



DIAMOND DRILL REPORT
ON THE PART 1-32 MINERAL CLAIMS
PARTRIDGE LAKE, YUKON TERRITORY
WHITEHORSE MINING DISTRICT
LATITUDE 60° 02' NORTH; LONGITUDE 135° 12' WEST
N.T.S. MAP-SHEET 105D/3E

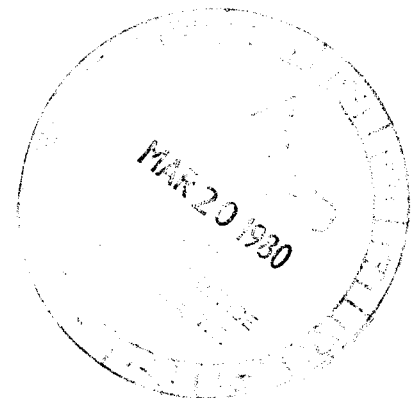
Based on work completed at intervals
between 17 September and 31 October, 1979

for
E & B Explorations Ltd.

by
R.R. Culbert, PhD., P.Eng.

D.G. Leighton & Associates Ltd.

31 January, 1980



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PART PROPERTY
PARTRIDGE LAKE, Y.T.

GENERAL

A diamond drilling program was carried out for uranium on the PART property in September and October, 1979. In all, 1,131 feet (3⁴5 meters) of BQ coring was completed. Object was to test structural lineaments associated with strong uranium geochemical anomalies. All holes were examined radiometrically with a gamma sensitive probe. Results were negative.

The property is owned by E & B Explorations Ltd. of Calgary. Work was done under the direction of R.R. Culbert of D.G. Leighton & Associates Ltd. of Vancouver. The drill contractor was B.B.S. Diamond Drilling of Whitehorse, Y.T.

LOCATION AND ACCESS

The PART property is located northwest of the Partridge River between Partridge Lake and the west arm of Bennett Lake. This is approximately 30 kilometers southwest of Carcross and 78 kilometers south of Whitehorse in the Yukon Territory. Access is by means of helicopter based in Whitehorse.

CLAIMS

The PART property consists of the following claims owned by E & B Explorations Ltd. of Calgary:

