MAR 19690002: NORTHEASTERN ALBERTA

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McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR-ROUYN OPTION

N. E. ALBERTA

NAT. TOP. REF.

74-M-9, 74-M-16.

February 1969

W. H. Thorpe

LIST OF MAPS

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2	Property Geological Plan	Scale: 1" = 1/2 "
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4	Airborne Scintillometer Survey	Scale: 1" = 1/2 "
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7	Ground Scintillometer Survey, Cherry Lake	Scale: 1" = 200 feet
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9	Reconnaissance Survey and Drill Plan, Small Lake	Scale: 1" = 200 feet
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	No. 68-1 to 68-14 inclusive and 69-1 to 69-3 inclusive.	

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McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR-ROUYN OPTION

NAT. TOP. REF.

74-M-9, 74-M-16.

Introduction

In 1967, as a result of increasing economic interest in uranium, Astrabrun Mines Limited obtained exploration permits Numbers 6 and 7 from the Alberta Government, which covered two adjoining blocks of ground in northeastern Alberta. Transfers were later made out to New Senator-Rouyn Limited under an agreement with Astrabrun.

On May 2nd, 1967, McIntyre Porcupine Mines Limited agreed to carry out certain exploration under an arrangement with New Senator-Rouyn.

Summary

All known uranium-bearing areas on the Concession are closely associated with pegmatite or granite intrusions and are very erratic in extent and low in grade. Results of trenching and diamond drilling were mainly negative and the few samples of ore grade had no continuity. Some of the radioactive zones contained traces of pyrite, pyrrhotite, molybdenite and chalcopyrite, but where investigated, these were not of economic importance.

Location (Map No. 1)

The Permits totalling approximately 80 square miles are situated in the north-eastern part of Alberta, near the Saskatchewan border, approximately 55 miles west of Uranium City and about 40 miles north of Lake Athabaska. The approximate centre is located at 59° 50' north latitude and 110° 13' west longitude.

Geology (Map No. 2)

The geology of the region is available from reports of the Research Council of Alberta by J. D. Godfrey.

Exploration 1967

During the field season of 1967, a widespread reconnaissance system of prospecting was carried out. This work indicated several areas of radioactivity around the north end of Cherry Lake as follows:

I. North Shore of Cherry Lake

A small zone of high radioactivity at the water's edge on the north shore of Cherry Lake was blasted and sampled. The best assay result was 0.79% U_3O_8 across 4.0 feet in granite gneiss.

II. Swampy Area, 800 feet N. E. of Cherry Lake

Intense radioactivity was discovered in swamp muck about 800 feet northeast of the north shore of Cherry Lake. Samples assayed up to 1.76% U_3O_8.

III. Pegmatite Zones, 2000 feet North of Cherry Lake

Trenching on low radioactivity gave values up to 0.10% U_3O_8 in pegmatite.

IV. Brecciated Pegmatite, 400 feet E. of N. Shore, Cherry Lake

Low intensity radioactivity in hematitic, brecciated pegmatite was tested by trenching and sampling. The best result was 0.03% U_3O_8 across 5.0 feet.

Exploration 1968

It was decided to explore the preceding favourable areas by diamond drilling and this work was carried out in February and March, without obtaining anything of economic interest. A total of 1,886 feet was drilled as follows:

Hole No.	Length (Ft.)	Purpose and Results
68 - 1	447	To check extension of 0.79% U_3O_8 across 4.0 feet in trench. Negative
68 - 2	163	Same purpose as 68-1 but drilled in different direction. Negative

Exploration 1968 cont'd.

Hole No.	Length (Ft.)	Purpose and Results
68 - 3	457	To check below high values in swamp muck. Negative
68 - 4	460	To check below weak radio - activity in trench. Negative
68 - 5	163	To check preceding trench on strike. Negative
68 - 6	196	To check below weak radio - activity in trench N. E. of Cherry Lake. Negative

Helicopter Scintillometer Survey (Maps No. 3 - 4)

During early June, a helicopter-borne Scintillometer survey was carried out by Trigg, Woollett and Associates over the whole Concession. A total of 503 line miles were flown in an east-west direction with flight lines at 1/4 mile spacings at an elevation of 100 feet above ground level. A total of 44 radioactive locations were indicated for ground follow-up. Most of these were shown as occurring north and northwest of Cherry Lake.

All anomalies were checked by ground work during the summer but most of them were found to be of no further interest. Trenching and diamond drilling were carried out in the most significant areas.

Field Crews

Three field parties were used during the summer of 1968 and camps were set up on most of the major lakes. A total of one field geologist, three prospectors and four students, plus one cook at base camp were employed.

Linecutting

Approximately 20 miles of linecutting were completed mainly in the Cherry Lake region. In addition local lines were cut where required.

Rock Trenching

In addition to the removal of overburden, approximately 700 feet of rock trenching was completed with an average width of 5.0 feet and an average depth of 3.0 feet. Two hundred and forty-nine samples were taken for assay from surface outcrops and trenches.

Twin Lakes Area (Maps No. 6-7)

Two trenches were blasted in local radioactivity on the south shore of South Twin Lake during the prospecting activity of 1967. Values up to 0.14% U_3O_8 were obtained but generally the values were shown to be erratic and much below ore grade.

An extensive grid system was cut and a ground scintillometer survey carried out during the 1968 field season. A zone of radioactivity in a pegmatite-intruded quartz-feldspar-biotite gneiss was outlined having a strike length of approximately one-half mile.

As indicated on map No. 6 numerous trenches were blasted into the spots of highest radioactivity. The best results were obtained in trench No. 2 which indicated a width of 43.0 feet assaying 0.016% U_3O_8. Total length of this trench was 103 feet with a maximum vertical depth of 5.0 feet.

Four diamond drill holes were put down below the most radioactive sections without intersecting anything of economic interest as follows:

Hole No.	Length (Ft.)	Purpose and Results
68 - 7	526	To check below trench No. 1, Negative.
68 - 8	525	To check below trench No. 2, Negative.
68 - 9	325	To check below trench No. 3, Best, intersection 0.08% U_3O_8 over 4.5 feet.
68 - 10	151	To check below trench No. 3, in a different direction. Obtained 0.12% U_3O_8 over 1.4 feet. This is not ore grade over mining widths.

Spider Lake Area (Map No. 10)

During the summer of 1968 several trenches were blasted across the belt of radioactivity extending from the islands to the northeast end of Spider Lake. Two holes, 68-11 and 68-12, were drilled under the best exposures. Nothing of economic interest was obtained. These holes had lengths of 303 and 466 feet respectively.

Hutton Lake Area

Prospecting in this area indicated some patches of low radioactivity but nothing appeared sufficiently interesting to warrant further work.

Holmes Lake Area (Map No. 12)

The area of most interest in this region seemed to be at the southwest corner of Holmes Lake. Several trenches were blasted on bands of radioactivity in pegmatite but no ore values were obtained.

A 406' Long diamond drill hole, No. 68-13, was put down to check the most radioactive zone. Low grade mineralization was found in pegmatite from the collar to a depth of 166 feet but values were far below ore grade.

Low intensity radioactivity was discovered in a pink syenite host rock about 1/2 mile southwest of Holmes Lake in a flat, swampy area. Selected pieces of the best mineralization assayed up to 0.14% U_3O_8. Subsequent prospecting and trenching revealed only material of a much lower grade. This zone lies approximately on strike with the mineralization at the south - west corner of Holmes Lake.

Small Lake Area (Maps No. 8-9)

A local grid system was cut and a ground scintillometer survey carried out in this area, about 11/4 miles northwest of Cherry Lake. Ten trenches were blasted into bedrock in the areas of greatest radioactivity. The best results were obtained in trench No. 4 which assayed up to 0.50% U_3O_8 across 5.0 feet.

Diamond drill hole No. 68-14 was drilled below trench No. 4 towards the end of October, 1968. The best intersection assayed 0.05% U_3O_8 for 15.0 feet. Additional diamond drilling was carried out in January 1969 but values were low and erratic.

Andrew Lake Arm (Map No. 11)

The most radioactive zone discovered in this region occurs on the north shore of Andrew Lake Arm about 2.7 miles west of Andrew Lake. Six trenches were blasted along a slightly magnetic zone trending N 25° E in pegmatitic granite. All samples assayed nil to trace U_3O_8.

Oval Lake Area

This area lies in the southwest corner of the Concession area. Prospecting revealed only low radioactivity in bedrock and granite boulders and no further work was carried out.

Diamond Drilling

The first period of diamond drilling occurred during March and April 1968 at the north end of Cherry Lake when 6 holes were completed.

Drilling was resumed on August 30th with hole 68-7 and continued to the completion of hole No. 68-14 on the 24th of October when operations were suspended untill after freeze-up.

Three holes were drilled at Small Lake in January, 1969 after which all further work was suspended.

In all 6,298 feet of "AX" Diamond Drilling was completed.

Assay Determinations

All assaying was carried out by X-Ray Laboratories of 45 Lesmill Road, Don Mills, Ontario.

Respectfully submitted,

[redacted]

February 10th, 1969

W. H. Thorpe, Geologist.

McIntyre Porcupine Mines Ltd.

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Geology of the Andrew Lake, North District by John D. Godfrey, Research Council of Alberta, Preliminary Report 58 - 3, 1961.

Mineralization in the Andrew Waugh and Johnson Lakes Area, Northeastern Alberta, by John D. Godfrey, Research Council of Alberta, Preliminary Report 58-4, 1958.

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Geology of the Andrew Lake, South District, Alberta by John D. Godfrey, Research Council of Alberta, Preliminary Report, 61-2, 1963.

Geology of the Bayonet, Ashton, Potts and Charles Lakes District, Alberta, by John D. Godfrey, Research Council of Alberta, Preliminary Report, 65-6, 1966.

Report on Alberta Concessions for 1967, New Senator Rouyn Limited, by E. A. Hart, November 1967.

Report on Airborne Scintillometer Survey by E. Lipsett and C. M. Trigg, July 1968.

ASSAYS

The following is a tabulation of those assay results not reported on maps.

Trench - North end of Cherry Lake

Sample No.	%U_3O_8	Width	Location
9920	0.14	2.0	W. end of trench
9921	0.01	2.0	E. end of trench
9922	Tr.	2.0	E. end of trench

Note: This is trench from which a previous sample had assayed 0.79% U_3O_8 across 4.0 feet in 1967.

Twin Lakes Area - Trench No. 1

Sample No.	%U_3O_8	%Th O2	Width	Location
9901	0.01	Tr.	0.0- 5.0	starting at E. end
9902	0.02	Tr.	5.0-10.0	
9903	Tr.	Tr.	10.0-15.0	
9904	Tr.	Tr.	15.0-20.0	
9905	0.02	Tr.	20.0-25.0	
9906	0.03	Tr.	25.0-30.0	
9907	0.03	Tr.	30.0-35.0	
9908	0.11	0.01	Grab	
9912	Tr.	-	35.0-40.0	
9913	Tr.	-	40.0-45.0	
9914	Nil	-	45.0-50.0	
9915	0.01	-	50.0-56.0	W. end

Twin Lakes Area - Trench No. 2

Sample	%U_3O_8	Width	Location
9916	0.01	0.0- 5.0	Starting at W. end
9917	Tr.	5.0-10.0	
9918	Tr.	10.0-15.0	
9919	Tr.	15.0-18.0	
9936	Tr.	18.0-23.0	
9937	0.02	23.0-28.0	
9938	0.04	28.0-33.0	
9939	Tr.	33.0-38.0	
9940	Tr.	38.0-43.0	
9941	Tr.	43.0-48.0	
9944	0.04	48.0-53.0	
9945	Tr.	53.0-58.0	
9946	0.02	58.0-63.0	

Twin Lakes Area - Trench No. 2 Cont'd.

