

British Columbia Geological Survey Geological Fieldwork 1979

APPLIED GEOLOGY

MINERAL PROPERTY EXAMINATIONS

SOUTHEAST BRITISH COLUMBIA

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DEB (SD 18) (82E/1W)

The SD 18 claim is located approximately 15 kilometres north of Grand Forks east of the Granby River, between Toronto and Snowball Creeks (Fig. 35). The claim is owned by Consolidated Boundary Exploration Limited and is part of the DEB group.

Uranium mineralization is found in a biotite-garnet-quartz feldspar pegmatite identical to that on the Radar claim to the east (*Geological Fieldwork*, *1978*, pp. 89, 90). K/Ar dating on biotite from the Radar claim yielded an age of 51.7±1.8 Ma.

A preliminary statistical study (see table) indicates again that the Log U (cpm)/Log K (cpm) and Log Th (cpm)/Log K (cpm) have a high correlation and can be used for mapping purposes. In this case (the SD 18 claim) there is a systematic increase in the thorium count from east to west. The mineralized zone is terminated on the north by a gabbro outcrop and on the south by overburden (Fig. 35). The claim to the north (SD 20) has similar pegmatites suggesting that gabbro intrusion is small.

Uranium was encountered with assays between 0.02 per cent and 0.034 per cent U_3O_8 in 78A-4 over 4.5 metres; and 0.017 per cent and 0.036 per cent U_3O_8 over 6 metres for percussion hole 78A-5. The assay data were provided by the owners.

				Log K	Th	U	Log U	Log Th	Log U	Log Th
Location	Tc	Т2	Tc-T2	Log (Tc-T2)	Т3	T2-3.5 x T3	Log (T2–3.5 x T3)	Log T3	Log K	Log K
Percussion hole										
PH78-1	3 750	200	3 550	3.55	60	0		1.78		.50
PH78-2	2 750	150	2 600	3.41	45	0		1.65		.48
PH78-3	3 600	200	3 400	3.53	50	25	1.40	1.70	.40	.48
PH78-4	24 000	1 000	23 000	4.36	160	440	2.64	2.20	.61	.50
PH78-5	40 000	1 000	38 400	4.58	225	812.5	2.91	2.35	.64	.51
PH786	3 750	200	3 550	3.55	60	0		1.28		.50
Station										
STA-1	1 000	625	375	2.57	225	0		2.35		.91
STA-2	90 000	5 000	85 000	4.93	1 100	1 150	3.06	3.04	.62	.62
STA3	41 500	2 000	45 500	4.66	225	1 212.5	3.08	2.35	.66	.50
STA4	100 000	6 700	93 300	4.97	900	3 550	3.55	2.95	.71	.59
STA-5	95 000	2 000	93 300	4.97	150	1 475	3.17	2.18	.64	.44
STA6	50 000	2 000	48 000	4.68	150	1 475	3.17	2.18	.68	.47

MCPHAR TV-1 SCINTILLOMETER RESULTS IN COUNTS PER MINUTE

REFERENCE

Addie, G. G. (1979): Mineral Property Examinations, Southeast British Columbia, B.C. Ministry of Energy, Mines & Pet. Res., Geological Fieldwork, 1978, Paper 79-1, pp. 89-91.

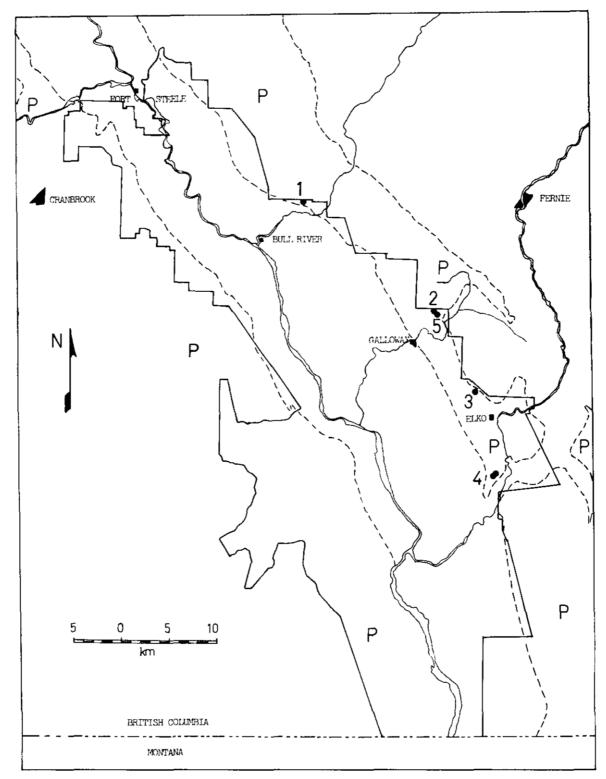


Figure 36. Outline of Libby Reserve planning study area, with locations of mineral deposits and showings described in report, and approximate boundaries of areas underlain by Purcell sedimentary rocks (P) (Leech, 1960; Price, 1961). [1 = Bull River mine, 2 = Empire-Strathcona, 3 = Burton, 4 = Sweet May and Jennie, 5 = Burt.]