680014

82E

PROPERTY REPORT

ON CLAIM

BEAVER NO. 2

in the

GREENWOOD MINING DIVISION

BRITISH COLUMBIA

January 14, 1977
Vancouver, B.C.

E. Amendolagine, P.Eng.,
Consulting Geologist

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This report is written at the request of Mr. P. Doug McClaren.

The property consists of claim named Beaver No. 2 Tag No. 26445, comprised of 18 units located in the Greenwood Mining Division of British Columbia.

The property lies in the general uranium strata bound trend between the Beaverdell Fuki uranium find and the Hydraulic Lake area uranium finds of Nissho-Iwai Ltd and Tyee. The most important factor is that the property lies adjacent and to the north of the Lacana Mining Corporation uranium mineralization reported in recent months. The drill results reported on the Lacana property are up to 2.7 lbs U_3O_8 across 50 feet of drill core. The strata bound trend should strike in the general northwesterly strike through the Beaver No. 2 claim.

It is recommended that the Beaver No. 2 claim be fully explored to pick up the strike of the uranium mineralization of the adjoining Lacana property.

The exploration program should consist of geologic, uranium detection surveys and limited percussion drilling to outline the trend. The expenditures for this phase would be $44,000.00. A detailed second phase would be based upon the results of the first phase.

PROPERTY

The property consists of mining claim Beaver No. 2 Tag No. 26445 consisting of 18 units in the Greenwood Mining Division of British Columbia, Claim Map M82E/10W.

LOCATION

The property is located midway between Okanagan and lower Arrow Lakes, some 26 miles southeasterly of Kelowna, some 13 miles northeasterly of Carmi, some 34 miles due east of Summerland, 49° 39'N latitude, 118° 55'W longitude and at an elevation of 3900 feet to 4200 feet a.s.l.

ACCESS

The property is accessible from Kelowna eastward via Highway 33 then southerly pass McCulloch and Arlington Lakes to Trapping Creek, then northeasterly up the Trapping Creek road some 9 miles. The Trapping Creek road is a loose surface secondary road. The southwest corner of Beaver No. 2 and Tag No. 26445 is located some one mile east of where this Trapping Creek road turns a southerly direction ascends up the ridge towards Lassie Lake.

MINERAL ACT - PROVINCE OF BRITISH COLUMBIA

Record of Mineral Claim
FORM G

MAP NO XXXXXX 82E/10W

RECORD NO 610

MINING RECEIPT NO 111174E RECORDED AT Grand Forks B.C. THIS 4 DAY OF January 19 77

DO NOT WRITE IN SHADED AREAS

MINING RECORDER

Greenwood
MINING DIVISION

Affidavit for Mineral Claim

I, BRIAN A. McCLAY NAME AGENT FOR NAME

705 - 856 W. HASTINGS VAN. B.C. ADDRESS ADDRESS

VALID SUBSISTING F.M.C. NO. 1440 72, 15 2354 VALID SUBSISTING F.M.C. NO.

MAKE OATH AND SAY:- I COMMENCED LOCATING THE BEAVER #2 MINERAL CLAIM

ON THE 5 DAY OF DEC, 19 76 AT 10.00 AM (TIME - INDICATE A.M. OR P.M.) AND COMPLETED THE LOCATION

ON THE 5 DAY OF DEC, 19 76 AT 7.00 AM (TIME - INDICATE A.M. OR P.M.) CONSISTING OF

3 (NUMBER) UNIT LENGTHS N (DIRECTION) AND 6 (NUMBER) UNIT LENGTHS EAST (DIRECTION) AND I HAVE IMPRESSED ALL THE REQUIRED INFORMATION

ON METAL TAGS NO. 26445, WHICH HAS BEEN SECURELY FASTENED TO THE POSTS AS REQUIRED UNDER THE REGULATIONS.

IDENTIFICATION POST(S) NOT PLACED WERE —

CHECK "V" APPLICABLE SQUARE

[V] THE LEGAL CORNER POST

† [ ] THE WITNESS POST FOR THE LEGAL CORNER POST

IS SITUATED: 10 METRES

OFF (WEST) OF LOGGING RD. APPROX 2½ MILES

(PRECISELY DESCRIBE POSITION OF POST RELATIVE TO KNOWN TOPOGRAPHICAL OR SURVEYED FEATURES THAT RELATE TO FEATURES ON A MAP)

FROM BEAVER DAM ON BEAVER CREEK RD, APPROX

4000 METRES NW OF SANDNER LAKE, AND APPROX

4000 METRES DIRECTLY EAST OF TRAPLINE CABIN

† BEARING AND DISTANCE TO TRUE POSITION OF LEGAL CORNER POST FROM THE WITNESS POST ° .

BEARING AND DISTANCE FROM IDENTIFICATION POST TO WITNESS POST ° .

I HAVE COMPLIED WITH ALL THE TERMS OF THE MINERAL ACT AND REGULATIONS PERTAINING TO THE STAKING OF MINERAL CLAIMS AND HAVE ATTACHED A PLAN, ACCEPTABLE TO THE MINING RECORDER, OF THE LOCATION.

SWORN AND SUBSCRIBED TO AT

THIS DAY OF 19 BEFORE ME

* A Commissioner for Taking Affidavits

SIGNATURE

111174E 40.00

MR OR SMR STAMP

* THIS AFFIDAVIT MAY BE TAKEN BY A PERSON EMPOWERED TO TAKE AFFIDAVITS BY THE EVIDENCE ACT OF BRITISH COLUMBIA.

NO. OF UNITS 18 WORK REQUIREMENT $ PER YEAR RENTAL REQUIREMENT - $10.00 PER $200.00 WORK; $20.00 PER $200.00 C/L

WORK NUMBERS	C/L IN $	MINING RECEIPT AND DATE RECORDED	TYPE OF WORK	YEAR OF EXPIRY	CREDIT WORK UNIT(S)	CREDIT RENTAL IN $ S	TRANSFERS (B/S'S, ASSIGNMENTS, CONVEYANCES)

OWNER

HISTORY

The property lies some 20 miles to the southeast of the Tyee uranium mineralization and Power Reactor & Nuclear Fuel Development Corporation uranium mineralization at Hydralic Lake.

It lies to the north of the Power Reactor & Nuclear Fuel Development Corporation and adjacent to the north of the Lacana uranium findings which has reported intersecting 2.7 lbs across 50 feet.

The history for the exploration and development of the uranium mineralized zones of the area are based upon the strata-bound uranium deposit theory. The theory is based upon secondary uranium mineralization situated in unconsolidated or leosely consolidated gravels, debris, or carbonaceous sediments. These are trapped or lying in old stream beds or basins eroded in older basement rocks than the Mesozoic Valhalla and Nelson Plutonics and capped by the younger Tertiary volcanic and sedimentary rocks. It is believed that the Mesozoic Valhalla and Nelson Plutonics are the source of the uranium.

The exploration programs consisted of searching the Tertiary sedimentary basins for old stream beds that exist in the older rock formations which were filled with gravels and debris and check these for radioactive material.

This search extends from Spokane, Washington to north of Vernon and probably north of Kamloops, past the Rexspar property at Birch Island. These basins are discontinuous and are searched out along the trend.

The exploration program has reported producing some radioactive anomalies associated with uranium mineralization at:

a) Fuki-Donen and Pb radioactive anomalies north of Beaverdell, B.C.

b) Power Reactor & Nuclear Fuel Development Corporation at Hydraulic Lake, some seven miles east of the Exel property.

c) Tyee Lake Resources property, some five miles east of the Exel property.

Economic Geology
Vol. 70, 1975, pp. 628–646

Uranium Mineralization by Ground Water in Sedimentary Rocks, Japan

Kazumi Doi, Shuichiro Hirono, and Yukio Sakamaki

Abstract

To solve the mechanism of uranium concentration in stratabound uranium deposits occurring in the basal part of Neogene sediments overlying granite basement, attention has been paid to uranium leaching from weathered granite by circulating carbonated fissure waters, to effective adsorbents for fixing uranium from uraniferous ground waters, to structural features controlling the ground-water circulation, and other relevant factors. The evidence for uranium transportation by hydothermal solutions, including hot spring waters, is hard to observe. Conclusions are summarized as follows:

(1) Uranium in the deposits is supplied from surrounding source rocks, mostly from granite.

