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GEOCHEMICAL REPORT ON THE DON GROUP OF CLAIMS

LIGHTNING PEAK - 49°, 118° N.E.

BY J.P. WEEKS, P. ENG. FOR
BRALORNE PIONEER MINES LIMITED

CLAIMS OWNED BY
PAYCHECK MINING & DEVELOPMENT COMPANY

WORK DONE BETWEEN THE
3RD AND 28TH AUGUST, 1966.

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In Pocket: Figure 1 - Plan showing sample locations.

GEOCHEMICAL REPORT ON THE DON GROUP OF CLAIMS,

LIGHTNING PEAK - 49^o, 118^o N.E.

Introduction.

This report has been prepared for submission as assessment work and describes a geochemical survey carried out on the above claims.

Location and Access.

The property is situated on the north eastern flank of Lightning Peak some 18 miles ^{west} east of the Township of Needles on the Lower Arrow Lake. Access is by a narrow dirt road for some 18 miles from the settlement of Inonoaklin Crossing on the Monashee Highway.

Topographically the claims are in an area of rolling plateau at an elevation of 6000' although the surrounding country is much more precipitous. The area is one of heavy winter precipitation and despite the elevation the claims are covered by a thick growth of conifers and underbrush.

Property.

The claim group consists of two claims, the Don Nos. 47 and 48, record numbers 6820 and 6821 respectively. Their history is unknown, but the first claims were staked in the area in 1897 and it is probable that the ground covered by the existing claims has been restaked many times since that date. That some work has been done underground is shown by the existence of an adit, now inaccessible, that was found in the northeast quadrant of the Don No. 48 claim.

Regional Geology

The regional geology is shown on Map No.6 - 1957, Kettle River (East Half) published by the Geological Survey of Canada and the results of a more detailed study of the Lightning Peak area by C.E. Cairnes were published in the G.S.C. Summary Report, Part A for 1930.

No purpose will be served by repeating this information here.

Property Geology.

The claims are generally underlain by greywacke, gneiss and limestone of Permian age belonging to the Anarchist group which form a roof pendant in later intrusives. The contact with these intrusives, which are granite of the Valhalla group of Mesozoic age, lies close to the eastern and southern boundaries of the Don 48 claim.

Generally the claims are covered by overburden of varying, but sometimes considerable depth and outcrops are exceptional.

With the exception of a small sparsely mineralized stringer in the adit mentioned above, no mineralization is known to exist on the claims. However at the Waterloo Mine in a similar geological environment some 17,000' to the east, strong mineralization, consisting largely of galena and sphalerite with smaller quantities of several silver minerals occurs in a shear zone striking approximately east and west.

Work Program.

As stated above most of the claims are covered by overburden but earlier work over the Waterloo vein to the east had shown that geochemistry was effective in tracing the vein beneath similar overburden. It was decided therefore to run a geochemical survey over the claims which, it was thought, would indicate the presence of any similar mineralization.

Most of the mineralized shears in the Lightning Peak camp strike east and west and it was concluded that four parallel lines of sampling in a north-south direction would locate any similar shears on the Don group.

When the northern boundary of the claims had been established sampling commenced from the northern extremity and continued in a due south direction. Samples were taken at 20' intervals and straightness of the lines was maintained by flagging and frequent checks by Brunton Compass. Mattock holes were dug and an ounce or two of soil from the "B" horizon was taken and placed in an envelope. All

Work Program. (c'td.)

samples were taken to camp for analysis where they were first dried and screened through a plastic sieve. A measure of 1/2 teaspoon of screened soil was placed in a small pyrex test tube to which was added 1 ml. of acetic acid sodium acetate solution (heavy metals), 1 ml. of dithizone solution and 1 ml. of toluene after which the test tube was stoppered and shaken. The sediment was allowed to settle and the samples observed for 30 minutes at the end of which time a pink colour was assumed to indicate the presence of heavy metals and a green colour was assumed to indicate their absence.

A total heavy metals testing kit obtained from Eldrico Geophysical Sales Ltd. was used throughout the survey.

Geochemical Survey.

The results from the survey are plotted on Figure 1 attached on which sample sites which gave negative reactions are shown by a small dot. No samples gave a positive reaction and it is concluded that the claims contain no mineralization of economic significance.

Statement of Qualifications.

- H. Urhahn - A third year geology student from the University of British Columbia who was employed on similar work during the summer of 1965 and also earlier in the present season.
- N. Andrade - A third year political science student from the University of British Columbia who was employed on similar work during the summer of 1965 and also earlier in the present season.
- R. Barnes - A second year undergraduate from the University of British Columbia who has been employed on geochemical work by this Company for the past eight months.

Statement of Qualifications. (c'td.)

B. Woodcock - A first year science student from the University of British Columbia who was trained in the techniques earlier in the year in the Kamloops area.

The entire program was carried out under my supervision.

Statement of Expenditures.

