MAR 19680005: NORTHEAST ALBERTA

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McINTYRE PORCUPINE MINES LIMITED

REPORT

ON

NEW SENATOR-ROUYN OPTION

NORTHEAST ALBERTA CONCESSION

September 28, 1968

W. H. Thorpe

McINTYRE PORCUPINE MINES LIMITED
NEW SENATOR-ROUYN OPTION

Summary

A program of prospecting, trenching, line cutting, geological mapping, airborne scintillation surveying and diamond drilling was carried out on this block of ground during 1968.

Work is continuing.

Property and Location

The 80 square mile concession is located in Northeastern Alberta, 60 miles northwest of Uranium City, Saskatchewan.

Access is by chartered plane. No roads lead to the property.

Introduction

The property was optioned from New Senator-Rouyn Limited, Suite 2014, 44 King Street West, Toronto, on April 27th, 1967.

New Senator-Rouyn had previously optioned the property from Astrabrun Mines Limited, Suite 906, 357 Bay Street, Toronto.

Work Done (1967)

The reader is referred to the report on "Alberta Concessions for 1967," New Senator-Rouyn Limited, by E. A. Hart, M. Sc., P. Eng., dated November 3, 1967, for work carried out in that year.

Work Done (1968)

Following favourable initial results obtained during the prospecting season of 1967, a major exploration program was undertaken by McIntyre in 1968.

Diamond drilling was started in February at the north end of Cherry Lake, on targets indicated by the 1967 prospecting. Work was suspended after the completion of six holes totalling 1,886 feet.

Drilling was started again in late August and is still in progress. To date, in this new program, 1,830 feet have been

completed which, together with the previously mentioned work, brings the 1968 total to 3,716 feet.

No ore grade intersections have been located to date. Drilling is continuing.

In early June, an airborne helicopter scintillation survey was completed over the entire concession. A total of 503 line miles was flown at a line spacing of 1,320 feet and an altitude of 100 feet. Where greater detail was required, spacings were reduced to 660 feet. This work established 44 radioactive anomalies that required ground checking.

Approximately 20 miles of picket lines were cut, mostly in the Cherry Lake region. These grids served as a control for geological mapping, trenching, sampling, scintillometer surveying and diamond drilling.

Three prospecting crews were active throughout the summer season, working in areas of interest located in 1967 and ground checking the anomalies found during the airborne scintillation survey.

A total of 615 feet of rock trenching, with an average width of 5.0 feet and depth of 3.0 feet, has been completed to date.

Two hundred and twenty-nine samples from surface outcrops and trenches have been assayed.

Future Work

Further prospecting, trenching, geological mapping and diamond drilling are planned.

[redacted]

for W. H. Thorpe

WHT:sl

McINTYRE PORCUPINE MINES LIMITED

TORONTO 1, ONTARIO

SUITE 1200
55 YONGE STREET
TELEPHONE 362-4751 - TELEX 02-29079

October,
Seventh,
1968.

McIntyre Porcupine Mines Limited

New Senator Option

Prospecting Permits, April 1st., 1967 to Sept. 30, 1968.

This is to certify that McIntyre Porcupine Mines Limited expended $108,690.21 on the above mentioned option, between the dates specified.

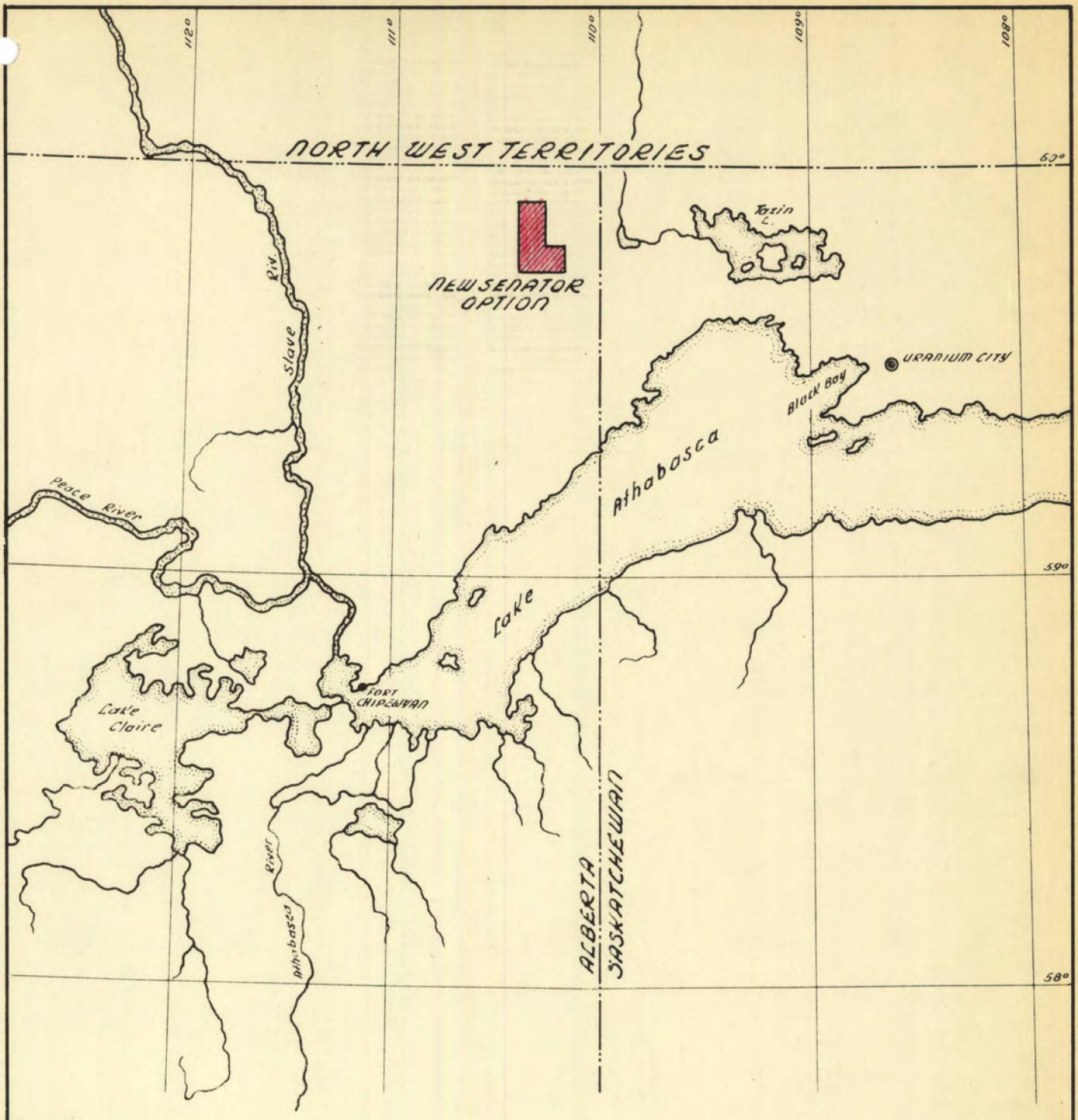
Certified Correct

McINTYRE PORCUPINE MINES LIMITED

[redacted]

O. J. Shore - Treasurer.

OJS/po



McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

ANDREW LAKE AREA

ALBERTA

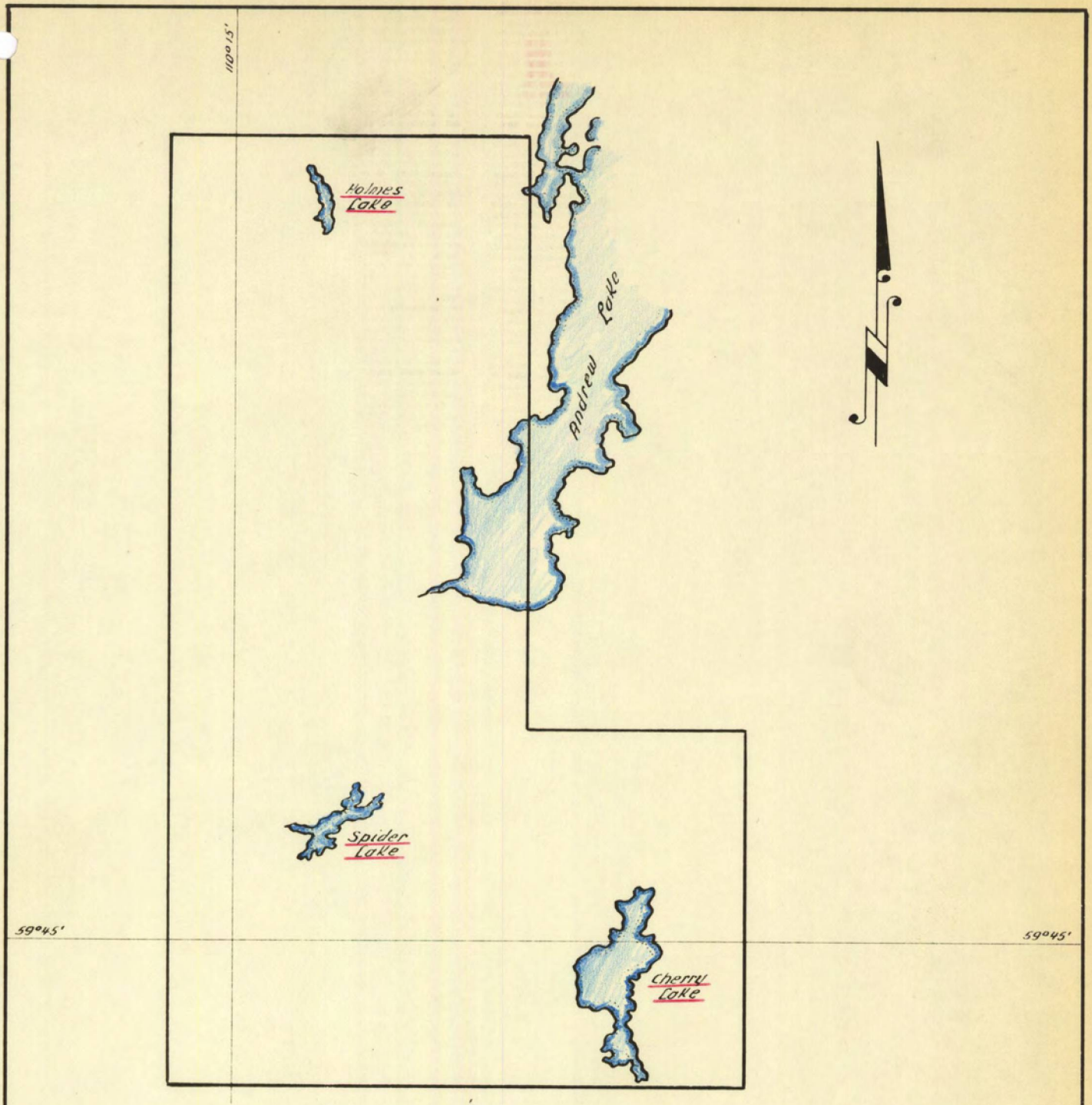
LOCATION MAP

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

19680005

Map #1

R.G.



McINTYRE PORCUPINE MINES LIMITED

NEW SENATOR OPTION

ANDREW LAKE AREA

ALBERTA

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

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Map #2

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys

At	Dip	Bearing
Surface	-47°	East
250 feet	-45°	(corrected for capillarity)

Hole No. NSO-68-1 Sheet No. 1
Length of Hole 447 feet
Date Started February 23rd, 1968 Completed Feb. 27/68
Core Logged by Gordon Bird
Date February 24th - February 27th, 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 1 + 00S south
~~East~~ on Base Line

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0	7	Casing						
7.0	12.0	Grey biotite granite gneiss, medium grained foliated at about 45° to the line of hole. At 10.0 feet some feldspars become Fe - stained. Numberous fractures at any angle to line of hole are present. Some have epidote or pyrophyllitic alterations on the fracture faces.						
12.0	17.0	Granite gneiss as above with strongly Fe-stained feldspars.	9501	13.5	14.5	1.0	0.005	
17.0	38.0	Augen gneiss, medium grained, grey to pink color.	9502	16.0	17.0	1.0	Tr.	
		Most color due to Fe-stain on feldspars. Rock has been brecciated in places	9503	36.2	43.0	1.0	Tr.	
		and there are numberous fractures filled with epidote (?).						
		26.0 - 27.0 Breccia zone.						
38.0	54.6	Pink granite gneiss, foliated about 45° to the line of hole. Some feldspar augen. Rock is brecciated in places. Some zones strongly hematite stained.						
		45.0 - 47.0 - Strong hematite staining.						
		48.0 - 50.0 Strong hematite staining.						
54.6	56.6	Ground core.						
56.6	96.0	Brecciated granite gneiss. Some pegmatite material, also brecciated. Most of feldspar is hematite stained giving rock a dark red color.						
		67.0 - Pegmatite stringer.						

EXPLORATION DEPARTMENT

Property: New Senator Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSO-63-1 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% 1/3 08	CORE ASSAYS
		75.0 Basic inclusion.						
		80.0 - 96.0 Strongly brecciated in places.						
96.0	117	Grey to pink granite gneiss with foliation about 45° to the line of hole. Numberous feldspar augen in finer grained ground mass. Some feldspars are hematite stained. There is a prominent set of fractures at 20° to the line of hole.						
117	119	Granite gneiss, strongly hematite stained and brecciated - Radio activity slightly above background.	9505	117	119.0	2.0	0.053	
119	168	Grey to pink granite gneiss as before.						
		126.6 - 128.6 Ground core	9506	128.8	129.8	1.0	0.02	
		135.0 - 135.5 - Pegmatite stringer						
		138.6 - 145.4 Pink granite gneiss, somewhat brecciated and hematite stained	9507	157.3	158.5	1.2	0.01	
168.0	427	Brecciated granite gneiss. Strongly hematite stained. Some pegmatitic material also brecciated. Brecciation is about 45° to the line of hole, and probably parallel to the line of hole. Some hematite filled fractures occur at 20° to parallel to the line of hole. Some zones are stained green - probably by reduction of Fe +3 to Fe +2. Some epidote and chlorite occure in some strongly brecciated zones. Some small, acicular tremolitic or	9508	168.2	169.2	1.0	Tr.	
			9509	224.4	225.4	1.0	Nil.	
			9510	236.8	238.8	2.0	Tr.	

EXPLORATION DEPARTMENT

Property: New Senator Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. N.S.O-68-1 Sheet No. 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
		actinolitic ~~aclinalitic~~ amphibole is present.	9511	247.3	248.3	2.0	0.01	
			9512	306.0	307.5	1.5	Nil	
		345 - 347 Rock is 25-30% epidote, strongly brecciated and annealed with loss	9513	346.0	347.0	1.0	Tr	
		of gneissdse texture.						
		400 - 412 - More siliceous facies of the breccia, up to 50% quartz. Strongly	9514	382.2	383.2	1.0	Tr.	
		hematite stained.						
427	447	Augen gneiss, somewhat sheared but not brecciated good foliation at 45°						
		to the line of hole. Fractures at 15 - 45° to the line of hole. -one prominent						
		set is about 30° to the line of hole. Some of the lower angler fractures are						
		filled with hematite.						
		440 - 445 Strongly hematite stained zone. Epidote common in veinlets and						
		fractures. Some green amphiboles are present. Biotite is common in less						
		sheared sections. Feldspar porphroblasts occur up to 2 1/2 inches in						
		diameter. There are fractured and stained with hematite along fracture planes.						
		Minute amounts of vein quartz .						
447.0		End of hole.						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core:

Surveys		
At	Dip	Bearing
Surface	-45°	135°

Hole No. NSR-68-2 Sheet No. 1
Length of Hole 163 feet
Date Started March 1st, 1968 Completed March 2nd
Core Logged by Gordon Bird
Date March 2nd, 1968
Elevation Surface Datum
Co-ordinates of Collar
North 0 + 00 North 60 ft. southeast along line
East bearing 135°

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS					
0	3	Casing										
3	163	Granitic gneiss composed of quartz, K-Feldspar, plagioclase, and biotite,										
		with accessory epidote. Some chlorite and calcite are present on fracture										
		faces. Some small veinlets of quartz. There is a good foliation at about 80°										
		to the line of hole. Three fracture systems are present; one at 45° to the	9517	36.0	37.5	1.5	Tr	Tr.	0.006			
		line of hole, and two conjugate fracture each about 30° to the line of hole	9516	46.0	47.5	1.5	Tr.	Tr.	0.006			
		one extention fractures with little or no alteration on fracture face, other is shear fracture										
		system with calcite, chlorite and slickensides present on or in the fracture.	9515	50.6	52.6	2.0	Tr.	Tr.	0.009			
		There are a few fractures subparallel to hthe line of hole. Chlorite is also	9518	89.0	90.0	1.0	Tr.	Tr	0.003			
		common on the fracture faces at 45° to the line of hole. Very weak radio	9519	120.0	121.5	1.5	Tr.	Tr.	0.006			
		activity is associated with some of the 30° shear fractures. Rock color	9520	100.0	101.0	1.0	Tr.	Tr.	0.009			
		varies from grey to pink with most of the pink color being associated with	9521	102.0	103.0	1.0	0.005	0.005	0.007			
		hematite staining of the feldspars.	9522	135.5	136.5	1.0	Tr.	Tr.	0.007			
			9523	143.2	144.2	1.0	0.006	0.006	0.01			
		15.5 - 20.0 Dark grey biotite rich section.										
		31.0 - 76.0 Pink granite gneiss with higher proportion of red stained felds-										
		par.										
		100.0 - 110.0 Dark grey biotite rich augen gneiss, possibly somewhat shear-										