(2) Uranium is transported by circulating ground-water solutions.

(3) The uranium dissolved in ground water is fixed in minerals in various ways, the most important being adsorption by carbonaceous matter.

(4) Ore-grade uranium concentrated from very dilute solutions occurs by multiple repetition of a leaching-and-fixation cycle between minerals or adsorbents and circulating uraniferous ground water.

(5) Important factors for uranium mineralization are sufficient uranium, supplied mostly from granite, the existence of effective adsorbents such as carbonaceous matter in the host rocks, and favorable geological, geochemical, and geophysical environments. The last seems to require not only physical and chemical conditions but also correct flow and volume of ground water.

Introduction

Numerous uranium deposits and indications have been discovered in Japan since the beginning of domestic uranium prospecting work in 1954 by Geological Survey of Japan and Power Reactor and Nuclear Fuel Development Corporation (PNC). The writers have been engaged in the prospecting work as members of these two national agencies.

The most important type deposits are epigenetic in sedimentary rocks, occurring as thin, tabular, peneconcordant layers in lithified sandstones and conglomerates of Neogene age. Since the first discovery of deposits of this type at Ningyotoge in 1955, genesis of the deposits has been discussed many times. One theory holds that the deposits were formed by later hydrothermal or hot spring action, while another holds that circulating ground water was responsible.

In this paper, the writers attempt to clarify the genesis of the deposits through investigations of uranium leaching from source materials by ground water and its later fixation from the solution.

Geological setting

Distribution of important uranium deposits in Neogene sediments in Japan is shown in Figure 1 and their general features are summarized in Table 1. The deposits occur exclusively in basal coarse-grained sediments of Neogene age unconformably overlying granites which are mainly of pre-Tertiary age. The deposits are generally flat, lenticular in shape, and concordant. Most important deposits are located in sediments rich in carbonaceous matter and cover depressions or troughs in basement rocks. In some deposits, such as Tono, Ningyotoge, and others, ore shoots occur along shear zones, faults, or dikes cutting the host sediments. Generally speaking, however, the uranium mineralization occurs in a definite horizon in each district. Uranium content and thickness of the orebodies vary considerably. Effects on the uranium mineralization due to volcanism or hydrothermal activity are hard to observe.

Mineralogy

Coffinite and uraninite are the most common primary ore minerals of the deposits, but ningyoite (Muto, 1962, 1965) is found as a primary constituent in the Ningyotoge and Okushiri deposits. In many cases, the uranium present is adsorbed on carbonaceous matter and zeolites, and in some deposits uranian apatite occurs as the major uranium-bearing mineral. The most common ore mineral in the oxidized zone is autunite. Other secondary uranium-bearing minerals occur in accordance with the geochemical environments of the deposits. Pyrite

is the most common accompanying mineral and is widely distributed in ore-bearing horizons associated with carbonaceous matter.

Uranium Leaching from Rocks by Natural Water

General remarks

It is widely thought that the source of uranium in sedimentary deposits is the so-called leachable uranium in the granitic rocks occurring in or around the mineralized area. There are a number of difficulties in getting clear field evidence for uranium leaching and transportation. For instance, the humid climate and steep topography in Japan produce effects of dilution or rather short residence time in surface and free ground waters. Based on data obtained by PNC and the Geological Survey of Japan, the background level of uranium in these waters is 0.05 ppb or below, even in granite regions. The result seems to be opposed to uranium leaching from host rocks.

Generally speaking, the most important factors controlling leaching are thought to be length of reaction time, dimension of reaction surface, chemical nature of host rocks and ground waters. Geochemical and hydrological studies on fissure waters in deeply weathered granitic rocks should therefore be expected to throw light on the problem. The writers chose fissure waters in tunnels and spring waters in granitic regions as suitable examples.

Fig. 1. Uranium ore deposits in Neogene sediments in Japan. See Table 1 for localities.

Uranium anomalies in fissure and spring waters

Anomalies in fissure waters in the Rokko and Kobe tunnels: Tunnels of Japan National Railways are located at the southern flank of the Rokko Mountains near Kobe City in central Honshu (main island), their length being 16.2 km for the Rokko and 8.0 km for the Kobe tunnels. They cut through basement rocks of the area, except for the eastern portal of the Rokko tunnel and the western portal of the Kobe tunnel, which cut Neogene sediments.

Table 1. General Features of Important Uranium Deposits in Neogene Sediments of Japan

Locality No.	Locality	Ore Mineral[a]	Accompanied Mineral[a]	Lithology[b]	Era[c]	Host Rock: Sedimentary Environment: Facies[d]	Structure[e]	Carbonaceous Matter[f]	Lithology of Basement[b]	Overlying Rock on the Host Rock[b]
1	Akasaki	U	P	ss,sh,cg	M	Co	b	co	g	g,sh
2	Futoro	A,Ab	P	c,ss	M	Co or D	un	c	gd	p,m
3	Hanamaki	A,C	P	ss,p	M	N	pd	c	g	p
4	Iela	Uc	P	ss,p	M	N	b	c	g	sh,p
5	Jyoban	A	P	ss,c	M	D	c	c	g	ss,c
6	Kamamura	C,A,Ab	P	ss,c	M	Co	c	c	g	p,sh
7	Kurihara	Ab	P	ss	M	Co or D	b	c	g	m
8	Mikawa	U	P	ss,c	M	D	un	c	g	p,sh
9	Mizoya	A	P	ss,c	M	Co or D	b	c	g	p,v
10	Nakaya	Uc		ss	M	N	un	s	g	sh
11	Nakamaruba	Uc,A	Cl	ss	M	N	un	n		p,sh
12	Ningyotoge	A,N,U	P,G	c,ss	M-Pl	Co	c	c	g	sh,p
13	Nuse	Uc	P,Cl	ss,c	M	N	un	s	c	p,m
14	Okushiri	A,N,T,U,Ab	P	ss p,c,ss	M	Co	un	s	gd	p
15	Okutango	C,A	P	ss,c,p	M	Co or D	c	c	g	p
16	Onuchi	Ab	P	ss,m	M	Co or D	un	co	g	ss,m,p
17	Shinooka	Ab	P	c	M	D or N	un	c	g	ss,p
18	Takamine	A,Ab,R		ss,c,p	Ple	Co	b	s	g	p
19	Tazawako	C	P,Ca	p	M	D or N	un	c	gd	p
20	Tono	A,Ab,C,U,Uc	P	ss,c	M	Co or D	c	co	g	p

[a] A, autunite, Ab, adsorbed uranium by carbonaceous matter, zeolites et al.; C, coffinite, Ca, calcite, G, gypsum, Gl, grauconite, N, ningyoite, P, pyrite; R, ramsdellite, T, torbernite, U, uraninite, Ua, uranian apatite, Uc, uranocircite.
[b] c, conglomerate, g, granite, gd, granodiorite, m, mudstone, p, pyroclastics, sh, shale, ss, sandstone, v, volcanic rock.
[c] M, Miocene, Pl, Pliocene, Ple, Pleistocene.
[d] Co, continental, D, delta, N, neritic.
[e] b, basal, c, channel, un, unknown.
[f] co, large quantity, c, common, s, some.

In the Inner Zone of southwest Japan, granite areas of late Cretaceous to Paleogene age are divided into three zones parallel to the Median Tectonic Line, namely, the Ryoke, Sanyo (or Naegi), and Sanin belts from the south to the north. In the area concerned, the boundary between the Ryoke and Sanyo belts is the contact between two different types of the granitic rocks, namely, the Nunobiki granodiorite (90 m.y.) of the Ryoke granitic complex and the Rokko granite (75 m.y.) of the Hiroshima granites. The former is intruded into the latter along the northern margin of the Ryoke belt (Minato et al., 1965). Except for fine-grained facies in the western part, and for porphyritic facies at contact zones, the Rokko granite is homogeneous coarse- to medium-grained biotite granite. The Nunobiki granodiorite consists of medium- to fine-grained hornblende-biotite granodiorite rich in xenoliths. Hornfels of Paleozioc age and Cretaceous rhyolitic rocks of the Arima group are found locally as roof pendants and are exposed in the tunnels (Huzita and Kasama, 1965a, 1965b; Kasama, 1968) (Figs. 2 and 3). The granitic rocks are extensively decomposed through deep weathering, especially in the eastern part of the mountains. According to the studies by Kitano et al. (1967), the deep weathering was caused by circulation of highly carbonated ground waters.

