URANIUM (PLACER)			TERRITORY	TERRITORY		
NAME OF PROPER	RTY VOWE	LL & MALLOY	CREEKS			
OBJECT LOCATED -		leases. Lat. 50°49'40"	Long. 116°47'50"	and		
	Golden	District	Kootenay	Inc the gla		
Lot		cession or Range		and 195		
Sec	Tp.	R.		sul		

IPANTIM (PTACEP)

FRUVINCE UK

British Columbia

OWNER OR OPERATOR

PRODUCT

DESCRIPTION OF DEPOSIT

The Cretaceous Bugaboo Batholith is divided into two lithologically distinct units consisting of a western fine- to medium-grained, uniform textured hornblende-biotite granodiorite and an eastern quartz monzonite. The latter consists of a number of textural variants ranging from a medium-grained, leuco-quartz monzonite of uniform texture to very coarsely porphyritic biotite quartz monzonite.

Black sand placer concentrations containing the columbiumand uranium-bearing minerals, uraninite, euxenite-polycrase, and pyrochlore-microlite occur in the outwash gravels of active glaciers in the high peaks of Bugaboo and Horsethief Batholiths. A large block of porphyritic quartz monzonite taken from Horsethief Batholith and representative of much of this pluton was crushed and a heavy concentrate was separated and examined. All minerals found in the placer concentrate were found in the common quartz monzonite of the pluton; pyrochlore-microlite, euxenite-polycrase, uraninite, anatase, lepidocrocite, epidote, see Card 2....

Associated minerals or products

Columbium, thorium, rare earths, iron, titanium, manganese.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located near the head of Vowell Creek, and its tributary Malloy Creek, 20 miles west-southwest of Spillimacheen, and about 80 miles south of Golden.

Prospecting in the area in 1952 by Quebec Metallurgical Industries Ltd., a subsidiary of Ventures Limited, led to the identification of uranium oxide and pyrochlore in postglacial placer sand and gravel deposits in upper Bugaboo and Vowell creeks. Churn drilling in 21 holes was done in 1954 by St. Eugene Mining Corporation, Limited, another subsidiary of Ventures Limited. The placer leases were subsequently allowed to lapse.

Dillingham Corporation Canada Ltd. acquired Placer Mining Leases Nos. 278-284 on Vowell creek in 1968. A scintillometer survey was carried out by J.M. Black, consulting geologist. Trenches and pits were dug to provide samples for testing. In 1969 the flat ground adjacent to Malloy and Vowell Creeks above the mouth of Malloy Creek was tested extensively by churn drilling. Holes were drilled on lines 1,000 feet apart, approximately at right angles to the valley, to depths up to 100 feet deep. Samples of sand above bedrock or a clay layer were taken at 4-foot intervals and concentrated in a series of screens and riffles before being shipped for analysis. A total of 98 holes were drilled (including the 21 in 1954), 38 on Malloy creek and 60 on Vowell creek. Hole depths varied from 8 to 95 feet and totalled 2,160 feet on Malloy creek and 2,723 feet on Vowell creek.

J.M. Black, P. Eng., estimated the volume and grade of the deposit as follows:

		Volume (cu. yds.)	U308 Nb205	$^{ThO}2$	Magne- tite	- Ilmen- ite
			(pounds			
Malloy	Creek	12,200,000	0.039 0.165	0.116	13.5	1
Vowell			0.038 0.25			3
Tar	oin Coppe	er Mines Limi	ited in 1974	acquir	ed 21	Placer

Leases, Nos. 379-399, 8 on Malloy creek (Malloy leases) and 13 on Vowell creek (Brsy leases).

Western Uranium Explorations staked an additional group of claims during 1978 exploration season on Malloy Creek to cover high radioactive readings in the area; drilling in 60 holes was reported. see Card 2

REFERENCES

Mineral Policy Sector; Corporation Files: "Western Uranium Explorations Inc."; "Lansview Resource Corp.".

Saunders, C.R.; Radioactive Black Sands in Malloy and Vowell Creeks; in Tapin Copper Mines Limited Statement of Material Facts, May 1974. \bigcirc

- Reesor, J.E.; Geology of the Lardeau Map-Area, East-Half, British Columbia; Memoir 369, pp. 87, 92, 117, Geol. Surv. of Canada.
- Reports of Minister of Mines, British Columbia: 1956, p. 142; 1968, p. 293.
- Geology, Exploration and Mining; British Columbia Dept. of Mines: 1969, p. 377.
- Lang, A.H., Griffith, J.W., and Steacy, H.R.; Canadian Deposits of Uranium and Thorium; Economic Geology Series No. 16 (Second Edition), p. 198, Geol. Surv. of Canada, 1962.
- Rose, R.B.; Columbium (Niobium) Deposits of Canada; Economic Geology Series No. 18, p. 28, Geol. Surv. of Canada, 1958.

MAP REFERENCES

- Map 1362 A, Lardeau, (Geol.), Sc. 1:250,000 accomp. Memoir 369.
- #Map of Placer Leases, Sc. 1:50,000, Fig. 2, Report by C.R. Saunders, March 1974 - accomp. Tapin Copper Mines Limited Statement of Material Facts, May 1974.
- *Map 82 K/15, Bugaboo, (Topo.), Sc. 1:50,000.
- Sketch Map of Bugaboo Creek placer deposits, C. 1":14 miles, Fig. 1, p. 29, Report by Rose, 1958.

REMARKS						
				 1	 	
Comp./Rev. By	DMacR	CFL	DMacR		 	
Date	7-75	11-79	02-86			

PRODUCT URANIUM (PLACER)	TERRITORY	TSU COTOUDIS	N.T.S. AREA 82 K/1	5 REF. U 2		
NAME OF PROPERTY VOWELL & MALLOY CR DESCRIPTION OF DEPOSIT (continued) allanite, magnetite, ilmenite, rutile, sp and zircon. Cassiterite and molybdenite of the black sand concentrates. Testwork that the minerals allanite, rutile, zirco unidentified titano-niobate (possibly pyr recovered in a sink-float process and that contain 2.25% U ₃ O ₈ , 6% Nb ₂ O ₅ , 2.5% ThO ₂ , of other rare earths. Manganese was also ddh's.	hene, apatite, fluorite, were also found in some by Dillingham suggests n, monazite, and an ochlore) could be t its concentrate could 6% cerium, and a number	 U₂O₂ and 0.331 lb/cu. yd. (150.14 gms/cu. meter) Nb₂O₅ (N.M. Oct. 25/79, p. 22). Under 1979 economic conditions, the Vowell creek property is regarded as important for its uranium content with columbium as a by-product. Western Uranium Explor- 				