EXPLORATION DEPARTMENT

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-68-2 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8 CORE ASSAYS
		ed.					
		END OF HOLE					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core:

Surveys At	Dip	Bearing
Surface	-45°	120°
250 ft.	-40°	(uncorrected)

Hole No.: NSR-68-3 Sheet No.: 1
Length of Hole: 457 feet
Date Started: March 5, 1968 Completed: Mar. 8/68
Core Logged by: Gordon Bird
Date: March 8, 1968
Elevation: Surface Datum:
Co-ordinates of Collar
North: 9 + 00 N
East: 4 + 18 E

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0	15	Casing						
15	29.5	Brecciated granitic gneiss, dark grey with considerable red hematite stain.						
		Are some narrow bands of brecciated pegmatitic material. Brecciation and						
		gneissosity trend about 30° to the line of hole. There are three major frac-						
		ture angles - one set of conjugate fractures at 30° to the line of hole. Third						
		type of fractures trend 15° to parallel to the line of hole. Grain size of rock						
		varies from f. g. to c. g.						
29.5	44.0	Biotite granite gneiss, medium grained, dark grey with some hematite stain						
		on feldspars. Some coarse grained pegmatitic material in brecciated stringers.						
		39.0 - 44.0 - [illegible] more intense than elsewhere.						
44.0	104.0	Brecciated biotite granite gneiss, fracturing and foliation as above. Amount						
		of hematite stain and color is variable from dark grey to dark red.	9524	97.5	100.0	2.5	0.02	
		There is some epidote on fracture faces. Some chlorite is present. There are	9525	103.0	104.0	1.0	Tr	
		lenses of coarse grained pegmatitic material.						
		60.0 - 65.0 Brecciated pegmatitic material, hematite stained.						
104	127	Sheared pegmatitic material with some remnant gneissic material-most of						
		rock is coarse grained and hematite stained. Some large dark red feldspar						
		porphyroblasts in a finer grained groundmass. Epidote and chlorite are						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property Senator Royya Option.
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSR-68-3 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		common and give rock a motted grey-green color. Some of the hematite					
		stained feldspars has altered to a yellow-brown mineral.					
127	144	Sheared biotite granite-gneiss, dark grey color, medium grained with some					
		coarse grained feldspar porphroblasts. Foliation is about 30° to the line of					
		hole. Fractures occur at 30° and parallel to the line of hole. Rock has a					
		slight reddish color from hematite stain.					
144	155	Sheared biotite granite gneiss as above but with less biotite and lighter color.					
		Epidote is present on some fracture faces and in matrix giving rock a green-					
		ish color in places.					
153	195.5	Sheared biotite granite gneiss as above but with more intense hematite stain	9526	163.0	165.0	2.0	Tr.
		giving rock a reddish color.					
		169.0 - 170.0 Vein quartz (or sheared quartzite) with some red coloration					
		from hematite.					
		179.0 - 180.0 As above 169.0 - 170.0					
		182.0 - 184.0 " " " "					
		184.0 - 186.5 Brecciated quartz and pegmatitic material with some chlorite					
		and epidote - coarse grained, light green color.					
195.5	197.0	Brecciated Pegmatite.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSR-68-3 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
197.0	200.5	Strongly altered gneiss with considerable epidote, vein quartz and talc. Feld-					
		spars are completely altered to light green mineral. Talc like mineral occurs					
		in small veinlets - Rock is light green color, fine grained.					
200.5	219.0	Brecciated pegmatite material strongly hematite stained. There is a remnant					
		foliation at 30° to the line of hole in some places.					
219.0	235.0	Biotite granite gneiss, sheared but not strongly brecciated. Hematite stain in-					
		creases toward 235.0 as does the intensity of shearing. 227 - 235 - As above					
		but with numberous epidote or talc filled fractures at angles from 30° to para-					
		llel to line of hole.					
235.0	261.0	Brecciated pegmatitic material mixed with remnants of gneiss. Foliation or	9527	257.0	259.0	2.0	Tr
		shearing at about 30° to line of hole. 249.0 - 251.0 - Rock is green color-					
		ed from presence of large amount of epidote, chlorite and talc.					
		252 - 253 - Jasper vein - is hematite stained quartz.					
		253 - 255 - Same as 249 - 251.					
261	281	Sheared brecciated granite gneiss - medium grained. Reddish grey colored					
		from hematite stain. Foliation about 30° to the line of hole. Fractures at 30°					
		and parallel to the line of hole. One quartz filled fracture can be traced con-					
		tinuously for 10 - 12 feet. Large feldspar porphroblasts are common and					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. N. S. R. -68-3 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		several small patches of pegmatite material are present.					
281	288	Brecciated pegmatite material as described previously.					
288	298.5	Brecciated granite gneiss with some pegmatite material - Some hematite stain.					
298.5	311.0	Basic dyke - extremely hematite stained making it impossible to identify original rock type. Dyke is somewhat brecciated in places and strongly fractured. Hematite stain is post fracturing as it follows fractures and is most intense closest to fracture.	9528	303.0	305.0	2.0	Nil
			9528	306.8	308.3	1.5	Tr
311	320.0	Brecciated granitic gneiss with some pegmatitic material and large feldspar porphroblasts.					
320.0	324.6	Brecciated highly altered gneiss, light green in color from presence of considerable epidote, talc and chlorite. Some quartz veining.					
324.6	337.0	Brecciated pegmatite with some remnant gneiss. Very coarse grained, pink in color from presence of weak hematite stain on some feldspars.					
337	371	Augen gneiss, sheared but not brecciated - some large feldspar porphroblasts patches of pegmatite. Foliation about 30° to the line of hole. Compositional banding becomes more distinct with depth. From 250 feet onword there is good segregation of mafic and felsic material. Mafic material was largely biotite					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. N.S.R. -68-3 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		but is now largely chlorite. Hematite staining on the feldspars is common but					
		is not intense. There are some narrow patches of pegmatite material .					
371	405	Brecciated pegmatite with narrow bands of gneiss coarse grained, composed					
		predominantly of quartz , emicrocline-perthite and biotite now altered to					
		chlorite. Weak hematite staining.					
405	457	Biotite granite gneiss, sheared but not brecciated-medium to coarse grained,					
		dark grey in color. Foliation about 20° to the line of hole.					
		421.5 - 424 Pegmatite.					
		428 - 433 - ~~Chloritic~~ Granitic gneiss, light grey to pink, medium grained poorly					
		foliated. This rock is similar to some of the pegmatite but is finer grained.					
	457	End of hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake, Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys At	Dip	Bearing
Surface	-45°	285°
250 feet	-38°	uncorrected

"AX" Core

Hole No. NS2-68-4 Sheet No. 1
Length of Hole 460
Date Started March 18th Completed March 22nd
Core Logged by Gordon Bird
Date March 19th, 20th, 21st, 22nd
Elevation Surface Datum
Co-ordinates of Collar
North 20 + 78 North
East 1 + 75 East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS	% MoS2
0	3	Casing						
3.0	21.5	Pegmatite, light grey to pink color, coarse grained weakly foliated at about						
		45° to the line of hole. Rock is composed of microcline perthite, biotite &	9530	3.0	5.0	2.0	Nil	
		muscovite or phlogopite but altered to chlorite, and quartz. Weak hematite	9531	9.0	11.0	2.0	Nil	
		stain present in places. Rock may have been weakly sheared.	9532	16.0	17.0	1.0	Nil	
21.5	75.0	Granitic gneiss, light to dark grey color, medium grained with some coarse	9533	24.0	25.0	1.0	Tr.	
		grained feldspar porphroblasts.	9534	29.0	30.0	1.0	Tr.	
		Good segregation of mafic and felsic material, occasional patches of hematite	9535	37.0	38.0	1.0	Tr.	
		stain. Mafic minerals are biotite, phlogopite and chlorite. Some phlogopite	9536	39.6	40.6	1.0	Tr.	
		is hematite stained and has metallic luster.	9537	70.5	71.5	1.0	Tr.	
75.0	96.0	Quartz, feldspar + biotite + phlogopite pegmatite, coarse grained, light grey						
		to pink color. Some sections of remnant gneiss are present. Weakly foliated						
		at 45° - 50° to the line of hole. Fracture systems are at 45° and subparall-	9538	75.0	76.0	1.0	Nil	
		el to the line of hole.	9539	84.0	86.0	2.0	.016	Tr.
		77.0 - 79.0 Strongly altered rock composed of quartz, epidote (?), Talc or						
		serpentine and altered feldspars, probably sheared.	9540	87.0	88.0	1.0	Nil	
96.0	152.5	Granitic gneiss - same as 21.5 - 75.0. Some pegmatite bands, some graphic	9541	89.0	91.0	2.0	Tr.	
		granite. Are traces of chalcopyrite along foliation planes.	9542	97.0	98.0	1.0	Tr.	

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-68-4 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	% HoS_2	CORE ASSAYS Au oz.			
			9543	104.5	105.5	1.0	-	Tr.				
		110.0 - 112.8 Brecciated pegmatite	9544	107.0	108.0	1.0	-	Tr.	Nil			
		120 - 123 Medium grained graphic granite with some vein quartz.	9545	110.0	122.8	2.8	-	Tr.				
			9546	124.0	125.0	1.0	-	Nil				
		148.0 - 150.0 Pegmatite										
152.5	205.0	Brecciated pegmatite, coarse grained, pink, composed of quartz, feldspar	9549	158.0	160.0	2.0	Nil					
		and biotite completely or partially altered to phlogopite and chlorite. Rock is weakly										
		foliated about 45° to the line of hole.	9550	160.0	161.5	1.5	Nil					
			9551	191.0	192.5	1.5	Tr.					
			9552	204.0	205.0	1.0	Tr.					
		170 - 173 Granitic gneiss										
		181 - 185 Granitic gneiss										
		185 - 186.5 Fault Gouge - soft light green color-composed of quartz, talc or										
		serpentine and muscovite. Direction of shearing 45° to the line of hole.										
205.0	229.0	Augen Gneiss - light grey, almost white in color with some hematite stained										
		patches. Has been sheared and quartz is strung out along foliation planes										
		about 45° to the line of hole. There is no distrinct segregation of mafic and										
		felsic material. There are traces of pyrrhotite, pyrite and graphite on some										

EXPLORATION DEPARTMENT

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-66-4 Sheet No. 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U3O8	Au oz.	Ag oz.			
		foliation planes.										
229	245.5	Biotite rich gneiss - almost massive - some hematite stained patches and										
		fractures ∠ 30° to the line of hole.					Tr	Nil	Nil			
245	300	Brecciated Pegmatite, coarse grained, light grey to pink color, weakly fol-	9553	294.5	296.5	2.0	Traces of pyrite, pyrrhotite					
		iated - Some hematite stain. Traces of pyrite or pyrrhotite on foliation										
		planes. Some of feldspars are altered to talc or serpentine. Narrow bands										
		of gneissic material are present.										
300	356.5	Brecciated granite gneiss with numberous pegmatite sections. Medium to										
		coarse grained, pink color weakly foliated with poorly segregated mafic and										
		felsic material .										
356.5	435.0	Grey granite gneiss - similar to above except for color-Some feldspars are										
		altered to greenish mineral completely devoid of hematite stain.										
435.0	455.0	Biotite rich gneiss - similar to 229 - 245.5 with slightly better foliation and										
		possibly slightlysheared.										
455	460	Grey granite gneiss as 356 - 435										
	460	End of hole										

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake, Alberta.
Claim No.:
Location of Core: Cherry Lake.

Surveys

At	Dip	Bearing
Surface	-45°	285°

Hole No. NSR 68-5 Sheet No. 1
Length of Hole 163 ft.
Date Started March 23 Completed March 24
Core Logged by Gordon Bird.
Date March 24, 1968
Elevation Surface Datum

Co-ordinates of Collar
North 19 + 80
East 1 + 50

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS % 43-08
0	6	Casing					
0	8	Biotite gneiss dark grey, medium grained, poorly foliated, occassional veinlets					
		of quartz and pegmatite.					
8	21	Pegmatite with remnants of gneissic material-all sheared & partially brecciated.					
		Foliation about 45° to core axis. Joints about 30° & subparrallel to core axis.					
		1890-19.0 Fault zone, strongly brecciated and altered green color, soft, all					
		mafic minerals altered to chlorite or talc.					
21	105	Granite gneiss, pink, medium grained to coarse grained with some pegnitte	9554	22.0	27.0	5.0	Nil Several small radioactive
		stringers-principle mafic mineral is biotite now altered to chlorite & phlogopite.					anomalies in brecciated gneiss and
		Most of colour comes from hematite stain. Rock is brecciated in places.					pegmatite-only slightly above back-ground
		42-43 Ground Core	9555	72.0	73.5	1.5	Tr Slightly above background
		49.5-88.0 Bsecciated pegmatite composed of feldspar and chloritized biotite,					radioactivity in hematite stained
		with very little quartz.					granite gneiss
		58.0-59.0 - Fault zone same as 18.0-19.0					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Option
Location Cherry Lake, Alberta
Claim No.
Location of Core cherry Lake

Surveys

At	Dip	Bearing
Surface	-45°	285°

Hole No. NSR 68-5 Sheet No. 2
Length of Hole 163 ft.
Date Started March 23 Completed March 24
Core Logged by Gordon Bird
Date March 24, 1968
Elevation Surface Datum

Co-ordinates of Collar

North 19 + 80
East 1 + 50

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
105	111	Brecciated Pegmatite, pink, coarse grained, comprised of quartz, feldspar and biotite.					
111	114	Biotite gneiss					
114	124	Pegmatite-light grey to pink color, comprised of quartz feldspar & biotite-are some narrow sections of graphic granite					
124	138	Biotite gneiss-light grey to dark grey color, medium grained, weakly foliated with very little segregation of mafic & felsic material-foliation about 20° to core axis fractures 30° and subparrallel					
138	150.6	Granite gneiss, pink - as 21-105					
150.6	158.0	Biotite gneiss-sheared and well foliated, fine grained dark grey - does not resemble other biotite gneiss.					
158	163	Granite gneiss, pink as 21-105					
	163	End of Hole					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake, Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys

At	Dip	Bearing
Surface	-45°	105°

Hole No.: NSR-68-6 Sheet No.: 1
Length of Hole: 196 feet
Date Started: March 28th, 1968 Completed: March 29th
Core Logged by: Gordon Bird
Date: March 30th, 1968
Elevation: Surface Datum:

Co-ordinates of Collar
North: 2 + 63 South
East: 11 + 41 East

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
0	11	Casing					
6	125	Brecciated gneiss, extremely brecciated and hematite stained, dark red	9556	12.0	13.5	1.5	Tr.
		color with some green section where epidote and/or chlorite are abundant.	9557	66.7	68.7	2.0	Tr.
		Most of rock is ~~fine~~ fine to medium grained but some coarse grained feldspar por-					
		phroblasts are present. Foliation is about 45° to the end of hole. There is					
		some compositioned banding.					
		51.0 - 52.5 Green rock composed of quartz, chlorite-probably after amphibole,					
		and feldspar altered to epidote - nearly massive.					
		72.0 - 74.5 - Sheared Basic rock - may have been a basic dyke. Now extrem-					
		ely altered and foliated - genesis uncertain.					
		95 - 105 Brecciated pegmatite - composed of feldspar, muscovite or phlogopite,					
		quartz. Coarse grained and hematite stained.					
125	142.5	Brecciated gneiss as before but with less hematite stain.					
		124.5 - 126.5 - Possibly a sheared basic dyke as 72.0 - 74.5.					
		142.5 - 145.9 - Same as 124.5 - 126.5.					
145.5	159.0	Brecciated pegmatite - pink, coarse grained. Some dark red patches of hem-					
		atite stain.					
159.0	164.5	Brecciated gneiss - dark grey to black with strongly hematite stained felds-					

EXPLORATION DEPARTMENT

Property New Senator Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-68-6 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		gars - fine to medium grained with some coarse grained feldspar porphroblasts					
		Some vein quartz.					
164.5	167.5	Brecciated pegmatite - 165.5 - Some coarse grained pyrite cubes in foliated.					
		Epidote or zoisite fills open fractures.					
167.5	171.0	Biotite gneiss - fine grained, poorly foliated, dark grey.					
171.0	184.0	Granite gneiss, pink, medium grained, poorly foliated. Some large feldspar					
		porphoblasts in foliation. Foliation about 45° to the line of hole - one major					
		set of fractures is present at about 15° to the line of hole.					
184	195	Biotite gneiss - dark grey , medium to fine grained, well foliated, some bre-					
		cciated spots. Ptygmatic banded pegmatite veinlet, present between 188-189.					
		Sub parallel to the line of hole.					
		189.0 - 190.5 Brecciated pegmatite with xenoliths of gneissic material. Some					
		small pyrite cubes are present in foliation.					
195	196	Pink pegmatite.					
	196	End of Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Option
Location Twin Lakes Area, N.W. Alberta
Claim No.
Location of Core