Water samples, 57 and 24, respectively, were collected in the Rokko and Kobe tunnels, in 1969 and 1970 during construction. Most of the samples have high radon contents, were pressurized, and flowed out along sheared zones or fractures in the granitic rocks. Uranium anomalies greater than 0.1 ppb U were detected on 39 samples from the Rokko tunnel and 13 from the Kobe tunnel. The maximum content was 8.5 ppb U for the former and 8.4 for the latter (Fig. 3). Uranium levels in surface waters in the vicinity of the tunnels, on the other hand, are slightly higher than average, being generally up to 0.13 ppb U. The anomalous values in the fissure waters, therefore, are clearly higher than uranium contents of the surface waters.

Selected examples to show the chemical compositions of the waters sampled are listed in Table 2, together with those of other localities for comparison. Most waters are classified chemically as Ca-HCO_3 and Na-HCO_3 types. Such chemical characteristics seem to correspond to the manner of decomposition of granitic rocks, especially that of plagioclase. No quantitative correlations between the concentration of uranium and any other constituents in the waters have been confirmed, though uranium anomalies are seldom found in pure waters but are found frequently in highly carbonated waters. This is probably because of extremely low concentrations of uranium at ppb levels even for anomalous samples.

The pH of the waters ranges from 6.6 to 8.0. Anomalous amounts of fluorine ion are also observed mainly in the waters from the eastern part of the

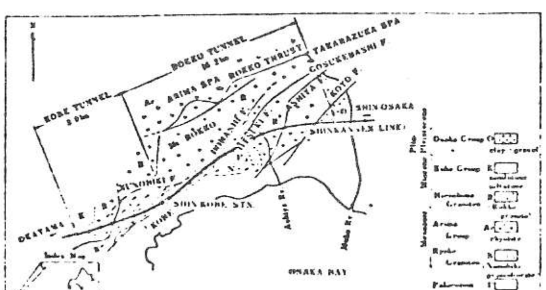


Fig. 2. Geologic map of the Rokko area. Generalized after Huzita and Kasama, 1965a, 1965b.

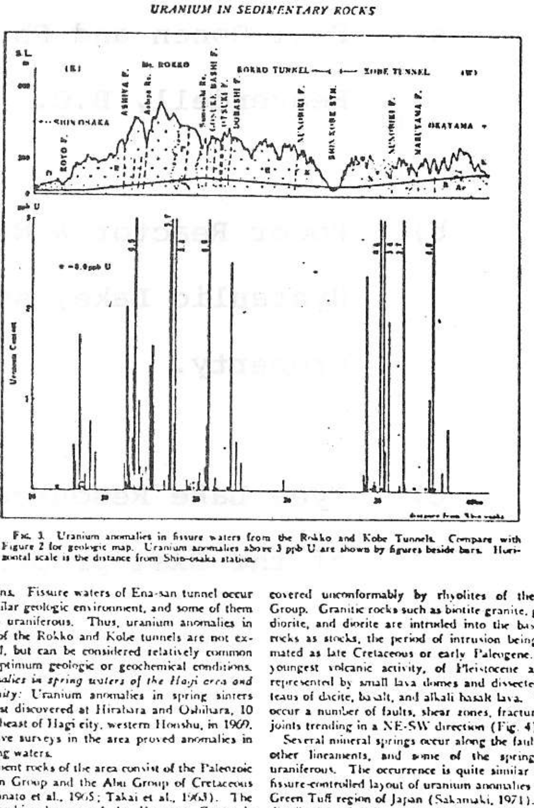


Fig. 3. Uranium anomalies in fissure waters from the Rokko and Kobe Tunnels. Compare with Figure 2 for geologic map. Uranium anomalies above 3 ppb U are shown by figures beside bars. Horizontal scale is the distance from Shin-osaka station.

mountains. Fissure waters of Ena-san tunnel occur in a similar geologic environment, and some of them are also uraniferous. Thus, uranium anomalies in waters of the Rokko and Kobe tunnels are not exceptional, but can be considered relatively common under optimum geologic or geochemical conditions.

Anomalies in spring waters of the Hagi area and its vicinity: Uranium anomalies in spring sinters were first discovered at Hirahara and Oshihara, 10 km northeast of Hagi city, western Honshu, in 1969. Successive surveys in the area proved anomalies in the spring waters.

Basement rocks of the area consist of the Paleozoic Kammon Group and the Abu Group of Cretaceous age (Minato et al., 1965; Takai et al., 1963). The Shimonoseki subgroup of the Kammon Group is composed of alternations of sandstone and shale and sandstone and tuff with much volcanic rock, and is covered unconformably by rhyolites of the Abu Group. Granitic rocks such as biotite granite, granodiorite, and diorite are intruded into the basement rocks as stocks, the period of intrusion being estimated as late Cretaceous or early Paleogene. The youngest volcanic activity, of Pleistocene age, is represented by small lava domes and dissected plateaus of dacite, basalt, and alkali basalt lava. There occur a number of faults, shear zones, fractures, or joints trending in a NE-SW direction (Fig. 4).

Several mineral springs occur along the faults and other lineaments, and some of the springs are uraniferous. The occurrence is quite similar to the fissure-controlled layout of uranium anomalies in the Green Tuff region of Japan (Sakamaki, 1971). The distribution of well waters containing dilute bicarbonate ions is also controlled by the faults (Fig. 5). It is noteworthy that the layout of the uranium

Recent Developments in Uranium Exploration in British Columbia

Peter Christopher, B.C. Dept. of Mines, Victoria
and
B.B. Ballantyne, Geological Survey of Canada, Ottawa.

ABSTRACT

Improvements in uranium prices and an outlook for strong demands has stimulated new interest in the uranium potential of British Columbia. Exploration activity is again at a high level with areas known uranium prospects providing targets for prospecting efforts. The geological and geochemical settings of known uranium occurrences are reviewed with emphasis on (1) hydrothermal uranium minerals in pyritized tuffs at the Rexspar property near Birch Island and (2) secondary minerals in unconsolidated fluvial sediments that underlie plateau basalts in south central British Columbia (Pb, Fuki, Dones).

An outline of the distribution of uranium occurrences in British Columbia and a classification of deposits in terms of geological setting, age and origin are presented. Geochemical associations and pathfinder elements for uranium are reviewed.

PART 1 GEOLOGICAL SETTING

INTRODUCTION

The widespread distribution of radioactive occurrences in British Columbia is demonstrated by figure 1. The apparent concentration of occurrences in south-central British Columbia is overemphasized by greater intensity of exploration with recent activity stimulated by the discovery of basal type uranium mineralization below Tertiary plateau basalts in the Kelowna-Beaverdell Area. The setting of recent discoveries indicates the difficulty of directing prospecting efforts for highly mobile uranium. The following statement from lecture notes on prospecting for uranium (presented in Vancouver in 1955). "The most definite advice that can be given is where not to seek uranium ore. Uranium would not be found in the lava fields of the interior....", emphasizes the difficulty of directing exploration.

The best direction for further uranium exploration is provided by an understanding of the setting and distribution of previous discoveries. While examining similar settings, other possible traps should be explored. This paper attempts to familiarize the prospector with the geological setting of known radiometric occurrences by updating the status of uranium exploration in British Columbia.

Acknowledgments.

The writer appreciates the assistance of Y. Kalnins and R. Holland in preparation of figures and tables. Settings of occurrences were discussed with S. Inazumi (P.M.C.), T. Kikuchi, R. Bell (G.S.C.) and K. McAdam (B.C.D.M.).

Distribution and Type of Deposits

Figure 1 summarizes the distribution and types of radiometric occurrences in British Columbia. Table 1 summarizes the type, setting and age of mineralization. A comprehensive list of references with short descriptions of each occurrence accompanies B.C.D.M. preliminary map No. 22 (Christopher, 1976).

Deposits are classified according to form or type of host. Most of the occurrences are either late Mesozoic or Cenezoic pegmatite deposits generally found in metamorphic complexes of unknown age. Deposits related to suspected carbonatites are believed to be either Paleozoic or Precambrian. Known reserves are small and occur mainly in stratabound deposits at Rexspar and in basal type in mid or late Tertiary sediments. A short description of each type of deposit follows.

