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KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

823265

To D. A. Lowrie From W. M. Sirola

Subject POTENTIAL MINERAL RESERVES ON POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT'S KALLIS CREEK AND HYDRAULIC LAKE PROPERTIES, NEAR KELOWNA, B.C. Date 9th July 1976

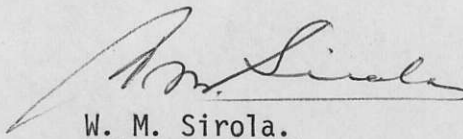
cc: R. Heim, Noranda Exploration

Herewith John Lund's report on the U₃O₈ mineral reserves on the PRD Kallis Creek and Hydraulic Lake properties, 15 miles south east of Kelowna, B.C.

The U₃O₈ mineralization (believed to be autunite) occurs in a poorly consolidated sandstone-conglomerate at the base of the Miocene lava. These sediments represent the erosional surface debris which has been derived from all of the pre Miocene rocks in the area. However, uraniferous paleo-channels may be confined to those areas in which artesian ground water supply has migrated along fault zones and deposited U₃O₈ in those portions of the sediments which are to some extent carboniferous and which are protected from erosion by a Miocene capping.

On the PRD properties, the base of the Miocene is from 100-175' below the surface. The mineralization may average 6' thick and have an average grade of .02 - .05 U₃O₈. The ratio of waste rock to mineralization would then be in the order of 16-25:1, in which the waste rock would be a hard massive basalt. Open pitting would, therefore, not be a practical mining approach. A decline combined with trackless mining would be more feasible. However, a grade of 0.05 or better would be required and in the light of our present knowledge, reserves of this grade are decidedly limited - something in the order of 2000 tons. This figure may, of course, be improved as more drilling is completed.

Regardless of the limits indicated in our studies, the PRD properties provide interesting exploration targets in the sense that the drilling to date has been confined to working along existing roads. There could well be additional paleo-channels which have not been investigated. Consequently, we would appear to be justified in maintaining an interest, along with Noranda, in trying to negotiate an exploration agreement with PRD. We are, of course, cognisant of the fact that some form of gentleman's agreement exists between PRD and Eldorado, and seemingly we can do little except await the outcome of that understanding.


W. M. Sirola.

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MR. D.A. LOWRIE

POTENTIAL MINERAL RESERVES ON POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT'S
KALLIS CREEK AND HYDRAULIC LAKE PROPERTIES, NEAR KELOWNA, B.C.

The object of this study was to obtain a potential reserve figure on these properties and on the adjacent Tye Resources holdings, to determine the extent to which Kerr Addison should become interested.

Drilling to date by both companies has not been definitive and these reserve calculations are based on a minimum of information and a number of assumptions which may or may not be valid.

ASSUMPTIONS:

1. There is a straight line relation between the counts per minute (cpm) and the percent U_3O_8 reported in drill holes # 10, 20, 31, on the Hydraulic Lake and Kallis Creek properties, and #30 on the Fuki-Donen occurrence, and that the relationship can be used to determine grade in other holes where only the cpm are reported. The attached graph illustrates the relationship.
2. The mineralized lenses may attain widths of up to 250 ft. (75 metres) and persist for 2500 ft. along strike. The Toge deposit in Japan has a maximum width of 130 metres and a length of 300 metres, with a maximum thickness of 1.7 metres. Estimated tons in the Toge deposit are 135,000 tons with a grade of $>0.05\%$ U_3O_8 .
3. A tonnage calculation factor of 18 is reasonable for these unconsolidated sediments.
4. The reported thickness of mineralized sections in the drill holes will persist as an average for each individual mineralized zone surrounding that drill hole or holes.

For the purposes of this report, the North claim group of Power Reactor will be labelled the Hydraulic Lake, and the South group, the Kallis Creek property.

A. Kallis Creek Property:

Reserves of 0.05% U_3O_8 and better.

Zone around D. Hole # 10 which has 3m of 0.4% U_3O_8 :

| | | | | |
|------------|---|---------------------------------------|---|----------------------------|
| Length | - | 1800' | | |
| Width | - | 80' | | |
| Thickness | - | 10' | | |
| "Reserves" | - | $\frac{1800 \times 80 \times 10}{18}$ | = | <u>80,000</u> tons average |

Grade would be \pm 0.4% U_3O_8 .

Reserves of 0.02% U_3O_8 to 0.05% U_3O_8 .

Zone around D. Hole # 7:

| | | | | |
|------------|---|---------------------------------------|---|---------------------------------|
| Length | - | 2000' | | |
| Width | - | 80' | | |
| Thickness | - | 10' | | |
| "Reserves" | - | $\frac{2000 \times 80 \times 10}{18}$ | = | <u>88,888</u> tons \geq 0.02% |

Zone around D. Hole # 10:

| | | | | |
|------------|---|--|---|--------------|
| Length | - | 2500' | | |
| Width | - | 200' | | |
| Thickness | - | 10' | | |
| "Reserves" | - | $\frac{2500 \times 200 \times 10}{18}$ | = | 277,777 tons |

Less reserves of 0.05% = 80,000

Balance = 197,777 tons \geq 0.02%

Zone around D. Hole # 12:

| | | | | |
|------------|---|--------------------------------------|---|---------------------------------|
| Length | - | 2000' | | |
| Width | - | 80' | | |
| Thickness | - | 5' | | |
| "Reserves" | - | $\frac{2000 \times 80 \times 5}{18}$ | = | <u>44,444</u> tons \geq 0.02% |

B. Hydraulic Lake Property:

Grades over 0.05% U_3O_8 .

| | | | |
|------------|---|---------------------------------------|-----------------------|
| Length | - | 2000' | |
| Width | - | 250' | |
| Thickness | - | 5' | |
| "Reserves" | - | $\frac{2000 \times 250 \times 5}{18}$ | = <u>138,888 tons</u> |

Grades 0.02% to 0.05% U_3O_8 .

| | | | |
|------------|---|--|--------------------------|
| Length | - | 6000' (total all zones) | |
| Width | - | 300' | |
| Thickness | - | 10' | |
| "Reserves" | - | $\frac{6000 \times 300 \times 10}{18}$ | =* <u>1,000,000 tons</u> |

* Note:

This figure appears much too high for this type of deposit and should, perhaps, be closer to 500,000 tons.

Total Potential Reserve (Power Reactor's Claims):

A. Kallis Creek Property:

| | |
|---------------------------|---------------------|
| 1. $\geq 0.05\%$ U_3O_8 | 80,000 tons |
| 2. 0.02% - 0.05% | <u>331,100 tons</u> |
| | 411,100 tons |

Possible grade 0.04% U_3O_8 .

B. Hydraulic Lake Property:

| | |
|---------------------------|------------------|
| 1. $\geq 0.05\%$ U_3O_8 | 138,888 |
| 2. 0.02% - 0.05% | <u>1,000,000</u> |
| | 1,138,888 tons |

Possible grade 0.025% U_3O_8 .

| | | |
|---|---|-----------------------|
| Total Both Zones | = | <u>1,549,988 tons</u> |
| Possible grade 0.03% - 0.05% U_3O_8 . | | |

It should be emphasized again that these figures are projections and should, therefore, be used as a guide only. The reserves indicated in each mineralized zone are either near those calculated for the Toge deposit or greater, and should be regarded as maximum reserves.

Tyee Lake Resources

Area of greatest interest here is that which lies immediately South and South East of Power Reactor's Hydraulic Lake property. The maximum length that can be projected from known mineralization in drill hole 76-3 (which is reported to have about 0.02% U₃O₈ over 22') is 2000' with a width of 250'. Average thickness of 10' will be assumed for the projected 2000' length.

$$\text{Potential Reserves: } \frac{2000 \times 250 \times 10}{18} = \underline{\underline{\sim 277,778 \text{ tons}}}$$

SUMMARY

A maximum potential of 1.5 million tons probably exists on the Power Reactor and Nuclear Fuel Development Corporation's Kallis Creek and Hydraulic Lake properties. Grade is unknown but would appear to be between 0.03% and 0.05% U₃O₈.

Maximum thickness of economic grade mineralization is about 10'. Mineralized intersections other than in drill hole #10 are less than 10' and would average possibly 6'.

Mineralization is in a coarse sandy conglomerate that has a high percentage of carbonaceous material. This is part of an unconsolidated sedimentary unit lying at the base of the overlying Miocene basalts which represents pre-basalt deposition in a paleostream channel. Not everywhere are the sediments covered by the Miocene basalts. The mineralized conglomerates on the Tyee ground do not have this basalt cover. Other similar areas may exist, however. The possibility of leaching of the uranium is greater where the favourable rock is not protected by the basalt cover.

The carbonaceous-rich horizon, not present in all drill holes, represents local basins of organic accumulation along the paleostream. This provides a favourable environment for uranium deposition. In areas of non-carbonaceous sediments, the values drop appreciably.

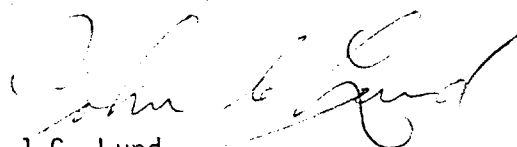
Such an environment would give rise to a number of lens-like mineralized zones along the paleostream bed, as indicated by the drilling.

