

REPORT

ON

LANSLOWNE MINERALS LTD.

LEAN-TO PROPERTY

Tahtsa Lake District

Omineca Mining Division

West Central British Columbia

by

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TABLE OF CONTENTS

1) SUMMARY	1
2) INTRODUCTION	2
3) PROPERTY	2
4) LOCATION AND ACCESS	2
5) GEOLOGY	
A) Regional	4
B) Local	4
5) HISTORY AND PREVIOUS WORK	4
6) RESULTS OF WORK TO DATE	
A) Geochemistry	5
B) Geophysics	5
C) Drilling	6
D) Trenching	7
7) DISCUSSION	7
8) BIBLIOGRAPHY	7

SUMMARY

The Lean-To property of Lansdowne Minerals Ltd. is located in the Ominica Mining District of west central British Columbia. It is centrally located in the Whitesail Mountain Range. The rocks are medium to late Mesozoic volcanics and sediments that have been intruded by later stage andesitic to rhyolitic rocks. These rocks have in turn been invaded by quartz porphyry and monzonite masses.

Copper-molybdenum porphyrys are associated with the later intrusive stages. Several such mineralized situations occur in the area of the Lean-To claims.

Work to date on the Lansdowne Property has not been directed at the large copper porphyry potential but rather at the possibility of gold ore zones.

When the results of the work to date are examined in the context of porphyry copper potential the outcome is extremely encouraging. In comparison with the other similar situations in the area the Lean-To Prospect is comparable in size and would appear to have significantly higher grades of copper, gold and silver.

INTRODUCTION

Lansdowne Minerals Ltd. (formerly Lansdowne Oil and Minerals Ltd) is a small Vancouver based exploration company. Its principal place of business is 1326-510 West Hastings Street, Vancouver, British Columbia. It is listed on the VSE under the symbol LNM. The company is capitalized at 20,000,000 shares of stock of which 5,638,807 are issued (2,000,000 are escrowed).

In 1980 the company staked the Lean-To claim group in the Ominica Mining Division in west central British Columbia. The claims were acquired on the strength of anomalous copper-silver soil geochemistry outlined by previous workers.

The author of this report has twice visited the Lansdowne offices in Vancouver in March and April of 1989. Mr. J. G. Ager who has extensive knowledge on the property provided much helpful information. Several hundred pages of reports outlining work done on the property have been examined. Available diamond drill core was examined. Pertinent government reports both Federal and Provincial were also reviewed.

The property itself has not been examined.

