontario, 1980.

I have the following employment experience:-

April 1981 to present Geologist with J.C. Stephen Explorations Ltd. North Vancouver, B.C. May to October 1980 Geologist with J.C. Stephen Explorations Ltd.

May to August 1979 Assistant geologist with Kelvin Energy Ltd. Calgary Alberta.

May to September 1978 Assistant geologist with the Ontario Geological Survey, Toronto, Ontario

Lean partler.

NOVEMBER 1981

JEAN PAUTLER