Sample	% U_3O_8	Width	Location
9947	0.03	63.0- 66.0	Starting at W. end
9581	Tr.	66.0- 71.0	
9580	Tr.	71.0- 76.0	
9579	0.04	76.0- 81.0	
9578	Tr.	81.0- 86.0	
9577	0.02	86.0- 91.0	
9576	Nil	91.0- 96.0	
9575	Tr.	96.0-101.0	
9574	0.01	101.0-103.5	East end of trench.

Twin Lakes Area - Trench No. 3

Sample No.	% U_3O_8	Width	Location
9667	Tr.	6.0'	W. end of trench (20.0')
9668	Tr.	6.0'	at 15.0'
9669	Tr.	5.0'	at 10.0'
9670	0.01	5.0'	at 5.0'
9671	0.02	5.0'	E. end of trench-on B. L.
9672	0.11	Grabs	selected-high radioactivity

Twin Lakes Area - Trench No. 4

Sample	% U_3O_8	Width	Location
9681	0.02	0.0- 5.0	N. E. end
9682	0.04	5.0-10.0	
9683	0.05	10.0-15.0	S. W. end
9684	0.02	Grabs	

Twin Lakes Area - Trenches No. 5-6-7

Sample	% U_3O_8	Width	Location
9809	Tr.	0.0- 5.0	Trench No. 5
9810	0.02	5.0-10.0	" " "
9811	Tr.	10.0-12.5	" " "
9812	0.04	0.0- 5.0	Trench No. 6
9813	Tr.	5.0-10.0	" " "
9814	Tr.	10.0-17.0	" " "
9815	0.01	5.0- 8.0	Trench No. 7
9816	Tr.	0.0- 5.0	" " "

Twin Lakes Area - Trench No. 8

Sample No.	% U_3O_8	Width	Location
9687	0.02	0.0- 3.0	N. W. corner
9688	Tr.	0.0- 5.0	W. end
9689	Tr.	5.0-10.0	Mid-section
9690	0.01	10.0-13.0	E. end

Twin Lakes Area - Trench No. 9

Sample No.	% U_3O_8	Width	Location
9622	0.02	0.0- 8.0	W. end
9623	0.03	8.0-16.0	
9624	0.01	16.0-24.0	
9625	0.01	24.0-32.0	
9626	0.01	32.0-40.0	
9627	0.02	40.0-48.0	
9628	0.02	48.0-56.0	
9629	Tr.	56.0-64.0	
9630	Tr.	64.0-68.0	E. end

Small Lake - Trench No. 1

Sample No.	% U_3O_8	Width	Location
9633	0.01	0.0- 8.0	W. end
9634	0.01	8.0-16.0	
9635	Tr.	16.0-24.0	
9636	Tr.	24.0-32.0	
9637	0.01	32.0-40.0	E. end

Small Lake - Trench No. 2

Sample No.	% U_3O_8	Width
9632	0.01	0.0- 5.0

Small Lake - Trench No. 3

Sample No.	% U_3O_8	Width
9608	0.06	0.0- 5.0

Small Lake - Trench No. 4

Sample No.	% U_3O_8	% Th 02	%MoS2	Width	Location
9609	0.50	0.15	-	0.0- 5.0	W. end
9610	0.04	Tr.	-	5.0-10.0	measurments w. to e.
9818	0.08	0.04	0.08	0.0- 1.0	check sampling w to e. at 2.0' depth
9819	0.04	0.03	0.06	1.0- 2.0	" " " " "
9820	0.08	0.07	0.08	2.0- 3.0	" " " " "
9821	0.05	0.03	0.07	3.0- 4.0	" " " " "
9822	0.04	Tr.	0.02	4.0- 5.0	" " " " "
9823	0.49	0.16	0.16	0.0- 1.0	" " " " "
9826	0.07	0.02	0.02	0.0- 1.0	New exposure w. to e. at 4.0'depth
9827	0.16	0.11	0.18	0.0- 1.0	New exposure e. to w. 4.0' depth
9828	0.03	0.02	0.07	1.0- 3.0	" " " " "
9829	0.05	Tr.	0.06	3.0- 5.0	measures e. to w. at 4.0' depth
9830	0.02	-	-	5.0- 6.0	" " " " "
9832	1.06	0.24	0.23	Grab	spot of high radio activity.

Small Lake - Trench No. 5

Sample No.	% U_3O_8	% Th 02	Width	Location
9611	0.04	0.01	0.0- 5.0	measurments w. to e.
9612	0.01	Nil	5.0-10.0	" " "

Small Lake - Trench No. 6 - (800' S. E. of Small Lake)

Sample No.	% U_3O_8	Au oz	Ag oz	Width
9631	0.01	-	-	0.0-8.0
9639	0.01	Nil	Tr.	Grab

Small Lake - Trench No. 7

Sample No.	% U_3O_8	% Th 02	%MoS2	Width	Location
9824	0.11	0.09	0.20	0.0-1.0	W. end
9025	0.19	0.11	0.28	1.0-3.0	

Small Lake - Trench No. 8

Not Sampled - Low radioactivity

Small Lake - Trench No. 9

Sample No.	% U_3O_8	% Th 02	Width	Location
9833	0.01	Tr.	0.0- 5.0	W. end
9834	0.03	Tr.	5.0-10.0	E. end
9835	0.08	0.01	Grab	

Small Lake - Trench No. 10

Sample No.	% U_3O_8	% Th 02	Width	Location
9836	0.02	Tr.	0.0- 6.0	W. end
9837	0.03	0.03	6.0-12.0	E. end

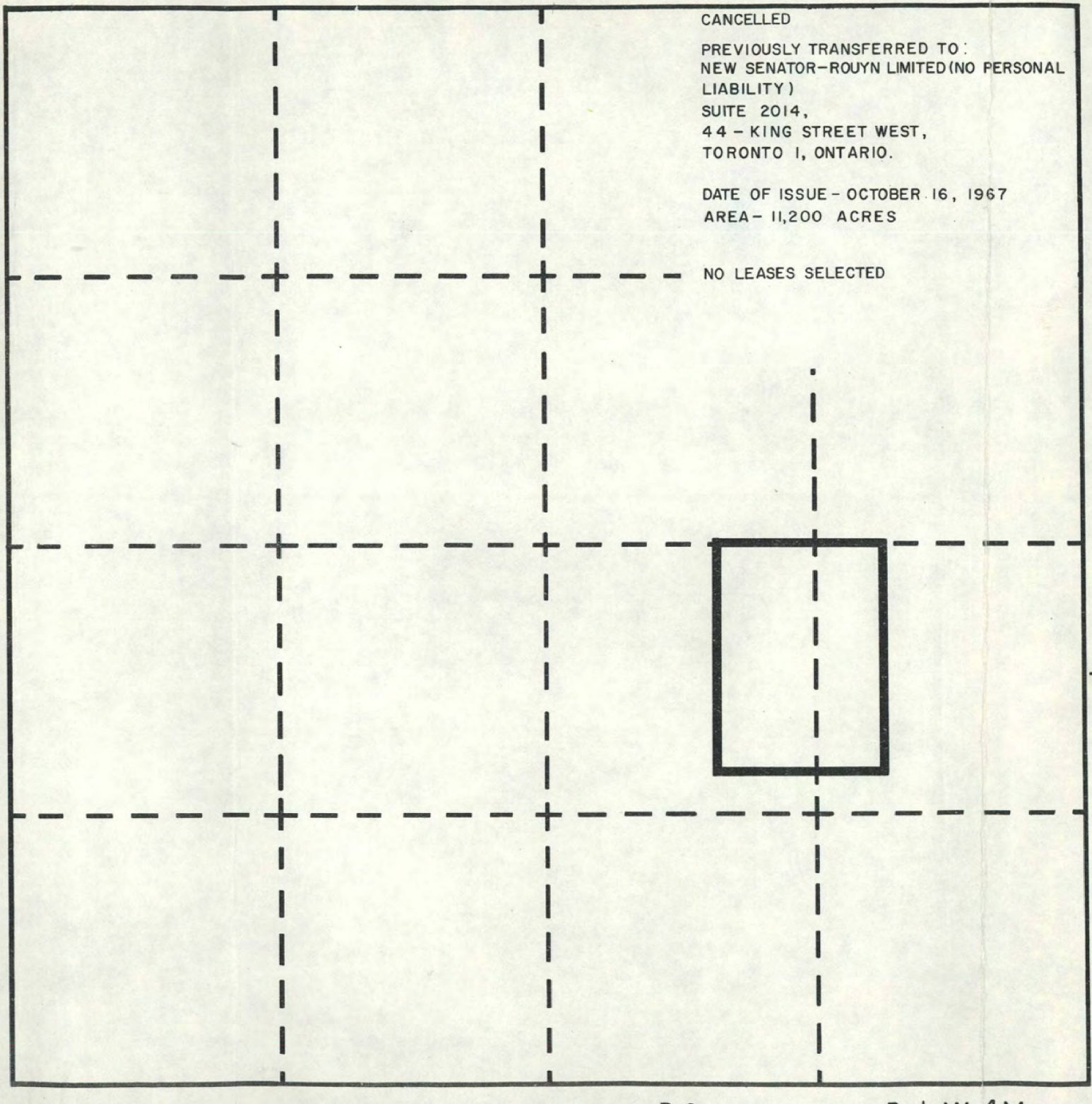
Ginger Lake - Outcrop Blasting

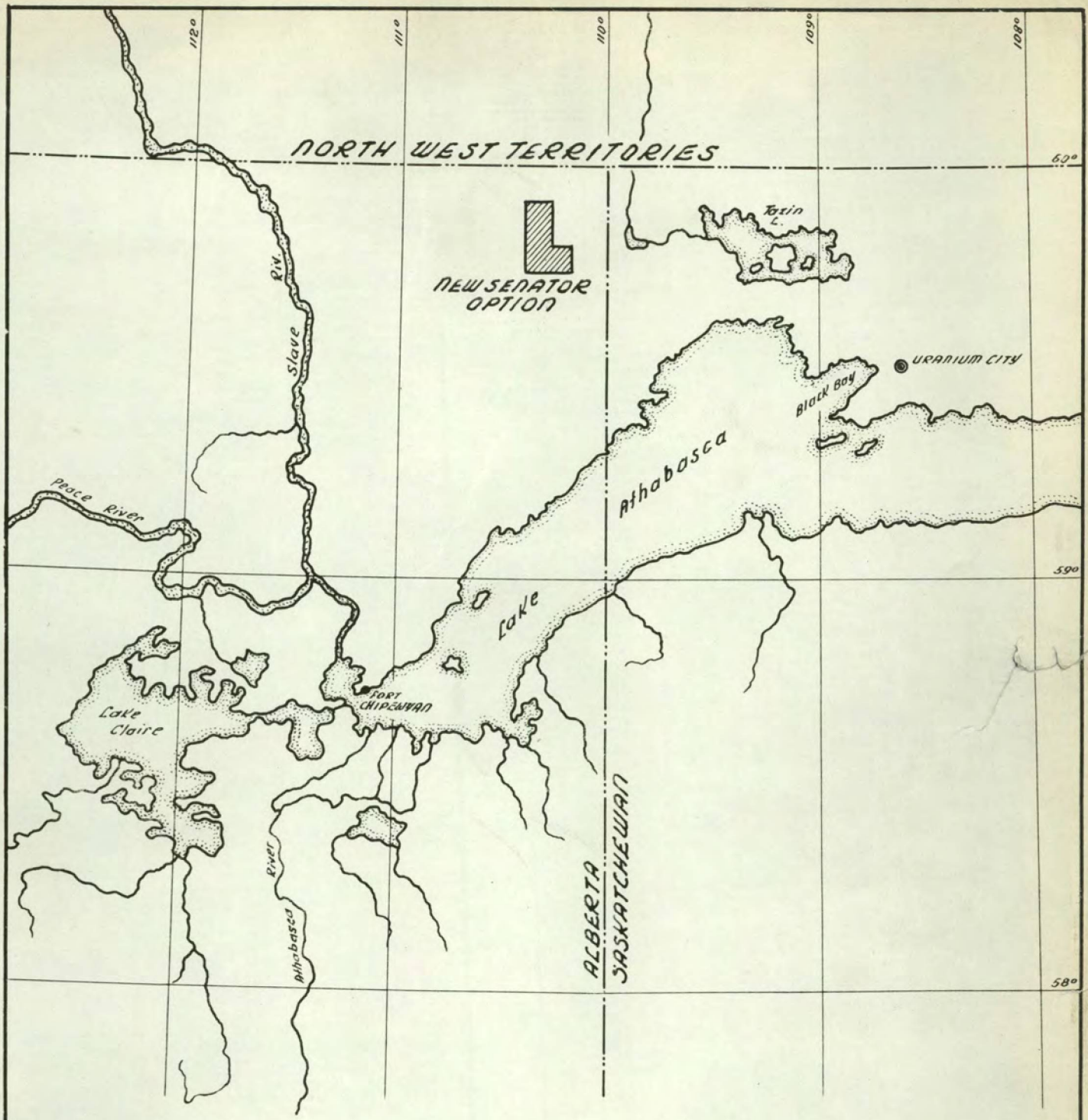
The following assays were obtained on selected grabs from a blasted zone of poor mineralization situated about 1,000 feet northwest of Ginger Lake.