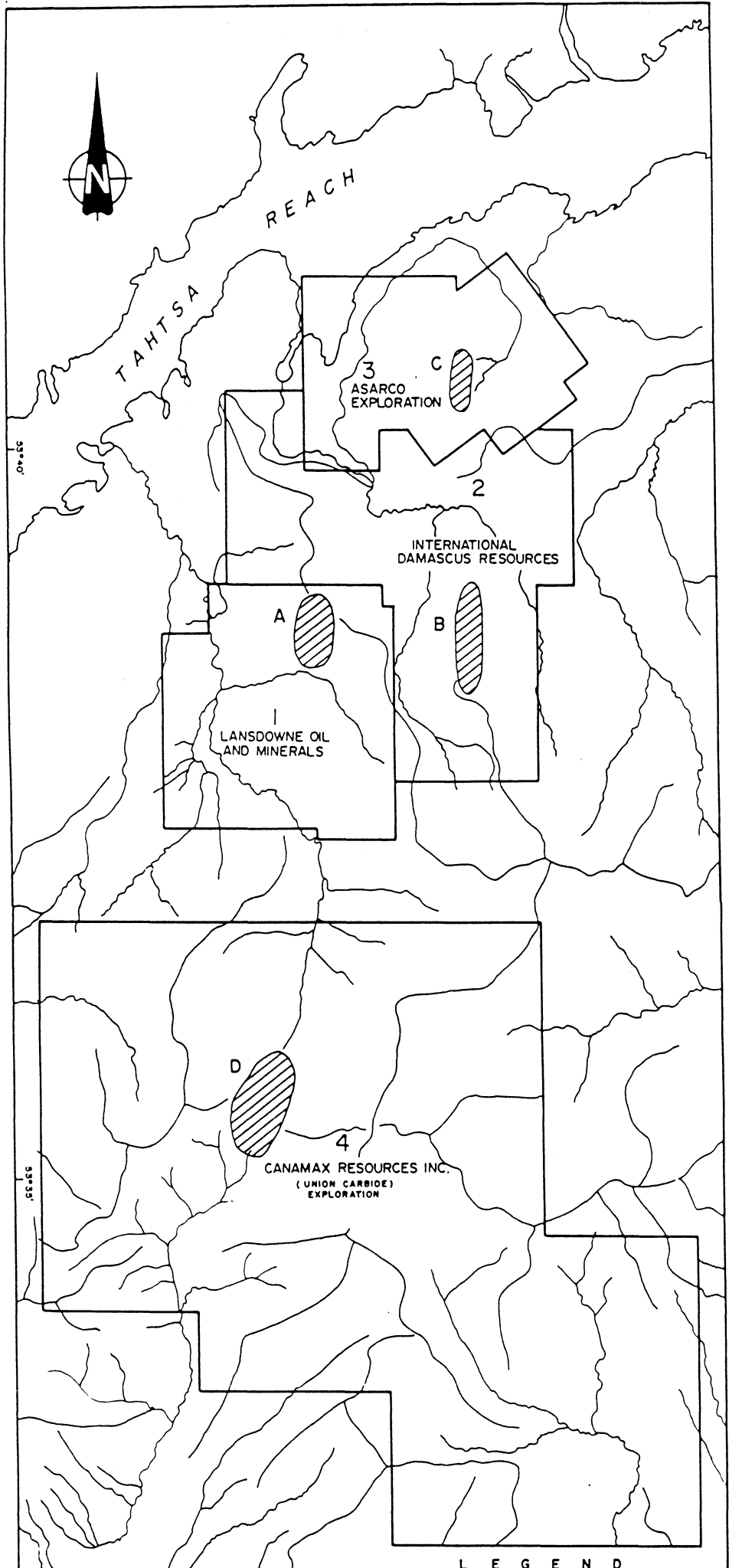
PROPERTY

The Lean-To claim group is comprised of 14 claims which total 43 units. This is approximately 1100 hectares or 2700 acres. The expiry dates on the claims are generally between 1992 and 1993.

LOCATION AND ACCESS

The Lean-To Property is located at latitude 53 degrees 38 minutes north and longitude 127 degrees 5 minutes west. It is on the north flank of the Whitesail Range which is part of the Tahtsa Ranges on the western edge of the Coast Mountains. The property is just south of Tahtsa Reach (see Figure 1) and is part of the Whitesail Lake map sheet (NTS 93E).

The nearest population center is Houston, B.C. which is 90 km north of the property. The surface access is by 140 km of logging road from Houston, barge across the Tahtsa Reach and then 8 km four wheel drive road to the claims.



LEGEND
 A - LEAN-TO Cu-Ag-Au deposit.
 B - OX Au-Pb-Ag showings and geochem. anomalies.
 C - OX LAKE Cu-Mo deposit.
 D - TROITSA PEAK Au geochem. anomalies (approx.).

LANSDOWNE OIL & MINERALS LTD.
WHITESAIL RANGE GOLD-SILVER-COPPER BELT

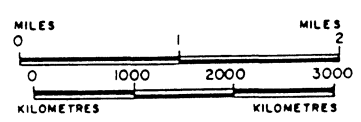


FIG. 1

GEOLOGY

REGIONAL

MacIntyre (1985) summarizes the regional geology as the meta volcanics and meta sedimentary rocks of the Jurassic Hazelton Group unconformably overlain by the Cretaceous Kasalka volcanics. Cauldron subsidence has produced a fault bounded structural depression that has been intruded by porphyritic andesitic to rhyolitic intrusive assemblages. Late Cretaceous and Tertiary Granitic intrusions are found just outside the area of subsidence. Porphyritic copper and molybdenum zones of mineralization are associated with these intrusions. Gold, silver, lead, zinc and arsenic are found in veins.

LOCAL

The Lean-To claim group is underlain by Hazelton meta volcanics and sediments. Quartz porphyry and monzonite intrude the Hazelton rocks. Associated with these intrusions is a disseminated pyrite zone that contains copper, silver, gold, lead, zinc and molybdenum.

A quartz porphyry plug in the central portion of the claims contains a quartz-carbonate altered breccia zone which has considerable copper-silver mineralization often with good gold values.

The Lean-To mineral occurrence is similar to others in the area (see Figure 1) that are receiving a substantial amount of attention due to the recent increase in the price of copper. The gold, copper and silver values found on the Lean-To claims are generally much higher than the others in the region.

HISTORY AND PREVIOUS WORK

In 1969 Bethlehem Copper Corporation acquired some claims that are now part of the present land package. An anomolous copper-silver soil area was drilled with eight percussion holes.