The Tyee deposit is the Southern extension of one of these zones, but a much deeper one than so far located on the Power Reactor ground, and could be broader, providing a potential for close to 280,000 tons on this extension. Down hole probe indicates a grade of 0.02% \pm U₃O₈.

Tyee's ground provides a moderately attractive exploration target.

CONCLUSIONS:

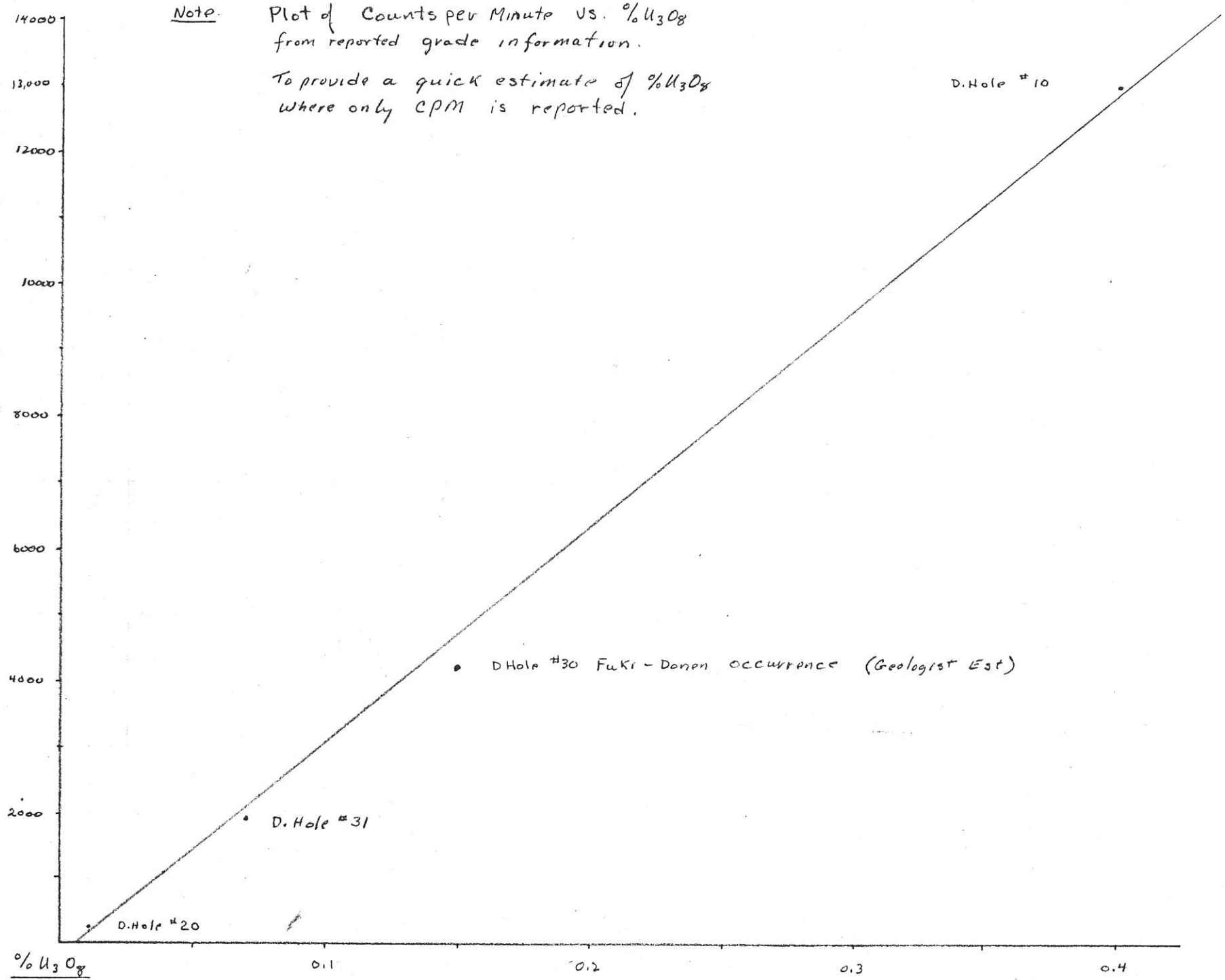
1. The Power Reactor ground has the greatest potential for producing an economic deposit.
2. The Tyee claim group adjacent to the Hydraulic Lake property has the potential for possible economic mineralization of a low grade nature, but of moderate size.
3. A grade of 0.05% U₃O₈ or better is desirable for these types of deposits to make them economically attractive.
4. Properties held by both companies should be developed by one company. If this cannot be arranged, the first priority would be the Power Reactor ground. If this is not available, the Tyee property is sufficiently interesting to justify exploration on its own merits.


J.C. Lund

JCL:1mp
29th June 1976

BY _____ DATE June/66 SUBJECT Power Reactor & Nuclear SHEET NO. _____ OF _____
 CHKD. BY _____ DATE Jct. Fuel Developments Okanogan JOB NO. _____
Uranium Properties

cpm

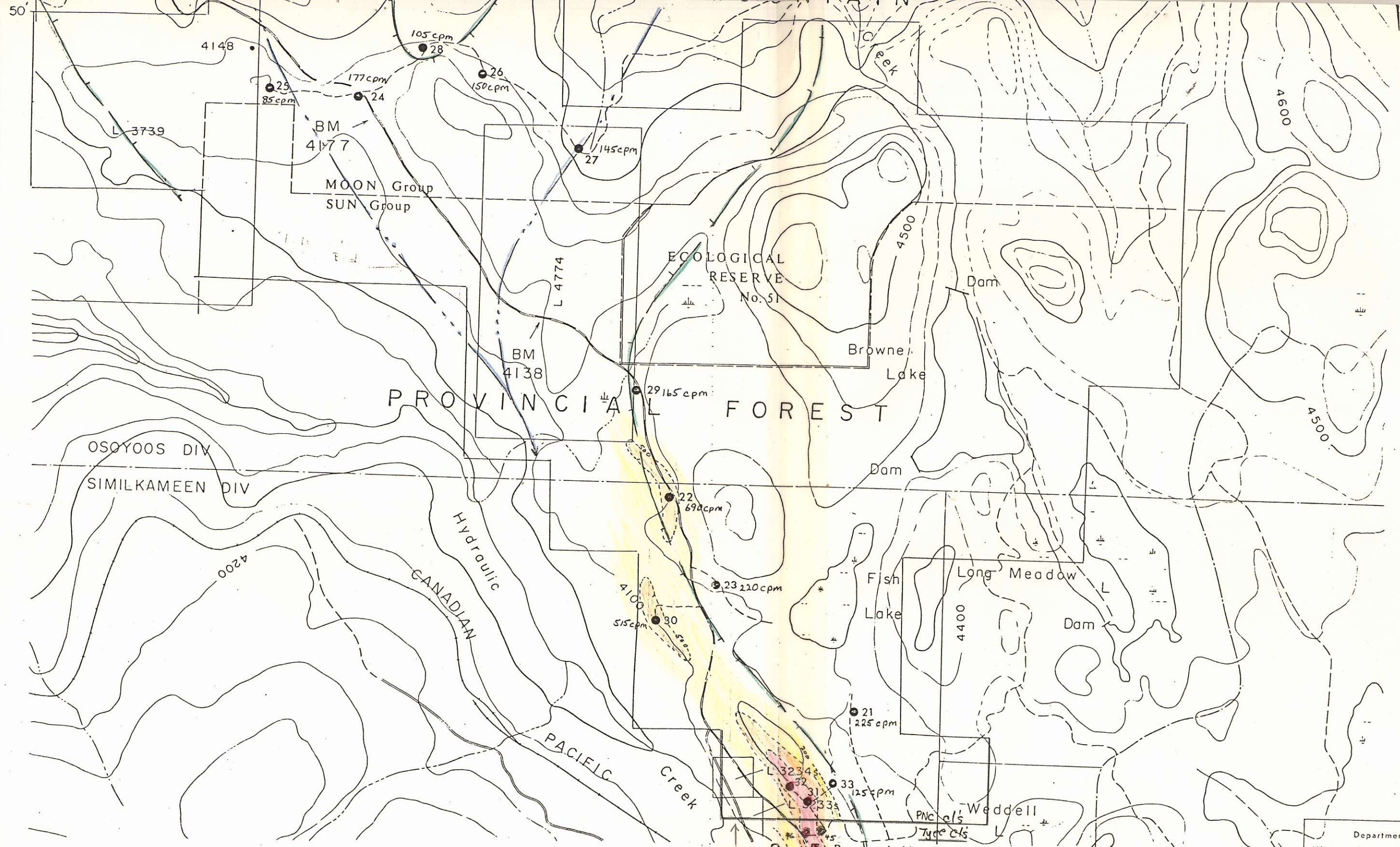


Note. Plot of Counts per Minute vs. %U₃O₈
 from reported grade information.
 To provide a quick estimate of %U₃O₈
 where only CPM is reported.