Sample No.	% U_3O_8	% Cu
9603	0.01	Tr.
9604	Nil	0.02
9605	0.01	Tr.
9606	Tr.	Tr.

19690002

QUARTZ MINERAL EXPLORATION PERMIT No. 7





McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

ANDREW LAKE AREA

ALBERTA

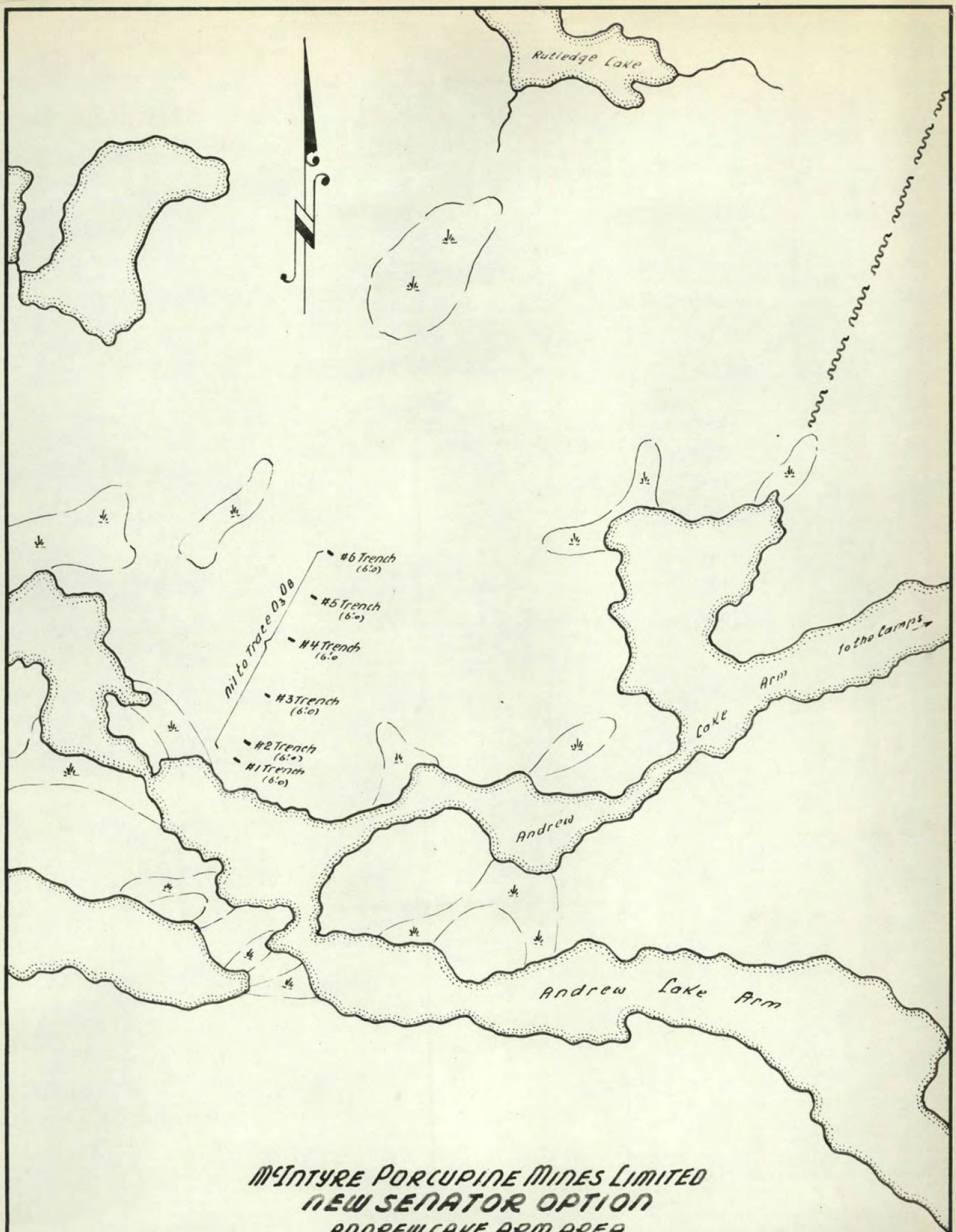
LOCATION MAP

SCALE: 1 inch = 25 miles DATE: October, 1968.

1969 0002

No 1

R.Gi.



McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE ARM AREA
ALBERTA
RECONNAISSANCE SURVEY

SCALE: 1" = 1320' DATE: Nov., 1968.

19690002

No 11

Lake

Base Line

10+00N

8+00N

Deep Overburden

L-6+00N

Granite Quartz Feldspar Biotite Gneiss
Minor Quartzite Pegmatite

L-4+00N

Trench #9

Trench #10

69-2

Trench #5

69-1 68-14 Trench #4

Trench #8

Trench #3

L-2+00N

69-3

Trench #7

Trench #2

Trench #1

L-0+00

Small Lake

Trench #6

Main Base Line Cherry Lake

North Twin Lake

L-26+00 N

McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE PROPERTY
ALBERTA

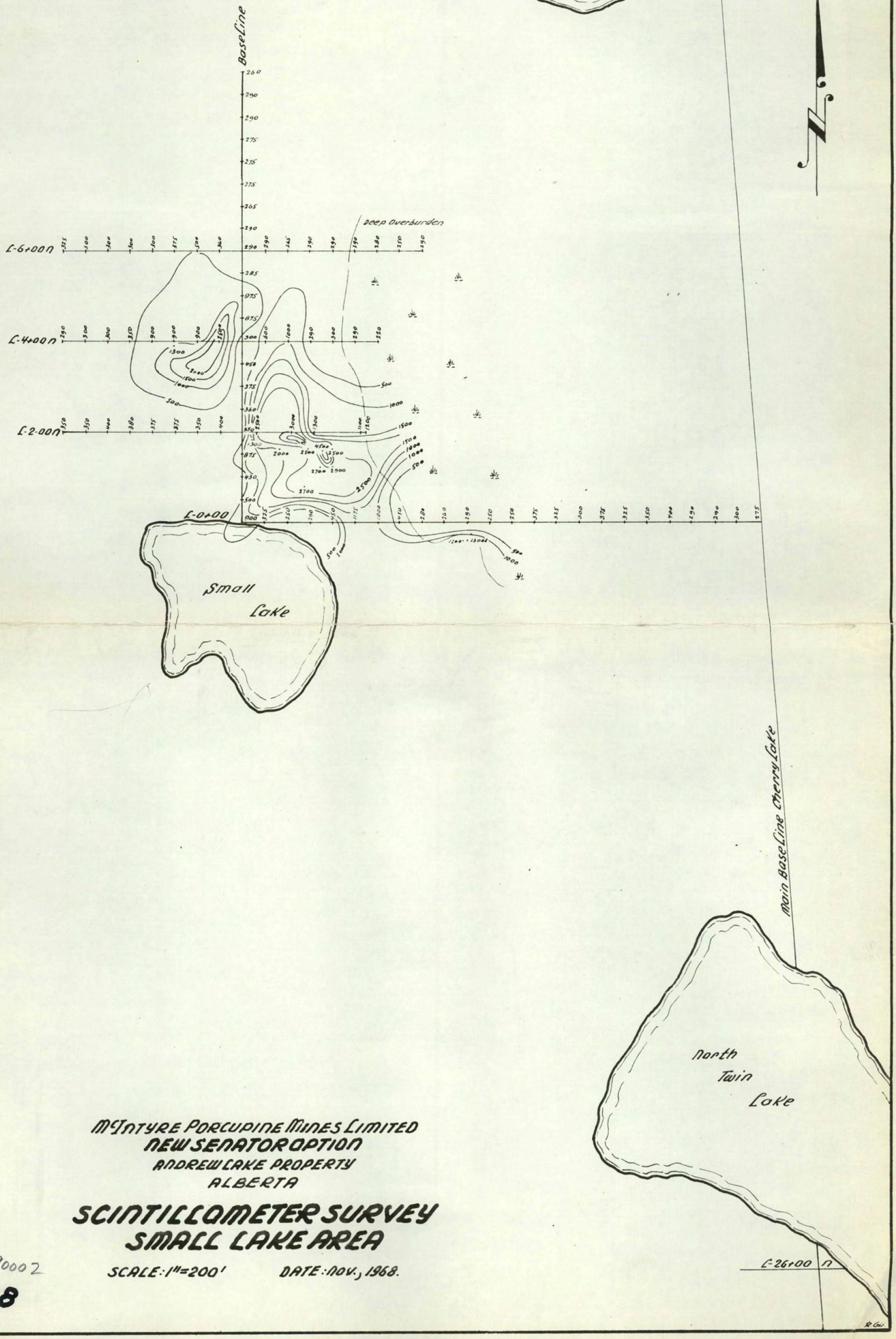
RECONNAISSANCE SURVEY
SMALL LAKE AREA

SCALE: 1"=200' DATE: NOV., 1968.

