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Mr. J. J. Brummer Exploration Manager Canadian Occidental Petroleum Ltd. 801 - 161 Eglinton Ave. East TORONTO, Ontario M4P 1J5

Dear Joe:

Thank you for your letter of March 1, 1977, which concerns your aspirations for a joint venture based on geochemical coverage in southern B.C. I was interested to note that you included a short treatise on the economic geology of the area and the applications of geochemical results.

We would not be interested in a joint venture with Occidental under the terms proposed and, indeed, it would seem somewhat naive to suppose that we would be interested in the data under the terms suggested. There is probably some merit in the approach you suggest; however, it's an approach that has been taken by others in the area of activity and elsewhere.

I would be interested to hear what success you have in attracting a joint venture party to this project, and I look forward to seeing you at the Prospectors' or in Vancouver.

Yours very truly,

KERR ADDISON MINES LIMITED

D. A. Lowrie Vice-President, Exploration

DAL: jas



# KERR ADDISON MINES LIMITED

P.O. BOX 91 - COMMERCE COURT WEST
TORONTO, ONTARIO MSL 1C7
TELEPHONE 867-7270



March 3, 1977

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#### Canadian Occidental Petroleum Ltd.

March 1, 1977



Exploration Manager, Kerr-Addison Mines Ltd, Box 91, Commerce Court West, Toronto.

Re: Joint Venture for Uranium Deposits in Southern British Columbia

#### Dear Sir:

During 1973-74 the Minerals Division of Canadian Occidental Petroleum Ltd. covered 5430 sq. miles in southern British Columbia by reconnaissance stream sediment geochemical surveys searching for porphyry copper and/or molybdenum deposits. The area surveyed extends north from the British Columbia/Washington border almost to Kamloops. See attached index plan.

Some 7580 samples were collected representing a density of 1.45 samples per square mile. The samples were tested for Cu, Mo and Zn content and some of the highlights of this work will be presented at the April 17-20 meeting of the C.I.M.M. in Ottawa and at the G.A.C./M.A.C./S.E.G. meeting in Vancouver on April 25-27, 1977.

With the increasing interest in uranium mineralization in the Cordillera it was realized that the samples already on hand could be readily tested to indicate areas with uranium potential.

The types of deposits likely to occur in the surveyed area would be similar to those found in the north and west and can be summarized as follows:

- 1) Porphyry-type uranium deposits associated with upper Cretaceous alkaline plutons such as the Carmi occurrence.
- 2) Uranium in basal clastic sediments beneath a cover of Tertiary volcanics such as the occurrences located at Deer Creek, (Fuki-Donen), Hydraulic Lake (Noranda/Kerr-Addison option).
- 3) Polymetallic deposit (with fluorite and uraninite) in veinreplacement zones in porphyritic trachytes of possible Permian age such as the Cons. Rexspar deposit. See attached notes for further details.

If any of these occurrences are of interest to you then the means are available for testing for them in the surveyed area at a low cost.

We still retain the -80 mesh screen fraction, of the sample pulps collected during 1973-74, and would be prepared to make the pulps available for analyses on a joint venture basis.

#### Joint Venture Agreement

Suggested terms of such an agreement could be:

- 1) CanOxy will make the pulps available for analysis and computer processing at Partner's expense to determine the uranium content using the neutron activation technique. This is a non-destructive method and the pulps, after testing, are to be returned to CanOxy.
- 2) CanOxy will arrange to process the data and provide targets for follow-up surveys and/or staking. CanOxy is prepared to act as the operator for subsequent work if this is mutually agreed to. CanOxy has a local base at Penticton and is active on a year-round basis in the area. However, if the Partner wishes to actively pursue this phase of the work then CanOxy will relinquish management to them.
- 3) CanOxy's expenditures on the 1973-1974 geochemical surveys total \$150,000. This is the sum the Partner must equal before earning equity in any properties staked or acquired within the area of interest.
- 4) Once the Partner's field expenditures equal CanOxy's then participation on any property acquired will be funded on a pro-rata basis. CanOxy, being a foreign controlled company, can only retain a 33 1/3% equity in any property brought to production. Hence the Partner can acquire the balance of the equity. Subsequent expenditures, past the \$150,000 mark, will therefore be funded 1/3 CanOxy and 2/3 Partner.
- 5) Should CanOxy not wish to proceed with financing of any of the properties acquired then its interest would be reduced proportionately as a percentage of total expenditures. However it will retain a minimum of 10% non-assessable interest in any property acquired in the area of interest.