Surveys

At	Dip	Bearing
Collar	-44°	045° (N 45° E)
250'	-46°	
500'	-50°	

"AX" Core

Hole No. 68-7 Sheet No.
Length of Hole 526 feet
Date Started 30 Aug 1968 Completed 3 Sep 1968
Core Logged by G. N. Woollett
Date 3 Sep 1968
Elevation Surface Datum

Co-ordinates of Collar

North 0 + 80 N
~~East~~ 8 + 20 W

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	6	Casing					
6	39	Granite-Pink to brick red, dk green, med grained. Locally cataclastic. 20% qtz. 60-70% feldspars, 10-15% hornblende &/or chlorite. Local patches of coarse grained pink potash felds which has been broken and crushed. Local foliation 50° @ 8', 60° @ 21', contact with following is gradational.					
39	50.5	Cataclastic/Crush Zone-Black, pink, coarse grained broken K-feldspar up to 2" Ø in groundmass of chlorite. Contact zone of preceding granite.					
50.5	154	Migmatite-med to dk grny-gry, pink minor wht & brk red. Foliated, many bands of med to coarse grained granitic material, often cataclastic in textures interbanded with a fine grained qtz.-felds-chlorite schist, and local bands milk wht qtz (79.75-80.5). Brecciated, healed by chlorite & a dk brown qtz. VerY minor pyrite. Angle of foliation to core - 50° @ 65', 45° @ 86', 60° @ 104', 25° @ 133', 55° @ 144',					
154	181.5	Cataclastic Gneiss-lt gry, wht, dk grn. Much as (50.5-154) but no schist sections and much milky wht to lt gry, qtz. Locally broken & crushed (164.5-4")					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-7 Sheet No.
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		lt gry, qtz, minor chlorite slightly rad. act. contacts S					
		(179.5-181.5) Brecciated and healed with chlorite.					
181.5		Fault - 1" plastic chloritic gouge @ 45° to core.					
181.5	184	Chlorite Alt Zone-Dk grn, minor wht. strong chlorite zone with local brecciated					
		fragments of white qtz, V. minor blebs of molyb. on slip planes. Not rad. act.					
184	239	Cataclastic & Ayben Gneiss with Minor Chlorite Schist-Med to dk gry, -grn,					
		Locally schistose. Bands of lt gry to wht cataclastic (~~qtz-felds~~) (pegmatite)					
		with local aybens. qtz & felds.					
		(190.5 - 191.5) Ground core					
		Angles of foliation to core					
		40° @ 88', 15° @ 190', 20° @ 195', 35° @ 209', 40° @ 202',					
		(220-225) (254-255) (275-276) wht cataclastic pegmatite qtz felds. Not rad act.					
		45° @ 217', 45° @ 260', 0-10° @ 266', 25° @ 277', 45° @ 321', 60° @ 348',					
239	526	Biotite Schist-Blk, dk green, local wht, schistose. 50-60% biotite &/or chlorite,					
		40-50% qtz felds as local coarse grained and cataclastic, bands. Local pyrite					
		on fractures					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 68-7 Sheet No.:
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(297-303) Much sericite & local lt. green patches & knots of feldspar?					
		(303-311) Fine to med grained lt. gry granite. Slightly foliation @ 65°. Local					
		pyrite on fractures. Latter contact sharp @ 40°.					
		(349-352) As (303-311) foliated @ 60°.					
		(381-457) Local lt grn, feldspar? In Knots & patches.					
		(487-495) As (381-457) Angle of foliation to core - 45° @ 394', 50° @ 443', 50° @ 521'.					
	526	End of Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location Twin Lakes Area, N.E. Alberta
Claim No.
Location of Core

Surveys		
At	Dip	Bearing
Collar	-45°	225° (S45°W)
250'	-51°30'	
500'	-49°30'	

"AX" Core

Hole No. 68-8 Sheet No. 1
Length of Hole 525 feet
Date Started 5 Sep 1968 Completed 9 Sep 1968
Core Logged by G. N. Woollett
Date 9 Sep 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 1+80 S
~~East~~ 5+20 W

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	2	Casing					
2	392	Crushed grainte gneiss - white, lt. gry, & minor biotite schist. Blk. med to coarse grained, gneissic. Numerous large broken but rounded fragments up to 1" dia of qtz & felds set in ground mass of a med grained granite gneiss. Local short lenghts (interbands) of a fine grained biotite, qtz schist. Overall composition - Feldspar 60-70%, qtz, 15-20%, biotite 10-20%, Angle of foliation to core - 40° @ 3', 35° @ 46', 35° @ 112', 20° @ 148', 40° @ 181', 30° @ 216'. (33-49) Minor lt. grn. altered feldspars. (33-34) Ground core (55-109) Flesh pink, coarse grained, crushed, qtz, felds pegmatite, local short sections of biotite schist. (75) Fracture @ 45° flanked by 1/2"' chlorite alteration (82.5-90) 10% lt. apple green clay material. (Alteration of feldspar). Up to 60%@83.5'. (100-106.5) As (82.5-90) (133.5-143) flesh pink, crmy, qtz felds pegmatite minor local coarse biotite. First contact sharp @ 30°, latter @ 45°.					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-8 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(143-154) Predominantly biotite schist.					
		(184. 5-185. 5) Molybdenite smeared on slip planes.					
		(191-200) Mottled appearance, large rounded fragments of qtz. & felds generally					
		altered to a lt. olive grn color.					
		(200-208) Med grained, pink, gneissic granite.					
		(208-213) Coarse rounded frags of pegmatite heald by 20% biotite. Crush zone.					
		(220-229) Slightly crushed flesh pink & wht pegmatite. Local green altered					
		feldspar. Contacts @ 35°.					
		(229-240) Crmy, minor dk. grn, finely foliated grainite. Foliation is caused by					
		fine laminated (mylonitic) qtz & minor chlorite.					
		(231) 4" sheared lt. grn, altered @ 30°.					
		(240) minor molybdenite on slip.					
		(240-242) Lt. grn, altered feldspar.					
		(240-274. 5) Coarsely crushed throughout					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(274.5-276.5) (277-284) As (229-240)					
		(310.5-311.5) Ground core					
		(284-343.5) Predominantly biotite schist.					
		(334-335) Ground core					
		(343.5-376) Coarsely crushed white pegmatite granits gneiss.					
		(376-386) Pink, med grained gneissic granite. Contacts sharp @ 30°					
		Angle of foliation, tocore - 30° @ 230', 010° @ 240', 40° @252', 40° @290', 40° @ 353'.					
		35° @ 383'.					
392	453	Pegmatite-crmy pink, flesh pink, crushed coarse grained, qtz, felds pegmatite					
		with 10-15% biotite/chlorite.					
		(412-416) As (376-386).					
		(439-448) 10-15% Red feldspar					
		(448-453) 20-30% biotite. Gradational with following.					
453	525	Gneissic Granite - flesh pink, wht, dk. green. Med grained, slightly crushed					
		70% feldspar, 15 % qtz, 15% chlorite.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: Sheet No. 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(484-485) Ground core					
		(504. 5-505) Ground core					
		(520 -522) Pegmatite, 1-2% mafics.					
		Angle of foliation to core - 35° @461', 50° @ 494'. 45° @ 516'.					
525		End of Hole					
		No Radioactivity in Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Twin Lakes Area
Claim No.:
Location of Core: At Cherry Lake

Surveys

At	Dip	Bearing
0	-44°	090° (Due East)

Hole No. 68-9 Sheet No. 1
Length of Hole 325'
Date Started September 14/68 Completed Sept. 17/68
Core Logged by G. N. Wollett
Date 17 Sep 1968
Elevation Surface Datum
Co-ordinates of Collar
North 18+47 S
~~East~~ 1+00 W

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	ThO_2 %	CORE ASSAYS
0	3	Casing							
3	61	Cataclastic Gneiss - Wht, pink, blk, lt gry, coarse grained, crushed. Quartz feldspar 60%, biotite/chlorite 20%. Minor interbands or fine grained biotite schist, locally tightly folded. Contact with following is gradational. Angle of foliation to core - 65° @ 6', 45° @ 25', 60° @ 51'.	20% 964	85.5	86.5	1.0	0.105	Tr	
61	129	Migmatite - Blk, lt gry, locally grnish. Fine grained, foliated, Biotite up to 80%, qtz & felds 20 - 30%. Local Sections grnish altered felds or possibly diopside? Angle of Foliation to core - 45° @ 71', 50° @ 82', 0 - 20° from 97' - 101', 75° @ 129', (66-67) - lt grn altered Diopside? (81.5 - 88) As (3 - 61) (110 - 122) Minor lt Grn alt diopside or felds?							
129	151.5	Qtz.-Felds Biotite Gneiss-Much As (3-61) but less crushed and no pink colour. Local Minor pyrite. Angle or foliation to core is 65° throughout.							
151.3	153	Fault - Apple grn, minor pink and blk, soft serpentined with minor qtz. veining							

EXPLORATION DEPARTMENT

Property
Location
Claim No.
Location of Core

Surveys At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-9 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	ThO_2 %	CORE ASSAYS
		and local pink felds fragments. Contact sharp @ 45° .							
153	181	Qtz-Felds-Biotite Gneiss - As (129-151.5) crushed and healed with chlorite							
		Angle of foliation to core - 60° .							
181	325	Biotite Gneiss - Much as (61-129). However becomes more gneissic than							
		schistose. Biotite 40 - 50%, qtz and felds 50 - 60%. Angle of foliation to core -	9619	151.5	154.0	2.5	0.03	Tr	
		65° @ 199', 70° @ 237' .	9620	155.0	159.0	4.0	0.05	0.02	
		(105-186) Pegmatite with minor diopside?	9615	162.5	167.0	4.5	0.08	Tr	
		(210-217.5) Pegmatite minor coarse biotite	9616	214.0	216.0	2.0	0.07	Nil	
		(241-247) " " " "	9617	219.5	222.5	3.0	0.02	Nil	
		(252-257) " " " "	9618	244.0	245.0	1.0	0.04	Nil	
		(258) 3" CG Biotite, minor pyrite, slightly rad act.							
		(260) 6" Coarsely brecciated, lt grn, alt feds?							
		(272-273.5) Pegmatite, minor lt grn diopside? Minor pyrite.	9621	272.0	273.0	1.0	0.01	Tr	
		(274.5-279) Pegmatite, minor CG biotite, slightly rad act.							

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property.....
Location.....
Claim No.....
Location of Core.....

Surveys		
At	Dip	Bearing

Hole No. 68-9 Sheet No. 3
Length of Hole.....
Date Started..... Completed.....
Core Logged by.....
Date.....
Elevation..... Datum.....
Co-ordinates of Collar
North.....
East.....

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(285-289) (289.5-293) coarsely crushed, fragments up to 1" dia.					
		(298-302) Pegmatite, slightly rad act.					
		(302-303.5) Fine grained, lt gry granite foliation @ 70° .					
		(303.5-305) Pegmatite.					
		(308-309) "					
		(317.5-319) Coarsely crushed pegmatite, not rad ~~mx~~ act)					
		(323-325) " " " " " "					
		(325) 1" of biotite gneiss following (323-325)					
		Angle of foliation to core - 60° @ 182, 60° @ 199, 50° @ 216, 75° @ 307',					
		70° @ 269' /					
	325	~~325~~ End of Hole.					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta.
Location Twin Lakes Area (West of Cherry Lake)
Claim No.
Location of Core N. W. Bay, Cherry Lake.

Surveys		
At	Dip	Bearing
0'	-45°	N 45° W (True)
125'	-42°	

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-10 Sheet No. 1
Length of Hole 151.0'
Date Started September 18, 1968 Completed Sept. 19/68
Core Logged by W. H. Thorpe [redacted]
Date September 21, 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ South 19 + 20'
East 0 + 50'

From	To	Description of Core "Ax" Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0	8	Casing						
8	9.5	Pegmatite dyke - no radioactivity. Out contact ground up						
9.5	21.0	Biotite gneiss. Gneissosity at 70° to CA, some small blebs pegmatite along gneissosity						
21.0	22.7	Pegmatite dyke, irregular contacts.						
22.7	75.5	Quartz-feldspar-biotite gneiss with local small injections of pegmatite. Gneissosity						
		at 70° - 45° to CA. From 50.0' gneissosity parallel to CA in places						
		35.8 - 36.2 pegmatite dyke						
		42.0 - 43.5 mainly milky quartz - barren						
75.5	117.0	Pegmatite, sometimes with local concentrations of biotite. Minor epidote in fractures.						
		108.6 - 110.0 minor radioactivity	9638	108.6	110.0	1.4	0.12	
117.0	136.0	Quartz-feldspar-biotite gneiss. Variable, folded gneissosity						
136.0	140.5	Pegmatite with large broken feldspar phenocrysts up to 1/2"						
140.5	151.0	Quartz-feldspar-biotite gneiss						
		148.0 - 149.0 mainly barren, milky, quartz, -feldspar						
		151.0 - End of Hole						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator - Rouyn Option
Location: Peninsula, north end of Spider Lake
Claim No.:
Location of Core: Left at drill site

Surveys		
At	Dip	Bearing
Collar	-45°	S 22° E (True)
300'	-40°	

Hole No. 68 - 11 Sheet No. 1
Length of Hole 303.0'
Date Started 27 September, 1968 Completed 28 Sept, 1968
Core Logged by W. H. Thorpe
Date 27, 28, September 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 4 + 90 S. W.
~~East~~ 1 + 00 N. W.

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0.0	3.0	Casing					
3.0	62.5	Granite gneiss-pink, banded, prominent biotite					
		3.0-20.0 gneissosity at 75° - 45° to CA, minor folding in places.					
		At 24.5', 2" crushed zone					
		20.0-42.0 more folded than preceding, gneissosity at 80° to parallel to CA.					
		Prominent biotite banding					
		42.0-62.5 less folded than preceding, gneissosity at 75° - 80° to CA.					
62.5	74.0	Quartz-feldspar-biotite gneiss					
		62.5-74.0 20% banded granite gneiss, gneissosity at 80° - 60° to CA.					
74.0	83.5	Impure quartzite with prominent bitite banding					
		74.0-83.5 gneissose banding at 80° - 55° to CA					
83.5	108.0	~~Aug~~ Augen gneiss					
		83.5-96.5 rounded feldspars up to 1/2", more massive than preceding core, up					
		to 30% grey quartz.					
		96.5-108.0 50% quartz, occasional trace molybdenite, pyrite, and chalcopyrite,					
		no radioactivity, 20% biotite, 30% feldspar with occasional hematite stain.					
		Crushed zone from 102.0 - 103.0					

EXPLORATION DEPARTMENT

Property: New Senator-Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 11 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8	CORE ASSAYS
108.0	148.0	Biotite gneiss-occasional garnet						
		108.0-136.5 considerably folded with occasional rounded feldspar up to 1/8".						
		Occasional trace pyrite						
		136.5-139.0 some augen feldspars and crushed zone from 137.0-139.0						
		139.0-148.0 prominent augen feldspars in places, 60% biotite.						
148.0	159.0	Augen gneiss - rounded feldspars	9640	149.0	154.0	5.0	0.01	
		148.0-149.0 60% grey quartz						
		149.0-154.0 very slightly radioactive, 65% grey quartz, 20% feldspar, 15% biotite						
		rough banding at 70° to CA, occasional trace pyrite						
		154.0-159.0 60% grey quartz.						
159.0	179.0	Biotite gneiss-60% biotite, 20% feldspar, 20% quartz						
		159.0-179.0 gneissosity at 65° to CA.						
179.0	213.0	Quartzite, impure, prominent biotite, occasional fine pyrite						
		179.0-188.0 gneissosity at 65° to CA, prominent biotite banding						
		188.0-195.5 sowhat brecciated parallel to gneissosity at 45° to CA.						

EXPLORATION DEPARTMENT

Property New Senator-Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-11 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		208.0-213.0 some hematization of feldspars					
213.0	218.0	Biotite gneiss, somewhat contorted					
218.0	303.0	Quartzite, impure, prominent biotite banding					
		218.0-232.0 gneissic banding at 45° - 65° to CA.					
		232.0-235.5 very minor biotite and more massive than preceding, somewhat crushed					
		235.5-244.0 brecciated zone with fractured feldspars up to 1/4" across, some					
		hematization, minor biotite. No radioactivity.					
		244.0-257.0 gneissosity at 65° to CA, occasional brecciation of feldspars along					
		257.0-273.0 occaisional minor augen feldspar along gneissosity at 65° -45° to CA. gneissosity.					
		273.0-293.0 occasional trace pyrite, chalcopyrite and molybdenite or graphite					
		293.0-294.3 breccia zone, mostley feldspar and quartz					
		294.3-303.0 gneissosity at 55° to CA, some brecciated fragments along gneissosity					
		303.0 End of Hole					

EXPLORATION DEPARTMENT

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McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location: Spider Lake - north peninsula
Claim No.:
Location of Core: Left at drill site

Surveys		
At	Dip	Bearing
Collar	-45°	S 47° E (true)
450'	-37°	

Hole No.: 68 - 12 Sheet No.: 1
Length of Hole: 466.0'
Date Started: September 29, 1968 Completed: Oct. 2, 1968
Core Logged by: W. H. Thorpe
Date: October 2, 1968
Elevation: Surface Datum:
Co-ordinates of Collar
North: 5 + 10 N. E.
East: 3 + 20 N. W.