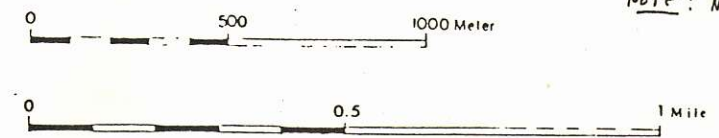
TYEE LAKE RESOURCES LTD.

DRILL HOLES VERY THICK FAVOURABLE SANDSTONE - Hiroshi Ogata, president of Tyee Lake Resources Ltd., has reported that diamond drilling at the Hydraulic Lake property, 14 miles east of Kelowna, B.C., has confirmed the presence of significant uranium mineralization in the Tertiary stream channel deposits. In hole No. 76-3 continuous anomalous radiometric readings were obtained throughout a thickness of 126 ft. of favourable sandstone, mudstone and conglomerate overlying the granite basement which was reached at a depth of 213 feet. In spite of elaborate precautions, recovery was not sufficient to provide entirely representative material for chemical assays. Where recovery was 20% it was felt that the unrecovered 80% was washed out by drilling water. The assay result of the recovered 20% was 0.07% U308, 1.4 pounds U308 per ton. The president states, "the real value of the 8 foot section is considered to be a minimum of 1.4 pounds U308 per ton. The subsequent 2 foot section from 193 ft. to 195 ft. had no core recovery despite the high radiometric readings of more than 30 times the background of 30 counts per second. The real value of this 2 foot section is most likely to be a minimum of 1.4 pounds U308 per ton. A further 13 foot section from 195 ft. to 208 ft. yielded a core recovery of 70%. The weighted average of assay results was 0.052% U308, 1.4 pounds U308 per ton which is considered to be a minimum value for the 13 foot section. The assay results of other important sections are still pending." Hole No. 76-1 was drilled 2,800 feet southeast of hole No. 76-3. It encountered one foot of the host conglomerate. The horizontal length of the buried stream channel could be more than 4,000 feet. The cores from holes No. 76-1 and 76-2 provided geological information but were not assayed due to relatively low radiometric readings. Holes No. 76-4, 76-5 and 76-6 have been completed. They cut the favourable formation and, while recovery was still poor, core has been sent for assay.

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---1000--- Contour of cpm's.



● 21 Hole No. BCP-21 Drilled in 1974
 --- Logging Road

Note: No data for Drill Holes 45, 46

- # 31 - 1980 cpm
- # 32 - 1100
- 76-2 - 30 cps
- 76-3 - 1000 cps (?)
- 76-4 - not completed
- 76-1 - 80 cps

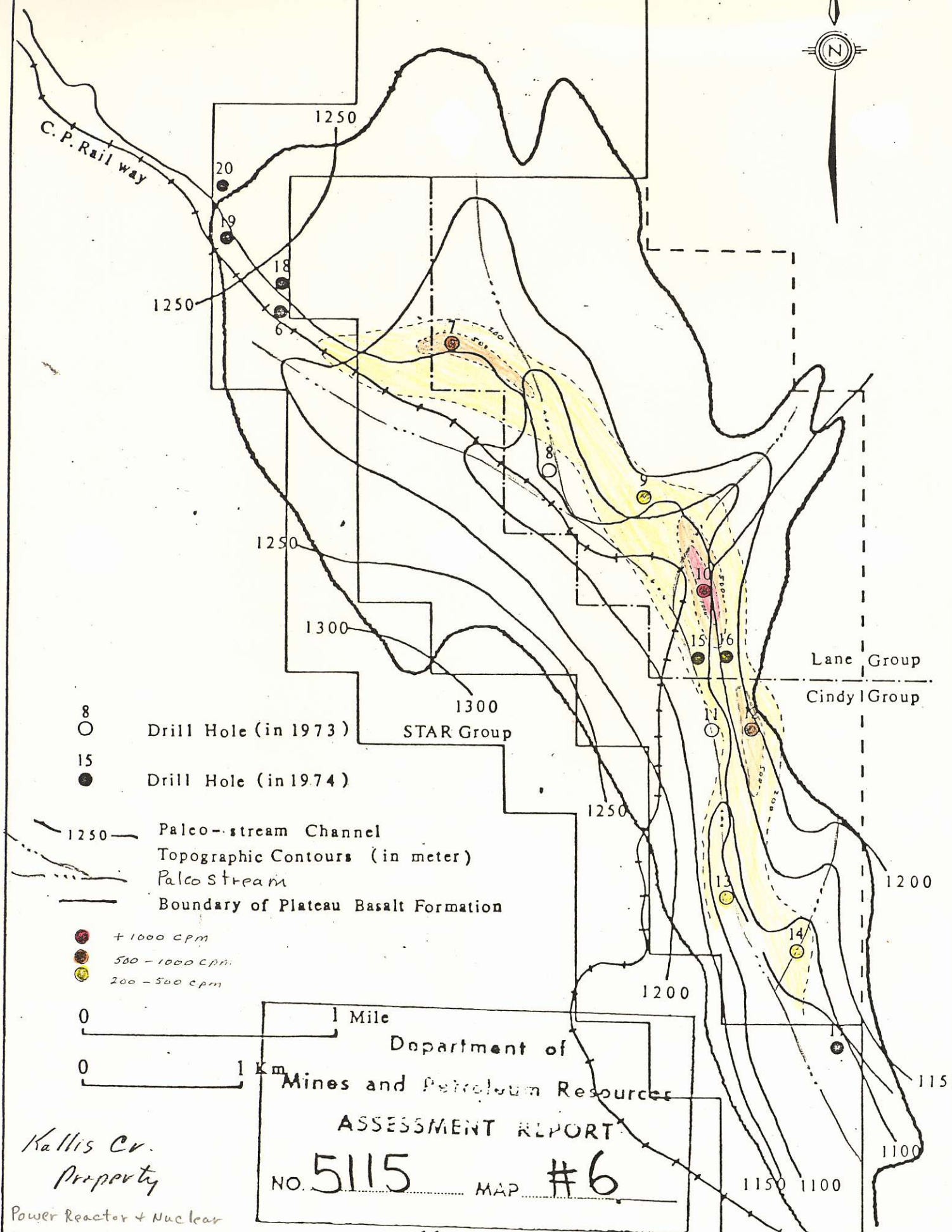
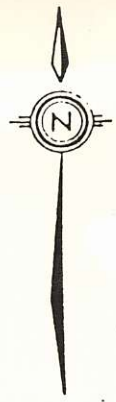
CAUTION
50%
OF ORIGINAL SIZE

Hydraulic Lake property

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5090 MAP #5

| | |
|--|----------------------|
| Fig. 8-4-5 Location Map of Drill Holes | |
| 180 217 PB 214, 249 | Mineral Claims B. C. |
| Investigated by Satoru Inazumi | |
| August 12, 1974 | |
| Inspected by Toru Kikuchi | |

Basement Topographic Map



- Drill Hole (in 1973)
- Drill Hole (in 1974)

- 1250 — Palco-stream Channel
- Topographic Contours (in meter)
- Palco stream
- Boundary of Plateau Basalt Formation

- + 1000 cpm
- 500 - 1000 cpm
- 200 - 500 cpm

0 — 1 Mile
0 — 1 Km

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5115 MAP #6

*Kallis Cr.
Property*

*Power Reactor + Nuclear
Development Corp. Property.*

To Beaverdell

DL

KERR ADDISON MINES LIMITED

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To D. A. Lowrie From W. M. Sirola

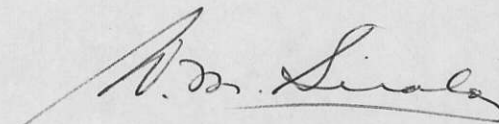
Subject John Lund's Report on Reconnaissance Examination of Date 13th July 1976
Specific Locations in the Kettle River Area, B. C.

Our examination of the Power Reactor and Nuclear Fuel Development Corp. deposit near Hydraulic Lake indicated that the portable radon detector was a potentially useful tool in the search for uranium deposits in the Okanagan. In addition, we were aware from prior experience, and some Japanese literature, that both water and silt sampling were potentially useful procedures. Accordingly, we selected three Miocene covered areas to determine whether or not any radioactivity was present.

The details of these locations, the geological characteristics and the responses are detailed in John's report, and his results may be summarised as follows:-

1. Silt sampling of drainage in the summertime works well.
2. Water sampling is not as useful as silt sampling.
3. The radon detector is useful for mapping rock contacts and for detection of U_3O_8 where not covered by Miocene rocks.
4. Only one anomalous silt sample (8.6-pmU) was found, 12 miles ESE of Okanagan Falls.
5. The purpose of the exercise was to test procedures.

A proper evaluation of any of the three areas would require a comprehensive work programme.



W. M. Sirola

WMS:1mp

enc:

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7th July 1976

TO: W. M. SIROLA
FROM: J. C. LUND
SUBJECT: RECONNAISSANCE EXAMINATION OF SPECIFIC AREAS
IN THE OKANAGAN - KETTLE RIVER AREA, B. C.

OBJECT:

1. To examine three specific areas as potential targets for uranium exploration.
2. Study the application of the Portable Radon Detector (Model RD200) as a reconnaissance tool in uranium search, using the Power Reactor and Nuclear Fuel Development Corporation's deposits near Hydraulic Lake and Dear Creek as a test case.
3. To take silt and water samples from streams draining the PNC uranium occurrences to determine the best method for regional search.

