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MINING ENGINEER

TELEPHONE MUTUAL 4-7734

616 CREDIT FONCIER BLDG.
850 WEST HASTINGS STREET
VANCOUVER 1, B.C.

711

REPORT
on the
GEOCHEMICAL SURVEY
of the
EDEN CLAIMS
for
NEW INDIAN MINES LIMITED
VANANDA EXPLORATIONS LIMITED
HIGHLAND VALLEY
ASHCROFT, B.C.

January, 1966.

F.J. Hemsworth, P.Eng.,
Consulting Mining Engineer.

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INTRODUCTION

A geochemical survey was carried out on the EDEN group of twenty mineral claims, in the Highland Valley, during the 1965 field season. The work was done for and jointly financed by New Indian Mines Limited and Vananda Explorations Limited, 661 Hornby Street, VANCOUVER 1, B.C.

Geochemistry or soil testing was done as part of an exploration program, aimed at finding bodies of copper mineralization. Soil samples were tested for copper by the rubenic acid method in a field laboratory.

This report on the soil testing survey, and the accompanying map, are submitted in compliance with the Mineral Act, claiming geochemical work for assessment purposes on the group of claims outlined in the text of the report.

LOCATION AND PROPERTY

The EDEN group of twenty claims is situated in the Highland Valley, Kamloops Mining Division, 35 miles by road southeast of Ashcroft, B.C. The geographical position is Latitude N50°38', Longitude W120°58'. The location of the group and its relation to other holdings in the area is shown on the property map accompanying this report.

Particulars of the claims covered by the survey are as follows:-

<u>Name</u>	<u>Tag No.</u>	<u>Record No.</u>
EDEN No. 1	508920	45881
EDEN No. 2	508936	45882
EDEN No. 3	508937	45883
EDEN No. 4	508938	45884
EDEN No. 5	508939	45885
EDEN No. 6	508940	45886
EDEN No. 7	508941	45887 <i>July</i>
EDEN No. 8	508942	45888
EDEN No. 9	508943	45889 <i>July</i>
EDEN No. 10	508944	45890
EDEN No. 11	508945	45891 <i>July</i>
EDEN No. 12	508946	45892
EDEN No. 13	508947	45893
EDEN No. 14	508948	45894
EDEN No. 15	508949	45895
EDEN No. 16	492666	45896
EDEN No. 17	492667	45897
EDEN No. 18	492668	45898
EDEN No. 19	492669	45899
EDEN No. 20	492670	45900

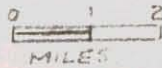
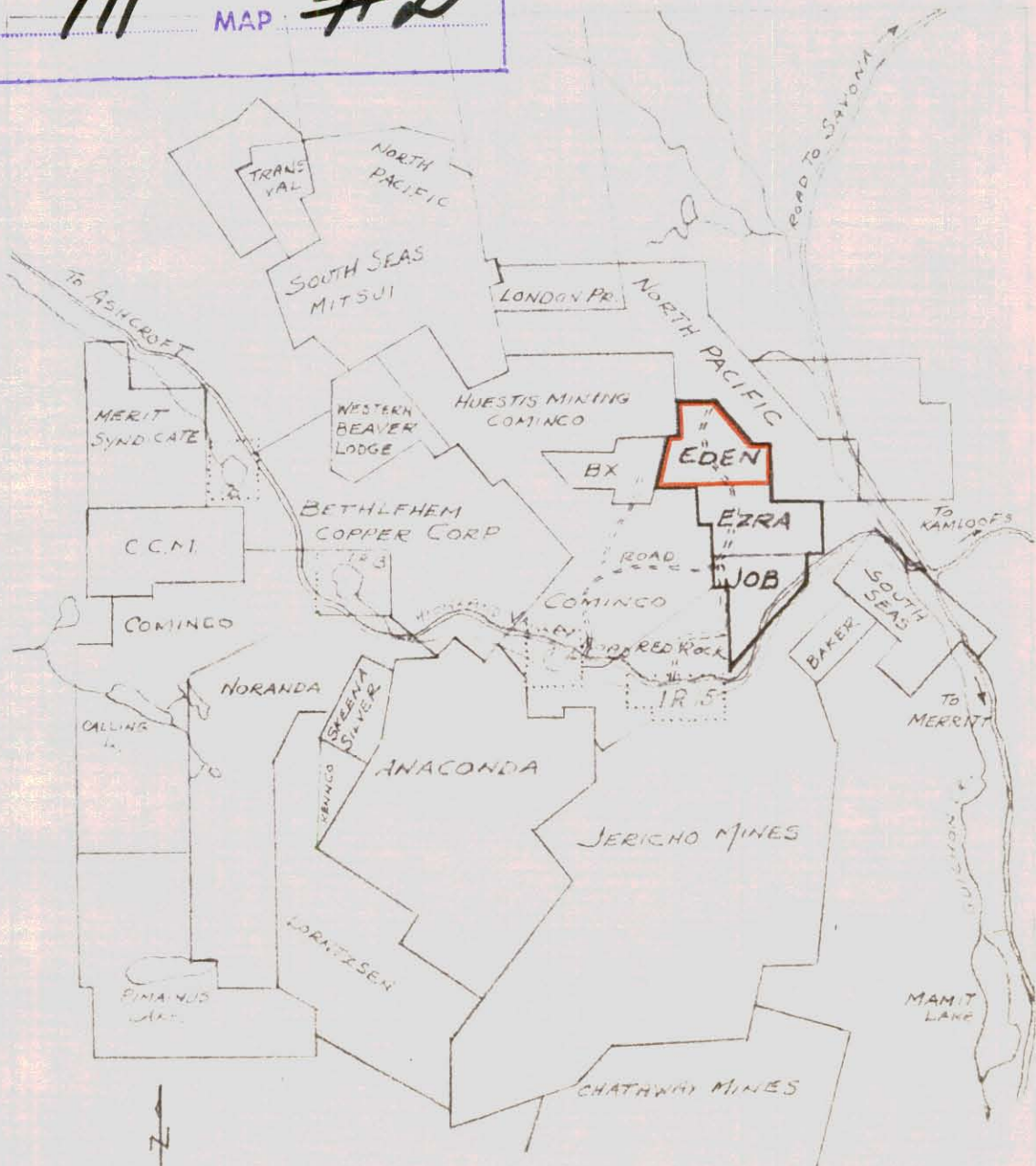
The above twenty claims were staked by D.R. Foster on April 20, 1964, and recorded April 24, 1964. A Brunton compass survey indicated that three claims, (EDEN Nos. 7,9,11) overlapped adjoining ground. The adjoining claims expired on July 10, 1965. Notice of abandonment was filed on July 7, 1965, and the EDEN Nos. 7, 9, and 11 claims were restaked July 11, 1965 and recorded July 20, 1965.