Pegmatites

Pegmatites occur mainly in the southern part of the Omineca Belt. Similar occurrences have probably been found further north in the Omineca Belt but have received little attention because of their remote location. The largest concentration of reported pegmatite occurrences is in the Grand Forks-Nelson area near the SD prospect (#1 figure 1. receiving most of the recent interest.)Large open pit potential has been suggested for this type of deposit but small bonanza deposits or reconcentration into secondary deposits are more likely

Stratabound Uranium Deposits

The Rexspar deposit and Fuki, Donen Pb etc, basal type uranium deposits in the Kelowna-Beaverdell area are stratabound occurrences. The Rexspar deposit is well known and has been explored intermittently since 1918 with uranium first detected in 1949. The Fuki outcrop was discovered in 1968 using a car-borne scintillometer survey with geological, geochemical, geophysical surveys and diamond drilling leading to the discovery of the Donen and Pb deposits.

Basal type uranium deposits are wide-spread in Tertiary formations of Japan (Katayama and Kamiyama, 1976) with the Tono (about 10.9 million tons @ 0.054% U_3O_8) and Ningyo-toge (about 5 million tons @ 0.050% U_3O_8) mines the largest deposits (Kamiyama, 1974). In Washington the Northwest Uranium (about 8 million tons @ 0.09% U_3O_8) reported in Nash and Lehrman, 1975) and Big Smoke mines are basal type deposits in carbonaceous sediments of the mid-Tertiary Cerome andesite. Knowledge of the existance and geological settings of these deposits provide a stimulus for the exploration program that led to the discovery of the Fuki outcrop.

Figure 2 shows the general geology of the Fuki-Donen uranium prospects and Figure 3 shows the general geology of the Hydraulic Lake area (Pb and other prospects). Secondary uranium minerals are situated in unconsolidated or loosely consolidated carbonanaceous sediments that are preserved below a cap of Pliocene (4.7 $\pm$ 0.2 m.y. whole rock K-Ar age) and Miocene? plateau basalt. Mineralized deposits occur in fluvial sediments that unconformably overlie metamorphic rocks (Anarchist or Monashee Groups), early Tertiary volcanic and sedimentary rocks (Marron Formation or Kettle River Formation) and Nelson, Valhalla, and Coryell intrusive rocks. Strong faults occur in area of the mineral deposits but their relationship to the mineralization has not been determined.

Secondary uranium minerals occur as films on pebbles and in the matrix of unconsolidated or loosely consolidated conglomerate and carbonaceous sediments that were deposited in paleo-stream channels. Metatorbernite is the only uranium mineral that has been identified. Authigenic pyrite is common in the unconsolidated sediments and in the Hydraulic Lake area massive sulphide sections have been encountered.

Figure 4 shows a typical section of a basal type uranium deposit in south-central British Columbia. Uranium mineralization occurs in groundwater traps at several horizons within the basal sediments but commonly at or near the unconformities. The base of the Eocene (Marron and Kettle River Formations) has been tested for similar deposits but significant uranium mineralization has not been detected.

Similar geological settings have been reported in the Quesnel-Prince George, Endako and Atlin area. A poorly explored favourable environment for basal type uranium deposits appears to exist in vast area of British Columbia.

The general geology of the Rexspar property is shown in figure 5. A highly faulted, northeasterly trending belt of trachyte tuffs and flows (alkali feldspar porphyry) overlies a series of Paleozoic or earlier quartz-sericite schists with interbedded carbonaceous and phyllitic units. Uranium mineral deposits occur as tabular, fault controlled, replacement zones within areas of the trachyte that are rich

in mica, pyrite (5-20%) and fluorite. A separate zone, reported to contain over a million tons of 15-20% fluorite and 10-15% celestite but only minor uranium, is refered to as the "Fluorite Zone".

The association of purple fluorite with uranium mineralization is commonly known but the massive sulfide environment which contains uranium at Rexspar and in basal type deposits at Hydraulic Lake deserves more attention.

Summary and Conclusions

Improvements in uranium prices and an outlook for strong demands has stimulated exploration activity for uranium in British Columbia. Several favourable environments still warrant further consideration or have been virtually overlooked.

1. Only the south-central part of British Columbia has been intensely explored for basal type uranium deposits but the favourable environment appears to extend from Washington to at least the Yukon.
2. Uranium should not be ignored when examining for other types of deposits and other metals, eg. massive sulphide deposits, stratabound Pb-Zn deposits, porphyry and skarn deposits (especially Mo, U, Sn etc.)
3. Potential for carbonatite deposits in areas such as the Frenchman's Cap Gneiss Dome (McMillan, 1974) is favourable.
4. Gamma ray logs that are used for correlation in petroleum and coal exploration might provide leads.
5. High background intrusive rocks have potential for secondary enrichment and/or contact deposits.
6. Mineral deposits aren't found at C.I.M. meetings, so see you in the field with your silt bags, water bottles, scintillometers, divining rod, E.S.P. or whatever works.

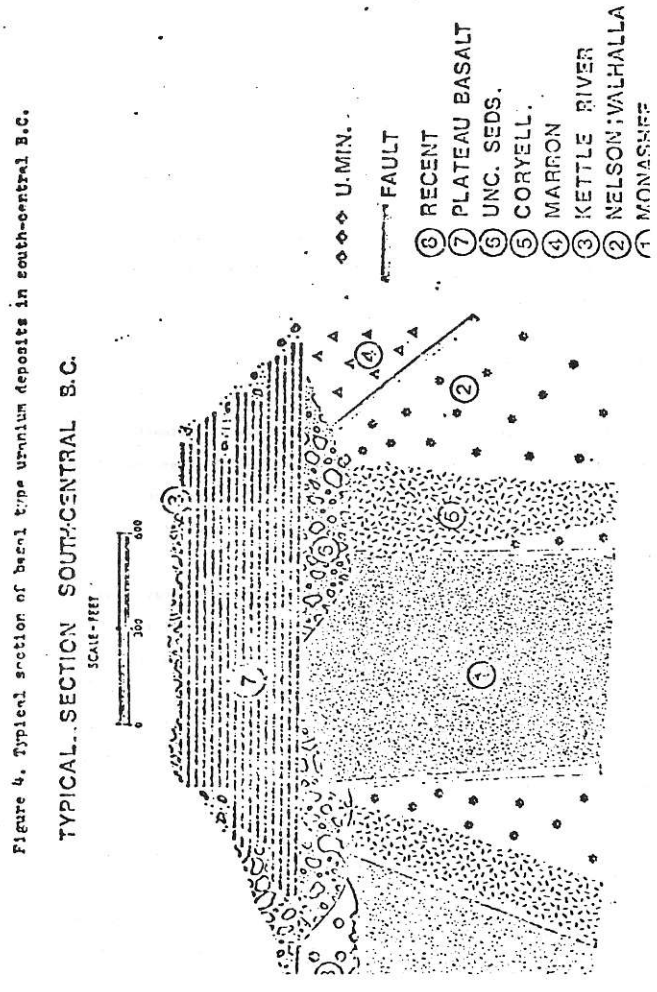


Figure 4. Typical section of basal type uranium deposits in south-central B.C.

GENERAL GEOLOGY

The general geology of the area consists of the Plateau Basalts formations overlying the Kettle River Formations, Valhalla and Nelson intrusions and the Monashee group of gneisses.

The main interest is the old stream channels or basins cut into the basement rocks with the channels and basins filled with gravels and debris and covered by the plateau basalts and sediments. The channels and basins are the favourable host to uranium mineralization.

GEOLOGICAL FORMATIONS

Tertiary

Plateau Basalt Formations

Pliocene - Olivine Basalt, Kallis Creek Basalt

Miocene - Coaly mudstone and shale, conglomerate, coaly sandstone containing uranium mineralization

Kettle River Formation

Oligocene - Tuff, black shale, conglomerate and tuffaceous sandstone.

Cretaceous

Valhalla and Nelson Intrusions

Pegmatite, granite and granodiorite.

Proterozoic

Monashee Group

Layered gneiss.

STRATA BOUND URANIUM DEPOSITS

The following two reports partially discuss strata-bound uranium mineralization.