Total Salaries - 8 man days	\$ 135.00
Fringe Benefits	25.00
Field Maintenance	50.00
Laboratory Supplies	20.00
Four Wheel Drive Vehicle	<u>15.00</u>
Total Expenditure	<u>\$ 245.00</u>

Details of the above are shown on the Statutory Declaration.

Assessment Work.

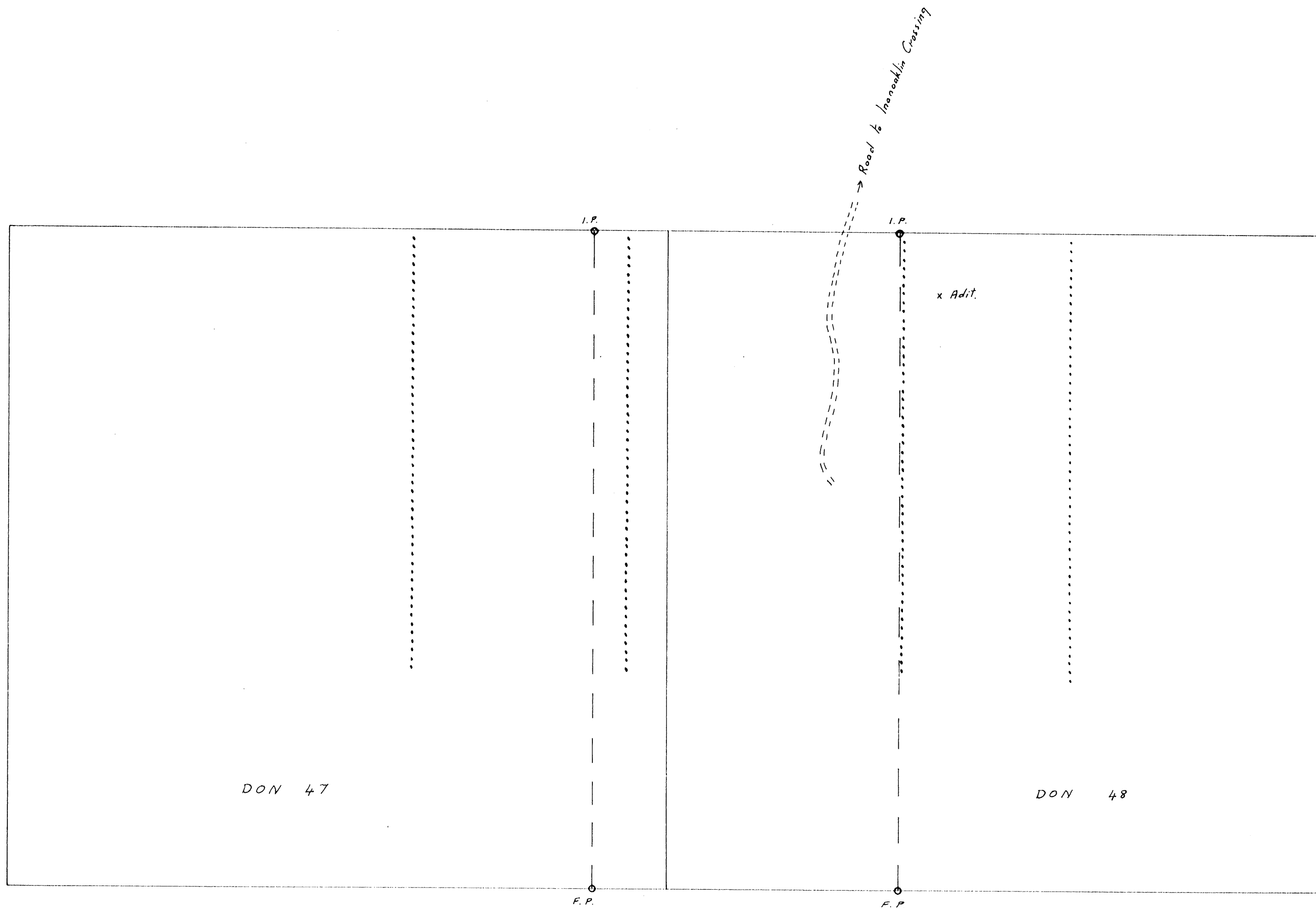
Assessment work is to be applied as follows:-

Don No. 47) One year's work to be
Don No. 48) applied to each claim.

Respectfully submitted,
BRALORNE PIONEER MINES LIMITED

J.P. Weeks
J.P. Weeks,
Chief Geologist.

JPW:md
Att.
Vancouver, B.C.
September 15th, 1966.



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J.P.W.-1

To Accompany geochemical report by J.P. Weeks, P. Eng.
 on the "Don" group near Lightning Peak,
 Vernon Mining Division, dated 15th September, 1966

BRALORNE PIONEER MINES LTD.		
Figure 1.		
Lightning Peak: Don Group		
Plan Showing Location of Sample Sites		
Negative Samples Shown thus: ...		
SCALE 1" = 200'	REF.	
DRAWN BY J.P.W./6	DATE 13 Sept. '66	No.