

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

MAY 23 1972

823818

J.H.S.	✓
P.M.K.	✓
G.M.H.	✓
R.D.S.	
B.C.B.	
I.D.B.	
M.D.R.	
J.H.F.	

E.O.I.

To Glen Hogg

From W.M. Sirola

Subject Birch Island Property of Consolidated
Rexspar Minerals and Chemicals Limited
Birch Island, B. C.

Date May 19, 1972

I have reviewed the report prepared by Bruce Arnott on the Birch Island Fluorspar-Uranium deposits and have reached the following conclusions:

1. The probability of finding sufficient additional fluorite tonnage to make a viable operation within the limits of the known zones is poor. I would limit this to a maximum of 300,000 tons in a lower horizon centered on the 50' intersection in drill hole 249. This tonnage, however, suffers from a 3:1 stripping ratio and may not therefore be open-pit ore. There is some possibility of additional tonnage between the A and BD zones but old drill records have either been lost or are illegible and this possibility of additional tonnage could only be determined by drilling.
2. There does exist some possibility of locating additional fluorite zones to the northeast of the main fluorite zone. Denison Mines drilled IP anomalies which turned out to be pyrite-mica zones such as occur within the known ore horizons. They also analyzed soil samples in this area for uranium but not for fluorspar. Since the fluorspar geochemistry was not done, I would think that it would be important to determine whether or not this mineral does exist in and around the IP targets. I have not been able to determine whether or not the pulps from these samples are still available but I am working on the problem. Should they be available it would be a simple matter to analyze critical samples for their fluorite content and this should give some indication as to whether or not more of the samples should be analysed.

The drilling of IP highs alone would not, in my view, be an adequate test of the potential northeast of the fluorite zone since there is a tendency for pyritization to occur within the trachyte member in the absence of fluorite and I am a little surprised that this was overlooked. Perhaps fluorite analysis was not yet in vogue in 1969.

3. The 1,632,000 tons of uranium mineralization containing 1.62 pounds of U_3O_8 per ton is a dubious asset at best even if we envision a two-metal concept ($CaF_2 + U_3O_8$). The U_3O_8 ore would have to pay for itself before the CaF_2 could be extracted as a by product. Since the U_3O_8 cannot be sold in the foreseeable future and the CaF_2 is below mineable grade (< 10%), the two-metal concept remains unworkable for the present time.

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KERR ADDISON MINES LIMITED

MEMO

VANCOUVER OFFICE

DATE _____

TO: GLEN HOGG (82 MW)
FROM: WMS
SUBJECT: REXSPM, BIRCH ISLAND B.C.

There is a 90% chance that the Denison Soil Samples are at the Bondor. Clegg lab in Vanc. but Ken Sanders of Denison thinks the assay data is on the property. Does Toronto have the ^{Soil} Sample No.s?

Bill

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To Glen Hogg From W.M. Sirola
Subject Birch Island Property ... (cont'd) Date May 19, 1972

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4. If our review of the exploration work done by Denison Mines to the northeast of the fluorite zones leaves open the possibility of encouragement, then we should do such work as may be necessary to determine whether or not additional fluorite deposits exist.
5. If the above work is undertaken and does locate additional ore, then the following diamond drill holes should be drilled in the search for additional fluorite centered on drill hole 249:

- | | | | |
|-----|-----------------------|-----|--------------------|
| (a) | 200' northeast of 249 | --- | 300' vertical hole |
| (b) | 200' southwest of 249 | --- | 300' vertical hole |
| (c) | 100' northwest of 249 | --- | 300' vertical hole |
| (d) | 100' southeast of 249 | --- | 300' vertical hole |

total - 1200 feet

6. To explore the possibility of a fluorite zone occurring between the A and BD zones, drill five 300' holes on Arnott's section CD on Denison's sections 23,800E, 24,000E, 24,200E, 24,400E, 24,600E, for a total of 1500 feet.
7. I would expect that the drilling could be done for \$10 per foot for a total drilling cost of \$27,000.

If the Denison soil samples are no longer available and we have to collect our own and have them analyzed, then we should allow \$2,500 for the collection and analysis. Fluorite analysis is \$2.50 per sample. The total cost of a preliminary test (drilling and geochem) would therefore be in the order of \$30,000.

I have reviewed all of the locally available literature on this project but do not, of course, have access to the exploration work done by Denison. I think it would be in our best interest to obtain this information and draw our final conclusions from their results.

For the moment I think that Joubin and James were close to the truth when they deduced that the Rexspar deposits occur in tuffaceous horizons within the trachytic rocks. Since there has been some brecciation both pre and post mineral, this movement could more readily take place in a tuffaceous horizon than in the rather massive trachyte member. ✓

* Structural Geology of Canadian Ore Deposits
Volume 2, page 85
Rexspar Uranium Deposits
by Frank Joubin and Donald James

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There is some possibility that originally only one mineralized horizon existed and that a rather flat thrustfault which has been found above the BD zone moved the fluorite zone upward into its present location. This implies that at one time the fluorite zone was the westward extension of the BD zone. I do not concur entirely with Arnott on the premise that uranium tends to occur updip and fluorite downdip. I prefer to think that these minerals tend to alternate within the ore horizon but I have no knowledge as to why this should occur.