Particulars of the new staking are as follows:

<u>Name</u>	<u>Tag No.</u>	<u>Record No.</u>
EDEN No. 7	540917	50858
EDEN No. 9	540918	50859
EDEN No. 11	540919	50860

Department of
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ASSESSMENT REPORT

NO. 711 MAP #2



HIGHLAND VALLEY
PROPERTY MAP

SHOWING LOCATION OF JOB EZRA EDEN GROUPS
VANANDA EXPLORATIONS LTD
NEW INDIAN MINES LTD

DEC. 1965

TO ACCOMPANY REPORT OF F.J. HENSWORTH.

F.J. Hensworth

The EDEN group is bounded on the south by the EZRA claims, which are also being explored by New Indian Mines and Vananda Explorations. On the north, North Pacific Mines are developing interesting copper showings; on the west, BX and Huestis Mining ground is being investigated by Valley Copper, a subsidiary of Cominco.

GENERAL DESCRIPTION

The Highland Valley is a southeast-trending valley, having an elevation of between four and five thousand feet above sea level.

The property lies on the north side of the valley. The ground rises gradually and the hillside is covered with a moderate growth of pine and fir. Swampy areas are common. Except on the ridges the ground is covered by glacial drift. The depth of overburden on most of the surface areas makes the determination of geological structure difficult.

Access to the north and central portions of the EDEN claims is by a new road constructed in 1964. The new road is a continuation of the BX mine road from a point two miles north of the Highland Valley road.

GEOLOGY

The few outcrops on the EDEN property are granitic rocks of the Guichon Batholith of Jurassic Age.

Disseminated copper mineralization in place and as float was noted along several of the crosslines. Stripping and trenching on the EZRA claims to the south revealed patches of altered granodiorite containing specks and blebs of malachite and chalcopyrite. Copper showings are widely scattered over the EDEN claims, particularly on the eastern section of the ground.

GEOCHEMICAL SURVEY

Survey of Grid

The location lines of the claims, which run in an east-west direction, were surveyed by Brunton compass and chain, and used as baselines. Stations were marked at 300-foot intervals along the baselines. From these stations, lines were run north and south to the claim boundaries. Soil samples were taken at 100-foot intervals along these north-south sidelines. The grid thus formed had 300-100 foot intervals as shown on the geochemical plan. In addition a survey was made of the road and its relation to the claim boundaries.

Soil Sampling Method

The field crew consisted of two men. At the sample intervals, (100 feet), a shallow hole was dug with a garden trowel. The hole was deep enough to get below the surface humus. The soil samples were taken at a depth of about six inches (A-3 horizon). About 200 grams of soil was placed in a small plastic bag, labelled, rolled up, and secured with an elastic band. Samples were carried back to camp in a small packsack.

Analyses

The spot tests for copper were made on a crude table at the tent camp. A $\frac{1}{4}$ teaspoon of soil was placed in a test tube with acetic acid extracting solution, mixed well, and filtered onto a strip of rubeanic acid paper. A blue spot indicated the presence of copper, the intensity of the blue color being proportionate to the amount of copper present. The results were compared with a set of standards prepared at the University of British Columbia, and the parts per million of copper estimated. The results are shown on the geochemical plan, in the report envelope.