From	To	Description of Core "Ax" Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0.0	2.0	Casing						
2.0	50.0	Granite gneiss-pink, prominent biotite, gneissosity at 65° -75° to CA, trace pyrite						
		46.0 - 50.0 crushed zone, slightly radioactive	9641	46.0	50.0	4.0	Tr.	
50.0	188.0	Quartz-feldspar-biotite gneiss, occasional hematized feldspars						
		50.0-55.0 slightly radioactive, some inclusions of granite gneiss. 4" quartz	9642	50.0	55.0	5.0	0.01	
		vein at 53.3						
		58.0 - 63.0 considerable crushing along gneissosity	9644	58.0	63.0	5.0	0.01	
		at 65° to C.A., slight radioactivity	9645	63.0	65.5	2.5	0.04	
		55.0 - 58.0 slight radioactivity, gneissosity at 65° -85° to C.A.	9643	55.0	58.0	3.0	0.04	
		63.0 - 84.5 decreasing radioactivity, gneissosity at 75° -65° to C.A.						
		84.5 - 85.7 mainly quartz-feldspar with hematized feldspar patches up to 1" across.						
		No radioactivity.						
		85.7 - 102.0 occasional minor hematization of feldspars. No radioactivity.						
		Gneissosity at 85° -45° to C.A.						
		102.0 - 103.5 50% lost core. No radioactivity in sludge or core						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 12 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		106.5 - 107.5 hematized feldspar-quartz section, no radioactivity some fine					
		with mauve colour					
		117.0 - 124.0 some hematized feldspar in quartz-rich sections. No radioactivity					
		Brecciation along gneissosity at 55° to C.A. Garnets in biotite rich sections.					
		124.0-128.0 augen gneiss texture, considerable movement along gneissosity at					
		65° - 50° to C.A. Some fine garnets.					
		128.0 - 131.0 predominantly quartz-feldspar, minor biotite, could be pegmatite					
		but conforms to gneissosity at 70° to C.A. and appears to be result of					
		metamorphism.					
		131.0 - 149.0 40% quartz-feldspar sections with some hematized feldspars					
		conforming to gneissosity at 70° - 80° to C.A.					
		149.0 - 170.0 biotite rich, occasional augen feldspar, gneissosity at 85° to CA.					
		170.0 - 188.0 40% quartz-feldspar rich sections with very minor biotite.					
		Good banding at 85° - 65° to C.A.					
188.0	225.0	Pegmatite-with 20% alternating quartz-feldspar-biotite gneiss band, slight					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta.
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

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DIAMOND DRILL LOG

Hole No. 68 - 12 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS % U_3O_8	oz. Au	oz. Cu	% MoS_2
		hematization of feldspar but no radioactivity.								
225.0	369.0	Quartzite, impure, prominent biotite, occasional actinolite, gneissic banding								
		at 65° to C.A., trace pyrite in places. No radioactivity.								
		235.5 - 236.5 90% quartz-feldspar section - may be pegmatite dyke along								
		gneissosity at 55° to C.A.								
		237.5- 239.0 75% quartz-feldspar section								
		256.0 - 256.5 and 261.5 - 262.3 quartz-feldspar sections								
		289.0 - 339.0 considerable folding.								
		At 341.5, 1/8" fracture with pyrrhotite containing trace chalcopyrite								
		360.0 - 365.0 25% irregular milky quartz veins,	9646	360.0	365.0	5.0	Nil	Nil	Tr	Tr
		2% pyrrhotite								
		365.0 - 369.0 considerably folded.								
369.0	466.0	Quartz-feldspar-biotite gneiss								
		369.0 - 402.0 considerably folded, occasional trace pyrite								

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta.
Location
Claim No.
Location of Core

At	Surveys Dip	Bearing

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DIAMOND DRILL LOG

Hole No. 68 - 12 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		402.0 - 407.0 15% irregular milky quartz, trace pyrrhotite in places					
		407.0 - 425.5 considerably folded					
		425.0 - 429.0 and 429.8 - 430.7 coarse-grained quartz-feldspar, probably dykes					
		429.0 - 440.0 prominent drag folding in places, 1-2% pyrrhotite, trace chalcopyrite					
		440.0 - 466.0 10% irregular quartz blebs, considerable folding, traces pyrrhotite, pyrite					
		466.0 - End of Hole.					

EXPLORATION DEPARTMENT

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McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location: Southwest end of Holmes Lake
Claim No.: -------
Location of Core: Left at drill site

Hole No.: 68-13 Sheet No.: 1
Length of Hole: 406.0
Date Started: Oct. 8th/68 Completed: Oct. 13th/68
Core Logged by: W. H. Thorpe [redacted]
Date: October 13th, 1968
Elevation: Surface Datum:

Co-ordinates of Collar
North: ----------
East: ----------

Surveys		
At	Dip	Bearing
Collar	-45°	S 45° E
400 Feet	-40°	(corrected for capillarity)

Sludge not recovered - 95% core recovery

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %
		"AX" Core (lost → water at 21.0 Feet)					
0.0	4.0	Casing					
4.0	179.0	Pegmatite - feldspars frequently hematized and crushed,	9647	4.0	6.0	2.0	Tr
		prominent biotite and occasional trace pyrite	9648	6.0	11.0	5.0	Tr
		4.0 - 6.0 slight radioactivity - up to 700 counts per second - trace pyrite	9649	11.0	14.0	3.0	0.01
		6.0 - 14.0 pronounced fracturing and crushing	9650	14.0	15.0	1.0	0.01
		At 14.3, 3 inch quartz vein with 700 counts per second and continues	9696	15.0	20.0	5.0	Tr
		crushed and hematized to 21.0 feet	9697	20.0	21.5	1.5	Tr
		20.0 - 21.5 prominent hematite stain	9698	21.5	25.0	3.5	Tr
		23.0 - 38.5 occasional hematite - stained feldspars	9699	25.0	30.0	5.0	Tr
		38.5 - 42.5 slightly radioactive - up to 700 counts per second, 15% biotite,	9700	30.0	35.0	5.0	0.01
		occasional trace pyrite	9301	35.0	38.5	3.5	0.01
		42.5 - 47.0 up to 1200 counts per second, prominent hematized feldspars,	9302	38.5	42.5	4.0	Tr
		considerable fracturing	9303	42.5	47.0	4.5	0.01
		47.0 - 52.0 hematized feldspars, a few cubes pyrite,	9304	47.0	52.0	5.0	0.02
		up to 1100 counts per second	9305	52.0	57.0	5.0	0.03
		52.0 - 57.0 slight gneissosity in places at 80° to Core Angle, considerable					
		fracturing - up to 1200 counts per second.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68-13 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	Au oz.	Ag oz.
		57.0 - 62.0 less hematized than preceding, more biotite (10%), traces pyrite, gneissosity at 80° - 45° to Core Angle- up to 1200 counts per second	9306	57.0	62.0	5.0	Tr	Nil	Nil
		62.0 - 67.0 slight gneissosity in places at 55° to Core Angle. Hematization less than in preceding sections, traces pyrite up to 900 counts per second	9307	62.0	67.0	5.0	0.01	-	-
		67.0 - 72.0 more biotite than preceding-up to 900 counts per second. Slight gneissosity in part at 45° to Core Angle, traces pyrite throughout.	9308	67.0	72.0	5.0	Tr	Nil	Nil
		72.0 - 77.0 biotite-rich banding at 45° to Core Angle from 72.0-74.0 - up to 900 counts per second	9309	72.0	77.0	5.0	Tr	-	-
		77.0 - 82.0 less hematized than preceding, prominent fracturing at various angles to Core Angle. Up to 1300 counts per second in biotite-rich section at 75.5 feet. Traces pyrite throughout.	9310	77.0	82.0	5.0	0.03	-	-
		82.0 - 87.0 no hematization, less quartz than preceding, greenish yellow stain in places - up to 800 counts per second .	9311	82.0	87.0	5.0	0.01	-	-
		87.0 - 91.0 some prominent biotite with gneissic banding in part at 80° to Core Angle. Up to 900 counts per second. No hematization.	9312	87.0	91.0	4.0	Tr		
		91.0 - 96.0 no hematization, trace pyrite throughout - up to 900 counts per second.	9313	91.0	96.0	5.0	0.01		
		96.0 - 101.0 no hematization, up to 1100 counts per second	9314	96.0	101.0	5.0	0.02		

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-13 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 % CORE ASSAYS
		101.0-106.0 fractured feldspars, no hematization, up to 900 counts per second	9315	101.0	106.0	5.0	0.02
		106.0-111.0 as preceding to 109.5 feet then minor hematization	9316	106.0	111.0	5.0	0.01
		111.0-116.0 minor hematization-up to 1000 counts per second	9317	111.0	116.0	5.0	0.01
		116.0-121.0 slight to moderate hematization-up to 1000 counts per second	9318	116.0	121.0	5.0	0.02
		121.0-126.0 moderate hematization-up to 950 counts per second	9319	121.0	126.0	5.0	Tr
		126.0-131.0 slight hematization-up to 1200 counts per second in biotitic sections. Biotite 5% overall.	9320	126.0	131.0	5.0	0.02
		131.0-136.0 slightly hematized, prominent milky quartz-up to 1100 counts per second.	9321	131.0	136.0	5.0	0.02
		136.0-142.0 moderate hematization-up to 800 counts per second	9322	136.0	142.0	6.0	0.02
		142.0-147.0 moderate hematization, biotite up to 10%. Up to 700 counts per second. At end of section, 10 inch greenish yellow oxide stain.	9323	142.0	147.0	5.0	0.02
		147.0-151.0 slightly hematized-up to 900 counts per second	9324	147.0	151.0	4.0	Tr
		151.0-156.0 slightly hematized-up to 1000 counts per second	9325	151.0	156.0	5.0	0.02
		156.0-161.0 slight to moderate hematization-up to 900 counts per second	9326	156.0	161.0	5.0	0.02
		161.0-166.0 1% pyrite throughout, no Radio Activity.	9327	161.0	166.0	5.0	0.02
		166.0-179.0 slightly hematized, no Radio Activity.					

EXPLORATION DEPARTMENT

Property New Senator Ronyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 6313 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
179.0	249.0	Biotite gneiss - no Radio Activity. 179.0-186.0 40% pegmatite injections.						
		186.0-186.4 milky quartz vein at 55° to Core Angle. 186.4-195.0 gneisso-						
		sity at 45° to Core Angle. 195.0-196.2 barren, irregular, milky quartz vein.						
		196.2-220.0 5-10% pegmatite injections, gneissosity at 35° -50° to Core Angle.						
		220.0-239.0 gneissosity at 60° to Core Angle. Two - 2 inch, 6 inch irregu-						
		lar milky quartz veins with traces pyrite, minor pegmatite injections.						
		239.0-249.0 10% pegmatite injections.						
249.0	257.0	Pegmatite-pink, hematized feldspars, no Radio Activity. In contact at 80° to						
		Core Angle.						
257.0	270.5	Biotite gneiss-10% pegmatite injections.						
270.5	319.8	Pegmatite-minor biotite gneiss in places - no Radio Activity. 270.5-273.5						
		brecciated, hematized feldspar phenocrysts, contacts at 65° to Core Angle.						
		No Radio Activity. 273.5-281.0 mixed biotite gneiss and pegmatite.						
		281.0-319.8 pegmatite, no Radio Activity.						
319.8		Biotite gneiss. 319.8-327.5 gneissosity at 60° -45° to Core Angle. 6 inches						
		pegmatite around 323.3 feet. 327.5-328.0 fault zone-broken, Vuggy Core-						
		No Radio Activity. 328.0-338.0 gneissosity at 60° to Core Angle, but con-						
		torted in places.						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68-13 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		338.0-359.0 probable faulting at 339.0 and 355.0-356.0						
		359.0-369.0 gneissosity at 65° to Core Angle, in some places contorted.						
		369.0-375.0 minor serpentinization in places						
		375.0-396.5 traces pyrite throughout, gneissosity generally at 35° to Core Angle, but some crumpling in places.						
404.2	405.7	Pegmatite - No Radio Activity.						
405.7	406.0	Biotite gneiss.						
		406.0 - End of Hole.						

EXPLORATION DEPARTMENT

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McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location: Small Lake, 1 1/4 mile N. W. of Cherry Lake
Claim No.:
Location of Core: Left at drill site

Surveys		
At	Dip	Bearing
Collar	-45°	0 90° (due East)
425'	-42°	(corrected for capillarity)

Hole No.: 68 - 14 Sheet No.: 1
Length of Hole: 425'
Date Started: 21 October 1968 Completed: 24 Oct. 1968
Core Logged by: W. H. Thorpe [redacted]
Date: 24 October 1968
Elevation: Surface Datum:
Co-ordinates of Collar
North: 2 + 63 } Small Lake Grid
East: 0 + 05 }

" Ax " Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8 CORE ASSAYS
0.0	6.0	Casing					
6.0	132.0	Quartz-feldspar-biotite gneiss with minor pegmatite intrusions, traces pyrite					
		throughout, occasional trace chalcopyrite, molybdenite, pyrrhotite.					
		6.0 - 9.0 Two - 6, 10 irregular pegmatite dykes, general gneissosity at 65° to	9328	6.0	9.0	3.0	Tr
		C.A., slight radioactivity.					
		9.0 - 14.0 Two - 18", 10" brecciated pegmatite dykes at 60° to CA, slight	9329	9.0	14.0	5.0	0.02
		radioactivity					
		14.0 - 19.5 Two - 18", 6" pegmatite dykes at 65° to C.A.	9330	14.0	19.5	5.5	Tr
		Includes 18" lost core, slight radioactivity.					
		19.5 - 21.0 - 12" brecciated pegmatite dyke, contacts lost, slight radioacitvity	9331	19.5	21.0	1.5	0.01
		21.0 - 25.0 - 40% pegmatite intrusions, no radioactivity, gneissosity at 55°					
		- 45° to C.A.					
		25.0 - 30.0 augen texture, slight to moderate radioactivity	9332	25.0	30.0	5.0	Tr
		30.0 - 35.0 as preceding, gneissosity at 45° to C.A.	9333	30.0	35.0	5.0	0.03
		35.0 - 40.0 25% pegmatite injections	9334	35.0	40.0	5.0	0.03
		40.0 - 44.0 last 12" is brecciated pegmatite	9335	40.0	44.0	4.0	0.02

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-14 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
		44.0 - 49.0 gneissosity at 55° to C.A., brecciated	9336	44.0	49.0	5.0	0.02	
		49.0 - 52.0 slight radioactivity	9337	49.0	52.0	3.0	Tr	
		52.0 - 57.0 slight radioactivity	9338	52.0	57.0	5.0	Tr	
		57.0 - 58.0 Pegmatite dyke, moderate radioactivity. Contact at 70° to C.A.	9339	57.0	58.0	1.0	0.07	
		58.0 - 62.0 low radioactivity, greenish yellow alteration on feldspars	9340	58.0	62.0	4.0	0.02	
		62.0 - 67.0 low radioactivity, greenish yellow alteration on feldspars, 10 %	9341	62.0	67.0	5.0	Tr	
		pegmatite inclusions						
		67.0 - 71.0 10" pegmatite dyke at 55° to CA, some hematization traces pyrite	9342	67.0	71.0	4.0	Tr	
		at contacts						
		71.0 - 75.0 18" pegmatite, irregular contacts, crushed and broken feldspar	9343	71.0	75.0	4.0	0.04	
		phenocrysts up to 1"						
		75.0 - 80.0 gneissosity at 45° to C.A., slight, spotty radioactivity contact at	9344	75.0	80.0	5.0	0.01	
		79.0 with following rock type						
		79.0 - 86.0 porphyritic gneiss, some hematization. In at 30°, out at 45° to						
		C.A., no radioactivity.						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 14 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
		86.0 - 103.0 porphyritic in places, no radioactivity, slight hematization in places						
		103.0 - 116.0 very minor pegmatite injections, less than 10%, local hematiz -						
		ation, no radioactivity.						
		116.0 - 124.0 pegmatite, no radioactivity, end contact at 55° to C.A.						
		124.0 - 132.0 gneissosity at 55° to C.A.						
132.0	161.5	Pegmatite						
		132.0 - 154.0 some hematization, no radioactivity, minor quartz-feldspar -						
		biotite gneiss in places (less than 10%) at 45° - 20° to C.A.						
		154.0 - 158.0 slight radioactivity	9345	154.0	158.0	4.0	Tr	
		158.0 - 161.5 brecciated, slight to moderate radioactivity, gneissosity at 60°	9346	158.0	161.5	3.5	0.06	
		to C.A.						
161.5	270.5	Quartz-feldspar-biotite gneiss, traces pyrite throughout						
		161.5 - 163.3 moderate radioactivity, traces pyrite, molybdenite	9347	161.5	163.3	1.8	0.04	0.047/15.0'
		163.3 - 168.3 slight to moderate radioactivity, brecciated, gneissosity at 45°	9348	163.3	168.3	5.0	0.03	
		to C.A., 20% pegmatite						
		168.3 - 173.0 brecciated, 25% pegmatite, slight radioactivity	9349	168.3	173.0	4.7	0.06	