The papers are:

1. Uranium Mineralization by Ground Water in Sedimentary Rock, Japan by K. Doi, S. Hirono and Y. Sakamaki.

2. Recent Developments in Uranium Exploration in British Columbia by P. Christopher and S.B. Ballantyne.

CANADA

DEPARTMENT

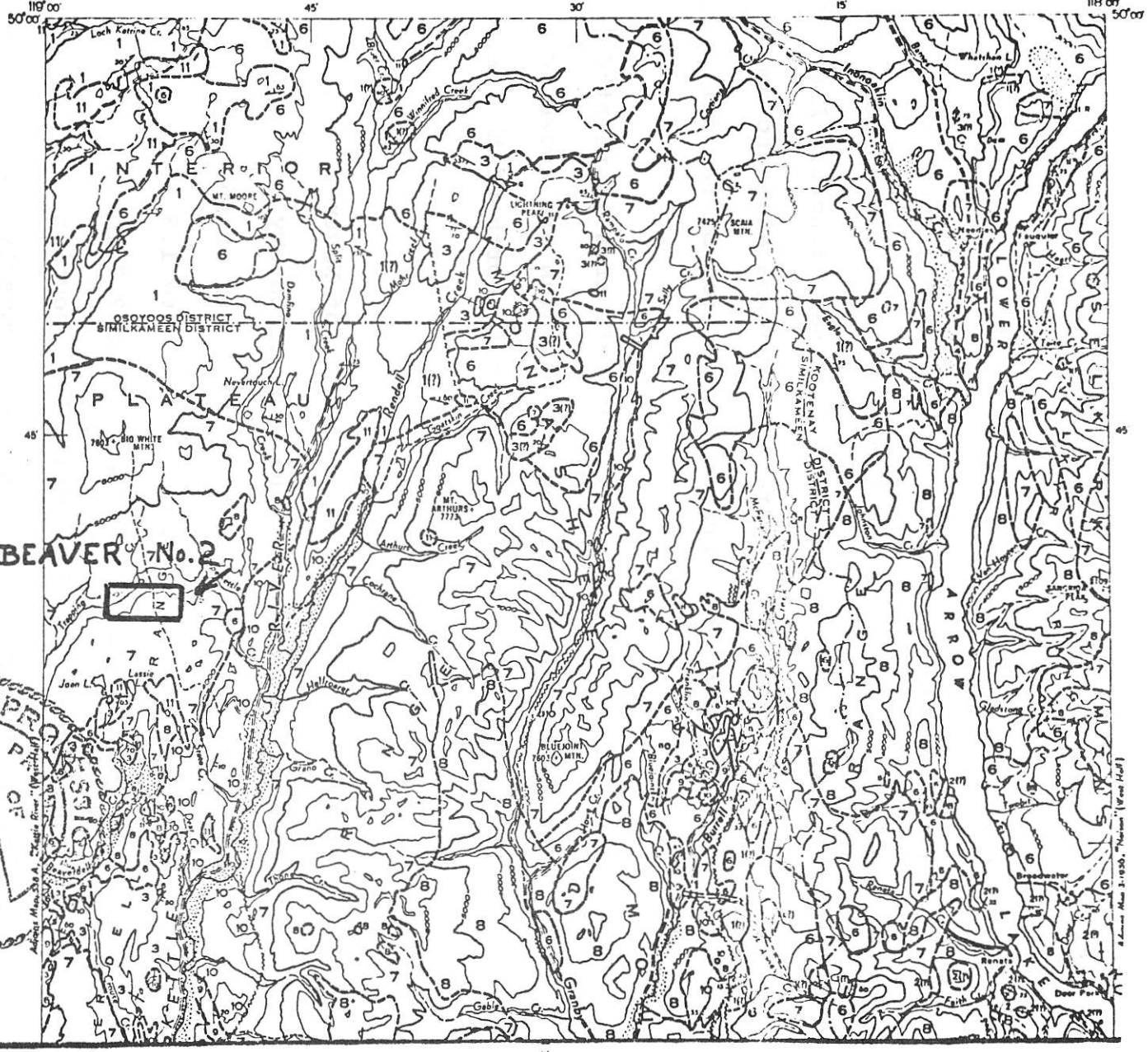
OF

MINES AND TECHNICAL SURVEYS

GEOLOGICAL SURVEY OF CANADA

PRELIMINARY SERIES

SHEET 82E (East Half)



LEGEND

CENOZOIC

TERTIARY

MIOCENE(?)

11 Basalt, olivine basalt

PALEOCENE OR EOCENE

PHOENIX VOLCANIC GROUP

10 Andesite, trachyte; minor basalt; locally, interbedded tuff, shale, and/or siltstone

9 KETTLE RIVER FORMATION: rhyolite and dacite tuff; locally, conglomerate, sandstone, and shale; minor rhyolite flows and intrusive porphyritic rhyolite

PALEOCENE(?)

8 CORYELL INTRUSIONS: syenite; monzonite, shonkinite and granite

MESOZOIC

CRETACEOUS(?)

LOWER CRETACEOUS(?)

7 VALHALLA INTRUSIONS: granite, porphyritic granite

6 NELSON INTRUSIONS: granodiorite, porphyritic granite; diorite, monzonite, quartz monzonite

5 Ultrabasic intrusions, serpentinite

JURASSIC

ROSSLAND GROUP

4 Andesite, latite; agglomerate and flow breccia; minor greywacke

PALAEOZOIC

PERMIAN(?)

ANARCHIST GROUP

3 Greenstone, greywacke, limestone; paragneiss

PENNSYLVANIAN AND/OR PERMIAN

2 MOUNT ROBERTS FORMATION: greywacke, greenstone, limestone; paragneiss

PROTEROZOIC (?)

1 MONASHEE AND GRAND FORKS GROUPS
Paragneiss; minor crystalline limestone and pegmatite

Drift-covered area

Geological boundary (defined approximate)

Bedding (inclined, overturned)

Bedding (inclined, vertical; tops unknown)

Gneissosity (inclined, vertical)

Fault (defined, approximate, assumed)

Fossil locality ⊕

Mineral property x11

PROPERTY INFORMATION

The property was not examined on the ground, however, I have worked with uranium properties since 1953 in the Uranium City area, Elliot Lake area, Bancroft Area, Colorado Plateau Area, Kenora Area and Kelowna Area and am familiar with the nature of uranium deposition of the different areas.

The uranium mineralization of this area is related to the strata bound type of deposition which are known to extend from around Spokane, Washington to north of the Rexspar property at Birch Island, B.C.

An article in the Northern Miner of November 25, 1976, reported on the Lacana property uranium discovery on the Beverly claim which is adjacent to the south of the Beaver No. 2 claim. Drill hole assay reports were 1.3 lbs; 0.75 lbs; 1.5 lbs and 2.7 lbs, uranium. The 2.7 lbs uranium assay represented a 50 foot drill hole section. The uranium results being obtained on the adjacent property are believed to be in the general northwesterly strata bound trend. The Beaver No. 2 claim is adjacent and to the north of the Beverly Claim and on

The Northern Miner

CANADA'S NATIONAL MINING NEWSPAPER

NOVEMBER 25, 1976 VOL. 62 NO. 37

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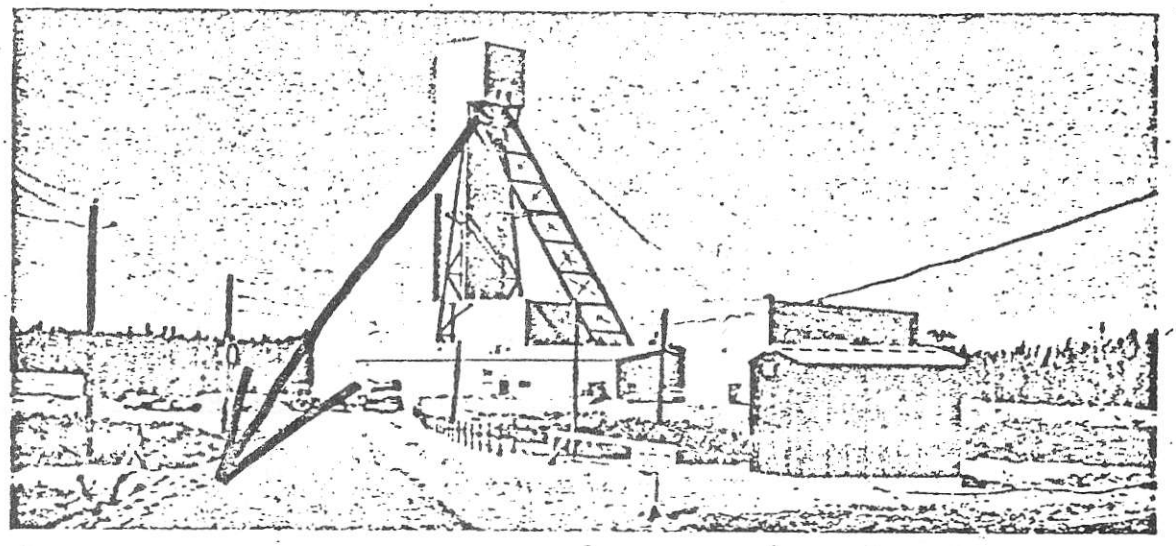
Four sections – A, B, C, D