19690002

19690002

No 9



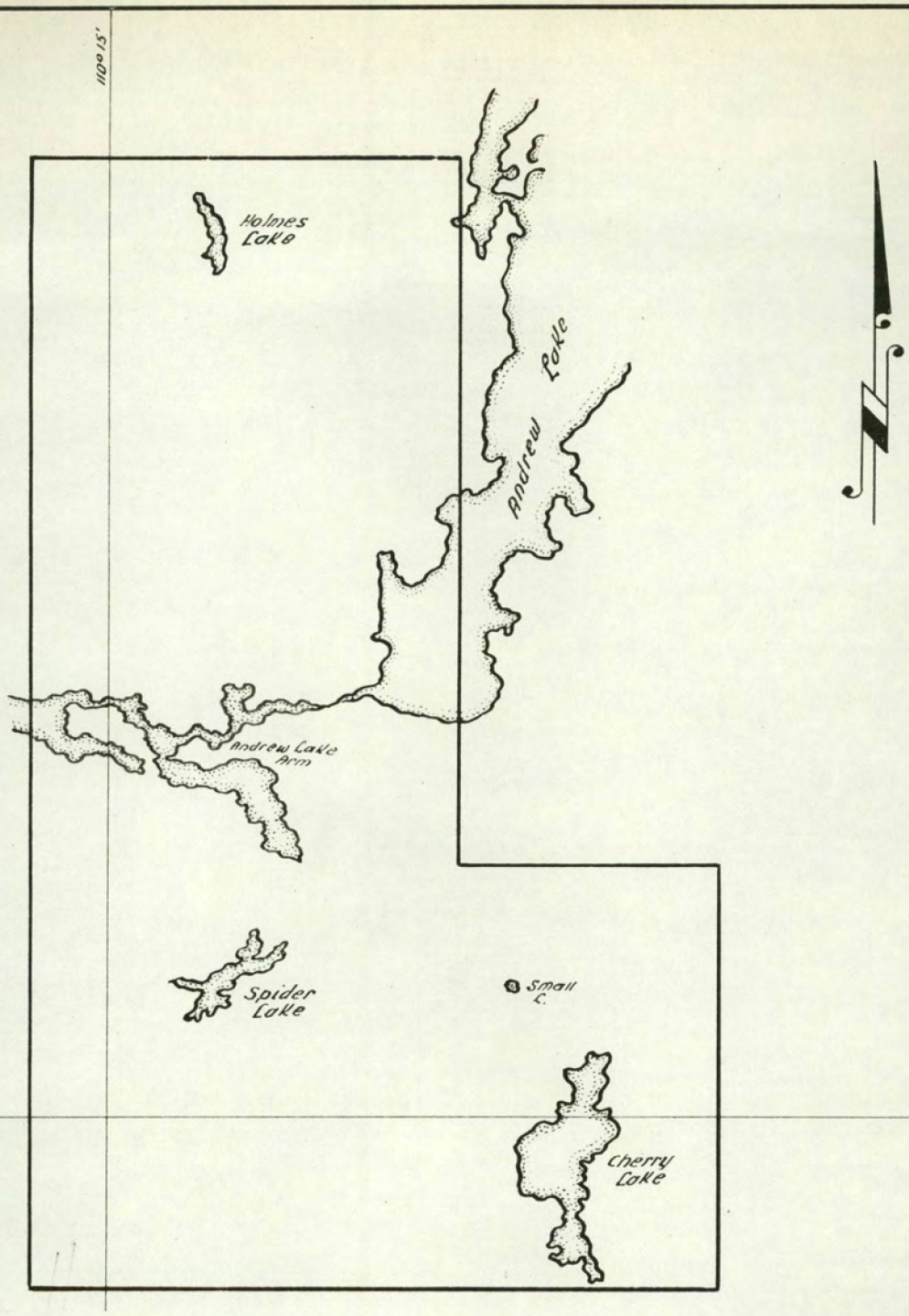
McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE PROPERTY
ALBERTA

SCINTILLOMETER SURVEY
SMALL LAKE AREA

SCALE: 1"=200' DATE: NOV., 1968.

19690002

No 8



McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

ANDREW LAKE AREA

ALBERTA

SCALE: 1inch = 2miles DATE: October, 1968.

19690002

No 5

McINTYRE PORCUPINE MINES LIMITED

AIRBORNE SCINTILLOMETER SURVEY

NEW SENATOR OPTION

SCALE 1/2 1/4 0 1/2 1 MILES

TRIGG, WOOLLETT & ASSOCIATES LTD.

EDMONTON, ALBERTA

JULY, 1968

19690002
No 4

LEGEND

COUNTS PER SECOND ABOVE BACKGROUND

①	0 – 200
②	200 – 400
③	400 – 600
④	600 – 800
⑤	800 – 1000
⑥	1000 +
○	NOT DETERMINABLE

1 ——— 2 FIDUCIAL POINTS INCREASING IN DIRECTION OF FLIGHT.

59° 52' 30"

Camsell Lake
Willan Smith Lake
Geikie Lake
Holmes Lake
Spider Lakes
Cinderella
Hutton Lake
ANDREW LAKE
ANDREW LAKE ARM
Sederholm
Johnson Lake
Cherry Lake
Spider Lake
Ridge Lake

DWG. 8MNSO-2

19690002

No 3

McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE AREA
ALBERTA

TOTAL RADIOACTIVITY ISORAD MAP

SCALE IN MILES
1/2 1/4 0 1/2 1

Prepared by: Trigg, Woollett & Assoc, Aug. 1968.

59°52'30"

Comsell Lake
William Smith L.
Goikie L.
Holmes Lake
Lakes
Cinderella Lake
Split
Hutton Lake
Andrew Lake
Partridge Lake
Andrew Lake Arm
Spider Lake
Johnson Lake
Cherry Lake

LEGEND
0 - 77
77 - 117
117 - 150
150 +
} x10 Counts per Second

110°00'
59°45'00"
RGü.

19690002

№2

McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE AREA
ALBERTA

SCALE IN MILES

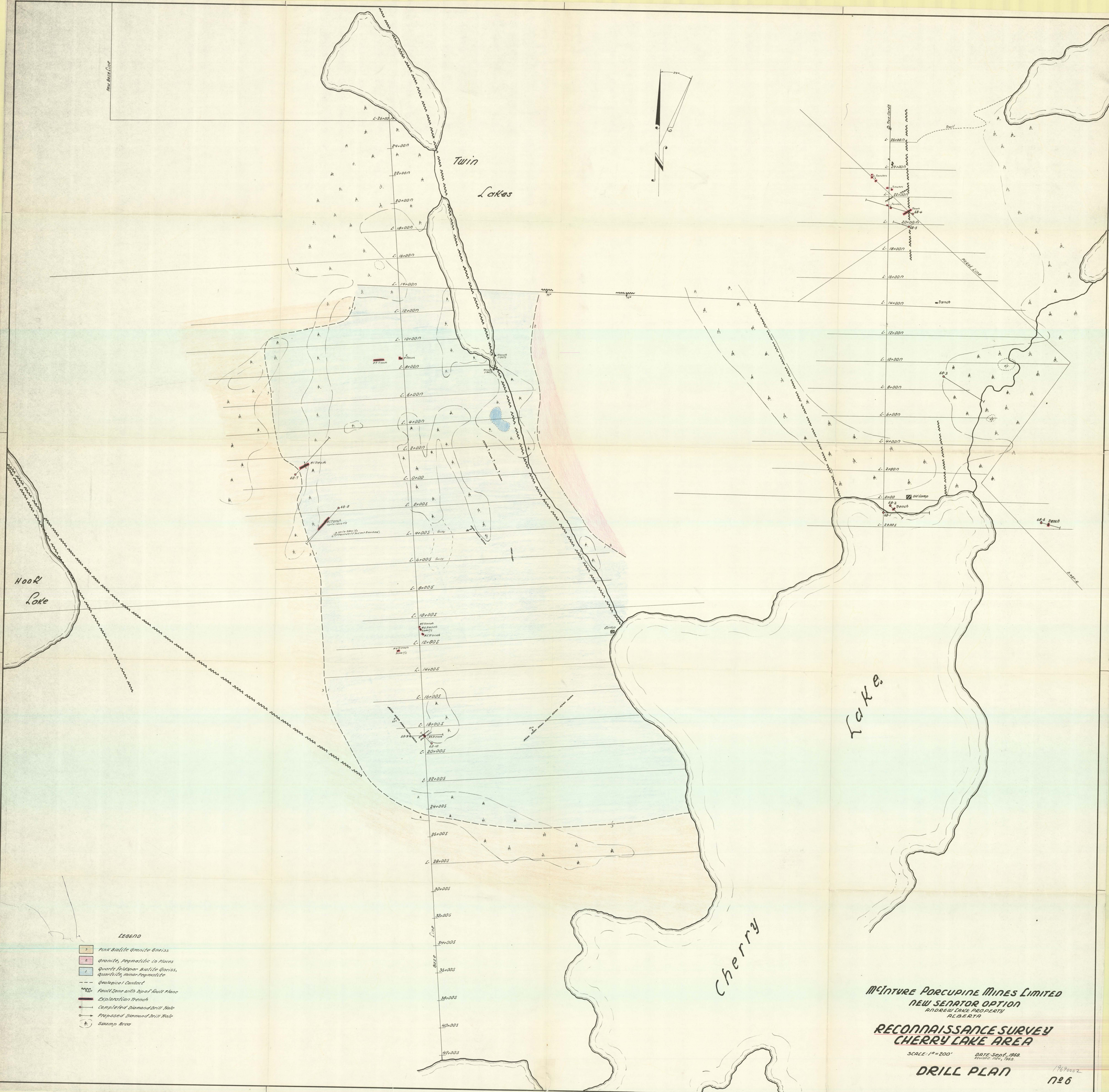
GEOLOGY

by John D. Godfrey, 1961/63

LEGEND

1. Quartzite
2. Biotite Schist
3. Biotite Granite Gneiss
4. Hornblende Granite Gneiss
5. Amphibolite
6. Biotite Granite
7. Granite Pegmatite

Camsell Lake
William Smith Lake
Geikie Lake
Holmes Lake
Split Lakes
Cinderella L.
Hutton Lake
Rutledge Lake
ANDREW LAKE ARM
ANDREW LAKE
Sederholm
Spider Lake
Ginger Lake
Johnson Lake
Cherry Lake
Cherry Lake
Oval Lake


Twin
Lakes
Hook
Lake
Cherry
Lake
Base Line
New Base Line
Tie Line
LEGEND
3 Pink Biotite Granite Gneiss
2 Granite, Pegmatitic in Places
1 Quartz Feldspar Biotite Gneiss, Quartzite, minor Pegmatite
Geological Contact
Fault Zone with Dip of Fault Plane
Exploration Trench
Completed Diamond Drill Hole
Proposed Diamond Drill Hole
Swamp Area
McIntyre Porcupine Mines Limited
New Senator Option
Andrew Lake Property
Alberta
Reconnaissance Survey
Cherry Lake Area
Scale: 1" = 200'
Date: Sept., 1968.
Revised: Nov., 1968.
Drill Plan
1969 0002
No 6

New Base Line

Twin

Lakes

Hook

Lake

Base Line

Four North

Lake

Cherry

LEGEND

Radioactivity in Counts per Second measured with SRDT Instrument held at waist Level.

Radioactivity Contour 500 Counts per Second Intervals.

	From 0 - 500 Counts per Second
	From 500 - 1000 " "
	From 1000 - 1500 " "
	From 1500 - 2000 " "
	Above 2000 " "

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

ANDREW LAKE PROPERTY

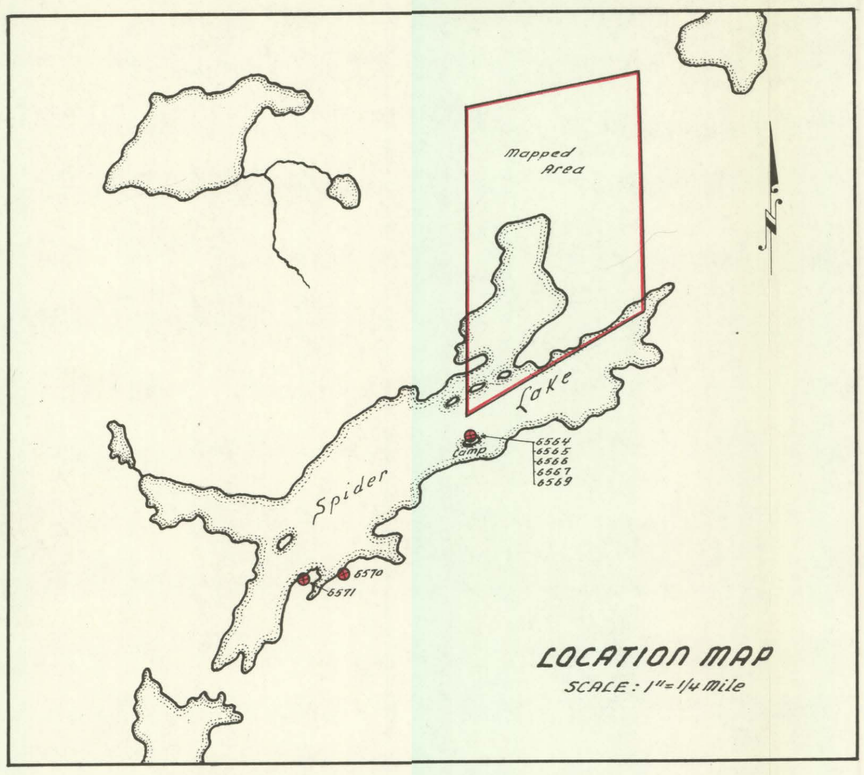
ALBERTA

SCINTILLOMETER SURVEY CHERRY LAKE AREA

SCALE - 1" = 200' DATE - Sept, 1968.