AREAS OF STUDY:

- A. This area is centred about 12 miles ESE of Okanagan Falls, between Shuttleworth and Vaseaux Creeks. Paleocene or Eocene sandstones and conglomerates lie unconformably on older Monashee gneisses and on Nelson Intrusions. Overlying these are Eocene-Oligocene volcanic rocks - these are mainly andesites and dacites. Twelve silt samples were taken from streams draining these rocks, and analysed for uranium. Radon readings were also taken.
- B. About 25 miles due east of Kelowna is an area underlain by Miocene basalt, near the headwaters of Pearson Creek. Drainage samples were to be taken from the contact regions to test for possible underlying uranium mineralization. Snow and high water prevented sampling. In addition, it was found that PNC had tested and drilled this area with negative results.
- C. Miocene basalts form a cap to a north-north easterly trending ridge about 47 miles north of Rock Creek. This ridge lies between Rendell Creek and Kettle River.

Traverses were to be made across the contact, taking readings with the RD200 radon detector, and sampling both silts and waters from the drainage. Because of difficult access, only the south east part was sampled. Nine silt samples were taken and seven water samples. Radon readings were taken the first traverse, but because of heavy rains, no further samples were taken.

- D. On the Beaver Creek road at mile 14.3 from Beavercreek, the road cuts through unconsolidated sediments which are part of the Fuki-Donen uranium occurrence of PNC. Uranium bearing sediments were sampled and radon readings taken over these sediments. Silt and water samples were taken from adjacent streams to the west and east and the unconsolidated sediments were sampled for assay.
- E. Near the south end of the Kallis Creek claim group of PNC, seepages were sampled at the base of the miocene lavas. Radon readings were taken adjacent to stream samples, where possible.

RESULTS OF THIS WORK:

Area A

Arithmetic average for uranium values in silts was 1.14ppm in areas underlain by volcanic rocks. One sample from a stream draining an area mapped as sediments gave 8.6ppm U. In terms of other samples, this is anomalous, however, if more sampling had been done on streams draining the sediments, we may have found this to be background for the sediments.

Radon readings taken across the contact between the volcanics and the Monashee gneisses, show a radon content in the gneisses of twice that over the volcanics.

Area B

Because of snow conditions, high runoff and poor results of work done by the Japanese company, no sampling was done here.

Area C

Water samples were consistently low, ranging from 0.2 to 0.4 ppm. The silts are more variable. The arithmetic average of all samples is 2.76ppm U. Two samples could be regarded as slightly anomalous, but not sufficiently high to justify follow-up work. These values are 5.6 and 5.2ppm U over a background of 2.76ppm.

The contact was not located. Rock outcrops examined were rocks of the Phoenix volcanic group and intrusive rocks of the Valhalla Cretaceous intrusions.

Radon readings were taken along one traverse that stopped short of the Miocene contact. There is a suggestion that lower values occur over the Paleocene or Eocene volcanics and higher values over the Valhalla intrusion. None of these readings was anomalous.

Area D

Two water and silt samples were taken from Dear Creek and an adjacent stream to the west. Both streams drain the area drilled by PNC for uranium. Water samples were consistently low, however, the silt samples, when compared to other areas sampled, were slightly anomalous giving values of 10.0ppm U for Dear Creek and 5.6ppm U for the adjacent stream.

Background reading on the Geiger counter was 12 cps. In the road cut, north side, gravels cemented by limonite gave readings of 2.2 x background. A number of radon readings were taken above this cut, near drill hole #1. Results of these readings suggest that either:

- (a) the detectable radon decreases significantly with increased overburden, or
- (b) the distribution of U in the sediments is erratic.

A sample of this material assayed 9ppm uranium.

On the south side of the road in a road cut, readings on the Geiger counter were just over 10 x background on grey to tan unconsolidated gravels. Material from this bank assayed 0.022% U₃O₈.

Radon readings above the gravels were extremely high, ranging from the first minute reading of 902 cpm to a third minute reading of 1088 cpm. It is apparent that where uranium does exist, the radon detector is effective.

Area E

Four silt samples were taken from seepage below the Miocene. Sample #2 taken from seepage near the projected paleo-channel was anomalous; the corresponding water sample was not. Two other silt samples were slightly anomalous, with the corresponding water samples assaying low.

Radon readings taken adjacent to the silt sampling were low. Anomalous radon readings were obtained from sample site #4 near the western edge of the paleo-channel, and may reflect a remnant of the pre-Miocene gravels preserved without the Miocene capping.

CONCLUSIONS:

In the areas examined, the Eocene or Oligocene volcanic rocks are fairly massive, and interbedded sedimentary units are thin and discontinuous. This unit (unit 19 on the west Kettle sheet) is not a likely host for uranium deposition.

Underlying Eocene-Oligocene sandstones, conglomerates, shales and tuffs were not seen in place. One sample draining these in Area A could be regarded as slightly anomalous. The unit may, under ideal conditions, be a favourable host.

Area C has not been sampled enough to determine its exploration potential. At least two days sampling remain from a helicopter supported camp on the north end of the ridge.

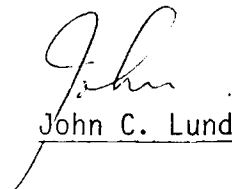
Water sampling does not appear to be as useful as silt in regional sampling. Results of our work showed consistently low values. This could be caused by either:

- (a) Samples taken during a high runoff period, or
- (b) Laboratory detection limits not capable of handling the very small quantities present.

Silt samples taken from streams draining the Kallis Creek and Fuki-Donen Occurrences were low, but distinctly anomalous. Silts would appear to be the best exploration tool.

The radon scintillometer as a reconnaissance tool, has limitations. Where the radioactive mineralization lies beneath a Miocene capping, the Miocene prevents movement of the radon gas and the instrument becomes ineffective. The RD200 can best be used:

- (a) In detailed surveys where mineralization is not capped by impervious material.
- (b) It may be useful in determining the edge of the Miocene cover. Values drop appreciably in areas underlain by Miocene.
- (c) In determining contacts between rock types of differing lithologies and radioactive mineral content.

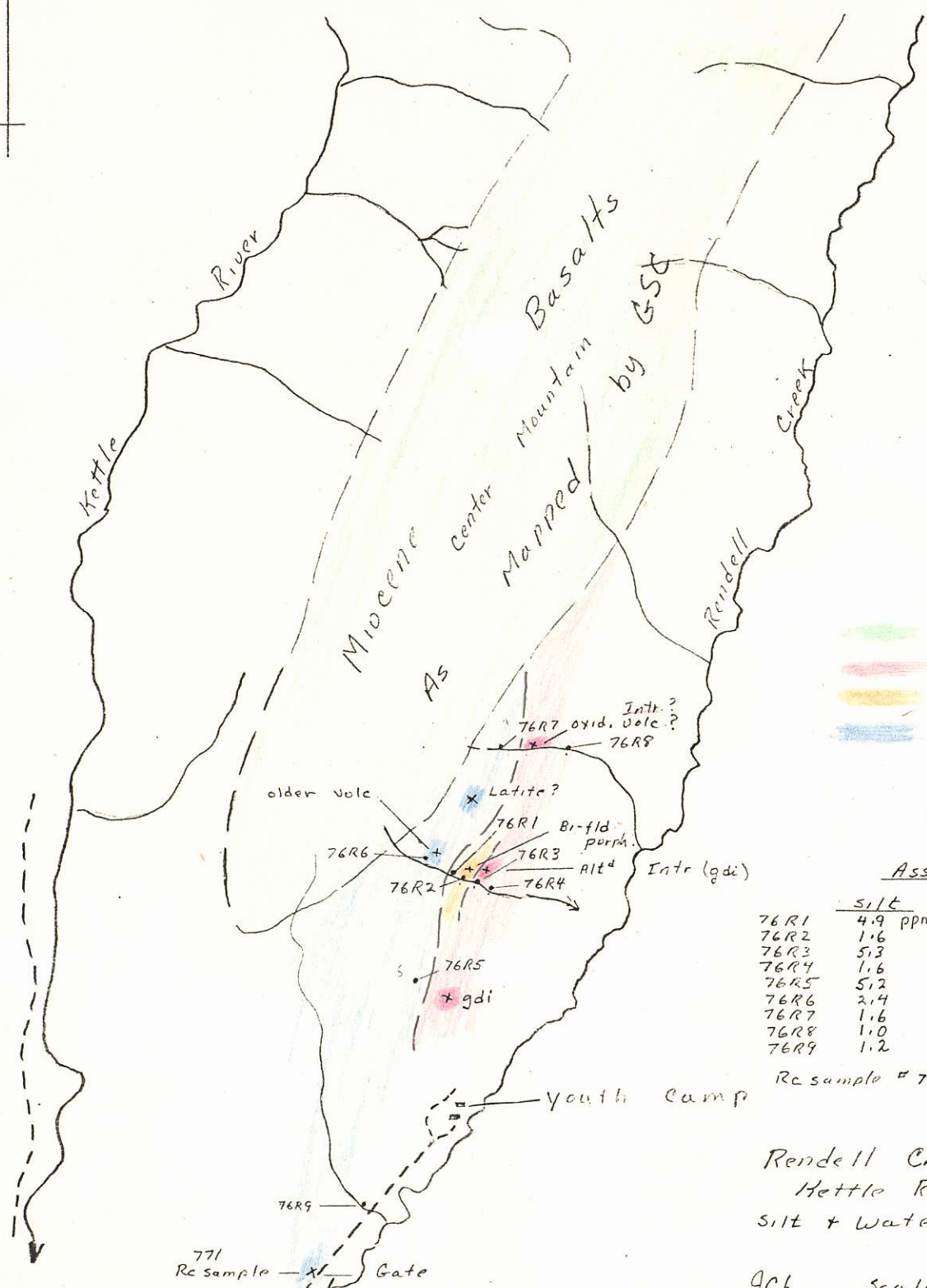

John C. Lund

JCL:1mp

enc:



118° 40'
 49° 45'



- Miocene lavas
- gdi
- Bi-fld-porph
- Volc rc.
Latite, dacite

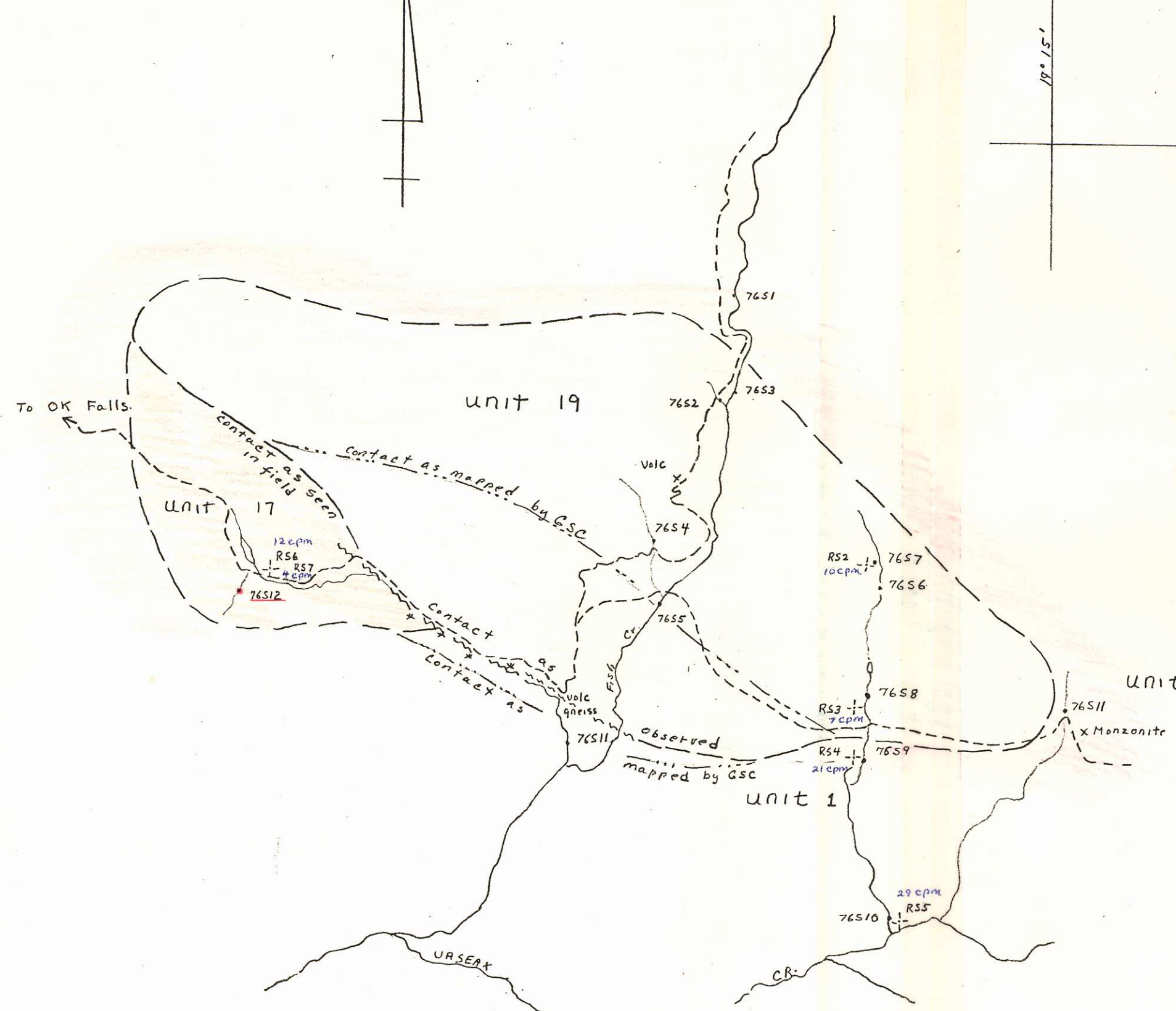
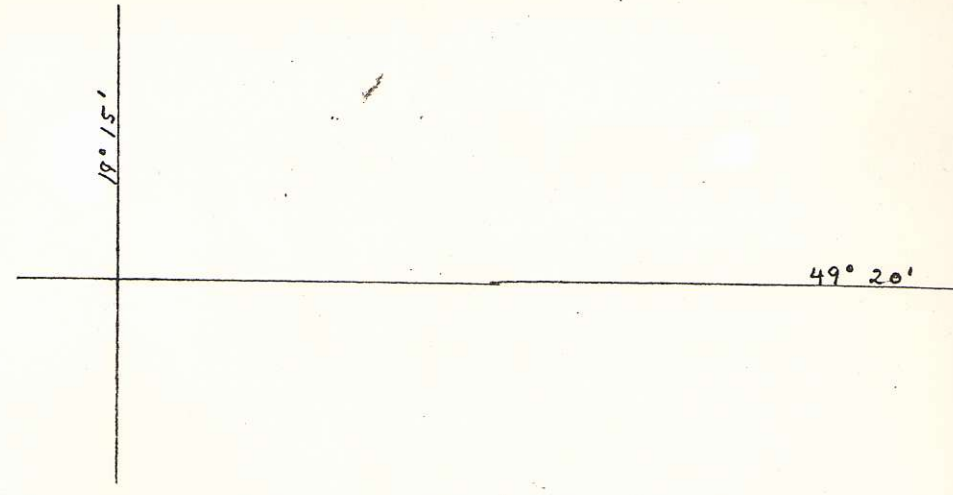
Assays

| | <u>silt</u> | <u>Water</u> |
|------|-------------|--------------|
| 76R1 | 4.9 ppm U | 0.2 ppb U |
| 76R2 | 1.6 | |
| 76R3 | 5.3 | 0.2 |
| 76R4 | 1.6 | 0.3 |
| 76R5 | 5.2 | 0.2 |
| 76R6 | 2.4 | |
| 76R7 | 1.6 | 0.4 |
| 76R8 | 1.0 | 0.2 |
| 76R9 | 1.2 | 0.3 |

Re sample # 771 - 1 ppm U

Rendell Cr Traverse
 Kettle River, B.C.
 silt + Water sampling
 June 1976.
 qck scale: 1:50,000

Shuttleworth



- Unit 19 - Eocene or Oligocene
volc. Res.
- Unit 17 - Paleocene or Eocene
Sandstone, shale, tuff.
- Unit 16 - Cretaceous Valhalla
granite, granodi
- Unit 1 - Proterozoic(?) Monashee
gneiss.

Silt samples.

| Sample ID | ppm U |
|-----------|-------|
| 7651 | 1.4 |
| 7652 | 0.3 |
| 7653 | 1.1 |
| 7654 | 1.8 |
| 7655 | 0.7 |
| 7656 | nd |
| 7657 | 0.3 |
| 7658 | 2.5 |
| 7659 | 1.8 |
| 76510 | 1.4 |
| 76511 | 1.2 |
| 76511A | ? |
| 76512 | 8.6 |

⊥ - Radon ²²² sample sites.

Shuttleworth Cr. Traverse
Silt sampling and
geology

Scale 1:50,000 June/76

BY..... DATE.....

SUBJECT Fuki Donon Uranium

SHEET NO..... OF.....