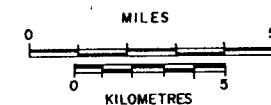
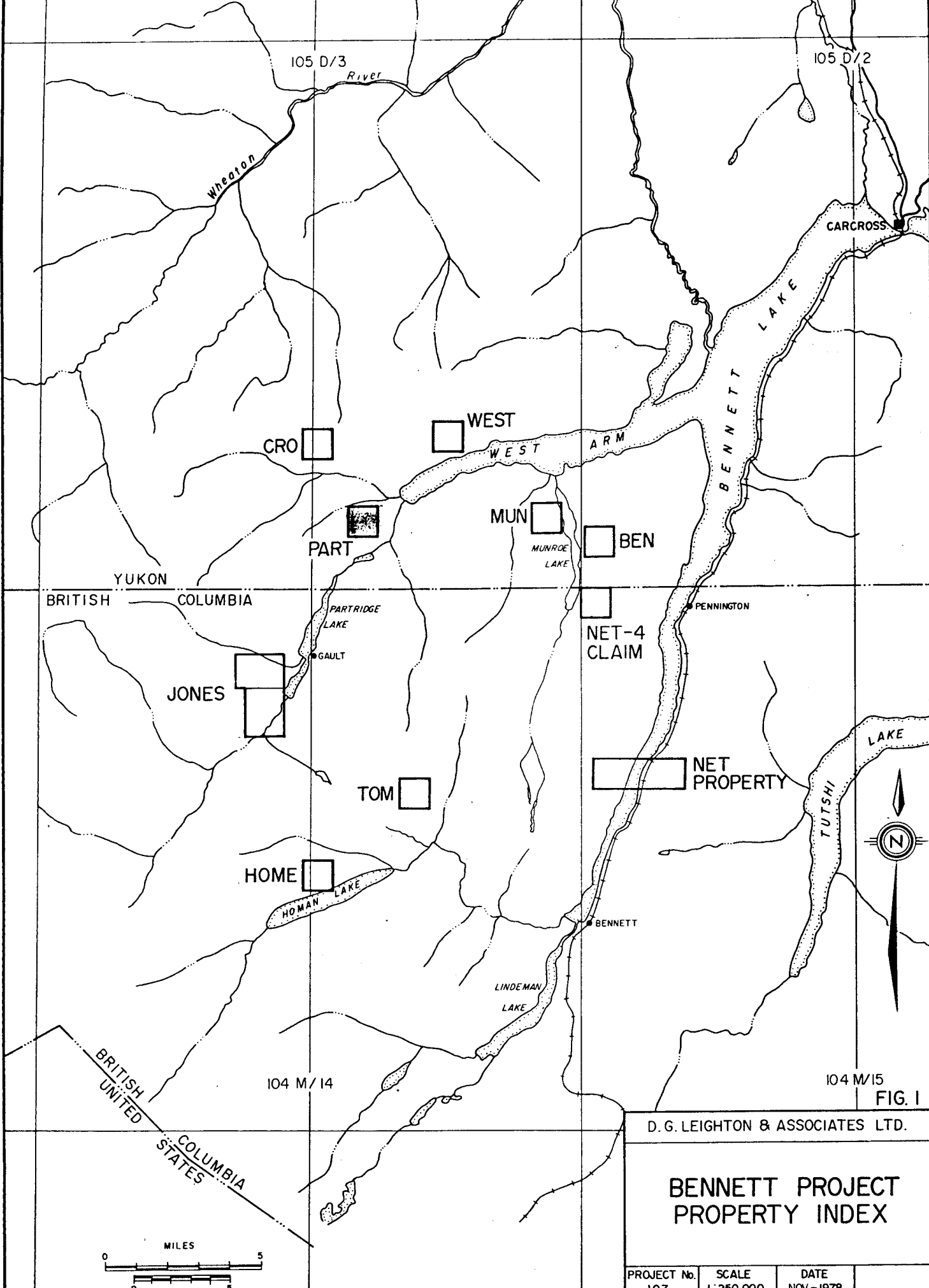
<u>Claims</u>	<u>Grant no.</u>	<u>Record date</u>	<u>Group</u>
PART 1-16	YA22567-YA22582	25 April, 1978	South
PART 17-32	YA22583-YA22598	25 April, 1978	North

PART PROPERTY DESCRIPTION

The PART claims lie within the Bennett Lake Cauldera ¹ (of Eocene age), and straddle the contact between a group of ashflows and an underlying, sheared quartz monzonite. Mapping in 1978 ² showed that at least part of this contact contained a basal conglomerate, but no radioactive occurrences were found, and the location of the major geochemical anomalies did not suggest a "basal" origin. Two radioactive zones were found by prospectors in 1978, and some native silver mineralization discovered in 1979. These all lie in altered parts of the Eocene ashflows, however, while the major geochemical anomalies clearly arise from the quartz monzonite unit.

The "quartz monzonite" is an unusual rock. It has been sheared into what might be considered a bulk mylonite, and is highly altered with the addition of epidote and chlorite. Quartz is seldom visible in hand specimen, but strongly represented in thin section. Beside a large number of aplitic and porphyritic dykes cutting the quartz monzonite, there are many bodies of older rocks which now appear as heterogeneous greenstones with some dioritization fractures and are locally of skarny appearance.

1. Bennett Lake cauldron subsidence complex; G.S.C. Bull. 227 by M.B. Lambert; 1974
2. Geological and geochemical report on the PART 1-32 mineral claims, Partridge Lake, Yukon Territory; Assessment Report by R.R. Culbert dated 28 Feb., 1979



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BENNETT PROJECT PROPERTY INDEX		
PROJECT No. 107	SCALE 1:250,000	DATE NOV.-1978

FIG. 1

The PART property lies along a major tectonic lineament which follows the structures containing Partridge Lake and the West Arm of Bennett Lake. On the PART property, there has been a major vertical displacement on the lineament, likely in Eocene times. The stringent geochemical anomalies arise along the main lineament and certain secondary ones, as these cross the plateau flanking Partridge River.