1769002

No 7



LOCATION MAP
SCALE: 1" = 1/4 Mile

SAMPLE Nº	%U_3O_8	%ThO_2	%MoS_2	LOCATION & REMARKS
6551	0.05	–	–	565' on B.L.Nº2 - Grab
6552	0.08	–	–	Island - 0.0-5.'o
6553	0.11	–	–	–"– Chips from Bottom of Trench
6554	0.04	–	–	550' on B.L.Nº2 - 0.0-4'.5
6555	0.04	–	–	520' on B.L.Nº2 - 0.0-1'.o
6556	0.17	–	–	Grab
6557	Nil	–	Tr.	Island - Trench Nº1 - 0.0-6'.5
6558	0.02	–	Tr.	–"– –"– 6'.5-11'.o
6559	Tr.	–	Tr.	–"– –"– 11'.0-16'.o
6560	Nil	–	Tr.	–"– –"– 16'.o-20'.o
6561	–	–	–	490' on B.L.Nº2 - spectrographic-nor significant
6562	Tr.	–	Nil	Island Nº6 - Trench Nº2 - 0.0-5'.o
6563	Tr.	–	–	–"– –"– 0.0-8'.7
6564	–	–	–	Camp Island - Grab - (See Location Map)
6565	–	–	Tr.	–"– " –"–
6566	–	–	Tr.	–"– " –"–
6567	–	–	Nil	–"– " –"–
6568	0.16	0.02	0.02	370' on B.L.Nº2 - Grab
6569	–	–	Nil	Camp Island - Grab (See Location Map)
6570	–	–	Nil	Bay SE Shore - " –"–
6571	–	–	Tr.	–"– " –"–
6572	0.01	Tr.	Tr.	500' along Base Line 2 - 36'.o-42'.o
6573	0.03	0.01	0.01	490' on –"– Trench Nº6 - 6'.o-10'.5
6574	Tr.	–	Nil	–"– –"– –"– 10'.5-15'.5
6575	Tr.	–	Nil	–"– –"– –"– 15'.5-19'.0
6576	Tr.	–	Tr.	–"– –"– –"– 19'.o-22'.o
6577	Tr.	–	Tr.	820' Base Line 2 - 15'.o 21'.5 - Poor RA.
6578	0.02	–	Tr.	" –"– - 21'.5-26'.o - Good RA.
6579	Tr.	–	Tr.	" –"– - 26'.o-32'.o - Poor RA.
6580	Tr.	–	Nil	370' –"– Trench Nº7 - 5'.o-6'.o - Poor RA.
6581	0.03	–	Tr.	" –"– –"– 6'.o-10'.o - Fair RA.
6582	Tr.	–	Tr.	" –"– –"– 10'.o-14'.o - Poor RA.
6583	0.11	0.02	0.02	475' –"– Chip S. 20 inches - Good RA.
6584	Tr.	–	–	" –"– " 1'.o -
6585	0.04	–	–	" –"– " 2'.3" - good RA.
6586	Tr.	–	–	" –"– " 1'.o - wall, poor RA.
6587	0.04	–	–	0+00 on B.L.Nº1 - Grab.
6588	0.03	–	Tr.	150' on B.L.Nº2 - Grab 10'.o - poor RA.
6589	0.03	–	0.01	550' on B.L.Nº2 - Grab 0.0-4'.o
6590	Tr.	–	Tr.	–"– –"– " " 4'.o-12'.o - poor RA.
6591	0.01	–	Tr.	490' on B.L.Nº2 - 0.0-2'.o - poor RA.
6592	Tr.	Tr.	0.01	–"– –"– - 2'.o-4'.5 - good RA.
6593	0.04	0.01	0.02	–"– –"– - 4'.5-8'.o –"–
6594	0.02	Tr.	0.02	–"– –"– - 8'.o-10'.o fair R.A.
6595	0.05	0.01	–	Nº2 Showing - Fair RA.
6596	0.05	–	–	–"– - Grab - Good RA.
6597	0.07	0.01	–	–"– - Chip-Grab - Good RA.
6598	0.09	–	–	–"– –"– –"–
6599	0.10	–	–	–"– –"– –"–
6600	0.02	–	–	–"– –"– –"–
9801	0.09	–	–	–"–
9802	0.12	–	–	–"–
9803	0.11	–	–	–"–
9804	0.05	–	–	–"–
9805	0.04	–	–	Nº3 Showing
9806	0.05	–	–	–"–
9807	0.04	–	–	–"–
9808	0.02	–	–	–"–

LEGEND

- 1 Quartz-feldspar-Biotite Gneiss
- 2 Quartzite - Impure, often rich in Biotite and Feldspar.
- 3 Granite
- 4 Granite Gneiss
- Strike & Dip
- Contact
- Contact assumed
- Fault
- Fault assumed
- Folding
- Outcrop
- Low Ground or Swamp
- 6555 Sample Location and Number

RADIO ACTIVITY:

- Concentrated
- Disseminated
- R.A. Weak

SHOWING Nº3

SHOWING Nº2

SHOWING Nº1

Base Line Nº4
Base Line Nº3
Base Line Nº2
Base Line Nº1 (Tie Line)
Picket Line
Lake
Spider
Spider Lake
Trench Nº1 (WL2/08-30-05)
Trench Nº2 (WL2/08-30-06)
Tr#1 (WL2/08-30-07)
Tr#6 (WL2/08-30-04)
Tr#7 (WL2/08-30-03)
WL2/08-31-04

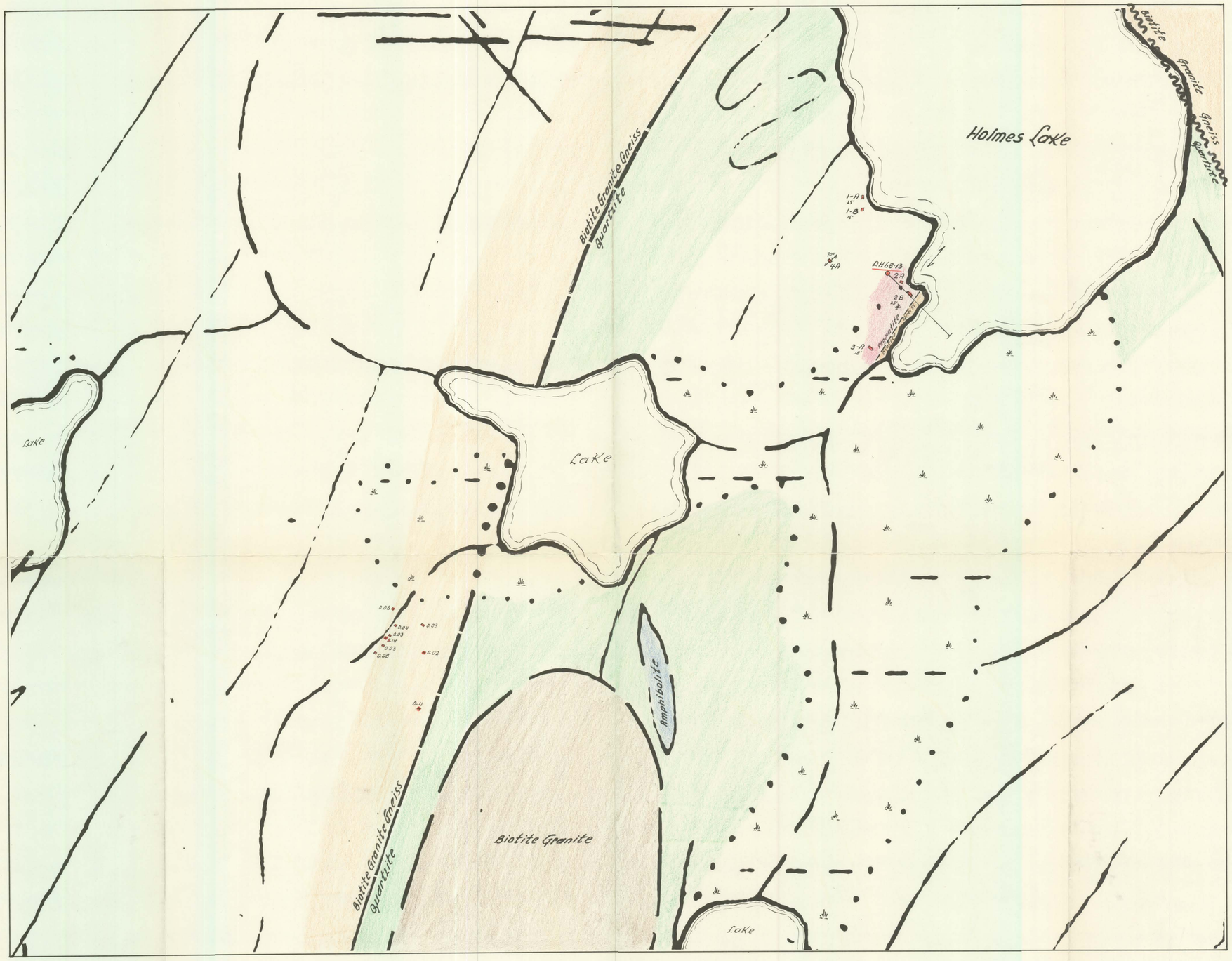
McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR OPTION
ANDREW LAKE PROPERTY
ALBERTA

RECONNAISSANCE SURVEY
SPIDER LAKE AREA

SCALE: 1" = 100' (1 : 1200)
DATE: Aug., 1968.
Revised: Nov. 1968

DRILL PLAN Nº10

19690002



LEGEND

- Trench
- Grab Sample may not be Outcrop
  Values in % U_3O_8
- Diamond Drill Hole

	Feet	% U_3O_8
TRENCH 1-A	0.0 - 5.0	Tr.
	5.0 - 10.0	0.01
	10.0 - 15.0	0.01
TRENCH 1-B	0.0 - 6.0	Tr.
	6.0 - 12.0	0.02
TRENCH 2-A	0.0 - 6.0	0.05
TRENCH 2-B	5.0 - 10.0	Tr.
	10.0 - 15.0	0.02
	15.0 - 20.0	0.01
	20.0 - 25.0	0.01
TRENCH 3A	0.0 - 5.0	0.01
	5.0 - 10.0	0.03
	10.0 - 15.0	0.05
	15.0 - 18.0	0.02
TRENCH 4A	0.0 - 6.0	0.05
	6.0 - 12.0	0.07

NOTE: Geology by John D. Godfrey

NEW SENATOR OPTION

N.E. ALBERTA

HOLMES LAKE AREA

RECONNAISSANCE SURVEY

SCALE: 1" = 200' DATE: July, 1968.

DRILL PLAN

1969002

№12

Azimuth: 90°

D.H. 68-1

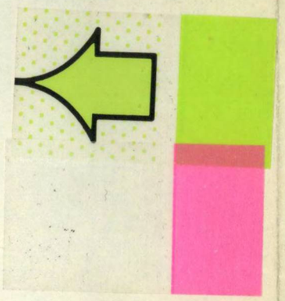
Surface

100'

200'

300'

400'



LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

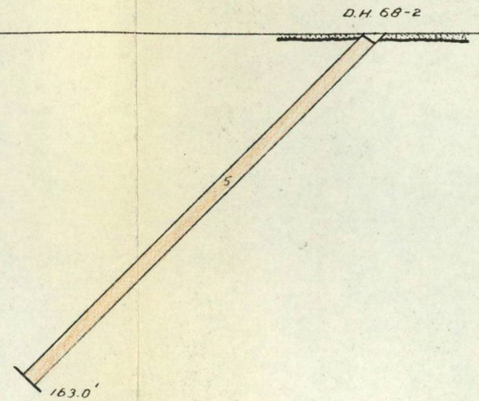
NEW SENATOR OPTION

SECTION DRILL HOLE 68-1

SCALE: 1" = 50' NOV., 1968.