In 1980 Lansdowne restaked the Bethlehem ground and a geochemical soil survey outlined a strong copper anomaly with coincident gold, silver, zinc and lead anomalies to the east of the Bethlehem zone. This zone has been named the Discovery Zone.

In 1982 and 1983 the company drilled 62 diamond drill holes most of which were quite shallow. The total for the two years was 2398.2 meters.

In 1985 ten more holes totalling 201 meters were drilled. The next drilling phase saw five holes totalling 506 meters drilled in 1987.

From 1982 to 1984 the company performed geophysical and geochemical surveys over the property. The geophysical surveys conducted were Induced Polarization and Magnetics. The geochemistry was in the form of soil surveys in which the copper, gold, silver, zinc and arsenic values were analysed.

In 1984 Cominco did an Induced Polarization survey and some trenching in the area of the Discovery Zone.

RESULTS OF WORK TO DATE

GEOCHEMISTRY

The surficial geochemical work has outlined several areas with multiple element coincident anomalies. In the Discovery Zone area these anomalies cover an area of several hundred meters and have a pronounced northeast-south west orientation with an additional slightly smaller north north west-south southeast trend. Just north west of the Discovery Zone is another parallel anomalous trend of the metallic elements. Eight hundred meters to the south of the Discovery Zone an area containing anomalous silver-lead-zinc has been outlined.

The map in the pocket is taken from a report written by J.G. Ager in 1988. No changes have been made or information added. The map covers the area of the Discovery Zone. Most of the drill holes are plotted and the salient intersections are noted.

The copper and silver geochemical anomalies, while somewhat larger, generally coincide with the depicted outline of the breccia as it is drawn on the map

GEOPHYSICS

In the Discovery Zone area a large IP anomaly is generally coincident with the geochemical trends. The IP results show a metal rich structure up to about 500 meters wide and 1100 meters long. As in the case of the geochemical anomalies the IP results are similar to the outline of the breccia, as seen in the map in the pocket, but cover a larger area. A second smaller parallel

IP structure is outlined approximately 250 meters to the southeast. Within and peripheral to the large IP anomalous structure are several magnetic anomalies which are somewhat circular in shape.

DRILLING

Although some 77 holes have been drilled, many of which are plotted on the enclosed map, totalling some 3000 plus meters, the information obtained is difficult to assess for several reasons.

1. Most of the work was done when copper prices were depressed and therefore the main thrust of the programs was directed at gold occurrences. Copper was not of primary importance. The drill programs were not designed to test large scale porphyry structures. Instead they were investigating gold vein situations.
2. Poor equipment and contractors contributed to troubles in core recovery. Many of the holes were stopped before they had reached their projected length.
3. Many of the holes have not been surveyed. Thus the compilation of the data is extremely difficult.

In spite of these rather imposing limitations, the drilling has confirmed the presence of a large highly altered breccia that contains significant copper-gold-silver mineralization. Copper values are found in several holes with widths up to 30 meters that range between 0.5 - 2.0 percent with silver running one to two ounces. High grade sections have assayed four to eight percent copper over short intervals along with silver values up to three ounces. Gold assays in smaller high grade sections are up to the 0.25 opt range. There appears to be a direct relationship between the copper and silver content.

The following are a very few selected intersections that have been chosen to represent the different types of good sections that have been intersected in the various drill programs.

Hole #	Length (m)	Interval	Width (m)	Cu %	Ag OPT
82-19	29.3	7.2-25.3	18.0	1.59	1.24
83-4	168.0	1.0-93.0	92.0	0.546	0.40
83-11	89.4	7.6-25.0	17.4	1.58	1.23
87 2	?	165.5-166.4	0.9	10.21	7.53
		167.9-172.2	4.3	0.823	0.790

TRENCHING

The trenches dug by Cominco in 1984 did not produce any conclusive results. The writer of this report spoke with the Cominco geologists involved with the work in April of this year. They did not really get through the overburden and the highly weathered and leached zone and so did not get into mineralized bedrock.

DISCUSSION

Lansdowne Minerals Lean-To claim group has had a substantial amount of work done on it. Although this work has not generally been directed at examining the prospects of a high grade porphyry copper deposit, the results suggest the strong potential of this possibility.

The geophysical and geochemical survey results corroborate the presence of a large metal bearing structure that has not really been properly tested by drilling and trenching. The drilling problems encountered in the work to date suggest that much better results would be obtained using larger core sizes.