The central question in interpreting uranium geochemistry on the PART property has been whether the correlation of lineaments and anomalies is due to hydrothermal mineralization associated with these early Tertiary fractures, or whether they simply provided a route of surfacing for uraniumiferous waters and organic marshes to trap the ions. Where uranium-rich waters first surface as springs, they usually leave a comparatively high content of radium and subsequent daughter products near the spring mouth or seep. In an area of indistinct drainages, this at least allows one to find where the uraniumiferous groundwaters first surface, and augering to the base of marshy areas was carried out to assist in mapping those lineaments which are first-exit structures.

From interpretation of the geochemical data (see Figure 2 in pocket) it was decided to test-drill the main lineament fracture, and also two smaller structures which produce unusual amounts of uranium daughter products. This work was carried out (see drill logs for holes PT 1-3, Appendix "A"). The two smaller structures had poorly defined shear or fracture zones and no sign of mineralization or alteration. The main lineament drill hole intersected both partly recrystallized mylonites and relatively fresh fracture zones and fault gouges. There were no signs of mineralization, however, and little alteration beyond the pervasive chlorite and epidote flooding of the crushed quartz-monzonite. The exception here was in the form of rare quartz-calcite stringer systems. No radioactive zones were present, the highest background coinciding with aplite dykes.

From these cores it was concluded that the main fracture lineament in this area is not generally a zone of hydrothermal alteration or

mineralization, and the secondary lineaments appear to mark only minor fracture systems. It hence does not seem likely that the uranium mineralization in this area is fracture controlled, and this leaves little in the way of targets.

A grab sample from a silver showing on the PART property ran 270.00 oz./ton Ag and 1.650 oz./ton Au. The rock is an altered volcanic with associated galena mineralization. The galena had previously been noted to occur, albeit sporadically, over a broad area. Taken together with the generally high silver values in soils, the area holds potential for silver-gold mineralization.

DRILLING

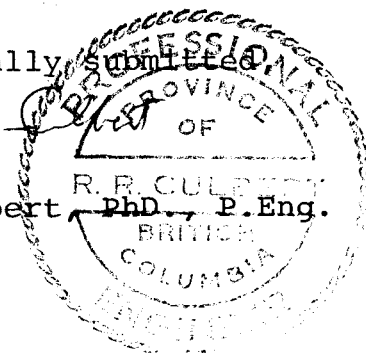
- (1) The location of drill holes on the PART property relative to local topography and claim boundaries is shown on Figure 2 in pocket.
- (2) Core is stored adjacent to drill collars on the property.
- (3) Drill logs are provided in Appendix "A" to this report. Core was not assayed, as testing by scintillometer failed to detect significant radioactivity.
- (4) Diamond drill holes P-1 and P-2 are collared on mineral claim PART #6 (of PART South group).
- (5) Diamond drill hole P-3 was collared on mineral claim PART #21 (of PART North group).

31 January, 1980

Respectfully submitted,

R.R. Culbert

R.R. Culbert, Ph.D., P.Eng.



APPENDIX "B"

DRILL LOG

PART PROPERTY

Hole PT1: Angle 45^o, Direction 290^o

0-10 feet	Glacial overburden.
10-16 feet	Into a coarse, pink and green quartz monzonite. This peculiar rock is known to be highly crushed and partly recrystallized. Thin sections have shown that it contains a large portion of quartz, although this is seldom visible in hand specimen. Generally it is an altered and heterogeneous lithology.
16-32 feet	Greenstone, with some dioritization textures. Epidote is common, and some breccia patterns are visible locally.
32-35 feet	The crushed quartz monzonite. Much epidote and chlorite visible with fracturing.
35-72 feet	Coarse, pink and green quartz monzonite.
72-76 feet	Bands of intense chlorite-epidote flooding.
84 feet	Brecciated aplite, followed by unusually inhomogeneous quartz monzonite.
105 feet	A dark mineral, possibly of chlorite type, apparent in clots, bands and breccia matrix.
165-174 feet	More dioritized greenstone.
178 feet	A darker and fresher greenstone dyke.
191 feet	Small aplitic breccia zone. Beyond this the quartz monzonite takes on a more cellular texture due to anhedral porphyroblasts and some secondary biotite-book development.
206 feet	Small aplitic dyke and alteration zone.
224-250 feet	Cellular texture gives way to a finer and inhomogeneous quartz monzonite. Epidote-rich breccia textures locally.