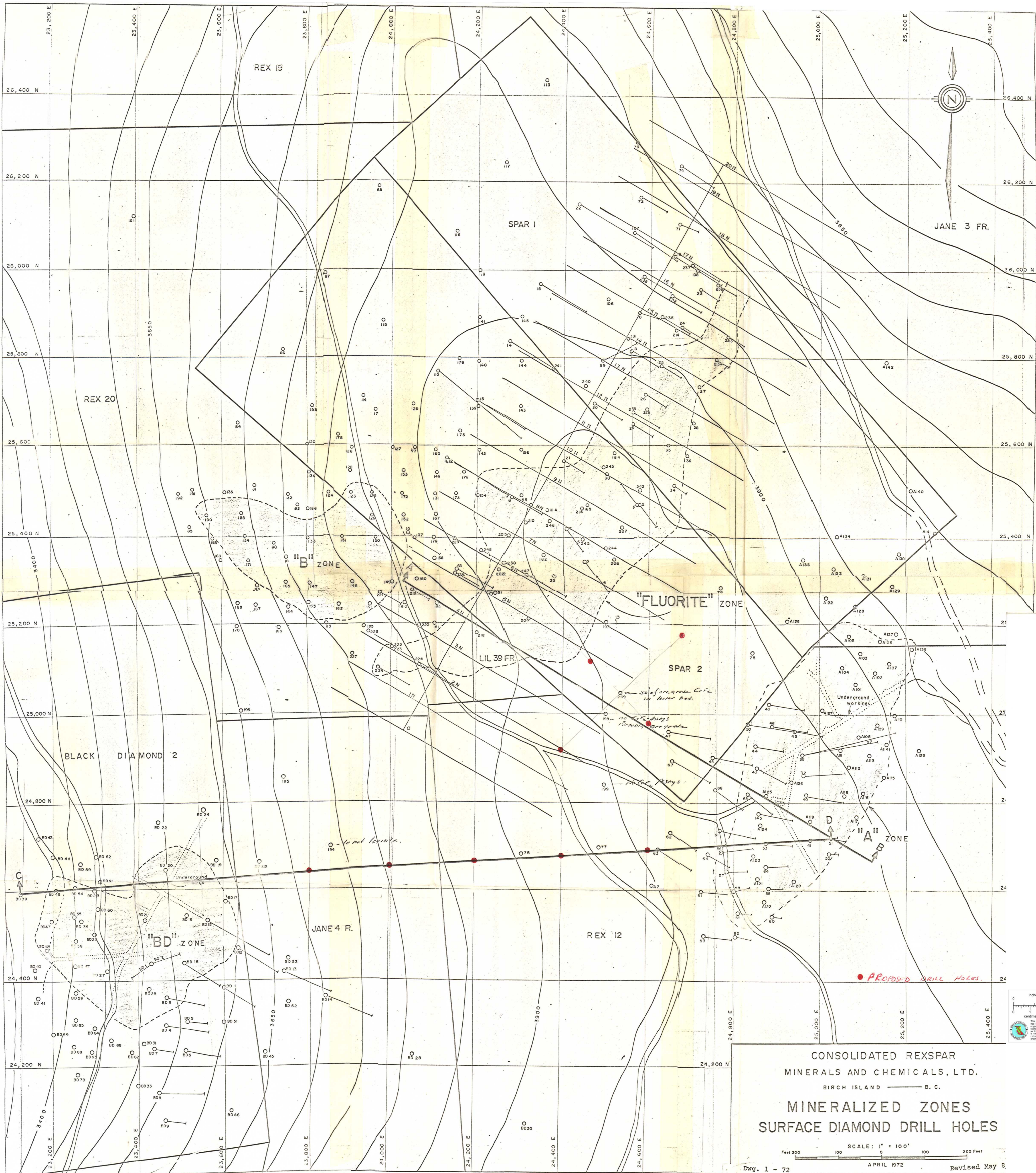
Gibson's memorandum of February 1st, 1972, regarding the Denison/Noranda meeting, states that no IP was present over the main zone. This should not be construed to mean that it is not possible to locate fluorite zones by IP. The main fluorite zone is devoid of overburden and the IP operators seemingly were unable to ground their electrodes on bare rock. Gibson's summary also mentions a large untested area northeast of the main zone which is probably covered by 50 to 100 feet of overburden. If this area has not been covered by IP then this should be done because there is enough pyrite in the mineralized zones to be readily detectable through 100 feet of overburden. This work in conjunction with geochem, should be fairly diagnostic.

If you concur in principle with what I have said would you please arrange to have the Denison IP and geochem data sent to me for review.



W.M. Sirola

WMS:lw



CONSOLIDATED REXSPAR
 MINERALS AND CHEMICALS, LTD.
 BIRCH ISLAND — B. C.
MINERALIZED ZONES
SURFACE DIAMOND DRILL HOLES

SCALE: 1" = 100'
 Feet 200 100 0 100 200 Feet