THE HEADFRAME

Symbol of the mining industry the world over, that's the headframe, despite the increasing number of open pit mines. The one to the right, near Ignace, Northwestern Ontario, belongs to Mattagami Lake Mines' Lyon Lake Division, which is aiming for production on a limited basis (500 tons per day) early in 1978. Shaft sinking to 1,500 ft. has been completed, lateral development is proceeding and underground diamond drilling to confirm base and precious metal ore reserves is being carried out. (Photo courtesy Mattagami Lake Mines.)

Will expand drilling

Lacana B.C. uranium discovery starting to look significant

Lacana Mining Corp. appears to have come up with a significant uranium discovery on its 3,000-acre holding in the Kelowna-Beaverdell area of British Columbia.

Percussion drilling in a preliminary prospecting program has picked up several fine intersections, including one of 50 ft. running 2.7 lb. U_3O_8 by chemical assay.

"Because of the encouraging results, a detailed and much larger program of diamond drilling will be undertaken to determine and define the ultimate size and grade of the uraniferous zone," E. G. Thompson, vice-president, told The Northern Miner this week. This program, which will probably involve 40 to 50 holes, will likely get started early in the New Year.

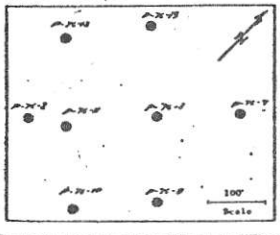
"This district will probably be one of the more active exploration camps in Canada this year," Mr. Thompson feels, pointing out that a lot of interest has been building up of late. It was Japanese interests, which have been working quietly in the area for several years, that really started the current activity. But, it wasn't until the Noranda Mines-Kerr Addison team moved in with a firmoption agreement involving the Tyee Lake Resources, ground that the mining fraternity began to take notice.

Apparently in recent months a number of the large Calgary-based oil firms have been moving into the area. "There has been a lot of flying going on," The Northern Miner is told.

The company this week reported the following drill results:

Hole No.	Footage From	To	U_3O_8 (lbs.)
P 76-1	150 -	180	1.3
P 76-2	220 -	240	0.75
P 76-8	150 -	170	1.5
P 76-11	210 -	260	2.7

Location of these holes is shown on the accompanying sketch. Chemical analyses of samples from holes 9, 10, 12 and 13 located in the same general area as shown on the map have not been completed to date, but appear to be below ore grade, officials say.



Ontario relaxing junior company rules

Is Ontario's bureaucracy at Queen's Park starting to relax its stranglehold on the thousands of dormant junior mining companies still in existence in that province? Perhaps. For there have been two straws in the wind of late.

This week the OSC published an "exposure draft" for a new Ontario policy that would exempt dormant companies from the necessity of issuing 6-month interim financial statements, though it has considered but rejected another proposal that

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Dramatic turnaround for copper hopefully in one more year

VANCOUVER – In the absence of any major disruption, the 1977 earnings of the copper and zinc producers are likely to be appalling once again. Hugh R. Snyder, president and chief executive officer, Western Mines, predicted at the Annual Outlook Conference of the Association of Professional Economists of B.C.

The degree of appallingness, he added, will be dependent upon the ability of management to keep costs under control and the labor force at work.

He said he would be surprised to see the coal producers achieve the same earnings level in 1977 as in 1976 and 1975, noting that the first three quarters of this year indicate that the coal producers are now coming under cost pressure.

However, he ended his address on an optimistic note. He reminded the economists that in 1973 the B.C. asbestos and metallurgical coal producers were "crying in their beer" with aggregate earnings of about $500,000. In 1975, their combined earnings were $97 million, the improvement almost entirely accounted for by price increases.

The same turnaround can and will happen for base metal producers, particularly copper, he continued. "I don't think it will be 1977, but hope it will be 1978," he said.

On the longer term, he saw some straws in the wind that hold the promise of a "return to sanity and the public attitudes which encouraged resource and northern development in the 1950s and 60s."

Earlier in his address, he said there is no lack of projects available for development in B.C., but there is

See Page A12

Ready by late 1977

Afton mine and smelter complex on schedule in spite of delays

VANCOUVER – In spite of repeated delays due to labor disputes in the B.C. construction industry, work at the Afton copper mine and smelter complex near Kamloops remains on schedule for start-up in the fall of 1977.

John Anderson, mine manager, told a meeting of the Canadian Institute of Mining and Metallurgy here that about $19 million has been spent on construction thus far and an equal amount is earmarked for further construction work (N.M., Sept. 2, 1976).

Mr. Anderson said 305 people are working at the site with 80 living in the construction camp.

The company hopes to have two pumping stations at a lake five miles away from the mine and smelter completed before winter while water levels on the lake are at their lowest. About 25,000 ft. of trenching for the pipeline has been completed and should be finished by early December.

Structural steelwork on the smelter building should be completed in several weeks, said Mr. Anderson, and then the ground floor will be clad. The upper part of the building will not be clad until the smelter and other equipment is installed. Delivery of the smelter is expected in February.

The main office building should be finished in early December and

Long Lac drill program starts on Silvermaque

Before this week is out, Long Lac Mineral Exploration expects to have two heavy diamond drills at work on its Elliot Lake area uranium property which it recently optioned from Silvermaque Mining. Lac is committed to carrying out a minimum of 10,000 ft. of drilling within a year.

The initial two holes, which are about 1,300 ft. apart, are being

See Page A12

Long range outlook bright

B.C. mining recovery slower than expected

By RICHARD J. ROBERTS
Assistant Editor

VANCOUVER – The long-range forecasts, based on projected world consumption and the province's potential mineral resources, point to immense expansion in the mining industry of British Columbia for overall progress in the province's mining industry are not ideal. World metal prices that had been displaying strength earlier in the year were turning soft at the time of writing. Labor and material costs are still rising. Production of copper and coal reflects costly labor strikes.

The B.C. Chamber of Commerce sums it up in this way: "Investors are gravely concerned that legislation which could so easily be imposed in 1974 and so easily removed in 1976 can just as easily be reimposed at some time in the future." The chamber called upon the

Inside:

CONCLUSION

The Beaver No. 2 claim is located in the general uraniferous trend which is reported extending from Spokane, Washington to north of the Rexspar property at Birch Island, B.C.

The Lacana property adjacent to the south of Beaver No. 2 has been intersecting uranium results in their drilling program. With the Beaver No. 2 claim being on the same general trend, it is recommended that the Beaver No. 2 claim be fully examined to test for the possibility of finding old stream bed uranium deposits.

RECOMMENDATIONS

It is recommended that the property be thoroughly explored with the intention of locating the old stream beds and testing them for uranium mineralization. The program should consist of geologic mapping, soil sampling and uranium detection surveys.