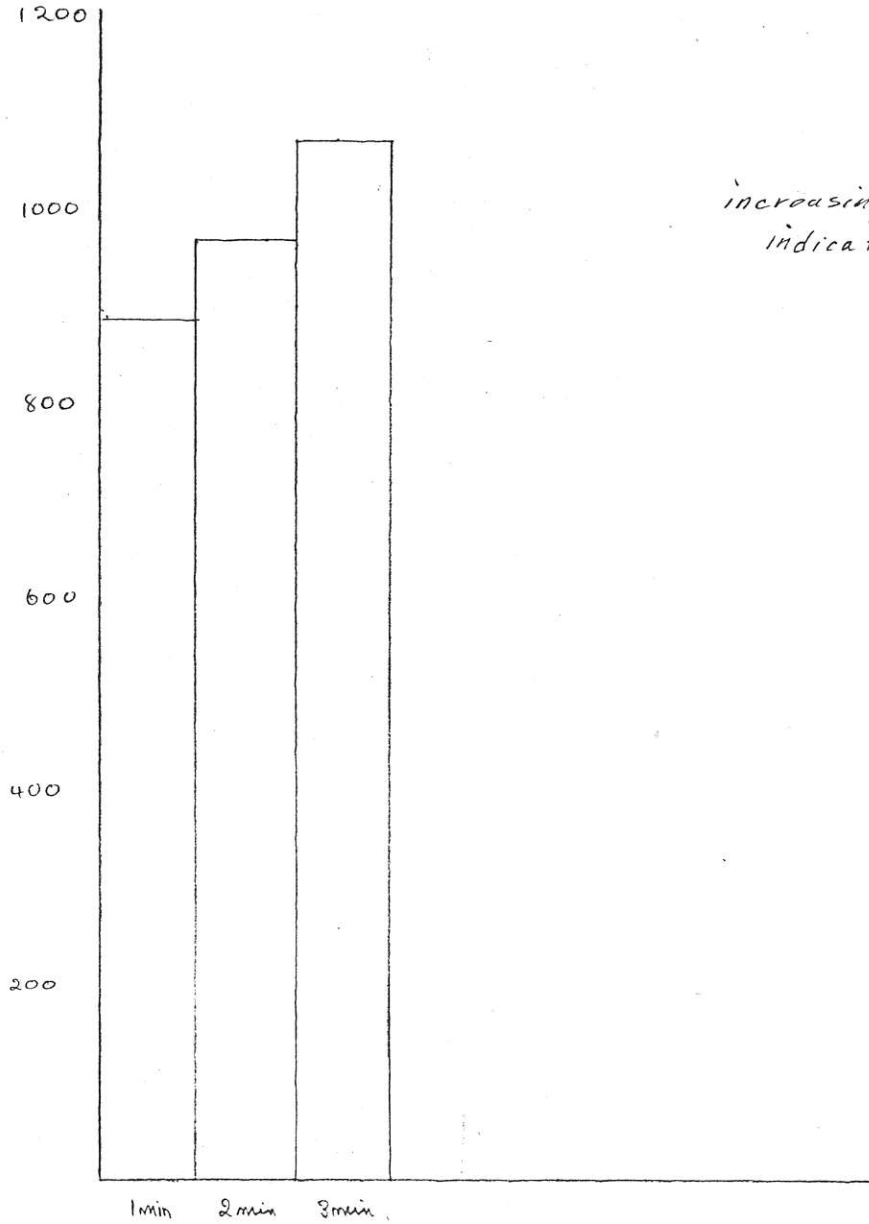
CHKD. BY..... DATE.....

occurrence Dear Cr

JOB NO. BC-1

Radon Readings over gravel bank with 10x background reading on Geiger Counter.

cpm.



increasing counts indicates Radon ²²².

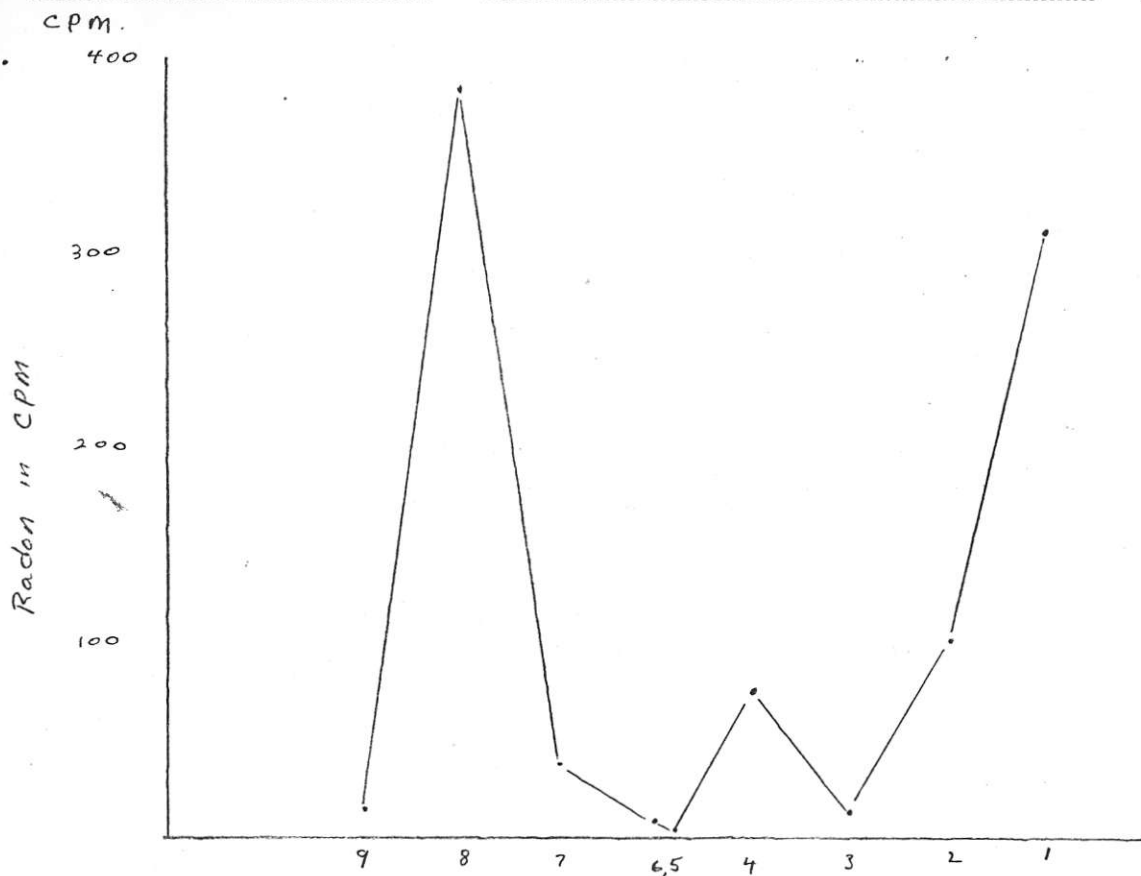
BY _____ DATE _____

SUBJECT Fuki Dones Uranium occurrence - Dear Creek, B.C.

SHEET NO. _____ OF _____

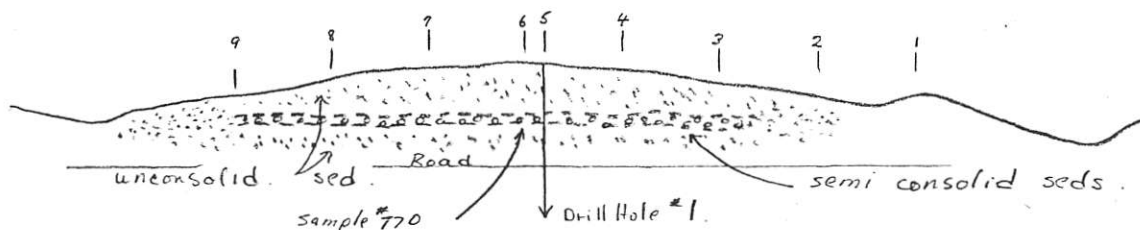
CHKD. BY _____ DATE _____

JOB NO. _____



Radon readings
 Taken over weakly
 mineralized semi-
 consolid. seds near
 Drill hole #1.

section looking N
 Rd cut. near Dear Cr.



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~~MR. D. A. LOWRIE~~

File

5th May 1976

TO: W. M. SIROLA
FROM: J. C. LUND
SUBJECT: KETTLE RIVER - URANIUM : MAP SHEET KETTLE RIVER 82E(E+W)

I have looked over this area where Power Reactor and Nuclear Development Corp. of Japan are exploring for uranium in unconsolidated sediments. The pertinent information regarding this deposit is as follows:

1. Secondary uranium minerals, mostly autunite, occur in unconsolidated sandstone, coal bearing sandstone and conglomerate that underlies Miocene basalts. The uranium bearing sedimentary unit unconformably overlies an Oligocene tuffaceous unit.
2. Source of this uranium is believed to be Pegmatite dykes and uranium bearing veins as well as low grade uranium disseminations in the Nelson intrusive rocks.
3. The uranium bearing sediments have survived the effects of normal erosion and glaciation because of a protective Miocene basalt cover.
4. Power Reactor and Nuclear Development Corp. have staked the major areas covered by the Miocene basalts along the Kallis Creek - Hydraulic Valley.
5. Claims held by Tye Lake Resources do not cover any mapped area of the Miocene cover. Mineralization found on their ground would be in remnants of the favourable sediments that have survived without the protective cover or uranium mineralization in carbon bearing sediments of a more recent age.
6. Claims to the South and East of PR & ND Corp. are in the same category as those of Tye Lake Resources. These include the Goat 1-8 and Freedom 1-3 mineral claims. Owner (staker) is:

Larry Stephanishin
207-2985 Airport Drive
Kamloops, B.C.

These claims are potentially favourable, providing the uranium / bearing sedimentary host is present.

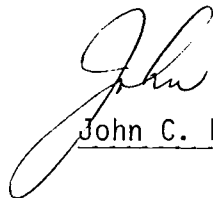
7. Paleocene and Eocene sediments should also be considered potentially favourable as a host to uranium mineralization.