The similarities between the Lean-To and other porphyry copper situations in the area are striking. The presence of a highly altered breccia with notably higher than average copper-silver-gold mineralization over a large area is a significant plus factor over the other occurrences.

The next stage of work should be directed at further examining the large structure in and around the Discovery Zone. It would appear that a moderately wide spaced drilling grid should be augmented using larger core sizes.

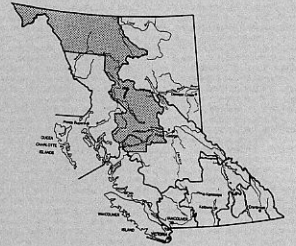
BIBLIOGRAPHY

MacIntyre, D.G., 1985: Geology and mineral deposits of the Tahtsa Lake District west central British Columbia, Bull. 75, B.C. Ministry of Energy, Mines and Petroleum Resources.

The author also has had access to 15 company reports, many with associated maps, as well as an incomplete set of drill logs.



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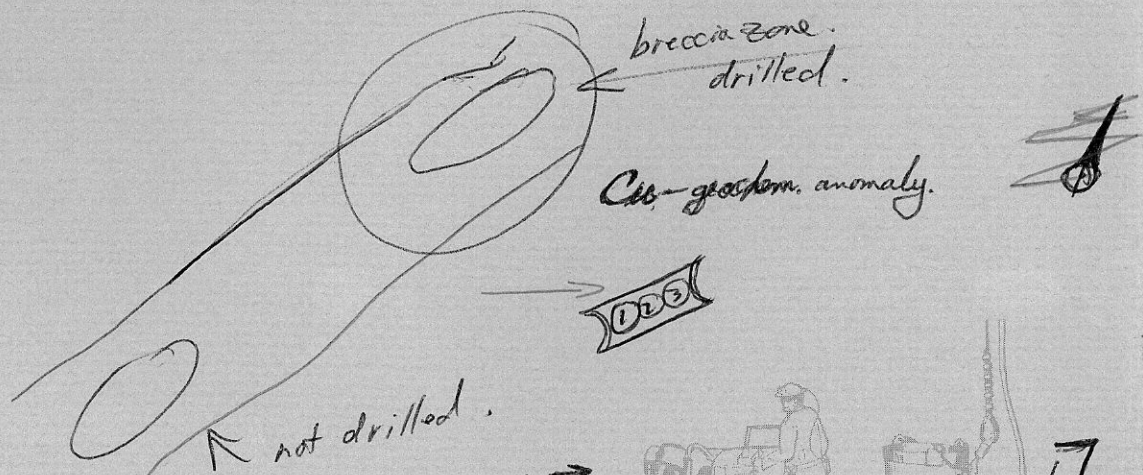
9098	3576
10168✓	11975
11237✓	
11777x0x	
12008x0x	



9098 - Lean-to coincident Cu, Ag, Au, zinc & lead geochem anomalies and mod. VLFEM conductor. on Lean-to 4 mod. anomalies (soil)