1969002

Azimuth: 135°



100'

200'

300'

400'

LEGEND:

6	Pegmatite
5	Granite, Granite Gneiss
4	Augen Gneiss
3	Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
2	Quartz-feldspar-Biotite Porphyry
1	Quartzite
△△	Brecciation, Crushing

100'

200'

300'

400'

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

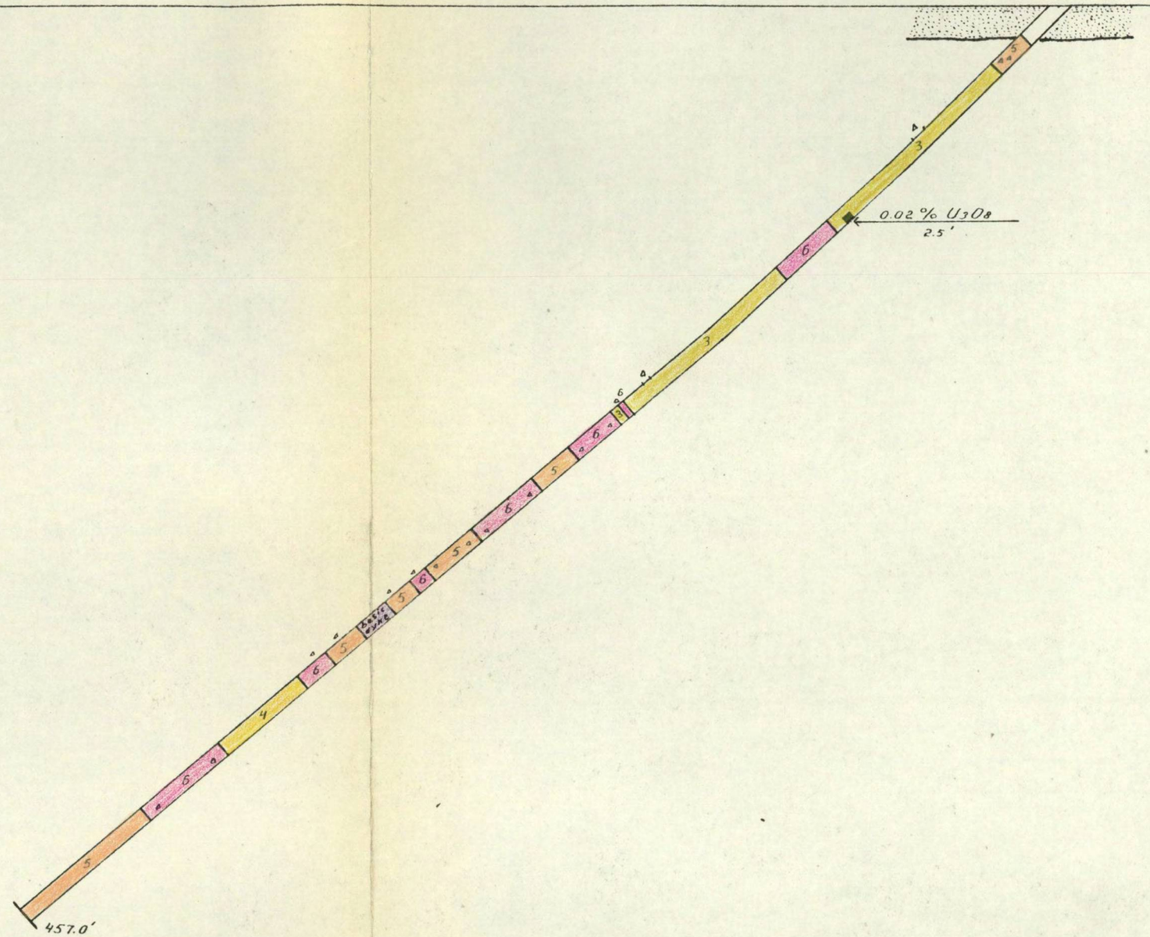
SECTION DRILL HOLE 68-2

SCALE: 1" = 50' Nov., 1968.

19690002

RGG

Azimuth: 120°



100'

200'

300'

400'

LEGEND:

- 6 Peymatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE 68-3

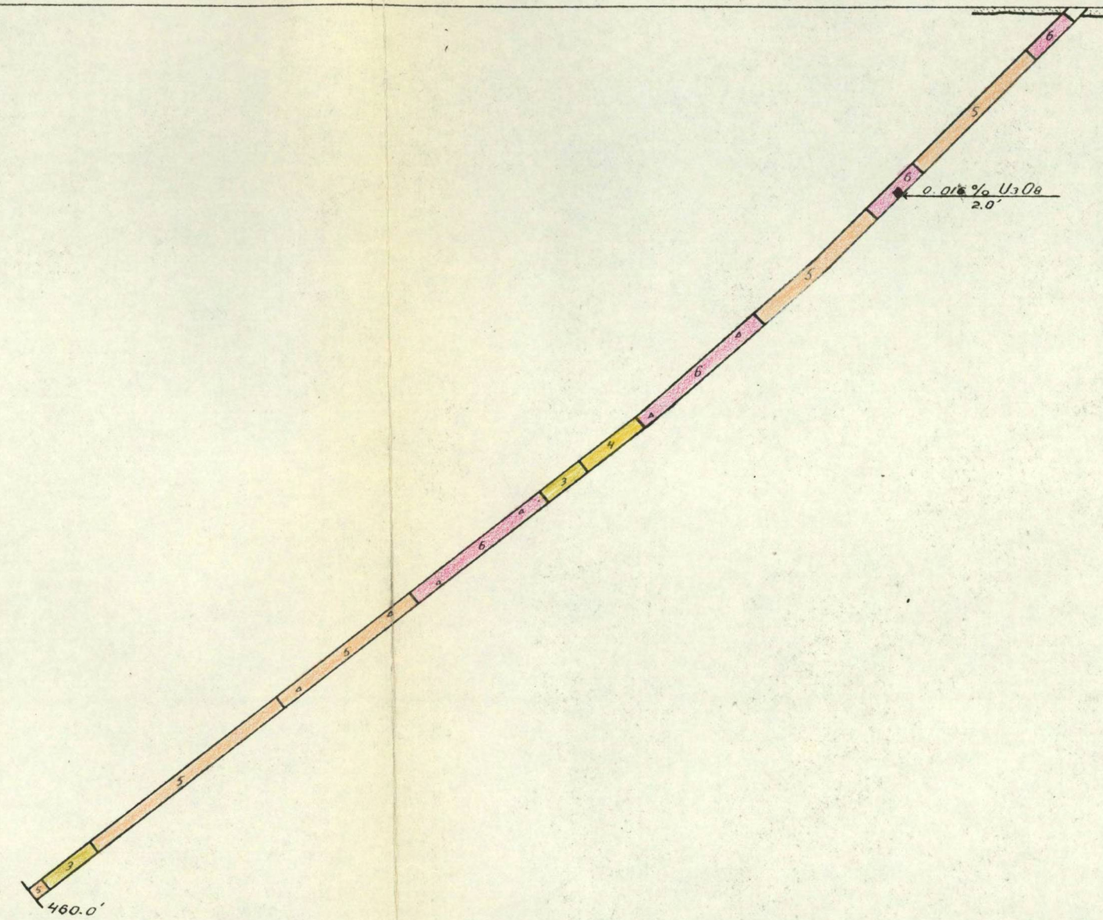
SCALE: 1" = 50' Nov., 1968.

19690002

Azimuth: 285°

D.H. 68-4

Surface



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

100'

200'

300'

400'

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

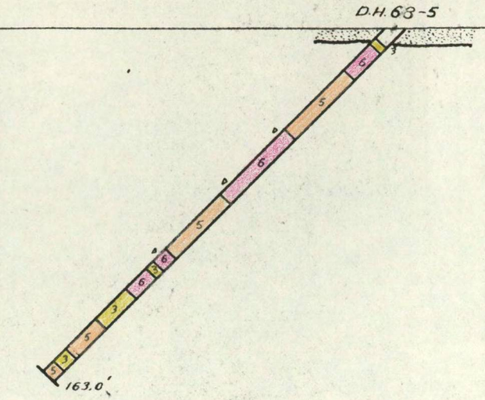
SECTION DRILL HOLE 68-4

SCALE: 1" = 50' NOV., 1968.

19690002

RGG

Azimuth: 285°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

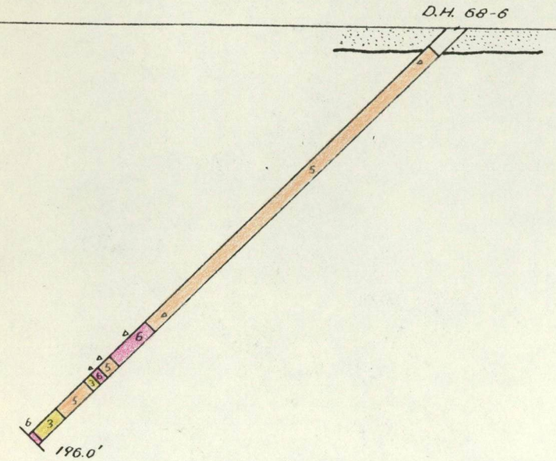
NEW SENATOR OPTION

SECTION DRILL HOLE 68-5

SCALE: 1" = 50' Nov., 1968.

1969002

Azimuth: 105°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE 68-6

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 45°

D.H. 68-7

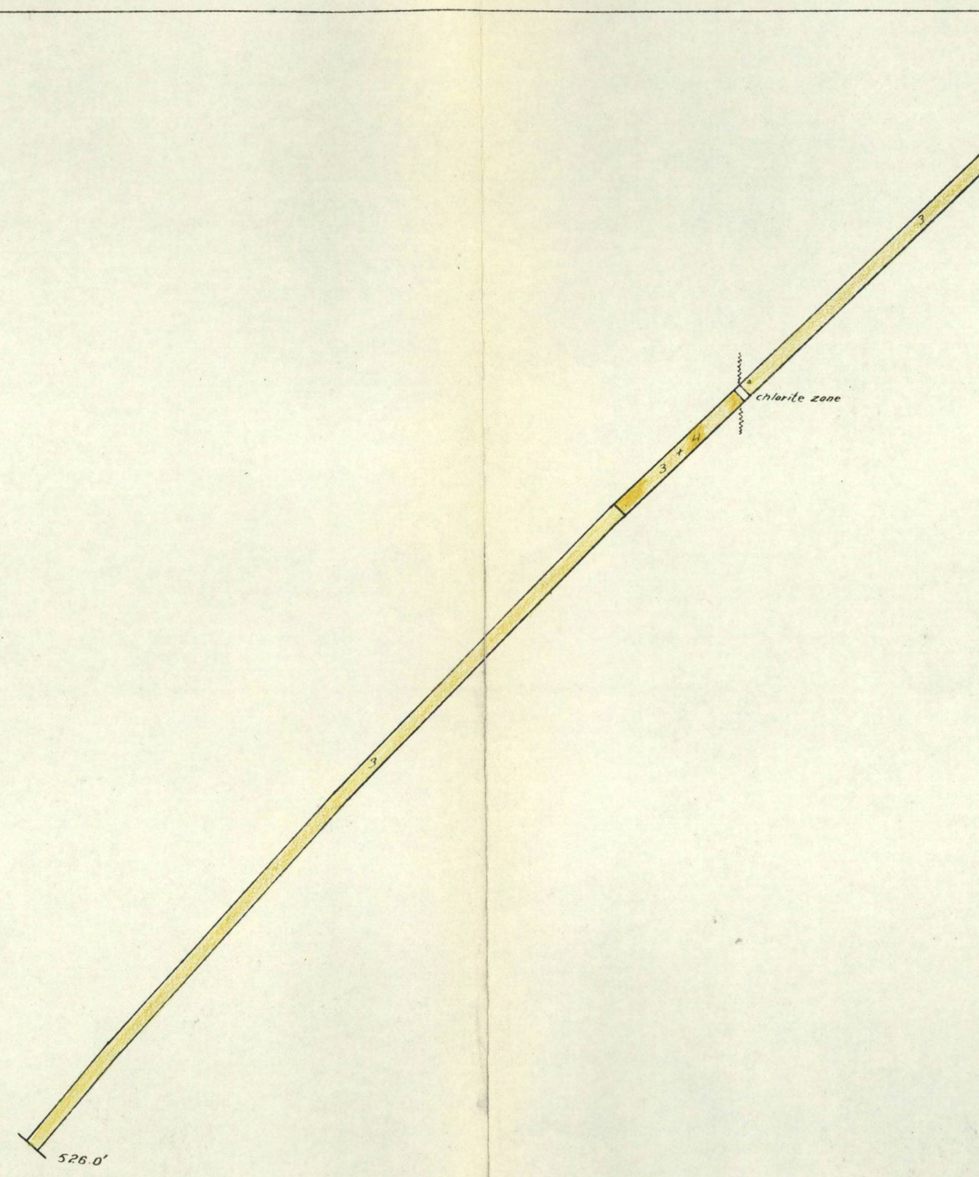
Surface

100'

200'

300'

400'



LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE 68-7

SCALE: 1" = 50' NOV., 1968.