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 14 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
		173.0 - 178.0 slight radioactivity, gneissosity at 45° - 55° to C.A.	9350	173.0	178.0	5.0	Tr	
		178.0 - 185.5 gneissosity pronounced at 50° to C.A., 5% pegmatite. Includes 30" lost core, slight radioactivity	9838	178.0	185.5	7.5	Tr	
		185.5 - 190.5 much folding and brecciation, gneissosity at 45° - 65° to C.A., slight radioactivity	9839	185.5	190.5	5.0	Tr	
		190.5 - 195.5 20% pegmatite, considerable hematization, slight radioactivity	9840	190.5	195.5	5.0	Tr	
		195.5 - 199.5 mainly pegmatite, pronounced brecciation, hematization, large broken feldspar patches up to 1", no radioactivity						
		199.5 - 201.5 hematized, less brecciated, gneissosity at 60° to C.A. no radioactivity						
		201.5 - 203.0 pronounced hematization, slight radioactivity	9841	201.5	203.0	1.5	0.03	
		203.0 - 218.5 variable gneissosity with cross-fracturing at right angles, no radioactivity, 5 - 10% pegmatite. At 218.5, 5" barren, irregular milky quartz						
		218.5 - 227.0 gneissosity at 45° - 55° to C.A.						
		227.0 - 235.0 mainly pegmatite, brecciated, no radioactivity						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option. N. E. Alberta
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 14 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS Cu %	Ni %	Au oz.	Ag oz.	U_3O_8 %
		235.0 - 244.5 10% pegmatite, both greenish-yellow and white angular to									
		rounded feldspar phenocrysts up to 1/2", scarcely detectable radioactivity									
		244.5 - 249.5 gneissosity at 45° - 60° to C.A., brecciation along gneissosity,									
		slight hematization, considerable granitization, very slight radioactivity									
		249.5 - 253.0 white and greenish-yellow feldspar phenocrysts up to 1/2",									
		broken and elongated along gneissosity at 65° to C.A., very slight radioactivity									
		253.0 - 260.0 50% pegmatite injections, porphyritic in places, gneissosity at									
		65° to C.A., some brecciation of feldspar phenocrysts, some greenish-yellow									
		staining of feldspars, slight hematization, very slight radioactivity in places									
		260.0 - 270.5 porphyritic, feldspars up to 1", broken in places, gneissosity in									
		places at 65° to C.A.									
270.5	425.0	Quartz-feldspar-biotite porphyry. Feldspar phenocrysts up to 1 1/2", in places									
		resembling chichen feed lava, occasional hornblende crystals, 1% dissemin -	9846	276.0	281.0	5.0	0.01	Tr	Nil	Nil	Tr
		ated pyrite throughtout									
		328.0 - 345.0 slightly gneissose in places at 65° to C.A., some brecciation of									

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68 - 14 Sheet No. 6
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		feldspars which appear to be of two different ages, 1% pyrite throughout					
		345.0 - 403.0 much as preceding but quartz-feldspar section from 364.0 -					
		366.0 no radioactivity but trace molybdenite, chalcopyrite					
		403.0 - 404.5 scarcely detectable radioactivity					
		404.5 - 425.0 fairly massive, no radioactivity					
425.0		End of Hole					

EXPLORATION DEPARTMENT

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McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location: Small Lake, 1 1/4 miles N. W. of Cherry Lake
Claim No.:
Location of Core: Left at drill site

Surveys

At	Dip	Bearing
Collar	-46°	090° (due East)
280'	-45°	(corrected for capillarity)
480'	-41°	(" " ")

Hole No. 69-1 Sheet No. 1
Length of Hole 482.0 feet
Date Started January 11, 1969 Completed Jan 17, 1969
Core Logged by W. H. Thorpe [redacted]
Date January 17, 1969
Elevation Surface Datum
Co-ordinates of Collar
North 2 + 63 } Little Lake Grid
East 1 + 00 W }

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	5	CASING					
5.0	190.0	Pink biotite granite, traces pyrite throughout					
		5.0 - 19.0 Slightly gneissic at 45° to the line of hole, no appreciable radioactivity					
		19.0 - 40.0 fairly massive, slightly brecciated from 19.0-21.0, no appreciable radioactivity					
		40.0-61.0 fairly massive, occasionally porphyritic with feldspar phenocrysts up to 1/4"					
		61.0-74.5 massive, medium grained to coarse grained					
		74.5-79.5 30% quartz-feldspar-biotite gneiss, gneissosity at 70° -55° to the line of hole					
		79.5-99.0 coarser grained than preceding, occasional minor quartz-feldspar-biotite gneiss up to 10%, no radioactivity					
		99.0-118.0 becoming coarser grained and approaching pegmatite in character, no radioactivity					
		118.0-137.0 10% pegmatite in patches, feldspars are much fractured, no radioactivity					

EXPLORATION DEPARTMENT

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		137.0-156.5 feldspar phenocrysts up to 1" in diameter, occasional trace molybdenite, pyrite						
		156.5-177.0 up to 20% quartz-feldspar-biotite gneiss with gneissosity at 45° to line of hole, traces molybdenite, pyrite						
		177.0-190.0 partly pegmatitic, slight spotty radioactivity						
190.0	238.0	Quartz - Feldspar - Biotite Gneiss						
		190.0-194.0 gneissosity at 60° to the line of hole, slight radioactivity in local, very limited, spots						
		194.0-200.0 increase in radioactivity	9730	196.0	200.0	4.0	0.03	
		200.0-219.0 slight gneissosity at 50° -65° to line of hole, traces pyrite, local pegmatite inclusions						
		219.0-232.0 5% pegmatite intrusions, very faint radioactivity, up to 3% pyrite						
		232.0-234.0 slight radioactivity, mainly pegmatite with hematite stain on feldspars	9731	232.0	234.0	2.0	0.02	
		234.0-238.0 50% pegmatite						
238.0	298.5	Pegmatite						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 69-1 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	CORE ASSAYS MoS_2 %
		238.0-243.0 slightly radioactive, hematite stained feldspars	9732	238.0	243.0	5.0	0.01	
		243.0-251.0 still hematite stain but no radioactivity						
		251.0-256.5 some undigested quartz-feldspar-biotite gneiss, no radioactivity						
		256.5-276.0 varies from coarse grained to fine grained, some sections porphyritic, hematite stain on feldspars but no radioactivity						
		276.0-298.5 feldspars with slight hematite stain but generally nonradioactivity						
		4" of slight radioactivity around 288.5. Gneissosity at 60° to line of hole						
298.5	315.5	Quartz-Feldspar-Biotite Gneiss						
		298.5-300.0 no radioactivity						
		300.0-302.5 pegmatite dyke, slight radioactivity in places, possibly traces molybdenite	9733	300.0	302.5	2.5	0.04	0.06
		302.5-307.5 slight to moderate radioactivity, 50% pegmatite, possibly traces molybdenite, brecciated	9734	302.5	307.5	5.0	0.06	0.06
		307.5-315.5 mainly pegmatite. Quartz-rich section from 309.5 to 313.0 which could be metamorphosed quartzite						
315.5	337.0	Pegmatite						

EXPLORATION DEPARTMENT

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		315.5-337.0 20% quartz-feldspar-biotite gneiss, no radioactivity. Slight gneissosity at 55° to the line of hole						
337.0	358.0	Fault zone-mainly brecciated quartz-feldspar-biotite gneiss, 5% pegmatite						
		337.0-341.5 greenish tinged brecciated feldspars, no radioactivity						
		341.5-342.5 red mud, no radioactivity						
		342.5-358.0 occasional minor hematite stain on feldspars which are often fractured. Fracture with slight radioactivity around 357.5'						
358.0	482.0	Quartz-feldspar-biotite gneiss						
		358.0-384.5 gneissosity at 65° to the line of hole, 35% pegmatite injections, no radioactivity						
		399.0-405.0 occasional large feldspar phenocrysts up to 3/4", 20% pegmatite no radioactivity						
		405.0-424.0 biotite rich, quartz poor, traces pyrite, no radioactivity, gneissosity at 55° to the line of hole						
		424.0 - 465.0 occasionally porphyritic, sometimes gneissose at 60° to the line						

EXPLORATION DEPARTMENT

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 5
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		of hole, very slight radioactivity on local fractures						
		445.0-455.0 as before						
		455.0-460.0 slight radioactivity	9735	455.0	460.0	5.0	0.03	
		460.0-465.0 slight hematite stain on feldspars, very slight radioactivity.						
		Cneissosity at 55° to the line of hole						
		465.0-482.0 no radioactivity						
	482.0	End of Hole						
		Sludges						
		Sample No. / Footage / Width / U_3O_8 %						
		9736 — 280.0-290.0 — 10.0' — 0.01						
		9737 — 300.0-310.0 — 10.0' — 0.04						
		9738 — 320.0-330.0 — 10.0' — 0.04						

EXPLORATION DEPARTMENT

(6)

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, NE Alberta
Location: Approximately 1 1/4 miles NW of Cherry Lake
Claim No.:
Location of Core: North shore of Small Lake

Surveys		
At	Dip	Bearing
Collar	-45°	090° (due East)
450'	-39°	(corrected for capillarity)

Hole No.: 69 - 2 Sheet No.: 1
Length of Hole: 461.0 feet
Date Started: January 19, 1969 Completed: Jan 22, 1969
Core Logged by: W. H. Thorpe
Date: 20 - 22 January 1969
Elevation: Surface Datum:
Co-ordinates of Collar
North: Surface 3 + 33)Small Lake Grid
[redacted] 1 + 50 W)

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	CORE ASSAYS MoS_2 %
0.0	4.0	CASING						
4.0	59.5	Pink biotite granite, traces pyrite throughout						
		4.0 - 24.0 massive, no radioactivity						
		24.0 - 46.0 occasional minor fracture at 55° to the line of hole no radioactivity						
		46.0 47.0 lost core						
59.5	320.5	Quartz-feldspar-biotite gneiss, traces pyrite throughout						
		59.5 - 66.2 mainly quartz-biotite, considerably folded and contorted, no radioacvity						
		66.2 - 82.0 50% pegmatite, no radioactivity						
		82.0 - 84.5 biotite rich, slightly radioactive	9739	82.0	84.5	2.5	0.04	
		84.5 - 89.0 biotite rich sections but only very slight radioactivity in places						
		89.0 - 93.0 biotite rich, slight radioactivity	9740	89.0	93.0	4.0	0.03	
		93.0 - 106.0 30% pegmatite						
		106.0 - 125.0 some quartz-rich sections very slight radioactivity onlocal						
		fractures local hematite stain						
		125.0 - 149.0 20% pegmatite, very slight radioactivity in places, very minor						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-2 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	MoS_2 %	CORE ASSAYS
		local hematite stain, some quartz rich sections, no radioactivity							
		149/0 - 161.0 gneissosity at 50° to the line of hole							
		161.0 - 164.0 slight radioactivity, traces pyrite, molybdenite	9741	161.0	164.0	3.0	0.03		
		164.0 - 181.0 porphyritic in places, fairly massive							
		181.0 - 186.0 traces pyrite throughout							
		186.0 - 187.0 slight radioactivity	9742	186.0	187.0	1.0	0.03		
		187.0 - 195.0 biotite rich in places, gneissosity at 55° - 60° to core axis							
		195.0 - 196.0 slight radioactivity	9743	195.0	196.0	1.0	0.02		
		196.0 - 198.0 biotite rich, very slight radioactivity							
		198.0 - 206.5 biotite rich, gneissosity at 50° to core axis							
		206.5 - 207.5 slight radioactivity	9744	206.5	207.5	1.0	0.02		
		207.5 - 214.0 gneissosity at 45° to core axis							
		214.0 - 219.0 slightly brecciated, slight to moderate radioactivity	9745	214.0	219.0	5.0	0.02		
		219.0 - 221.0 gneissosity at 50° to core axis, no radioactivity							
		221.0 - 223.5 slight to moderate radioactivity	9746	221.0	223.5	2.5	0.04		
		223.5 - 237.5 gneissosity at 60° to core axis, very slight radioactivity in places							
		237.5 - 240.0 slight radioactivity in places	9747	237.5	240.0	2.5	0.01		

EXPLORATION DEPARTMENT

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-2 Sheet No. 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		240.0 - 252.0 biotite rich, gneissosity at 60° to core axis, no radioactivity						
		252.0 - 255.0 slight radioactivity	9748	252.0	255.0	3.0	0.02	
		255.0 - 257.5 slight to moderate radioactivity	9749	255.0	257.5	2.5	0.01	
		257.5 - 270.5 40% pegmatite, gneissosity at 60° to core axis, no radioactivity						
		270.5 - 272.5 pegmatite section, slight radioactivity	9750	270.5	272.5	2.0	0.02	
		272.5 - 287.5 mainly pegmatite						
		287.5 - 290.0 slight radioactivity, mainly pegmatite	11801	287.5	290.0	2.5	0.03	
		290.0 - 295.0 slight to moderate radioactivity, mainly pegmatite with biotite rich sections						
		295.0 - 298.5 slight radioactivity, gneissosity at 65° to core axis	11803	295.0	298.5	3.5	0.03	
		298.5 - 302.0 no radioactivity	11804	298.5	302.0	3.5	0.01	
		302.0 - 305.0 slight to moderate radioactivity	11805	302.0	305.0	3.0	0.01	
		305.0 - 314.0 very slight radioactivity in places						
		314.0 - 317.5 biotite rich, gneissosity at 65° to core axis, no radioactivity						
		317.5 - 320.5 5% pegmatite, slightly radioactive	11808	317.5	320.5	3.0	0.02	
320.5	369.0	Pegmatite						
		320.5 - 331.5 10% quartz-feldspar-biotite gneiss, no radioactivity						
		331.5 - 332.5 slightly radioactive	11809	331.5	332.5	1.0	0.04	

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. 69-2 Sheet No. 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		332.5 - 351.0 20% quartz - feldspar-biotite gneiss, some brecciation along gneissosity at 60° to core axis, very slight radioactivity in local spots					
		351.0 - 369.0 50% quartz-feldspar-biotite gneiss, very slight radioactivity in places, much brecciation along gneissosity at 65° to core.					
369.0	461.0	Quartz-feldspar-biotite gneiss					
		369.0 - 389.0 10% pegmatite, less brecciated than preceding, very slight radioactivity in places					
		389.0 - 409.0 15% pegmatite, slight brecciation along gneissosity at 55% - 65% to core axis, very slight radioactivity in places					
		409.0 - 429.0 gneissosity at 65° to core axis, considerable brecciation in places, very slight occasional radioactivity.					
		429.0 - 434.0 gneissosity at 60° to core axis, no radioactivity.					
		434.0 - 435.5 slight radioactivity	118.10	434.0	435.5	1.5	Tr
		435.5 - 448.0 slightly brecciated in places, very slight local radioactivity.					
		448.0 - 461.0 becoming porphyritic, no radioactivity					
461.0		End of hole.					

EXPLORATION DEPARTMENT

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-2 Sheet No. 5
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		SLUDGE SAMPLES					
		Sample No. Footage Width U_3O_8 %					
		11806 210.0-220.0 10.0 0.03					
		11807 220.0-230.0 10.0 0.02					
		11811 310.0-320.0 10.0 0.03					

EXPLORATION DEPARTMENT

(9)

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location: Small Lake, 1 1/4 miles N. W. of Cherry Lake
Claim No.:
Location of Core: north shore of Small Lake

Surveys

At	Dip	Bearing
Collar	-45°	090° (due East)

No dip tests taken-machine broke down at 342. 0 feet

Hole No.: 69-3 Sheet No.: 1
Length of Hole: 342.0 feet
Date Started: January 25, 1969 Completed: Jan 27, 1969
Core Logged by: W. H. Thorpe
Date: January 26-27 1969
Elevation: Datum:
Co-ordinates of Collar
North: 1 + 60
East: 0 + 00 (on Base Line) } Small Lake Grid

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0.0	8.0	CASING					
8.0	38.5	Pink biotite granite					
		8.0-24.0 pegmatitic in places, no radioactivity					
		24.0-38.5 includes minor amount of undigested quartz-feldspar-biotite gneiss no radioactivity					
38.5	51.5	Quartz-feldspar-biotite gneiss. In contact at 80° to the line of hole					
		38.5-44.0 5% pegmatite, gneissosity at 40° to the line of hole, no radioactivity					
		44.0 - 51.5 fairly massive, no radioactivity					
51.5	63.0	Pegmatite, no radioactivity					
63.0	342.0	Quartz-Feldspar-Biotite Gneiss					
		63.0-80.5 slight gneissosity at 50° to the line of hole, no radioactivity					
		80.5-97.5 considerable granitization, no radioactivity					
		97.5-98.5 very slight radioactivity, porphyritic texture and somewhat brecciated					
		98.5-100.0 feldspar phenocrysts up to 1/2", no radioactivity					
		100.6-124.0 gneissosity at 60° to the line of hole, very slight radioactivity in places, some brecciation along gneissosity					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. 69-3 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	CORE ASSAYS MoS_2 %
		124.0-129.0 slight to moderate radioactivity, 10% pegmatite, trace molybdenite or graphite	11812	124.0	129.0	5.0	0.02	tr
		129.0-134.0 slight to moderate radioactivity, gneissosity at 50° to the line of hole biotite rich, traces molybdenite or graphite	11813	129.0	134.0	5.0	0.03	0.02
		134.0-139.0 as before	11814	134.0	139.0	5.0	0.02	0.01
		139.0-142.5 slight radioactivity-in places only						
		142.5-162.5 gneissosity at 50° to the line of hole slight radioactivity from 151.5 to 152.5						
		162.0-182.0 5-10% pegmatite, slight radioactivity in places						
		182.0-206.0 slight gneissosity at 40° to the line of hole, 20% pegmatite, very slight radioactivity in places 206.0-213.0 slight gneissosity at 65° to the line of hole, nor radioactivity, 20% pegmatite						
		213.0-218.0 slight radioactivity, some brecciation, slight hematization of feldspars, trace molybdenite or graphite	11815	213.0	218.0	5.0	0.04	0.03
		218.0-242.5 biotite rich, no radioactivity, gneissosity at 55° to the line of hole						
		242.5-243.5 pegmatite, brecciated, moderate radioactivity	11816	242.5	243.5	1.0	0.05	