286 feet Dark-chlorite breccia band.

292-308 feet A very inhomogeneous section with greenstones and some aplitic stockworking. This is the last distinctive feature in otherwise typical crushed quartz-monzonite.

396 feet Hole ends.

Hole PT2: Angle 45° , Direction 110°

0-4 feet Glacial overburden.

4-16 feet Pink and green crushed quartz monzonite as described in Hole PT1.

16-27 feet Shearing, epidote alteration and brecciation.

42-50 feet Another shear zone, this with pink hydrothermal alteration and calcite veining. Some aplite stringers also present.

50 feet Into inhomogeneous greenstone. This has dioritization textures and extensive epidote-chlorite alteration. Breccia textures are important. Rock returns gradationally to a heterogeneous, green quartz monzonite by ± 100 ft.

120 feet Small, fresh greenstone dyke.

128-134 feet Highly chloritized shear zone.

134-196 feet A featureless grey aplite occurs to end of hole at 196 ft.

Hole PT3: Angle 45° , Direction 290°

- | | |
|--------------|---|
| 0-20 feet | Overburden, featuring muskeg underlain by glacial sands and clays with gravel. |
| 20-25 feet | A peculiar greenstone here appears to be a fine, green mylonite. Skarny in part. |
| 25-30 feet | The crushed pink and green quartz monzonite as described in Hole PT1. |
| 32-36 feet | Pegmatite stringers. |
| 40-42 feet | A shear zone here has gouge and sharp clasts. No mineralization or alteration visible and appearance of fracture is fresh. |
| 42-70 feet | Typical crushed quartz-monzonite with some breccia textures. |
| 70-110 feet | A large band of brown and green rock is intersected here. It appears to be some sort of fine dyke, but may also be a partly recrystallized mylonite. |
| 110-121 feet | Similar to above, but with bleaching and inhomogeneity. |
| 121-165 feet | Return to the crushed quartz monzonite. |
| 165-206 feet | A cellular texture develops in the quartz monzonite due to partial preservation of phenocrysts or partial development of recrystallization centers. A few chlorite brecciation zones occur. |
| 206-236 feet | A fine-grained pink and green band, again likely mylonitic in origin. |
| 236-287 feet | The crushed quartz monzonite returns, but in an unusually altered and inhomogenous form. Chlorite and epidote flooding is widespread, and breccia textures common. |
| 287-290 feet | Black and green banded stockwork. |

- 290-305 feet A pink quartz monzonite here exhibits both an unusual texture due to clots of chlorite, and also many inclusions of what is apparently altered fragments of a quartz diorite.
- 305-309 feet A highly heterogeneous rock which is likely a dioritized greenstone.
- 315-328 feet Pink, cellular quartz monzonite occurs inter-banded with inhomogeneous greenstones.
- 328-351 feet A cellular texture returns to the crushed quartz monzonite, and epidote is unusually common.
- 351-362 feet Dark greenstone with pegmatite stringers.
- 362-394 feet A major dyke? of silicious, porphyritic dacite. Some pegmatite and epidote stringers cut this, but otherwise massive.
- 394-404 feet Still in "dacite", but brecciation and epidote flooding increasing.
- 404-414 feet Inhomogeneous, partly dioritized, greenstone.
- 414-450 feet Relatively homogeneous quartz monzonite with cellular texture.
- 450-466 feet Chlorite and greenstone bands with brecciation cause a zone of inhomogeneity in the quartz monzonite.
- 466-468 feet Mylonized shear zone.
- 468-492 feet A fairly standard section of the pink and green, crushed quartz monzonite. There is a small aplite and breccia zone at 477 ft.
- 492-497 feet White blotches in quartz monzonite combine here with a high epidote content and a coarse texture.
- 497-520 feet "Normal" crushed quartz monzonite.
- 520-524 feet A porphyritic greenstone band.