19690002

RGS

Azimuth: 225°

D.H. 68-8

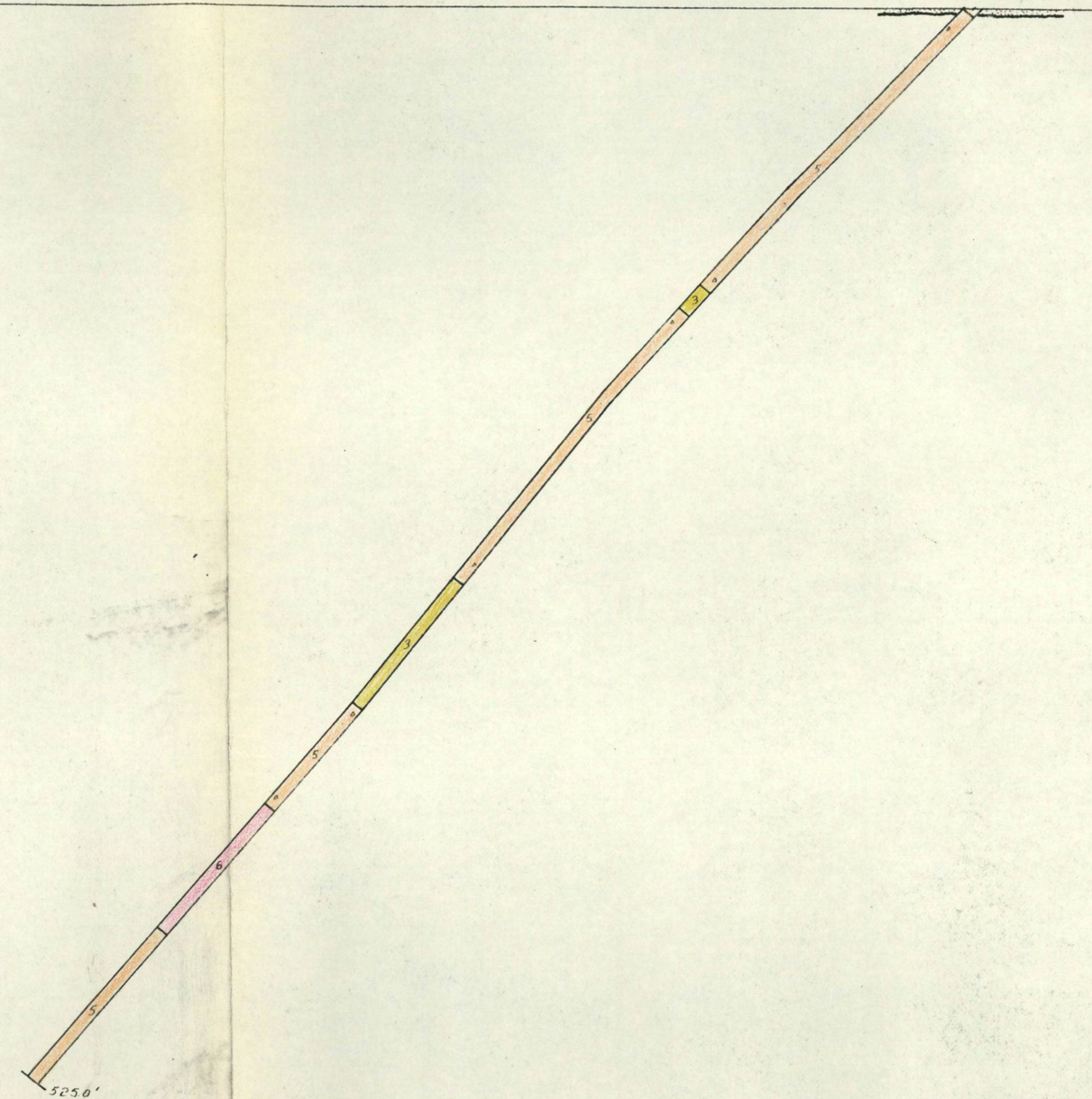
Surface

100'

200'

300'

400'



LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

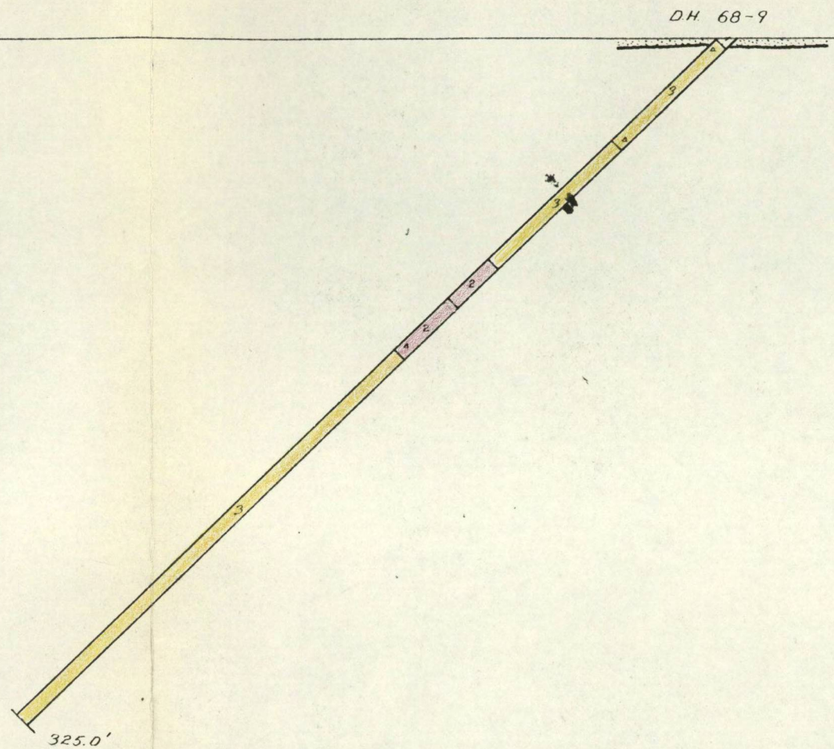
NEW SENATOR OPTION

SECTION DRILL HOLE 68-8

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 90°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

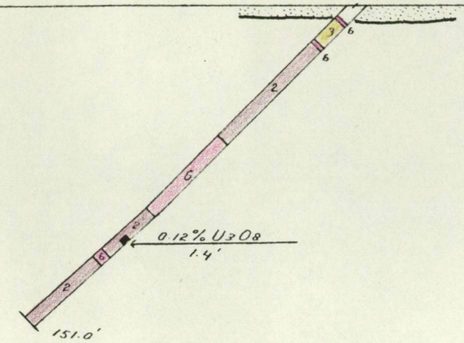
NEW SENATOR OPTION

SECTION DRILL HOLE 68-9

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 315°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

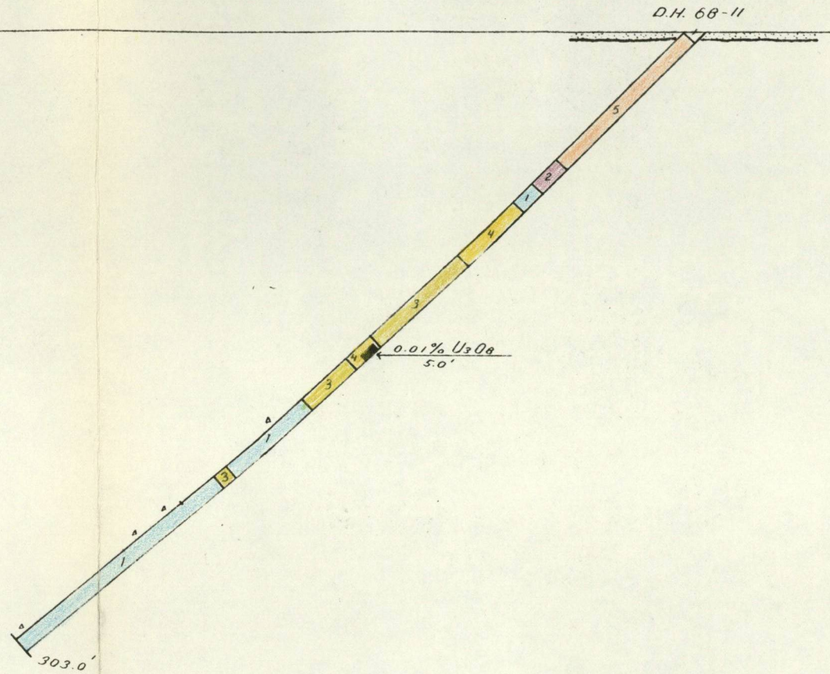
NEW SENATOR OPTION

SECTION DRILL HOLE 68-10

SCALE: 1" = 50' Nov., 1968.