ESTIMATED COST OF PROGRAMME

The following are the monies required to expedite the exploration programme:

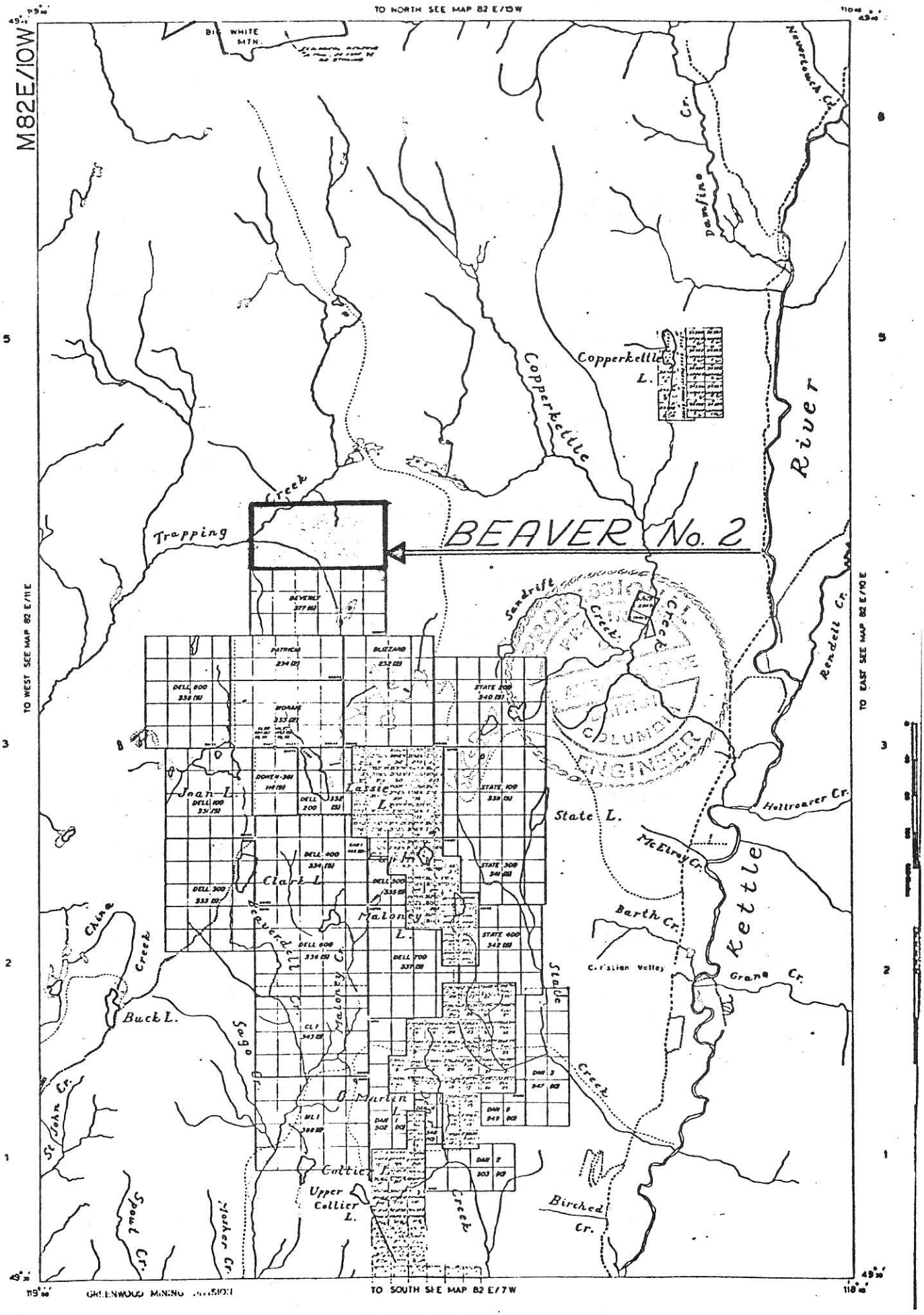
1.	Control lines	$ 3,000.00
2.	Geologic Mapping	4,000.00
3.	Track etch or equivalent survey	7,000.00
4.	Allowance for 1,000 feet of test percussion drilling	9,000.00
5.	Tractor for trenching and roads	3,000.00
6.	Assay allowance	3,000.00
7.	2 helpers, 2 months room & board	7,000.00
8.	Travel and rental expenses	2,000.00
9.	Engineering	2,000.00
		$40,000.00
Contingencies 10%		4,000.00
	TOTAL	$44,000.00

Respectfully submitted
MANNY CONSULTANTS LTD.,

E. Amendolagine, P.Eng.,

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA E. AMENDOLAGINE

January 14, 1977


M82E/10W
TO NORTH SEE MAP 82 E/15W
TO WEST SEE MAP 82 E/11E
TO EAST SEE MAP 82 E/10E
TO SOUTH SEE MAP 82 E/7W
BIG WHITE MTN.
Copperkettle L.
Copperkettle
River
Trapping
Creek
BEAVER No. 2
Sandrift
Creek
Rendell Cr.
Hellroarer Cr.
State L.
McElroy Cr.
Barth Cr.
Kettle
Grand Cr.
Christian Valley
Joan L.
Lassie L.
Clark L.
Malony L.
Marlin L.
Collier L.
Upper Collier L.
Buck L.
Chine Creek
Sevenell Cr.
Malony Cr.
Sago Cr.
St. John Cr.
Spout Cr.
Mother Cr.
Birched Cr.
Creek
GREENWOOD MINING DIVISION

CERTIFICATE

I, EMANUEL AMENDOLAGINE, of the City of Vancouver, in the Province of British Columbia, hereby certify:

1. That I am a geologist and reside in Vancouver, British Columbia.

2. That I am a graduate of Hunter College, of the City of New York, and Columbia University, with a B.A. and M.A. degree respectively, and that I have been practising my profession as a geologist for 23 years.

3. That I am a registered professional engineer in the Province of British Columbia.

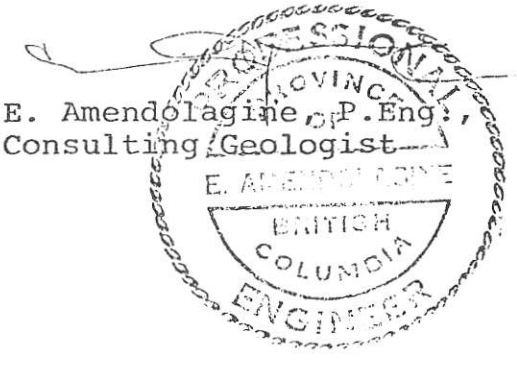
4. That this report is based upon knowledge of the area and uranium deposition and upon study of the sequence of formations and knowledge of uranium in the Beaverlodge, Saskatchewan area, Ellioet Lake, Ontario area, Kenora, Ontario area, Colorado Plateau area and others.

5. That the writer does not have, nor does he expect to receive, either directly or indirectly, any interest in the Beaver No. 2 claim or any company it is affiliated with.

6. That this report may be used for the purpose of a Prospectus if so desired.

7. It is believed that this claim is situated as represented by the owners.

DATED at Vancouver, British Columbia, this 14th day of January, 1977.



E. Amendolagine, P.Eng.,
Consulting Geologist

20. STATUTORY RIGHTS OF RESCISSION

Sections 61 and 62 of the Securities Act (British Columbia) provides in effect, that where a security is offered to the public in the course of primary distribution:

(a) A purchaser has a right to rescind a contract for the purchase of a security, while still the owner thereof, if a copy of the last Statement of Material Facts, together with financial statements and a summary of engineering reports as filed with the Vancouver Stock Exchange, was not delivered to him or his agent prior to delivery to either of them of the written confirmation of the sale of the securities. Written notice of intention to commence an action for rescission must be served on the person who contracted to sell within 60 days of the date of delivery of the written confirmation, but no action shall be commenced after the expiration of three months from the date of service of such notice.

(b) A purchaser has the right to rescind a contract for the purchase of such security, while still the owner thereof, if the Statement of Material Facts or any amended Statement of Material Facts offering such security contains an untrue statement of material fact or omits to state a material fact necessary in order to make any statement therein not misleading in the light of the circumstances in which it was made, but no action to enforce this right can be commenced by a purchaser after expiration of 90 days from the later of the date of such contract or the date on which such Statement of Material Facts or amended Statement of Material Facts is received or is deemed to be received by him or his agent.

Reference is made to the said Act for the complete text of the provisions under which the foregoing rights are conferred.

21. CERTIFICATE OF THE DIRECTORS AND PROMOTERS OF THE ISSUER:

The foregoing constitutes full, true, and plain disclosure of all material facts relating to the securities offered by this Statement of Material Facts.

DARVA RESOURCES AND DEVELOPMENT LTD. April 1, 1977
(Date)

Larry G. Seeland, Director & Promoter

Armand Arsenault, Director & Promoter

Echlin Miller, Director

CERTIFICATE OF THE ~~UNDERWRITER(S)~~ AGENT:

To the best of our knowledge, information, and belief, the foregoing constitutes full, true, and plain disclosure of all material facts relating to the securities offered by this Statement of Material Facts.