If we are to pursue uranium in the Kettle River area, there are two approaches we can take:

- A. Option, if possible, either the Tye Lake Resources property, or that held by Larry Stephanishin.
- B. Select areas covered by Miocene volcanics, or the Paleocene - Eocene sediments where these are close to the Nelson intrusions and would appear to duplicate conditions existing on Power Reactor and Nuclear Development claims.

A list of these areas that are as yet unstaked, together with a location map, is attached.

The area is close to transportation and if the assays from the one drill hole reported on PR & ND Corp ground (0.4% U₃O₈) are indicative of what can be expected, we should take a serious look at either participation on existing properties, or set out an exploration programme to test other areas underlain by the Miocene basalt or older sediments.


John C. Lund

JCL:1mp

enc:

TRE (82E/NW-3, 8 ?) (Fig. A, No. 39)

LOCATION: Lat. 49° 56' Long. 119° 59' (82E/13W)
 OSOYOOS and NICOLA M.D. Fifteen miles northwest of Peachland, covering the headwaters of Trepanier Creek, between 4,400 and 5,200 feet elevation.

CLAIMS: TRE 1 to 18.

OWNER: CANADIAN OCCIDENTAL PETROLEUM LTD., Minerals Division, 801, 161 Eglinton Avenue East, Toronto, Ont.

METALS: Copper, molybdenum.

DESCRIPTION: Chalcopyrite, molybdenite, and pyrite occur as fracture fillings in granodiorite.

WORK DONE: Linecutting; surface geological mapping, 1 inch equals 400 feet; geochemical survey, 198 soil samples, 39 rock chip samples, and 24 stream silt samples, 200 by 400-foot grid spacing, 8 line-miles covering Tre 1-8.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1969, p. 291 (Dan); 1970, p. 39 (Tee, Lite, Bern); 1971, p. 288 (North Brenda).

ALFY, BEAR (82L/SW-5, 9; 82E/NW-7) (Fig. A, No. 79)

LOCATION: Lat. 50° 00' Long. 119° 46' (82L/4W; 82E/13W)
 Report on this property in section 82L/4W.

PB (Fig. A, No. 33)

LOCATION: Lat. 49° 49' Long. 119° 12' (82E/14E, 11E)
 49° 46' 119° 08'

GREENWOOD, VERNON, and OSOYOOS M.D. Two groups of claims: 17.5 miles east-southeast of Kelowna, covering Kallis Creek from its head to its confluence with Hermon Creek and 13.5 miles east-southeast of Kelowna, covering Browne and Fish Lakes and the headwaters of Grouse Creek.

CLAIMS: PB 81 to 214, 217 to 249.

OWNER: Nissho-Iwai Canada Ltd.

OPERATOR: POWER REACTOR & NUCLEAR FUEL DEVELOPMENT CORP., 9-13, 1-chome, Akasaka, Minato-ku, Tokyo, Japan.

DESCRIPTION: The claims are underlain by Monashee Group rocks, Valhalla plutonic rocks, the Kettle River Formation, and Miocene plateau basalts and sedimentary rocks. Radioactive anomalies occur in sandstone, coaly sandstone, and conglomerate which underlie plateau basalts and overlie unconformably tuffaceous sedimentary rocks of the Oligocene (?) Kettle River Formation. No uranium mineralization was identified.

WORK DONE: Surface geological mapping, 1 inch equals one-half mile covering all claims; surface diamond drilling, 20 holes totalling 3,333 feet on PB 141, 164, 165, 181, 182, 183, 185, 187, 193, 196, 227, 230, 236, and 238.

REFERENCES: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1973, p. 52; Assessment Reports 5090, 5115.

AU, SILVE

LOCATION

CLAIMS:

OWNER:

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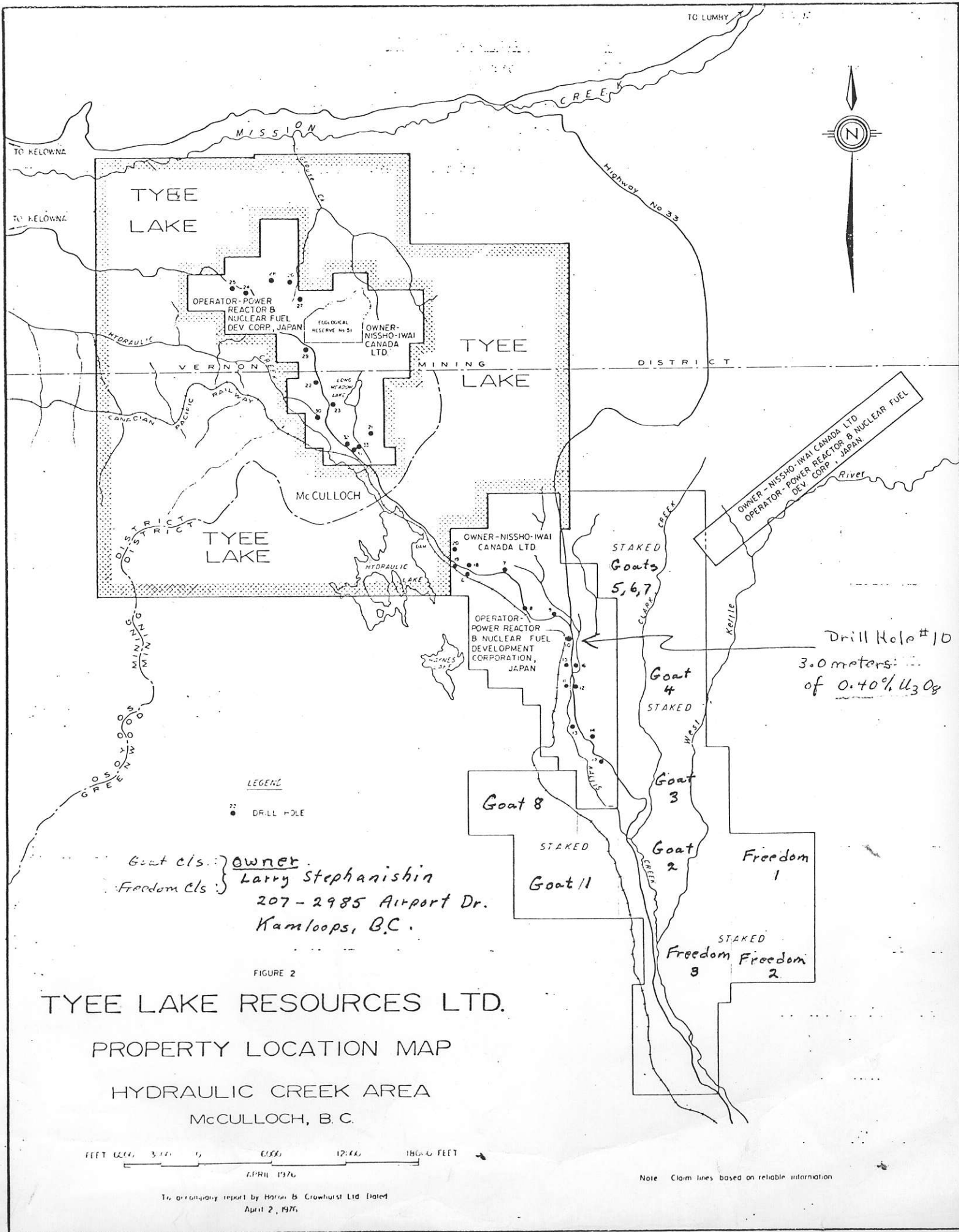
LOCATIO

Secondary Uranium (Fuki and Donen)

The Fuki and Donen (82E/10W) claims are situated 25 kilometres northeast of Beaverdell. Secondary uranium minerals mainly (autunite) have accumulated in unconsolidated gravel and sand deposits that are preserved below a cap of Miocene plateau lavas. Exploration in the Kallis Creek and Hydraulic Lake areas has located deposits with similar settings. Oxidation and weathering of uranium-bearing veins or pegmatites or low-grade disseminated uraninite in basement rocks (for example, Carmi molybdenum prospect) may be the source of this secondary mineralization.

REFERENCES

- Leary, G. (1967): Petrology and structure of the Tuzo Creek molybdenite prospect near Penticton, British Columbia, unpublished M.Sc. Thesis, Dept. of Geology, *University of British Columbia*.
- Reinecke, L. (1915): Ore Deposits of the Beaverdell Map-Area, *Geol. Surv., Canada*, Mem. 79.
- Staples, A. B. and Warren, H. V. (1946): Minerals from the Highland Bell Silver Mine, British Columbia, *Western Miner*, May, pp. 38-43 and June, pp. 54-58.



LEGEND
 ● DRILL HOLE

Goat cls. } owner
 Freedom cls. } Larry Stephanishin
 207-2985 Airport Dr.
 Kamloops, B.C.

Drill Hole #10
 3.0 meters
 of 0.40% U₃O₈

FIGURE 2

TYEE LAKE RESOURCES LTD.
 PROPERTY LOCATION MAP
 HYDRAULIC CREEK AREA
 McCULLOCH, B.C.