19690002

Azimuth: 158°



100'

200'

300'

400'

LEGEND:

6	Pegmatite
5	Granite, Granite Gneiss
4	Augen Gneiss
3	Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
2	Quartz-feldspar-Biotite Porphyry
1	Quartzite
△△	Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

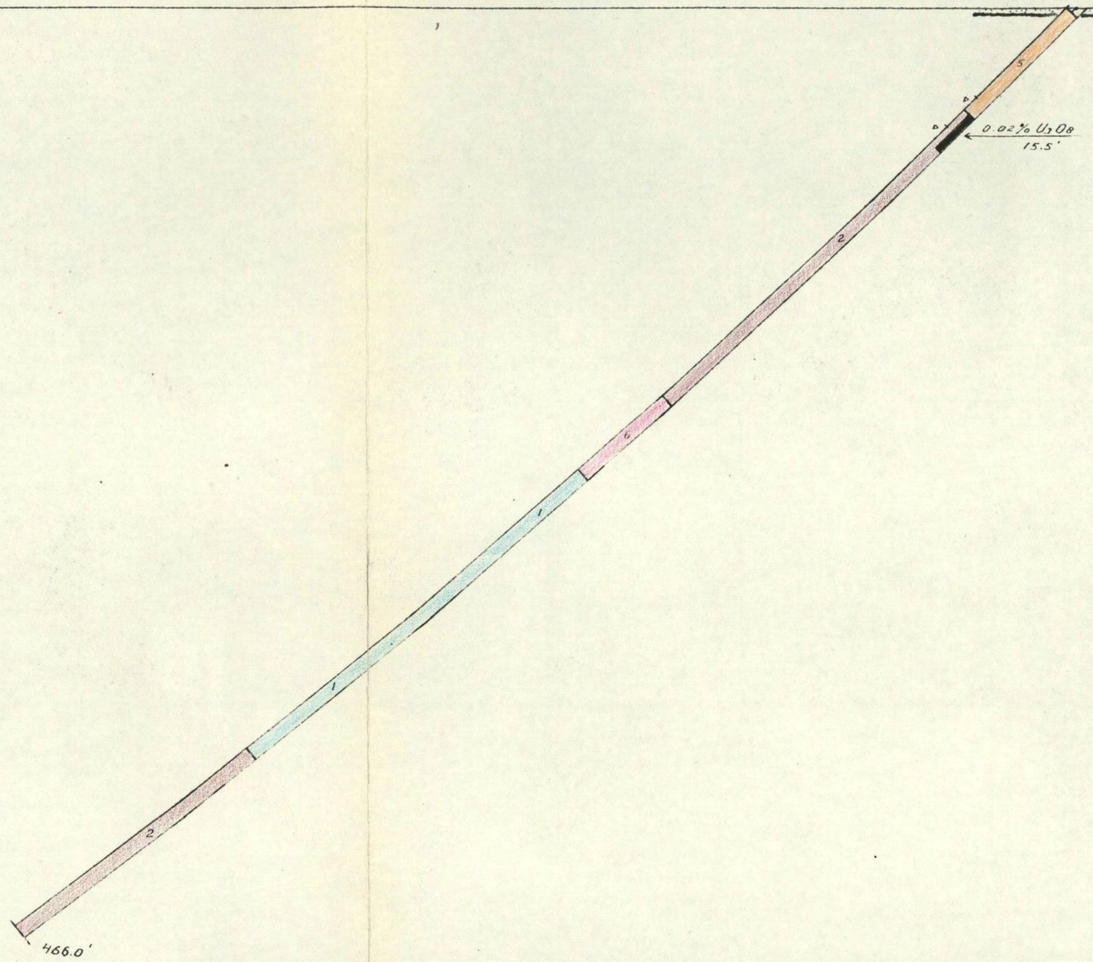
NEW SENATOR OPTION

SECTION DRILL HOLE 68-11

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 113°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

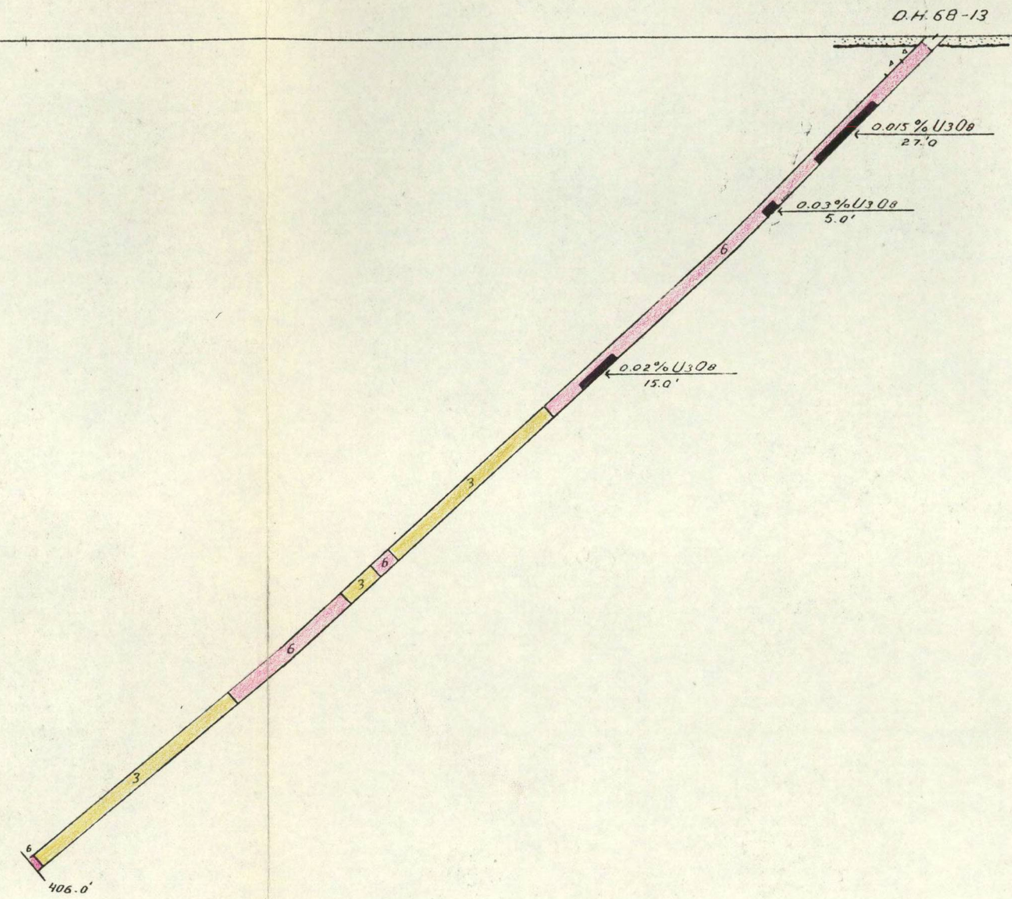
NEW SENATOR OPTION

SECTION DRILL HOLE 68-12

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 135°



100'

200'

300'

400'

LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite Porphyry
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE 68-13

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 90°

D.H.-68-14

D.H.-69-1

Surface

Trench No.4

0.02% U_3O_8 5.0

0.03% U_3O_8 14.0'

0.06% U_3O_8 20'o(Sludge)

0.05% U_3O_8 15.0'

0.03 U_3O_8% 4.0

Gneiss

0.02 U_3O_8% 2.0

0.01 U_3O_8% 5.0

0.01 U_3O_8% 10.0

0.04 U_3O_8% 10.0

.05 U_3O_8% - .05 MoS_2% 7.5

Gneiss

0.04 U_3O_8% 10.0

Fault

Gneiss

0.03 U_3O_8% 5.0

425.0'

482.0'

100'

200'

300'

400'

LEGEND:

6	Pegmatite
5	Granite, Granite Gneiss
4	Augen Gneiss
3	Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
2	Quartz-feldspar-Biotite Porphyry
1	Quartzite
△△	Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE 68-14 69-1

SCALE: 1" = 50' NOV., 1969.

19690002

Azimuth: 90°

O.H.-69-2

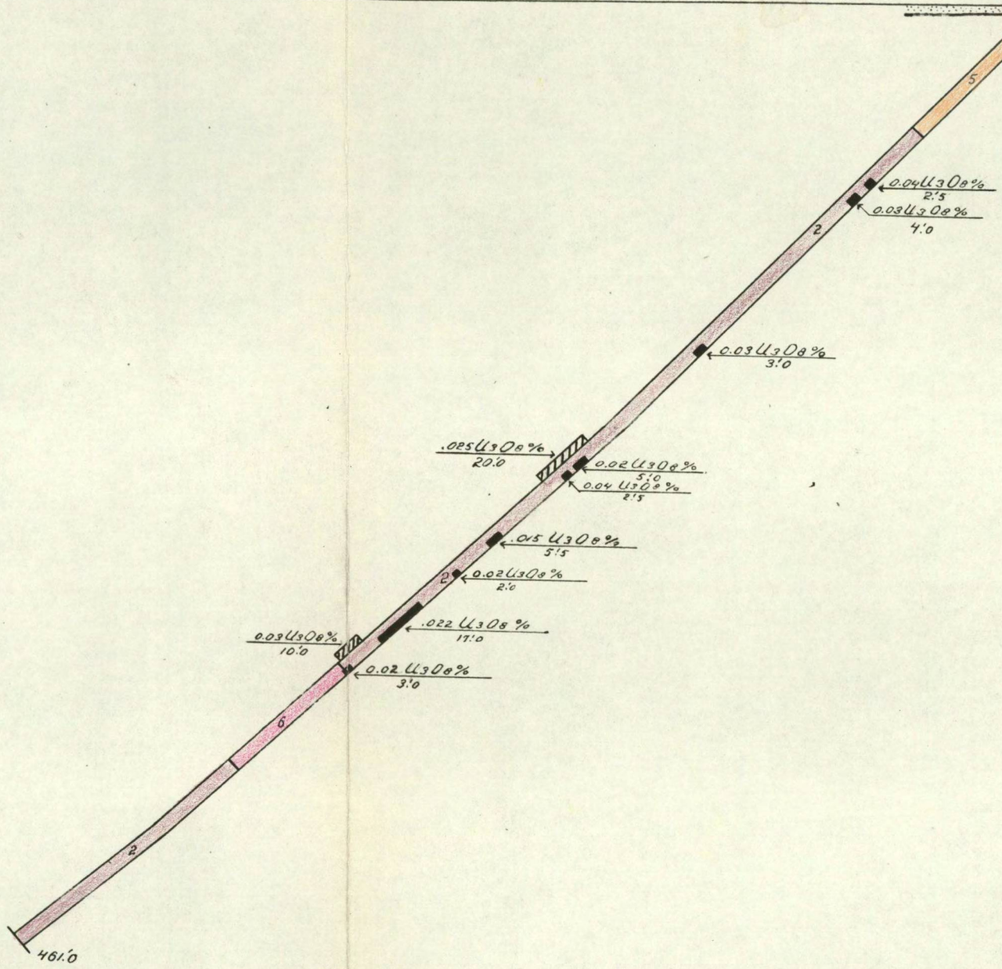
Surface

100'

200'

300'

400'



LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite-Gneiss
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE-69-2

SCALE: 1" = 50' NOV., 1968.

19690002

Azimuth: 90°

D.H. - 69-3

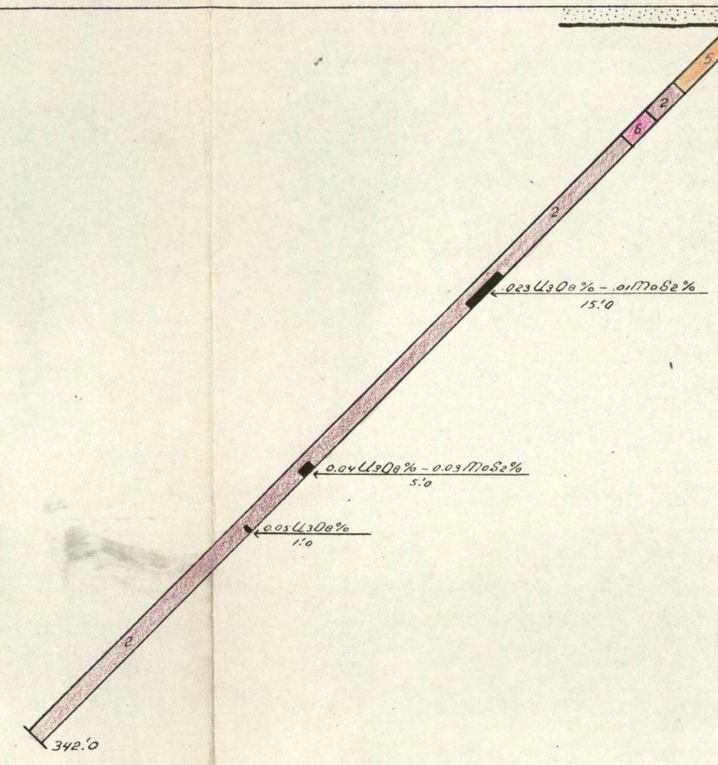
Surface

100'

200'

300'

400'



LEGEND:

- 6 Pegmatite
- 5 Granite, Granite Gneiss
- 4 Augen Gneiss
- 3 Biotite Gneiss, Biotite Schist, Cataclastic Gneiss, Migmatite
- 2 Quartz-feldspar-Biotite - Gneiss
- 1 Quartzite
- △△ Brecciation, Crushing

McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

SECTION DRILL HOLE-69-3

SCALE: 1" = 50' NOV., 1968.

19690002