Interpretation of the Results

Of a total of 1,507 samples tested, 1,330 showed 0.4 or less parts per million of copper, 88 had 1 part per million; 47 had 2 parts per million; 34 had 4 parts per million; 5 had 10 parts per million; and 3 had 20 parts per million. From the writer's experience with geochemistry in the Highland Valley, samples containing 2 or more parts per million are considered anomalous. The locations of anomalous samples are marked in red on the plan.


The results were surprisingly low, particularly adjacent to rock outcrops which showed specks of chalcopyrite. This occurred at several localities and may be due to transient glacial till which has little or no relationship to the underlying rock.

There is a north-south trending draw or gully traversing the western part of EDEN No. 6 and EDEN No. 7 claims. Most of the mineral showings discovered to date lie east of this depression.

Although the soil samples did not show a pattern of anomalous values that could be contoured, the results were sufficiently encouraging to merit additional work in this area.

Respectfully submitted,

January, 1966.


F. J. Hemsworth, P. Eng.,
Consulting Mining Engineer.

**GEOCHEMICAL MAP
EDEN MINERAL CLAIMS,
HIGHLAND VALLEY, B.C.**

SCALE: 1 IN. = 400 FT.

DECEMBER 1965.

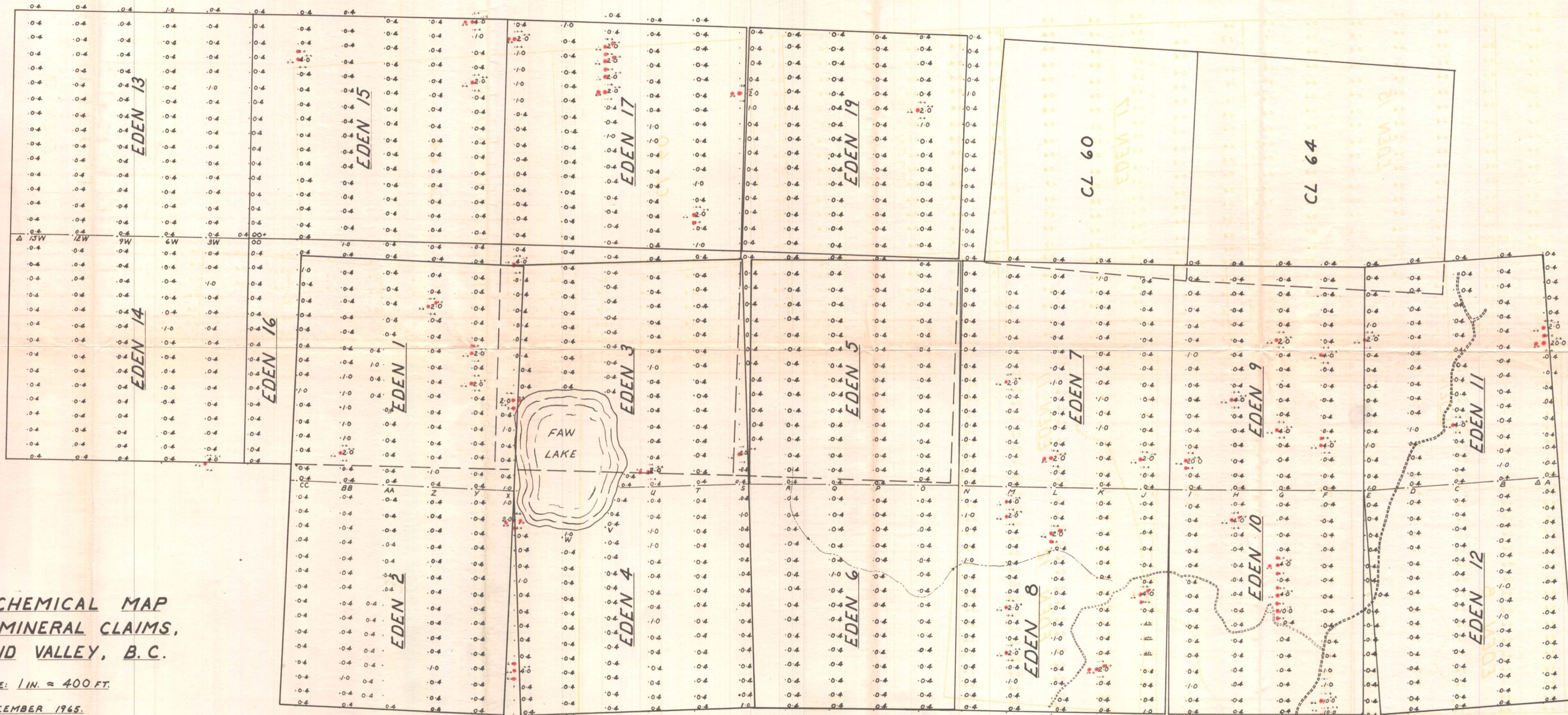
VALUES INDICATE PARTS PER MILLION COPPER

2.0 P.P.M. OR GREATER

Department of
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ASSESSMENT REPORT
NO. 711 MAP #1

TO ACCOMPANY REPORT BY F.J. HEMSWORTH, P. ENG.

F.J. Hemsworth



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