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys		
At	Dip	Bearing

Hole No.: 69-3 Sheet No.: 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar
North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
	259.0-278.5	gneissosity at 50° -70° to core axis, brecciated from 274.5 to 275.2 but no radioactivity, some hematisation					
		278.5-303.0 slight hematization in places, brecciated from 301.0 to 302.0 but very slight radioactivity. General gneissosity at 45° to the line of hole					
		303.0-312.0 pronounced hematite stain, some brecciation along gneissosity at 60° to the line of hole, no radioactivity					
		312.0-325.0 brecciated feldspar phenocrysts in places along gneissosity at 60° to the line of hole, very slight radioactivity over a few inches					
		325.0-342.0 5-10% pegmatite, more massive and less braciated than preceding gneissosity in places at 60° to core axis, no radioactivity. Tendency to porphyritic texture in places.					
342.0		End of Hole					

Sludge Sample

Sample No.	Footage	Width	U_3O_8 %
U1817	320.0-330.0	10.0	tr

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys

At	Dip	Bearing
Surface	-47°	East
250 feet	-45°	(corrected for capillarity)

Hole No. NSO-68-1 Sheet No. 1
Length of Hole 447 feet
Date Started February 23rd, 1968 Completed Feb. 27/68
Core Logged by Gordon Bird
Date February 24th - February 27th, 1968
Elevation Surface Datum

Co-ordinates of Collar

~~North~~ 1 + 00South
East on Base Line

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
0	7	Casing					
7.0	12.0	Grey biotite granite gneiss, medium grained foliated at about 45° to the line of hole. At 10.0 feet some feldspars become Fe - stained. Numberous fractures at any angle to line of hole are present. Some have epidote or pyrophylittic altertions on the fracture faces.					
12.0	17.0	Granite gneiss as above with strongly Fe-stained feldspars.	9501	13.5	14.5	1.0	0.005
17.0	38.0	Augen gneiss, medium grained, grey to pink color.	9502	16.0	17.0	1.0	Tr.
		Most color due to Fe-stain on feldspars. Rock has been brecciated in places	9503	36.2	43.0	1.0	Tr.
		and there are numberous fractures filled with epidote (?).					
		26.0 - 27.0 Breccia zone.					
38.0	54.6	Pink granite gneiss, foliated about 45° to the line of hole. Some feldspar augen. Rock is brecciated in places. Some zones strongly hematite stained.					
		45.0 - 47.0 - Strong hematite staining.					
		48.0 - 50.0 Strong hematite staining.					
54.6	56.6	Ground core.					
56.6	96.0	Brecciated granite gneiss. Some pegmatite material, also brecciated. Most of feldspar is hematite stained giving rock a dark red color.					
		67.0 - Pegmatite stringer.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSO-68-1 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS % U_3O_8
		75.0 Basic inclusion.					
		80.0 - 96.0 Strongly brecciated in places.					
96.0	117	Grey to pink granite gneiss with foliation about 45° to the line of hole. Numberous feldspar augen in finer grained ground mass. Some feldspars are hematite stained. There is a prominent set of fractures at 20° to the line of hole.					
117	119	Granite gneiss, strongly hematite stained and brecciated - Radio activity slightly above background.	9505	117	119.0	2.0	0.053
119	168	Grey to pink granite gneiss as before.					
		126.6 - 128.6 Ground core	9506	128.8	129.8	1.0	0.02
		135.0 - 135.5 - Pegmatite stringer					
		138.6 - 145.4 Pink granite gneiss, somewhat brecciated and hematite stained	9507	157.3	158.5	1.2	0.01
168.0	427	Brecciated granite gneiss. Strongly hematite stained. Some pegmatitic material also brecciated. Brecciation is about 45° to the line of hole, and probably parallel to the line of hole. Some hematite filled fractures occur at 20° to parallel to the line of hole. Some zones are stained green - probably by reduction of Fe +3 to Fe +2. Some epidote and chlorite occure in some	9508	168.2	169.2	1.0	Tr.
			9509	224.4	225.4	1.0	Nil.
		strongly brecciated zones. Some small, acicular ~~tremalitic~~ tremolitic or	9510	236.8	238.8	2.0	Tr.

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: N. S. O-68-1 Sheet No.: 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		actinolitic ~~actinalitic~~ amphibole is present.	9511	247.3	248.3	2.0	0.01
			9512	306.0	307.5	1.5	Nil
		345 - 347 Rock is 25-30% epidote, strongly brecciated and annealed with loss	9513	346.0	347.0	1.0	Tr
		of gneissdse texture.					
		400 - 412 - More siliceous facies of the breccia, up to 50% quartz. Strongly	9514	382.2	383.2	1.0	Tr.
		hematite stained.					
427	447	Augen gneiss, somewhat sheared but not brecciated good foliation at 45°					
		to the line of hole. Fractures at 15 - 45° to the line of hole. -one prominent					
		set is about 30° to the line of hole. Some of the lower angler fractures are					
		filled with hematite.					
		440 - 445 Strongly hematite stained zone. Epidote common in veinlets and					
		fractures. Some green amphiboles are present. Biotite is common in less					
		sheared sections. Feldspar porphroblasts occur up to 2 1/2 inches in					
		diameter. There are fractured and stained with hematite along fracture planes.					
		Minute amounts of vein quartz .					
447.0		End of hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core:

Surveys At	Dip	Bearing
Surface	-45°	135°

Hole No. NSR-68-2 Sheet No. 1
Length of Hole 163 feet
Date Started March 1st, 1968 Completed March 2nd
Core Logged by Gordon Bird
Date March 2nd, 1968
Elevation Surface Datum
Co-ordinates of Collar
North 0 + 00 North 68 ft. southeast along line
East bearing 135°

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0	3	Casing						
3	163	Granitic gneiss composed of quartz, K-Feldspar, plagioclose, and biotite, with accessory epidote. Some chlorite and calcite are present on fracture faces. Some small veinlets of quartz. There is a good foliation at about 80° to the line of hole. Three fracture systems are present; one at 45° to the line of hole, and two conjugate fracture each about 30° to the line of hole one extention fractures with little or no alteration on fracture face, other is shear fracture system with calcite, chlorite and slickensides present on or in the fracture. There are a few fractures subparallel to the line of hole. Chlorite is also common on the fracture faces at 45° to the line of hole. Very weak radio activity is associated with some of the 30° shear fractures. Rock color varies from grey to pink with most of the pink color being associated with hematite staining of the feldspars.	9517	36.0	37.5	1.5	Tr	[redacted]
			9516	46.0	47.5	1.5	Tr.	[redacted]
			9515	50.6	52.6	2.0	Tr.	[redacted]
			9518	89.0	90.0	1.0	Tr.	[redacted]
			9519	120.0	121.5	1.5	Tr.	[redacted]
			9520	100.0	101.0	1.0	Tr.	[redacted]
			9521	102.0	103.0	1.0	0.005	[redacted]
			9522	135.5	136.5	1.0	Tr.	[redacted]
			9523	143.2	144.2	1.0	0.006	[redacted]
		15.5 - 20.0 Dark grey biotite rich section.						
		31.0 - 76.0 Pink granite gneiss with higher proportion of red stained feldspar.						
		100.0 - 110.0 Dark grey biotite rich augen gneiss, possibly somewhat shear-						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSR-68-2 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		ed.					
		END OF HOLE					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake Alberta
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing
Surface	-45°	120°
250 ft.	-40°	(uncorrected)

Hole No. NSR-68-3 Sheet No. 1
Length of Hole 457 feet
Date Started March 5, 1968 Completed Mar. 8/68
Core Logged by Gordon Bird
Date March 8, 1968
Elevation Surface Datum
Co-ordinates of Collar
North 9 + 00 N
East 4 + 18 E

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
0	15	Casing					
15	29.5	Brecciated granitic gneiss, dark grey with considerable red hematite stain. Are some narrow bands of brecciated pegmatitic material. Brecciation and gneissosity trend about 30° to the line of hole. There are three major fracture angles - one set of conjugate fractures at 30° to the line of hole. Third type of fractures trend 15° to parallel to the line of hole. Grain size of rock varies from f.g. to c. g.					
29.5	44.0	Biotite granite gneiss, medium grained, dark grey with some hematite stain on feldspars. Some coarse grained pegmatitic material in brecciated stringers. 39.0 - 44.0 - Hematitic stain more intense ekon elsewhere.					
44.0	104.0	Brecciated biotite granite gneiss, fracturing and foliation as above. Amount of hematite stain and color is variable from dark grey to dark red.	9524	97.5	100.0	2.5	0.02
		There is some epidote on fracture faces. Some chlorite is present. There are lenses of coarse grained pegmetitic material.	9525	103.0	104.0	1.0	Tr
		60.0 - 65.0 Brecciated pegmatitic material, hematite stained.					
104	127	Sheared pegmatitic material with some remnant gneissic material-most of rock is coarse grained and hematite stained. Some large dark red feldspar porphyroblasts. in a finer grained groundmass. Epidote and chlorite are					

EXPLORATION DEPARTMENT

Property: New Senator Rowyn Option.
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-68-3 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		common and give rock a motted grey-green color. Some of the hematite stained feldspars has altered to a yellow-brown mineral.					
127	144	Sheared biotite granite-gneiss, dark grey color, medium grained with some coarse grained feldspar porphroblasts. Foliation is about 30° to the line of hole. Fractures occur at 30° and parallel to the line of hole. Rock has a slight reddish color from hematite stain.					
144	155	Sheared biotite granite gneiss as above but with less biotite and lighter color. Epidote is present on some fracture faces and in matrix giving rock a greenish color in places.					
155	195.5	Sheared biotite granite gneiss as above but with more intense hematite stain giving rock a reddish color.	9526	163.0	165.0	2.0	Tr.
		169.0 - 170.0 Vein quartz (or sheared quartzite) with some red coloration from hematite.					
		179.0 - 180.0 As above 169.0 - 170.0					
		182.0 - 184.0 " " " "					
		184.0 - 186.5 Brecciated quartz and pegmatitic material with some chlorite and epidote - coarse grained, light green color.					
195.5	197.0	Brecciated Pegmatite.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSR-68-3 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
197.0	200.5	Strongly altered gneiss with considerable epidote, vein quartz and talc. Feld-					
		spars are completely altered to light green mineral. Talc like mineral occurs					
		in small veinlets - Rock is light green color, fine grained.					
200.5	219.0	Brecciated pegmatite material strongly hematite stained. There is a remnant					
		foliation at 30° to the line of hole in some places.					
219.0	235.0	Biotite granite gneiss, sheared but not strongly brecciated. Hematite stain in-					
		creases toward 235.0 as does the intensity of shearing. 227 - 235 - As above					
		but with numberous epidote or talc filled fractures at angles from 30° to para-					
		llel to line of hole.					
235.0	261.0	Brecciated pegmatitic material mixed with remnants of gneiss. Foliation or	9527	257.0	259.0	2.0	Tr
		shearing at about 30° to the line of hole. 249.0 - 251.0 - Rock is green color-					
		ed from presence of large amoun ts epidote, chlorite and talc.					
		252 - 253 - Jasper vein - ie hematite stained quartz.					
		253 - 255 - Same as 249 - 251.					
261	281	Sheared brecciated granite gneiss - medium grained. Reddish grey colored					
		from hematite stain. Foliation about 30° to the line of hole. Fractures at 30°					
		and parallel to the line of hole. One quartz filled fracture can be traced con-					
		tinuously for 10 - 12 feet. Large feldspar porphroblasts are common and					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. N. S. R.-68-3 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
		several small patches of pegmatite material are present.					
281	288	Brecciated pegmatite material as described previously.					
288	298.5	Brecciated granite gneiss with some pegmatite material - Some hematite stain.					
298.5	311.0	Basic dyke - extremely hematite stained making it impossible to identify original rock type. Dyke is somewhat brecciated in places and strongly fractured. Hematite stain is post fracturing as it follows fractures and is most intense closest to fracture.	9528	303.0	305.0	2.0	Nil
			9528	306.8	308.3	1.5	Tr
311	320.0	Brecciated granitic gneiss with some pegmatitic material and large feldspar porphroblasts.					
320.0	324.6	Brecciated highly altered gneiss, light green in color from presence of considerable epidote, talc and chlorite. Some quartz veining.					
324.6	337.0	Brecciated pegmatite with some remnant gneiss. Very coarse grained, pink in color from presence of weak hematite stain on some feldspars.					
337	371	Augen gneiss, sheared but not brecciated - some large feldspar porphroblasts patches of pegmatite. Foliation about 30° to the line of hole. Compositional banding becomes more distinct with depth. From 250 feet onword there is good segregation of mofic and felsic material. Mafic material was largely biotite					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. N. S. R. -68-3 Sheet No. 5
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:
Co-ordinates of Collar
North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		but is now largely chlorite. Hematite staining on the feldspars is common but					
		is not intense. There are some narrow patches of pegmatite material .					
371	405	Brecciated pegmatite with narrow bands of gneiss coarse grained, composed					
		predominantly of quartz . , onicrocline-perthite and biotite now altered to					
		chlorite. Weak hematite staining.					
405	457	Biotite granite gneiss, sheared but not brecciated-medium to coarse grained,					
		dark grey in color. Foliation about 20° to the line of hole.					
		421.5 - 424 Pegmatite.					
		428 - 433 - ~~Chloronitic~~ Granitic gneiss, light grey to pink, medium grained poorly					
		foliated. This rock is similar to some of the pegmatite but is finer grained.					
	457	End of hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option
Location: Cherry Lake, Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys		
At	Dip	Bearing
Surface	-45°	285°
250 feet	-38°	uncorrected

"AX" Core

Hole No. NSR-68-4 Sheet No. 1
Length of Hole 460
Date Started March 18th Completed March 22nd
Core Logged by Gordon Bird
Date March 19th, 20th, 21st, 22nd
Elevation Surface Datum
Co-ordinates of Collar
North 20 + 78 North
East 1 + 75 East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS % U_3O_8	% MoS2
0	3	Casing						
3.0	21.5	Pegmatite, light grey to pink color, coarse grained weakly foliated at about						
		45° to the line of hole. Rock is composed of microcline perthite, biotite &	9530	3.0	5.0	2.0	Nil	
		muscovite or phlogopite but altered to chlorite, and quartz. Weak hematite	9531	9.0	11.0	2.0	Nil	
		stain present in places. Rock may have been weakly sheared.	9532	16.0	17.0	1.0	Nil	
21.5	75.0	Granitic gneiss, light to dark grey color, medium grained with some coarse	9533	24.0	25.0	1.0	Tr.	
		grained feldspar porphroblasts.	9534	29.0	30.0	1.0	Tr.	
		Good segregation of mofic and felsis material, occasional patches of hematite	9535	37.0	38.0	1.0	Tr.	
		stain. Mafic minerals are biotite, phlogopite and chlorite. Some phlogopite	9536	39.6	40.6	1.0	Tr.	
		is hematite stained and has metallic luster.	9537	70.5	71.5	1.0	Tr.	
75.0	96.0	Quartz, feldspar + biotite + phlogopite pegmatite, coarse grained, light grey						
		to pink color. Some sections of remnant gneiss are present. Weakly foliated						
		at 45° - 50° to the line of hole. Fracture systems are at 45° and suleparall-	9538	75.0	76.0	1.0	Nil	
		el to the line of hole.	9539	84.0	86.0	2.0	.016	Tr.
		77.0 - 79.0 Strongly altered rock composed of quartz, epidote (?), Talc or						
		perpentine and altered feldspars, probably sheared.	9540	87.0	88.0	1.0	Nil	
96.0	152.5	Granitic gneiss - same as 21.5 - 75.0. Some pegmatite bands, some graphic	9541	89.0	91.0	2.0	Tr.	
		granite. Are traces of chalcopyrite along foliation planes.	9542	97.0	98.0	1.0	Tr.	