FISHER SECURITIES CORPORATION April 1, 1977
(Date)

but one representative of Corporate Capital Company or the investor will join the Board of the Issuer at the time the Certificate of Deposit is arranged.

Corporate Capital Company has 90 days from March 7, 1977 to arrange the financing on the above terms, or on other terms acceptable to the Issuer. On successfully arranging the financing, Corporate Capital Company will have the right and option to purchase 100,000 shares of the Issuer at a price of $1.00 per share by way of private placement.

See Item 11 hereof for information regarding the Logjam property.

ITEM 4 THE ESTIMATED NET PROCEEDS OF THE ISSUER ARE TO BE SPENT

Although it is not possible to determine the actual net proceeds from the offering of shares pursuant to Item 1 hereof, in the event all of the 200,000 shares are sold at the minimum price of $1.00 per share, the proceeds would be $200,000 less commissions of $15,000, for a net amount of $185,000. The principal purposes for which the estimated net proceeds from the sale of securities offered pursuant to Item 1 hereof are to be spent in order of priority as follows:

(a)	To pay accounts payable	$ 32,784
(b)	Legal and audit	10,000
(c)	Payment to P. Doug McLaren re purchase of Beaver #1 Mineral Claim (See Item 11)	15,000
(d)	To carry out roadwork, bulk sampling and establishment of camp on Logjam property	70,000
(e)	To carry out preliminary exploration work on Beaver #2 Mineral Claim as recommended by E. Amendolagine, P.Eng.	44,000
(f)	To repay shareholders loan	10,000
(g)	Working Capital	3,216
		$185,000

ITEM 5 THE FULL NAME, HOME ADDRESS AND CHIEF OCCUPATION, THE NUMBER OF SHARES OF THE ISSUER BENEFICIALLY OWNED, DIRECTLY OR INDIRECTLY, BY EACH SENIOR OFFICER OR DIRECTOR OF THE ISSUER, AND IF EMPLOYED DURING THE PAST FIVE YEARS, THE NAME OF EACH EMPLOYER

Name and Address Present Office Held	Chief Occupation	Number of Shares of Issuer beneficially owned
Larry G. Seeland 995 Duchess Ave. West Vancouver, B.C. President & Director	Businessman	1,000

The following beneficially own, directly or indirectly, in excess of 5% of each class of the issued shares of the Agent:

Name and Address	Number and Class	Percentage
Errol Fisher 3019 Point Grey Road Vancouver, B.C.	1,000 Common "A" 1,000 Common "B"	100% 100%

The promoters, directors, officers and insiders of the Issuer own as a group, directly or indirectly, 283,000 shares, representing 21.8% of the presently issued shares of the Issuer.

ITEM 2 PARTICULARS CONTRIBUTING TO THE SPECULATIVE NATURE OF THE SECURITIES BEING OFFERED

There is no known body of commercial ore on any of the Company's mining properties and the proposed program is an exploratory search for ore.

The Company's mineral properties consist of located mineral claims and therefore in accordance with the mining laws of the jurisdictions in which they are situate, the existence and area of such claims could be in doubt.

The shares of the Company must be considered speculative securities as the Company's mining properties are in the exploration and development stage.

ITEM 3 DETAILS OF ANY MATERIAL CHANGES OR PROPOSED MATERIAL CHANGES IN THE AFFAIRS OF THE COMPANY

By an agreement dated March 7, 1977 between the Issuer and Corporate Capital Company, 1200-6290 Sunset Blvd., Los Angeles, Calif. (a Los Angeles-based financial services firm), the Issuer appointed Corporate Capital Company its fiscal agent to arrange the $3,000,000 financing necessary to put the Issuer's Logjam property in the Yukon Territory into production. The financing which Corporate Capital Company will attempt to arrange will be on the following basis:

a) The sum of $3,000,000 (U.S.) in the form of a Certificate of Deposit will be deposited with a bank against which the Issuer may borrow funds.

b) Up to 50% equity interest in the property will be transferred to the investor with the remaining 50% being shared by the Issuer as to 35% and A.M.P. Explorations & Mining Co. Ltd. as to 15%.

c) An affiliate of Corporate Capital Company will be appointed the agent of the Issuer to market production for normal market fees or commissions.

d) The Issuer will be the operator of the property

Armand Arsenault 29 Alsek Whitehorse, Yukon Director	Mining Executive	282,000
Echlin Miller 2304 - 1600 Beach Vancouver, B.C. Director	Independent business consultant, natural resource industry	NIL

ITEM 6 PARTICULARS OF THE CORPORATE STANDING OF THE COMPANY

The Company was incorporated on the 14th day of November, 1972 under the laws of the Province of British Columbia by memorandum and articles and is a reporting Company.

All filings required to be made by the Company under the Securities Act and the Company's Act of British Columbia are up to date. The Company filed an Annual Report with the Registrar of Companies on July 28, 1976.

The latest audited financial statements of the Company were dated July 31, 1976 and were placed before the shareholders of the Issuer on November 15, 1976, the date of the last Annual General Meeting.

The Company is engaged in the business of developing natural resource properties.

ITEM 7 THE AUTHORIZED AND ISSUED SHARE CAPITAL OF THE ISSUER

The authorized capital of the Company consists of 3,000,000 shares without par value of which 1,313,025 shares have been issued and fully paid. There are no conversion rights, no special liquidation rights, pre-emptory rights or subscription rights attached to the shares of the Company.

ITEM 8 THE PRICES AT WHICH SECURITIES OF THE ISSUER HAVE BEEN ISSUED DURING THE PAST YEAR

No securities of the Company have been issued during the past year.

ITEM 9 PARTICULARS OF ANY BONDS, DEBENTURES, NOTES, MORTGAGES, CHARGES, LIENS, OR HYPOTHECATIONS OF THE ISSUER

There are no bonds, debentures, notes mortgages, charges, liens, or hypothecations outstanding against the Company.

ITEM 10 PARTICULARS OF IMPORTANT PROPERTIES PRESENTLY OWNED, LEASED, HELD UNDER OPTION, OR OPERATED BY THE ISSUER OR ANY SUBSIDIARY THEREOF OR PROPOSED TO BE OWNED, LEASED, HELD UNDER OPTION, OR OPERATED BY THE ISSUER OR ANY SUBSIDIARY THEREOF

A. LOGJAM PROPERTY

The Issuer has an option to acquire an 85% interest in the Barb 1-22 mineral claims located in the Watson Lake Mining Division, Y. T., known as the "Logjam property". (See Items 3 and 11 hereof for further details.)

During the past year the Issuer has expended $3,045 on the property as cash in lieu of assessment work.

B. BEAVER #2 PROPERTY

Upon receipt by Mr. P. Doug McLaren of 300,000 shares in the capital of the Issuer, the Issuer shall earn a 100% interest in the Beaver #2 Mineral Claim comprising 18 units located in the Greenwood Mining Division, British Columbia.

No work has been carried out by the Issuer on the property to date.

C. BEAVER #1 PROPERTY

Upon the payment of $15,000 to P. Doug McLaren, as set out in Item 11(C) hereof, the Issuer will acquire a 100% interest in the Beaver #1 Mineral Claim located in the Greenwood Mining Division, B. C.

No work has been carried out by the Issuer on the property to date.

ITEM 11 PARTICULARS OF THE COST OF PROPERTIES ACQUIRED BY THE ISSUER OR ANY SUBSIDIARY THEREOF WITHIN THE PAST THREE YEARS OR PROPOSED TO BE ACQUIRED BY THE ISSUER OR ANY SUBSIDIARY THEREOF

A. LOGJAM PROPERTY

By an option agreement dated February 11, 1974 and amendments thereto between the Issuer and A.M.P. Explorations and Mining Co. Ltd., Vancouver, B. C. ("A.M.P."), the Issuer obtained an option to acquire an undivided 85% interest in the Logjam property upon the payment of $15,000 (previously paid by the Issuer) and $10,000 on or before April 1, 1977(this has been paid), $20,000 on or before October 1, 1977, $50,000 on or before October 1, 1978, $55,000 on or before October 1, 1979, and upon the performance of certain work commitments as set out in the agreement. Mr. Arsenault, a director and shareholder of the Issuer, is also a director of A.M.P.

See Item 3 hereof for details of the agreement between Corporate Capital Company relating to the Logjam property.