FEET 0 300 600 900 1200 1500 1800 FEET

APRIL 1976

Note Claim lines based on reliable information

To accompany report by Havel B. Crowhurst Ltd. Dated April 2, 1976

VESTOR EXPLORATIONS LTD.

FIRST DIAMOND DRILL HOLE
IN LAKE ZONE CUT 570 FEET
WITH GOOD MOLYBDENUM MINERALIZATION

- John A Greig, P.Geol.secretary treasurer of Vestor Explorations Ltd., has reported that the No.V-18 diamond drill hole, the first in the current series, on the Carmi molybdenum property has been completed to 620

feet. The hole was drilled in the Lake Zone and was well mineralized from the collar to 70 feet. The core has been split and assayed in 20 foot sections with the results reported as the combination of the core assays and the sludge assays. The first 160 feet of the hole assayed 0.219% MoS₂. The Carmi property is located 40 miles south of Kelowna, B.C.

The samples from the hole between 160 feet and 400 feet are in for assay now and the samples from 400 feet to 570 feet have been split and are in transit to the Calgary assay office. Mr.Greig stated that the mineralization from 160 to 570 feet in the hole is comparable to that from 0 to 160 ft. Mr.Greig reported the assay results by telephone from Edmonton.

The second hole in the series, No.V-19, is being drilled on the E zone some 4,000 feet to the east of the NO.V-18 hole. (See GCNL No. 75, page three, April 20, 1976, for previous story on the Carmi, B.C., property.

TYEE LAKE RESOURCES LTD.

URANIUM PROPERTY OPTIONED - Hiroshi Ogata, president, announces that Tyee Lake Resources Ltd. IN OKANAGAN AREA, B.C. have acquired an option on an uranium prospect of 320 mineral

claims in the Hydraulic Lake area about 14 miles southeast of Kelowna in southern B.C. Part of this claim group completely surrounds a group of claims being explored by the Power Reactor & Nuclear Fuel Development Corporation, a Japanese government agency and the rest are situated between this property and another of the Japanese company's claim groups to the south.

Discovery of significant uranium mineralization in a flat-lying sedimentary sandstone and conglomerate on both of Power Reactor's claim groups has been reported in their assessment reports filed with the B.C. government. Mr. Ogata says it is believed that these discoveries of sedimentary uranium deposits are the first of their kind in B.C.

J.J.Crowhurst, P.Eng., states in his 2Apr76 report that, "Hole No.10 on the Power Reactor's claim group cut 3.0 metres (9.85 feet) of uranium mineralization grading 0.40% U₃O₈ in a flat-lying pebble conglomerate bed about 125 feet below the surface. This is the best intersection, but enough other intersections were obtained to establish an attractive pattern."

The consultant concludes that Tyee Lake's "property offers excellent possibilities to discover economic zones of uranium mineralization as either extensions of known flat-lying sedimentary deposits in adjacent ground or, alternatively, to discover other similar uranium deposits not now known." Access to Tyee Lake's property is good and the company intends to start exploration as soon as snow conditions permit. The initial program will consist of geological mapping and Track Etch survey to be followed by diamond drilling, if warranted.

Elsewhere, Tyee Lake's natural gas well in Alberta is now generating a net cash flow of approximately \$4,000 per month, says Mr. Ogata, which will help the company conduct initial exploration of the Hydraulic Lake uranium property. (See map overleaf).

FOR THE RECORD

Starbird Mines Ltd. has been renamed Camrelco Resources Group Ltd. On 21Apr76, Starbird shs. were replaced by Camrelco shs. on Vancouver Curb Exchange, symbol CGP. Of 7,000,000 shs. with no par value authorized, 1,772,505 are issued including 600,100 in escrow. Transfer agent is Canada Trust Company.

Con-Am Resources Ltd.'s best efforts offering effective 19Mar76 has been discontinued. Total shares sold pursuant to the offering were 14,000. Con-Am shs. remain in primary distribution pending confirmation of net proceeds to the company.

Seaforth Mines Ltd., by 9Apr76 agt.effective 21Apr76, have had 125,000 shs. underwritten at 25¢ each by Continental Securities Corp.(1971) Ltd. and granted Continental an option to buy 125,000 shs. at 35¢ each, good through 20Jul76.

A shareholders' offering of 90,000 previously issued shs. of Seaforth has been qualified for sale on Vancouver Stock Exchange until 20Jul76 by 3 shareholders, each as to 30,000 shs.

(See also Seaforth story on page four of this news letter).

New Denver Explorations Ltd. shareholder's offering of 50,000 previously issued shs. has been qualified for sale on Vancouver Stock Exchange by Jo-Don Holdings Ltd. until 14Jun76.

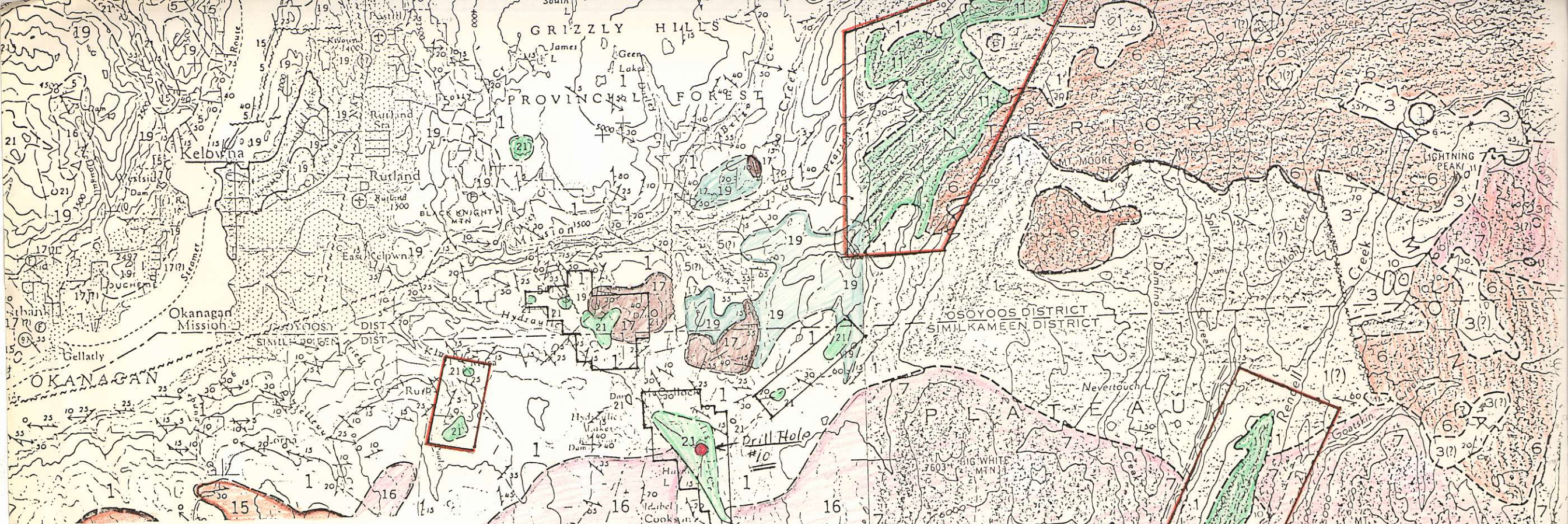
Petrowest Resources Ltd. shareholder's offering of 45,000 previously issued shs. has been qualified by Montego Management Inc. for sale on Vancouver Curb Exchange for 60 days starting 26Apr76.

Canadian Tokar Limited has been renamed Interpublishing (Canada) Limited. On 21Apr76, Canadian Tokar shs. were replaced by interpublishing shs. on the Industrial Board of Vancouver Stock Exchange, symbol INK. Of 3,500,000 no par value shs. authorized, 1,651,957 are issued. None is in escrow. Transfer agent is Canada Permanent Trust Company.

Anglo-Bomarc Mines Ltd.'s underwriter, Bond Street International Securities Ltd., have taken down their first option on 100,000 shs. at \$1.35 each due 27May76 to net Anglo-Bomarc \$135,000. Another option remains outstanding, being on 100,000 shs. at \$1.60 each, good through 25Aug76.


Challenger Exploration Ltd. shs. were suspended by Vancouver Stock Exchange at the close, 21Apr76, for failure to make filings with the Exchange and the Superintendent of Brokers. A 77A cease trade order has been issued for 15 days by the Superintendent of Brokers from 21Apr76.


Consolidated Boundary Explorations Limited option on 200,000 shs. at 27½¢ each due 6Apr76, was not exercised by Bond Street International Securities Ltd. The shs. are out of primary distribution 21Apr76.











Kettle River Map Area 82E (E+W)

URANIUM

 Power Reactor and Nuclear Dev. Corp.

 Potential Expl. Areas.

 Drill Hole (PR & ND Corp.)

-  20 (8) Coryell Plutonic Rocks
-  16 (7) Valhalla granite, granodiorite
-  15 (6) Nelson plutonic rocks undivided
-  21 (11) Miocene Basalt
-  19 Eocene or Olig. volc & sed rocks
-  17 Paleocene or Eocene congl., sst., shale, tuff.
-  1() Monashee Group (Proterozoic) gneisses, schist, Amphibolite, qtzite

Rock unit Number

.8) Map sheet w 1/2 (E 1/2)