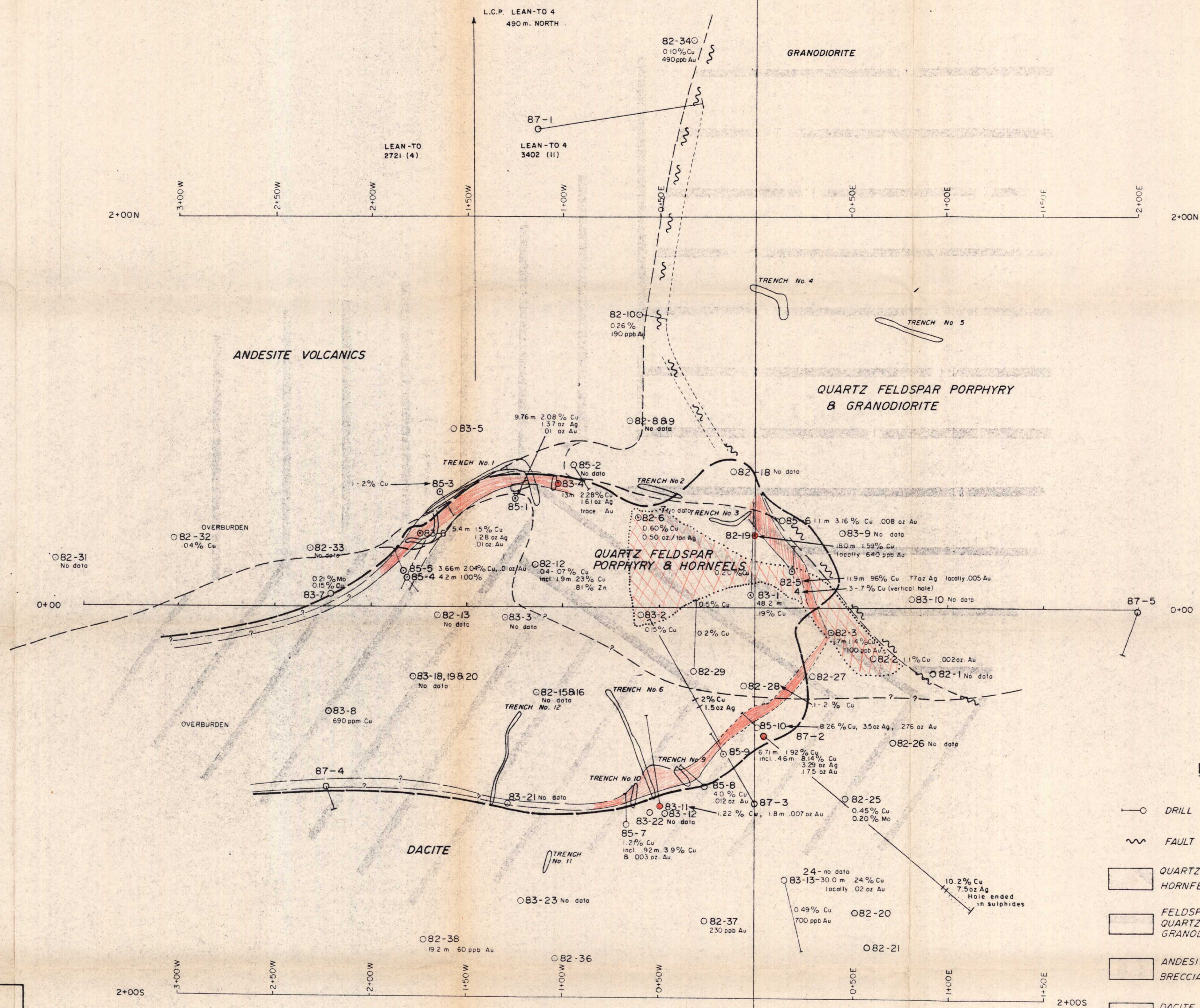
10168 - Airborne VLF - anomalies

11237 - Geology, diamond drilling, road construction. breccia zone 300m E-W x 150m N-S. Discovery Zone. 1) silicification 2) carbonitization + sulfides. 38 drill holes 16-53 m deep. in an area 650 x 550 m wide. shallow holes.



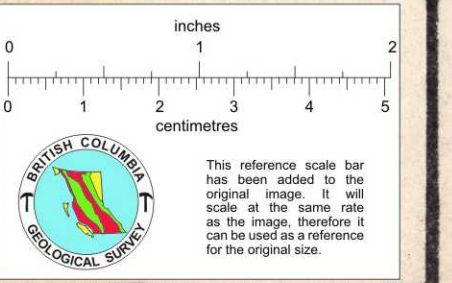
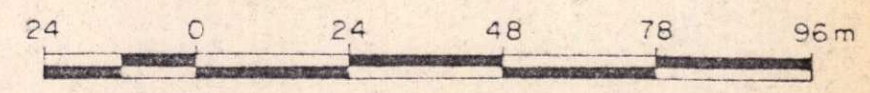
- can't relate geochem grid to drill grid. [oo can't correlate drilling to geochem.]





LEGEND

- DRILL HOLE
- ~ FAULT
- ▨ QUARTZ FELDSPAR PORPHYRY & HORNFELS
- ▨ FELDSPAR PORPHYRY, QUARTZ FELDSPAR PORPHYRY, GRANODIORITE
- ▨ ANDESITE, SILICIFIED VOLCANICS BRECCIATED VOLCANICS
- ▨ DACITE, ALTERED DACITE BRECCIATED ALTERED DACITE
- LOW GRADE MINERALIZATION
- HIGH GRADE MINERALIZATION
- GEOLOGICAL CONTACTS
- BOUNDARY OF BRECCIATED ZONE



LANSDOWNE OIL & MINERALS
 LEAN-TO PROJECT
 DRILL PLAN, GEOLOGY, MINERALIZED ZONES

J.G. AGER CONSULTANTS LTD.
 To Accompany Report By:
 James G. Ager, B.Sc. Geologist, Feb. 1988

James G. Ager

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