## Estimated Cost of Analyses and Processing of Data

1) Analyses by A.E.C. Ltd. using "neutron activation delayed neutron counting" technique.

7,580 samples @ \$3.15 each: \$23,877. Say \$ 24,000.

2) Data processing of results with computer plotting of moving-average and residual metal maps. All the field data, digitized sample locations, etc., are already stored on magnetic tape. Hence additional costs would simply mean adding the uranium analyses to the computer records, processing the data and producing the maps. This work will be carried out by Computer Applications and Systems Engineering ("CASE") of Toronto.

3) Services of a Consulting Geochemist to supervise above and assess results, say, 10 days @ \$300./day - \$3,000.

4) Drafting services, etc., say -

\$ 1,000.

5) CanOxy's overheads and expenses at 15%

\$ 5,250.

Total -

\$40,250.

Or Cost per Sq. Mile: \$7.41.

This information would give Partner a fairly detailed assessment of the uranium potential of the area covered. The next step would be to follow-up the anomalies outlined.

## Timing of Above

If this proposal is of interest to you then it should be proceeded with as soon as possible.

If a positive decision can be made by March 31 then the analyses can be completed during April-May and the results processed during June. This will allow time for the staking of claims during July and August, 1977.

If this is of interest please advise so that we can get the operation under way.

Yours truly,

CANADIAN OCCIDENTAL PETROLEUM LTD.,

J.J. Brummer,

Exploration Manager,

jjb/s

enclosure

## Uranium Exploration in Area South of Kamloops, B.Columbia

#### A) CanOxy Surveys

- 1) Project Princeton 1973: covered 4,000 sq. miles, with 5099 samples, density 1.27 per sq. mile, across NTS 82-E & 92-H, see map attached.
- 2) Project Nicky 1974: covered 1,439 sq. miles, with 2751 samples, density 1.92 per sq. mile, across NTS 82-L and 92-I, see map attached.

Thus, total is 5,430 sq. miles, 7580 samples for density of 1.45 samples per sq. mile.

- B) G.S.C./B.C. Joint Federal / Provincial Uranium Reconnaissance Program, (U.R.P.)
  - 1) 1975 B. Ballantyne of G.S.C. carried out an orientation study. Results released on open file Dec. 20th, 1976. For details see map attached.
  - 2) 1976 Barry Smee of G.S.C. covered NTS sheets 82-E, 82-M, 82-L for U.R.P., 1 sample per 5 sq. miles for release in May(?), 1977. This is 0.2 sample per sq. mile compared to CanOxy's 1.45 sample per sq. mile, i.e. CanOxy sampling X7.

## C) Known Uranium Occurrences

- "Fuki-Donen" Claims off Dear Creek, Kettle Valley, Beaverdell (4 on Fig.)
- a) Power Reactor and Nuclear Fuel Development Corp. (Japanese Government agency) known as P.N.C., is now Nissho-Iwai Canada Ltd.

Mineralization found during 1968; drilled 16 ddh 1972, 20 ddh in 1973. This outlined 2500 x 1200 foot area, within a 300 claim area, 3-6 foot thick section of 0.02-0.7% U<sub>3</sub>O<sub>8</sub> in carbonaceous mudstone, conglomerate and sometimes basalt, the Tertiary sequence overlying Shuswap gneisses, Jurassic-Cretaceous granites and Coryell intrusions.

- b) Peregrine Petroleum Ltd. (Noranda-Kerr Addison Option) hold 220 claims more or less surrounding the Fuki-Donen claims of P.N.C., in the Lassie Lake area. Peregrine Oils have drilled, data not released.
- c) Adjoining Peregrine Oils are claims of Lacana Mining Corp. where at least 4 ddh have been completed. Results are not known.