524-530 feet	A fracture zone occurs here in an aplitic rock, likely part of a dyke. No mineralization or alteration observed.
530-539 feet	The aplite, with a few epidote stringers.
539 feet	End of hole.

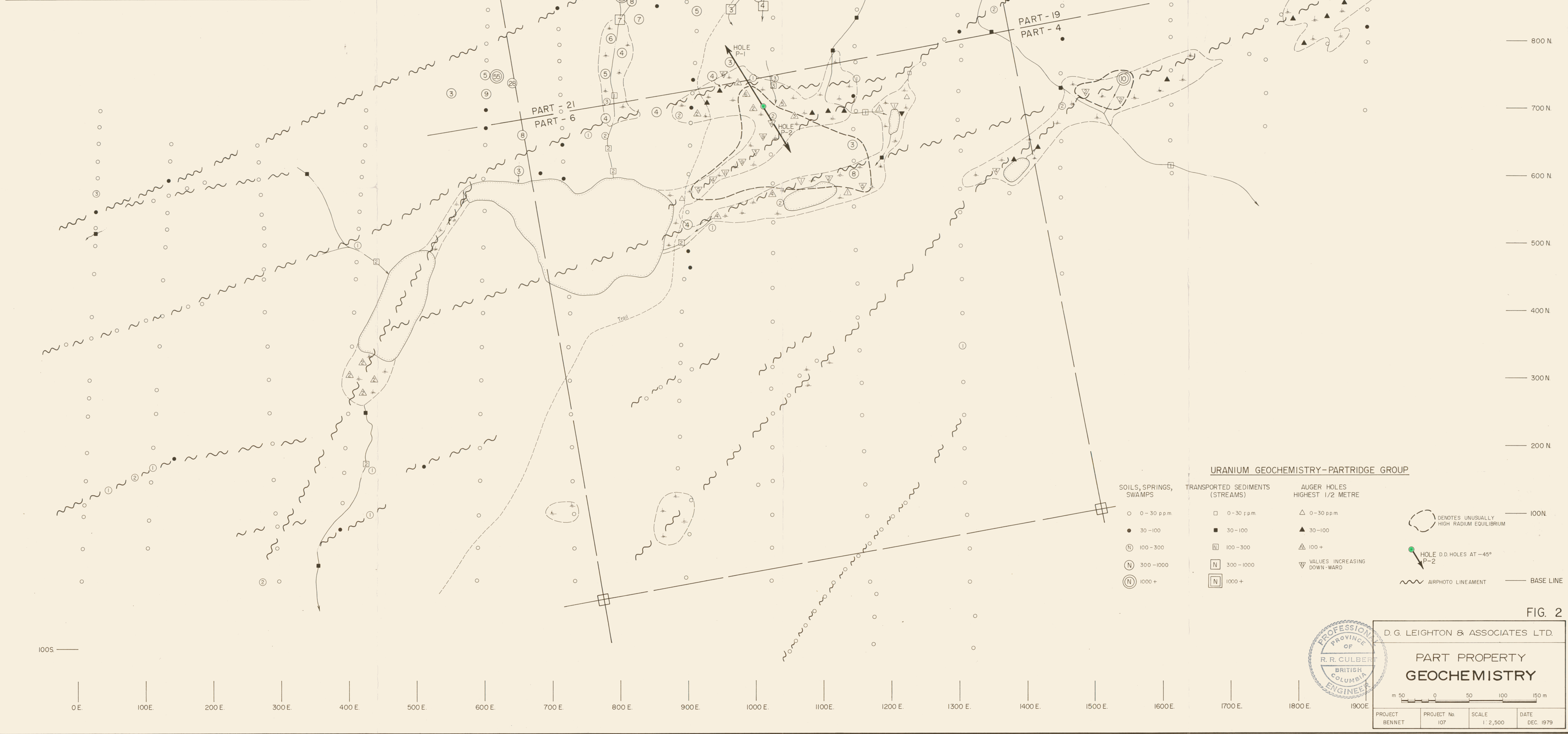