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. NSR-68-4 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	% MoS_2	CORE ASSAYS Au oz.
			9543	104.5	105.5	1.0	-	Tr.	
		110.0 - 112.8 Brecciated pegmatite	9544	107.0	108.0	1.0	-	Tr.	Nil
		120 - 123 Medium grained graphic granite with some vein quartz.	9545	110.0	112.8	2.8	-	Tr.	
			9546	124.0	125.0	1.0	-	Nil	
		148.0 - 150.0 Pegmatite							
152.5	205.0	Brecciated pegmatite, coarse grained, pink, composed of quartz, feldspar	9549	158.0	160.0	2.0	Nil		
		and biotite completely or partially altered to phlogopute and chlorite. Rock is	weakly						
		foliated about 45° to the line of hole.	9550	160.0	161.5	1.5	Nil		
			9551	191.0	192.5	1.5	Tr.		
			9552	204.0	205.0	1.0	Tr.		
		170 - 173 Granitic gneiss							
		181 - 185 Granitic gneiss							
		185 - 186.5 Fault Gouge - soft light green color-composed of quartz, talc or							
		serpentine and muscovite. Direction of shearing 45° to the line of hole.							
205.0	229.0	Augen Gneiss - light grey, almost white in color with some hematite stained							
		patches. Has been sheared and quartz is strong out along foliation planes							
		about 45° to the line of hole. There is no district segregation of mofic and							
		felsic material. There are traces of pyrrhotite, pyrite and graphite on some							

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. NSR-68-4 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	Au oz.	Ag oz.	CORE ASSAYS		
		foliation planes.										
229	245.5	Biotite rich gneiss - almost massive - some hematite stained patches and fractures @ 30° to the line of hole.					Tr	Nil	Nil			
245	300	Brecciated Pegmatite, coarse grained, light grey to pink color, weakly foliated - Some hematite stain. Traces of pyrite or pyrrhotite on foliation planes. Some of feldspars are altered to talc or perpentine. Narrow bands of gneissic material are present.	9553	294.5	296.5	2.0	↗ Traces of pyrite, pyrrhotite					
300	356.5	Brecciated granite gneiss with numberous pegmatite sections. Medium to coarse grained, pink color weakly foliated with poorly segregated mofic and felsic material .										
356.5	485.0	Grey granite gneiss - similar to above except for color-Some feldspars are altered to greenish mineral completely devoid of hematite stain.										
435.0	455.0	Biotite rich gneiss - similar to 229 - 245.5 with slightly better foliation and possibly slightlysheared.										
455	460	Grey granite gneiss as 356 - 435										
	460	End of hole										

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake, Alberta.
Claim No.:
Location of Core: Cherry Lake.

Surveys

At	Dip	Bearing
Surface	-45°	285°

Hole No. NSR 68-5 Sheet No. 1
Length of Hole 163 ft.
Date Started March 23 Completed March 24
Core Logged by Gordon Bird.
Date March 24, 1968
Elevation Surface Datum
Co-ordinates of Collar
North 19 + 80
East 1 + 50

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	o/c U_3O_8 CORE ASSAYS
0	6	Casing					
0	8	Biotite gneiss dark grey, medium grained, poorly foliated, occassional veinlets					
		of quartz and pegmatite.					
8	21	Pegmatite with remnants of gneissic material-all sheared & partially brecciated.					
		Foliation about 45° to core axis. Joints about 30° & subparrallel to core axis.					
		18.0-19.0 Fault zone, strongly brecciated and altered green color, soft, all					
		mafic minerals altered to chlorite or talc.					
21	105	Granite gneiss, pink, medium grained to coarse grained with some pegnitite	9554	22.0	27.0	5.0	NIL Several small radioactive
		stringers-principle mafic mineral is biotite now altered to chlorite & phlogopite.					anomalies in brecciated gneiss and
		Most of colour comes from hematite stain. Rock is brecciated in places.					pegmatite-only slightly above back-ground
		42-43 Ground Core	9555	72.0	73.5	1.5	Tr Slightly above background
		49.5-88.0 Brecciated pegmatite composed of feldspar and chloritized biotite,					radioactivity in hematite stained
		with very little quartz.					granite gneiss
		58.0-59.0 - Fault zone same as 18.0-19.0					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake, Alberta
Claim No.:
Location of Core: cherry Lake

Surveys

At	Dip	Bearing
Surface	-45°	285°

Hole No. NSR 68-5 Sheet No. 2
Length of Hole 163 ft.
Date Started March 23 Completed March 24
Core Logged by Gordon Bird
Date March 24, 1968
Elevation Surface Datum

Co-ordinates of Collar
North 19 + 80
East 1 + 50

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
105	111	Brecciated Pegmatite, pink, coarse grained, comprised of quartz, feldspar					
		and biotite.					
111	114	Biotite gneiss					
114	124	Pegmatite-light grey to pink color, comprised of quartz, feldspar & biotite-are					
		some narrow sections of graphic granite					
124	138	Biotite gneiss-light grey to dark grey color, medium grained, weakly foliated					
		with very little segregation of mafic & felsic material-foliation about 20° to					
		core axis; fractures 30° and subparrallel					
138	150.6	Granite gneiss, pink - as 21-105					
150.6	158.0	Biotite gneiss-sheared and well foliated, fine grained dark grey - does not					
		resemble other biotite gneiss.					
158	163	Granite gneiss, pink as 21-105					
	163	End of Hole					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Cherry Lake, Alberta
Claim No.:
Location of Core: Cherry Lake

Surveys

At	Dip	Bearing
Surface	-45°	105°

Hole No.: NSR-68-6 Sheet No.: 1
Length of Hole: 196 feet
Date Started: March 28th, 1968 Completed: March 29th
Core Logged by: Gordon Bird
Date: March 30th, 1968
Elevation: Surface Datum:
Co-ordinates of Collar
North: 2 + 63 South
East: 11 + 41 East

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
0	11	Casing					
6	125	Brecciated gneiss, extremely brecciated and hemetite stained, dark red	9556	12.0	13.5	1.5	Tr.
		color with some green section where epidote and/or chlorite are abundant.	9557	66.7	68.7	2.0	Tr.
		Most of rock is fine to finale medium grained but some coarse grained feldspar por-					
		phroblasts are present. Foliation is about 45° to the end of hole. There is					
		some compositioned banding.					
		51.0 - 52.5 Green rock composed of quartz, chlorite-probably after amphibole,					
		and feldspar altered to epidote - nearly massive.					
		72.0 - 74.5 - Sheared Basic rock - may have been a basic dyke. Now extrem-					
		ely altered and foliated - genesis uncertain.					
		95 - 105 Brecciated pegmatite - composed of feldspar, muscovite or phlogopite,					
		quartz. Coarse grained and hematite stained.					
125	142.5	Brecciated gneiss as before but with less hematite stain.					
		124.5 - 126.5 - Possibly a sheared basic dyke as 72.0 - 74.5.					
		142.5 - 145.9 - Same as 124.5 - 126.5.					
145.5	159.0	Brecciated pegmatite - pink, coarse grained. Some dark red patches of hem-					
		atite stain.					
159.0	164.5	Brecciated gniess - dark grey to black with strongly hematite stained felds-					

EXPLORATION DEPARTMENT

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: NSR-68-6 Sheet No.: 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		pars - fine to medium grained with some coarse grained feldspar porphroblasts					
		Some vein quartz.					
164.5	167.5	Brecciated pegmatite - 165.5 - Some coarse grained pyrite dubes in foliated.					
		Epidote or zoisite fills open fractures.					
167.5	171.0	Biotite gneiss - fine grained, poorly foliated, dark grey.					
171.0	184.0	Granite gneiss, pink, medium grained, poorly foliated. Some large feldspar					
		porphoblasts in foliation. Foliation about 45° to the line of hole - one major					
		set of fractures is present at about 15° to the line of hole.					
184	195	Biotite gneiss - dark grey , medium to fine grained, well foliated, some bre-					
		cciated spots. Ptygmatic banded pegmatite veinlet, present between 188-189-					
		Sub parallel to the line of hole.					
		189.0 - 190.5 Brecciated pegmatite with xenoliths of gneissic material. Some					
		small pyrite cubes are present in poliation.					
195	196	Pink pegmatite.					
	196	End of Hole.					

EXPLORATION DEPARTMENT

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DIAMOND DRILL LOG

Property: New Senator Option
Location: Twin Lakes Area, N.E. Alberta
Claim No.:
Location of Core: N.W. Shore of Cherry Lake

Surveys At	Dip	Bearing
Collar	-44°	045° (N 45° E)
250'	-46°	(corrected for capillarity)
500'	-50°	" "

"AX" Core

Hole No. 68-7 Sheet No. 1
Length of Hole 526 feet
Date Started 30 Aug 1968 Completed 3 Sep 1968
Core Logged by G. N. Woollett
Date 3 Sep 1968
Elevation Surface Datum
Co-ordinates of Collar
North 0 + 50 N
~~East~~ 8 + 20 W

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	6	Casing					
6	39	Granite-Pink to brick red, dk green, med grained. Locally cataclastic. 20% qts.					
		60-70% feldspars, 10-15% hornblende &/or chlorite. Local patches of coarse grained					
		pink potash felds which has been broken and crushed. Local foliation 50° @ 8',					
		60° @ 21', contact with following is gradational.					
39	50.5	Cataclastic/Crush Zone-Black, pink, coarse grained broken K-feldspar up to 2"					
		Ø in groundmass of chlorite. Contact zone of preceding granite.					
50.5	154	Migmatite-med to dk grny-gry, pink minor wht & brk red. Foliated, many bands					
		of med to coarse grained granitic material, often cataclastic in textures interbanded					
		with a fine grained qtz.-felds-chlorite schist, and local bands milk wht qtz					
		(79.75-80.5). Brecciated, healed by chlorite & a dk brown qtz. VerY minor pyrite.					
		Angle of foliation to core - 50° @ 65', 45° @ 86', 60° @ 104', 25° @ 133', 55° @ 144',					
154	181.5	Cataclastic Gneiss-lt gry, wht, dk grn. Much as (50.5-154) but no schist					
		sections and much milky wht to lt gry, qtz. Locally broken & crushed (164.5-4")					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-7 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		lt gry, qtz, minor chlorite slightly rad. act. contacts S					
		(179.5-181.5) Brecciated and healed with chlorite.					
181.5		Fault - 1" plastic chloritic gouge @ 45° to core.					
181.5	184	Chlorite Alt Zone-Dk grn, minor wht. strong chlorite zone with local brecciated					
		fragments of white qtz, V. minor blebs of molyb. on slip planes. Not rad. act.					
184	239	Cataclastic & Avben Gneiss with Minor Chlorite Schist-Med to dk gry, -grn,					
		Locally schistose. Bands of lt gry to wht cataclastic ~~(qtz&felds)~~ (pegmatite)					
		with local Avbens. qtz & felds.					
		(190.5 - 191.5) Ground core					
		Angles of foliation to core					
		40° @ 88', 15° @ 190', 20° @ 195', 35° @ 200', 40° @ 202',					
		(220-225) (254-255) (275-276) wht cataclastic pegmatite qtz felds. Not rad act.					
		45° @ 217', 45° @ 260', 0-10° @ 266', 25° @ 277', 45° @ 321', 60° @ 348',					
239	526	Biotite Schist-Blk, dk green, local wht, schistose. 50-60% biotite &/or chlorite,					
		40-50% qtz felds as local coarse grained and cataclastic, bands. Local pyrite					
		on fractures					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

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DIAMOND DRILL LOG

Hole No. 68-7 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(297-303) Much sericite & local lt. green patches & knots of feldspar?					
		(303-311) Fine to med grained lt. gry granite. Slightly foliation @ 65°. Local					
		pyrite on fractures. Latter contact sharp @ 40°.					
		(349-352) As (303-311) foliated @ 60°.					
		(381-457) Local lt grn, feldspar? In Knots & patches.					
		(487-495) As (381-457) Angle of foliation to core - 45° @ 394', 50° @ 443', 50° @ 521'.					
	526	End of Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location Twin Lakes Area, N.E. Alberta
Claim No.
Location of Core

Surveys

At	Dip	Bearing
Collar	-45°	225° (S 45° W)
250'	-57°30'	
500'	-49°30'	

"AX" Core

Hole No. 68-8 Sheet No. 1
Length of Hole 525 feet
Date Started 5 Sep 1968 Completed 9 Sep 1968
Core Logged by G. N. Woollett
Date 9 Sep 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 1 + 80 S
~~East~~ 5 + 20 W

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	2	Casing					
2	392	Crushed ~~grainte~~ granite gneiss - white, lt. gry, & minor biotite schist.					
		Blk. med to coarse grained, gneissic. Numerous large broken but rounded					
		fragments up to 1" dia of qtz & felds set in ground mass of a med grained granite					
		gneiss. Local short lenghts (interbands) of a fine grained biotite, qtz schist. Overall					
		composition - Feldspar 60-70%, qtz, 15-20%, biotite 10-20%, Angle of foliation					
		to core - 40° @ 3', 35° @ 46', 35° @ 112', 20° @ 148', 40° @ 181', 30° @ 216'.					
		(33-49) Minor lt. grn. altered feldspars.					
		(33-34) Ground core					
		(55-109) Flesh pink, coarse grained, crushed, qtz, felds pegmatite, local short					
		sections of biotite schist.					
		(75) Fracture @ 45° flanked by 1/2"' chlorite alteration					
		(82. 5-90) 10% lt. apple green clay material. (Alteration of feldspar), Up to 60%@83. 5'.					
		(100-106. 5) As (82. 5-90)					
		(133. 5-143) flesh pink, crmy, qtz felds pegmatite minor local coarse biotite.					
		First contact sharp @ 30°, latter @ 45°.					

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 65-8 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(143-154) Predominantly biotite schist.					
		(184.5-185.5) Molybdenite smeared on slip planes.					
		(191-200) Mottled appearance, large rounded fragments of qtz. & felds generally					
		altered to a lt. olive grn color.					
		(200-208) Med grained, pink, gneissic granite.					
		(208-213) Coarse rounded frags of pegmatite heald by 20% biotite. Crush zone.					
		(220-229) Slightly crushed flesh pink & wht pegmatite. Local green altered					
		feldspar. Contacts @ 35°					
		(229-240) Crmy, minor dk. grn, finely foliated grainite. Foliation is caused by					
		fine laminated (mylonitic) qtz & minor chlorite.					
		(231) 4" sheared lt. grn, altered @ 30°.					
		(240) minor molybdenite on slip.					
		(240-242) Lt. grn, altered feldspar.					
		(240-274.5) Coarsely crushed throughout					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68-8 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(274.5-276.5) (277-284) As (229-240)					
		(310.5-311.5) Ground core					
		(284-343.5) Predominantly biotite schist.					
392	453	Aplite-grnny pink, flesh pink, crushed coarse grained, qtz, felds pegmatite					
		with 10-15% biotite/chlorite.					
		(412-416) As (376-386).					
		(439-448) 10-15% Red feldspar					
		(448-453) 20-30% biotite. Gradational with following.					
453	525	Gneissic Granite - flesh pink, wht, dk. green. Med grained, slightly crushed					
		70% feldspar, 15 % qtz, 15% chlorite.					

EXPLORATION DEPARTMENT

Property: New Senator Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys		
At	Dip	Bearing

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-8 Sheet No. 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar
North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(484-485) Ground core					
		(504.5-505) Ground core					
		(520 -522) Pegmatite, 1-2% mafics.					
		Angle of foliation to core - 35° @461', 50° @ 494'. 45° @ 516'.					
525		End of Hole					
		No Radioactivity in Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option
Location: Twin Lakes Area
Claim No.:
Location of Core:

Surveys At	Dip	Bearing
Collar	-44°	090° (Due East)
325'	-40°	(Corrected for capillarity)

"AX" Core

Hole No. 68-9 Sheet No. 1
Length of Hole 325'
Date Started September 14/68 Completed Sept. 17/68
Core Logged by G. N. W.
Date 17 Sep 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 18 + 47 South
East 1 + 00 West

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	3	Casing					
3	61	Cataclastic Gneiss - Wht, pink, blk, lt gry, coarse grained, crushed. Quartz 20%					
		feldspar 60%, biotite/chlorite 20%. Minor interbands or fine grained biotite					
		schist, locally tightly folded. Contact with following is gradational.					
		Angle of foliation to core - 65° @ 6', 45° @ 25', 60° @ 51'.					
61	129	Migmatite - Blk, lt gry, locally grnish. Fine grained, foliated, Biotite up to 80%,					
		qtz & felds 20 - 30%. Local Sections grnish altered felds or possibly diopside?					
		Angle of Foliation to core - 45° @ 71', 50° @ 82', 0 - 20° from 97' - 101',					
		75° @ 129', (66-67) - lt grn altered Diopside?					
		(81.5 - 88) As (3 - 61)					
		(110 - 122) Minor lt Grn alt diopside or felds?					
129	151.5	Qtz.-Felds Biotite Gneiss-Much As (3-61) but less crushed and no pink colour.					
		Local Minor pyrite. Angle or foliation to core is 65° throughout.					
151.3	153	Fault - Apple grn, minor pink and blk, soft serpentined with minor qtz. veining					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property
Location ↖ New Senator-Rouyn Option
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 6F-9 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		and local pink felds fragments. Contact sharp @ 45° .					
153	181	Qtz-Felds-Biotite Gneiss - As (129-151.5) crushed and healed with chlorite					
		Angle of foliation to core - 60° .					
181	325	Biotite Gneiss - Much as (61-129). However becomes more gneissic than					
		schistose. Biotite 40 - 50%, qtz and felds 50 - 60%. Angle of foliation to core -					
		65° @ 199', 70° @ 237' .					
		(105-186) Pegmatite with minor diopside?					
		(210-217.5) Pegmatite minor coarse biotite					
		(241-247) " " " "					
		(252-257) " " " "					
		(258) 3" CG Biotite, minor pyrite, slightly rad act.					
		(260) 6" Coarsely brecciated, lt grn, alt feds?					
		(272-273.5) Pegmatite, minor lt grn diopside? Minor pyrite.					
		(274.5-279) Pegmatite, minor CG biotite, slightly rad act.					