- 2) PB81-179 Claims off Hydraulic Lake, Kelowna, (2 on Fig.)
- a) P.N.C., see above, staked PB81-179 in 1972, drilled 8 ddh in 1973, by May 1976 drilled 28 ddh for total of 5300 feet. Best intersection of 9!8 feet of 0.4% U<sub>3</sub>O<sub>8</sub> at depth 125 feet below ground.
- b) Tyee Lake Resources Ltd. Peregrine Petroleum Ltd.

Tyee Lake holds 320 claims, Peregrine Petroleum (Noranda-Kerr Addison Option) holds 360 claims which completely surround PB81-179. Started work August, 1975, geology and Track Etch and drilled 22 ddh. Of last 11 ddh, average chemical assay is 33 feet of 0.065% U<sub>3</sub>O<sub>8</sub>, best is 14 feet of 0.15% U<sub>3</sub>O<sub>8</sub>, this equals 500,000 tons of 0.05% U<sub>3</sub>O<sub>8</sub> which is what Noranda-Kerr Addison bought.

3) Vidler Creek Area - Vernon (6 on Fig.)

Chatham Resources Ltd., claims cover uranium mineralization overlying Shuswap gneisses and below Tertiary basalt area; being tested by drilling.

4) Carrott Mountain - Kelowna (5 on Fig.)

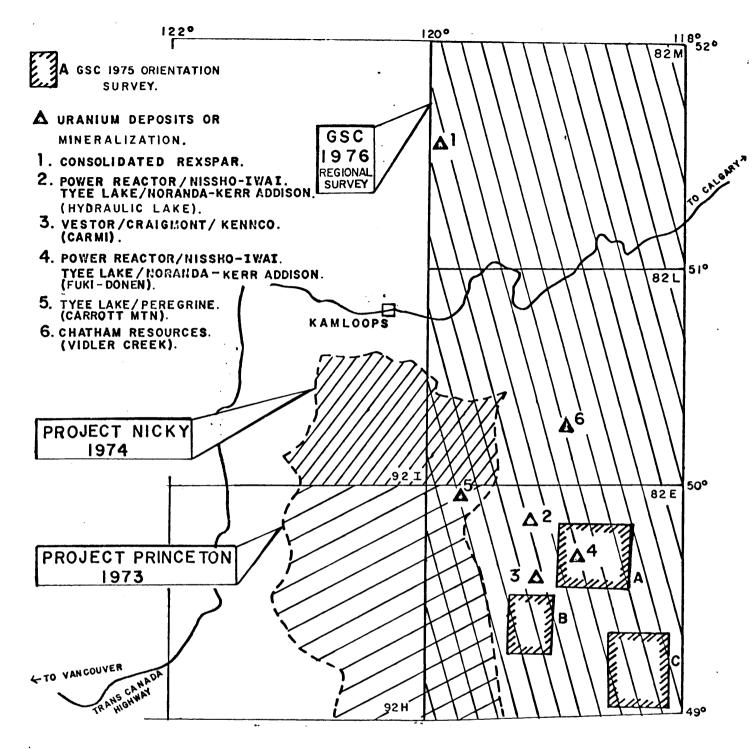
Tyee Lake Resources Ltd.-Peregrine Petroleum Ltd. (50/50 joint venture), drilled 4 ddh, some did not reach required depth.

5) Carmi Area (3 on Fig. )

Vestor-Craigmont-Kennco; disseminated Mo-Cu mineralization in granitic stock, this is accompanied by disseminated fluorite and uraninite ("porphyry uranium deposits"), could be source area of (1-4) above.

6) Consolidated Rexspar Minerals & Chemicals Ltd. (Denison Mines Ltd., owner of 47%) (1 on Fib.)

Polymetallic deposit in trachyte containing fluorite and uraninite with rare earth minerals, 202 claims; 1,650,000 tons of 0.075% U<sub>3</sub>O<sub>8</sub> and 1,300,000 tons of 29% fluorite. Production planned at 500 tpd.



SCALE I"=34 miles

1973-1974: Areas covered by CanOxy Princeton and Nicky geochemical

surveys. Sample density: 1.45 samples/square mile.

1975:

G.S.C. orientation geochemical surveys.

1976:

G.S.C. regional geochemical surveys.

Sample density: 0.2 sample/square mile.

Index Map Showing Areas Covered By Geochemical Surveys and Adjacent Uranium Occurrences