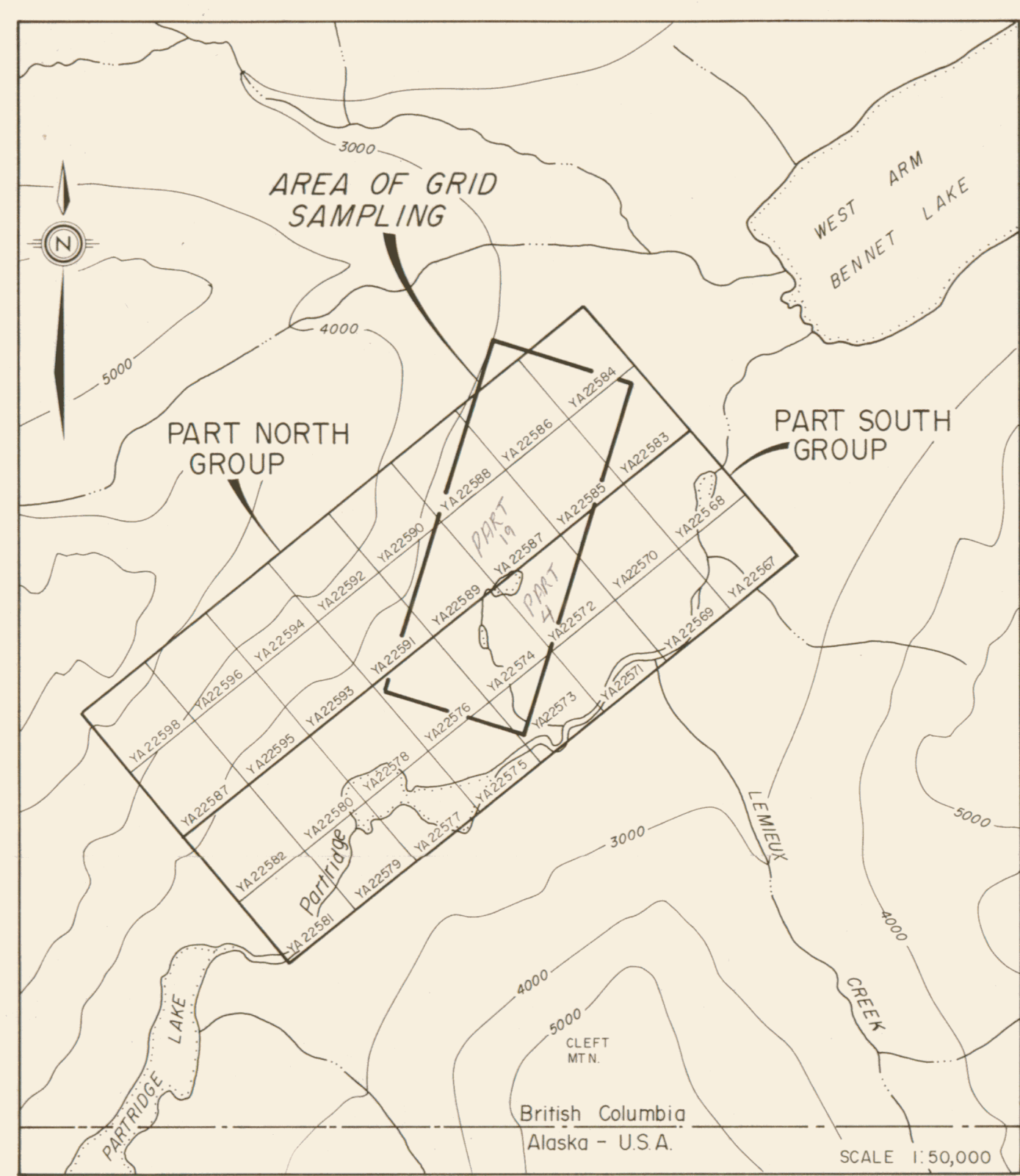


FIG. 2

D.G. LEIGHTON & ASSOCIATES LTD.

PART PROPERTY GEOCHEMISTRY

PROFESSIONAL ENGINEER
 PROVINCE OF BRITISH COLUMBIA
 R.R. CULBERT

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