EXPLORATION DEPARTMENT

Property: New Senator Rouyn Optim
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-9 Sheet No. 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		(285-289) (289.5-293) coarsely crushed, fragments up to 1" dia.					
		(298-302) Pegmatite, slightly rad act.					
		(302-303.5) Fine grained, lt gry granite foliation @ 70° .					
		(303.5-305) Pegmatite.					
		(308-309) "					
		(317.5-319) Coarsely crushed pegmatite, not rad ~~xkx~~ act)					
		(323-325) " " " " " "					
		(325) 1" of biotite gneiss following (323-325)					
		Angle of foliation to core - 60° @ 182, 60° @ 199, 50° @ 216, 75° @ 307',					
		70° @ 269' /					
	325	~~325~~ End of Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta.
Location: Twin Lakes Area (West of Cherry Lake)
Claim No.:
Location of Core: N. W. Bay, Cherry Lake.

Surveys

At	Dip	Bearing
0'	-45°	N 45° W (True)
125'	-42°	

Hole No. 68-10 Sheet No. 1
Length of Hole 151.0'
Date Started September 18, 1968 Completed Sept. 19/68
Core Logged by W. H. Thorpe [redacted]
Date September 21, 1968
Elevation Surface Datum
Co-ordinates of Collar
North South 19 + 20'
East 0 + 50'

From	To	Description of Core "Ax" Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8 CORE ASSAYS
0	8	Casing					
8	9.5	Pegmatite dyke - no radioactivity. Out contact ground up					
9.5	21.0	Biotite gneiss. Gneissosity at 70° to CA, some small blebs pegmatite along gneissosity					
21.0	22.7	Pegmatite dyke, irregular contacts.					
22.7	75.5	Quartz-feldspar-biotite gneiss with local small injections of pegmatite. Gneissosity					
		at 70° - 45° to CA. From 50.0' gneissosity parallel to CA in places					
		35.8 - 36.2 pegmatite dyke					
		42.0 - 43.5 mainly milky quartz - barren					
75.5	117.0	Pegmatite, sometimes with local concentrations of biotite. Minor epidote in fractures.					
		108.6 - 110.0 minor radioactivity	9638	108.6	110.0	1.4	0.12
117.0	136.0	Quartz-feldspar-biotite gneiss. Variable, folded gneissosity					
136.0	140.5	Pegmatite with large broken feldspar phenocrysts up to 1/2"					
140.5	151.0	Quartz-feldspar-biotite gneiss					
		148.0 - 149.0 mainly barren, milky, quartz, -feldspar					
		151.0 - End of Hole					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator - Rouyn Option
Location: Peninsula, north end of Spider Lake
Claim No.:
Location of Core: Left at drill site

Surveys		
At	Dip	Bearing
Collar	-45°	S 22° E (True)
300'	-40°	

Hole No. 68 - 11 Sheet No. 1
Length of Hole 303.0'
Date Started 27 September, 1968 Completed 28 Sept, 1968
Core Logged by W. H. Thorpe [redacted]
Date 27, 28, September 1968
Elevation Surface Datum
Co-ordinates of Collar
~~North~~ 4 + 90 S. W.
~~East~~ 1 + 00 N. W.

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0.0	3.0	Casing					
3.0	62.5	Granite gneiss-pink, banded, prominent biotite					
		3.0-20.0 gneissosity at 75° - 45° to CA, minor folding in places.					
		At 24.5', 2" crushed zone					
		20.0-42.0 more folded than preceding, gneissosity at 80° to parallel to CA.					
		Prominent biotite banding					
		42.0-62.5 less folded than preceding, gneissosity at 75° - 80° to CA.					
62.5	74.0	Quartz-feldspar-biotite gneiss					
		62.5-74.0 20% banded granite gneiss, gneissosity at 80° - 60° to CA.					
74.0	83.5	Impure quartzite with prominent biotite banding					
		74.0-83.5 gneissose banding at 80° - 55° to CA					
83.5	108.0	~~Ag~~ Augen gneiss					
		83.5-96.5 rounded feldspars up to 1/2", more massive than preceding core, up					
		to 30% grey quartz.					
		96.5-108.0 50% quartz, occasional trace molybdenite, pyrite, and chalcopyrite,					
		no radioactivity, 20% biotite, 30% feldspar with occasional hematite stain.					
		Crushed zone from 102.0 - 103.0					

EXPLORATION DEPARTMENT

Property: New Senator-Rouyn Option
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68 - 11 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8	CORE ASSAYS
108.0	148.0	Biotite gneiss-occasional garnet						
		108.0-136.5 considerably folded with occasional rounded feldspar up to 1/8".						
		Occasional trace pyrite						
		136.5-139.0 some augen feldspars and crushed zone from 137.0-139.0						
		139.0-148.0 prominent augen feldspars in places, 60% biotite.						
148.0	159.0	Augen gneiss - rounded feldspars	9640	149.0	154.0	5.0	0.01	
		148.0-149.0 60% grey quartz						
		149.0-154.0 very slightly radioactive, 65% grey quartz, 20% feldspar, 15% biotite						
		rough banding at 70° to CA, occasional trace pyrite						
		154.0-159.0 60% grey quartz.						
159.0	179.0	Biotite gneiss-60% biotite, 20% feldspar, 20% quartz						
		159.0-179.0 gneissosity at 65° to CA.						
179.0	213.0	Quartzite, impure, prominent biotite, occasional fine pyrite						
		179.0-188.0 gneissosity at 65° to CA, prominent biotite banding						
		188.0-195.5 somwhat brecciated parallel to gneissosity at 45° to CA.						

EXPLORATION DEPARTMENT

Property New Senator-Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-11 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		208.0-213.0 some hematization of feldspars					
213.0	218.0	Biotite gneiss, somewhat contorted					
218.0	303.0	Quartzite, impure, prominent biotite banding					
		218.0-232.0 gneissic banding at 45° - 65° to CA.					
		232.0-235.5 very minor biotite and more massive than preceding, somewhat crushed					
		235.5-244.0 brecciated zone with fractured feldspars up to 1/4" across, some					
		hematization, minor biotite. No radioactivity.					
		244.0-257.0 gneissosity at 65° to CA, occasional brecciation of feldspars along					
		257.0-273.0 occaisional minor augen feldspar along gneissosity at 65° -45° to CA. gneissosity.					
		273.0-293.0 occasional trace pyrite, chalcopyrite and molybdenite or graphite					
		293.0-294.3 breccia zone, mostley feldspar and quartz					
		294.3-303.0 gneissosity at 55° to CA, some brecciated fragments along gneissosity					
		303.0 End of Hole					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location: Spider Lake - north peninsula
Claim No.:
Location of Core: Left at drill site

Surveys

At	Dip	Bearing
Collar	-45°	S 47° E (true)
450'	-37°	

Hole No. 68 - 12 Sheet No. 1
Length of Hole 466.0'
Date Started September 29, 1968 Completed Oct. 2, 1968
Core Logged by W. H. Thorpe [redacted]
Date October 2, 1968
Elevation Surface Datum

Co-ordinates of Collar
North 5 + 10 N. E.
East 3 + 20 N. W.

From	To	Description of Core "Ax" Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U_3O_8	CORE ASSAYS
0.0	2.0	Casing						
2.0	50.0	Granite gneiss-pink, prominent biotite, gneissosity at 65° -75° to CA, trace pyrite						
		46.0 - 50.0 crushed zone, slightly radioactive	9641	46.0	50.0	4.0	Tr.	
50.0	188.0	Quartz-feldspar-biotite gneiss, occasional hematized feldspars						
		50.0-55.0 slightly radioactive, some inclusions of granite gneiss. 4" quartz	9642	50.0	55.0	5.0	0.01	
		vein at 53.3						
		58.0 - 63.0 considerable crushing along gneissosity	9644	58.0	63.0	5.0	0.01	
		at 65° to C.A., slight radioactivity	9645	63.0	65.5	2.5	0.04	
		55.0 - 58.0 slight radioactivity, gneissosity at 65° -85° to C.A.	9643	55.0	58.0	3.0	0.04	
		63.0 - 84.5 decreasing radioactivity, gneissosity at 75° -65° to C.A.						
		84.5 - 85.7 mainly quartz-feldspar with hematized feldspar patches up to 1" across.						
		No radioactivity.						
		85.7 - 102.0 occasional minor hematization of feldspars. No radioactivity.						
		Gneissosity at 85° -45° to C.A.						
		102.0 - 103.5 50% lost core. No radioactivity in sludge or core						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 68 - 12 Sheet No.: 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		106.5 - 107.5 hematized feldspar-quartz section, no radioactivity some fine					
		with mauve colour					
		117.0 - 124.0 some hematized feldspar in quartz-rich sections. No radioactivity					
		Brecciation along gneissosity at 55° to C.A. Garnets in biotite rich sections.					
		124.0-128.0 augen gneiss texture, considerable movement along gneissosity at					
		65° - 50° to C.A. Some fine garnets.					
		128.0 - 131.0 predominantly quartz-feldspar, minor biotite, could be pegmatite					
		but conforms to gneissosity at 70° to C.A. and appears to be result of					
		metamorphism.					
		131.0 - 149.0 40% quartz-feldspar sections with some hematized feldspars					
		conforming to gneissosity at 70° - 80° to C.A.					
		149.0 - 170.0 biotite rich, occasional augen feldspar, gneissosity at 85° to CA.					
		170.0 - 188.0 40% quartz-feldspar rich sections with very minor biotite.					
		Good banding at 85° - 65° to C.A.					
188.0	225.0	Pegmatite-with 20% alternating quartz-feldspar-biotite gneiss bands slight					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, Alberta.
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68 - 12 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8	Au	Cu	MoS_2
		hematization of feldspar but no radioactivity.								
225.0	369.0	Quartzite, impure, prominent biotite, occasional actinolite, gneissic banding								
		at 65° to C.A., trace pyrite in places. No radioactivity.								
		235.5 - 236.5 90% quartz-feldspar section - may be pegmatite dyke along								
		gneissosity at 55° to C.A.								
		237.5- 239.0 75% quartz-feldspar section								
		256.0 - 256.5 and 261.5 - 262.3 quartz-feldspar sections								
		289.0 - 339.0 considerable folding.								
		At 341.5, 1/8" fracture with pyrrhotite containing trace chalcopyrite								
		360.0 - 365.0 25% irregular milky quartz veins,	9646	360.0	365.0	5.0	N.I	N.I	Tr	Tr
		2% pyrrhotite								
		365.0 - 369.0 considerably folded.								
369.0	466.0	Quartz-feldspar-biotite gneiss								
		369.0 - 402.0 considerably folded, occasional trace pyrite								

EXPLORATION DEPARTMENT

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, Alberta.
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. 68 - 12 Sheet No. 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		402.0 - 407.0 15% irregular milky quartz, trace pyrrhotite in places					
		407.0 - 425.5 considerably folded					
		425.0 - 429.0 and 429.8 - 430.7 coarse-grained quartz-feldspar, probably dykes					
		429.0 - 440.0 prominent drag folding in places, 1-2% pyrrhotite, trace chalcopyrite					
		440.0 - 466.0 10% irregular quartz blebs, considerable folding, traces					
		pyrrhotite, pyrite					
		466.0 - End of Hole.					

EXPLORATION DEPARTMENT

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N.E. Alberta
Location: Southwest end of Holmes Lake
Claim No.: ------
Location of Core: Left at drill site

Hole No.: 68-13 Sheet No.: 1
Length of Hole: 406.0
Date Started: Oct. 8th/68 Completed: Oct. 13th/68
Core Logged by: W. H. Thorpe [redacted]
Date: October 13th, 1968
Elevation: Surface Datum:

Co-ordinates of Collar
North: ----------
East: ----------

Surveys

At	Dip	Bearing
Collar	-45°	S 45° E
400 Feet	-40°	(corrected for capillarity)

Sludge not recovered - 95% core recovery

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		"AX" Core (lost → water at 21.0 Feet)						
0.0	4.0	Casing						
4.0	179.0	Pegmatite - feldspars frequently hematized and crushed,	9647	4.0	6.0	2.0	Tr	
		prominent biotite and occasional trace pyrite	9648	6.0	11.0	5.0	Tr	
		4.0 - 6.0 slight radioactivity - up to 700 counts per second - trace pyrite	9649	11.0	14.0	3.0	0.01	
		6.0 - 14.0 pronounced fracturing and crushing	9650	14.0	15.0	1.0	0.01	
		At 14.3, 3 inch quartz vein with 700 counts per second and continues	9696	15.0	20.0	5.0	Tr	
		crushed and hematized to 21.0 feet	9697	20.0	21.5	1.5	Tr	
		20.0 - 21.5 prominent hematite stain	9698	21.5	25.0	3.5	Tr	
		23.0 - 38.5 occasional hematite - stained feldspars	9699	25.0	30.0	5.0	Tr	
		38.5 - 42.5 slightly radioactive - up to 700 counts per second, 15% biotite,	9700	30.0	35.0	5.0	0.01	
		occasional trace pyrite	9301	35.0	38.5	3.5	0.01	
		42.5 - 47.0 up to 1200 counts per second, prominent hematized feldspars,	9302	38.5	42.5	4.0	Tr	
		considerable fracturing	9303	42.5	47.0	4.5	0.01	
		47.0 - 52.0 hematized feldspars, a few cubes pyrite,	9304	47.0	52.0	5.0	0.02	
		up to 1100 counts per second	9305	52.0	57.0	5.0	0.03	
		52.0 - 57.0 slight gneissosity in places at 80° to Core Angle, considerable						
		fracturing - up to 1200 counts per second.						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

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PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-13 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	Au oz	Ag oz
		57.0 - 62.0 less hematized than preceding, more biotite (10%), traces pyrite, gneissosity at 80° - 45° to Core Angle- up to 1200 counts per second	9306	57.0	62.0	5.0	Tr	Nil	Nil
		62.0 - 67.0 slight gneissosity in places at 55° to Core Angle. Hematization less than in preceding sections, traces pyrite up to 900 counts per second	9307	62.0	67.0	5.0	0.01	-	-
		67.0 - 72.0 more biotite than preceding-up to 900 counts per second. Slight gneissosity in part at 45° to Core Angle, traces pyrite throughout.	9308	67.0	72.0	5.0	Tr	Nil	Nil
		72.0 - 77.0 biotite-rich banding at 45° to Core Angle from 72.0-74.0 - up to 900 counts per second	9309	72.0	77.0	5.0	Tr	-	-
		77.0 - 82.0 less hematized than preceding, prominent fracturing at various angles to Core Angle. Up to 1300 counts per second in biotite-rich section at 75.5 feet. Traces pyrite throughout.	9310	77.0	82.0	5.0	0.03	-	-
		82.0 - 87.0 no hematization, less quartz than preceding, greenish yellow stain in places - up to 800 counts per second .	9311	82.0	87.0	5.0	0.01	-	-
		87.0 - 91.0 some prominent biotite with gneissic banding in part at 80° to Core Angle. Up to 900 counts per second. No hematization.	9312	87.0	91.0	4.0	Tr		
		91.0 - 96.0 no hematization, trace pyrite throughout - up to 900 counts per second.	9313	91.0	96.0	5.0	0.01		
		96.0 - 101.0 no hematization, up to 1100 counts per second	9314	96.0	101.0	5.0	0.02		

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68-13 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		101.0-106.0 fractured feldspars, no hematization, up to 900 counts per second	9315	101.0	106.0	5.0	0.02	
		106.0-111.0 as preceding to 109.5 feet then minor hematization	9316	106.0	111.0	5.0	0.01	
		111.0-116.0 minor hematization-up to 1000 counts per second	9317	111.0	116.0	5.0	0.01	
		116.0-121.0 slight to moderate hematization-up to 1000 counts per second	9318	116.0	121.0	5.0	0.02	
		121.0-126.0 moderate hematization-up to 950 counts per second	9319	121.0	126.0	5.0	Tr	
		126.0-131.0 slight hematization-up to 1200 counts per second in biotitic sections. Biotite 5% overall.	9320	126.0	131.0	5.0	0.02	
		131.0-136.0 slightly hematized, prominent milky quartz-up to 1100 counts per second.	9321	131.0	136.0	5.0	0.02	
		136.0-142.0 moderate hematization-up to 800 counts per second	9322	136.0	142.0	6.0	0.02	
		142.0-147.0 moderate hematization, biotite up to 10%. Up to 700 counts per second. At end of section, 10 inch greenish yellow oxide stain.	9323	142.0	147.0	5.0	0.02	
		147.0-151.0 slightly hematized-up to 900 counts per second	9324	147.0	151.0	4.0	Tr	
		151.0-156.0 slightly hematized-up to 1000 counts per second	9325	151.0	156.0	5.0	0.02	
		156.0-161.0 slight to moderate hematization-up to 900 counts per second	9326	156.0	161.0	5.0	0.02	
		161.0-166.0 1% pyrite throughout, no Radio Activity.	9327	161.0	166.0	5.0	0.02	
		166.0-179.0 slightly hematized, no Radio Activity.						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 6313 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
179.0	249.0	Biotite gneiss - no Radio Activity. 179.0-186.0 40% pegmatite injections. 186.0-186.4 milky quartz vein at 55° to Core Angle. 186.4-195.0 gneissosity at 45° to Core Angle. 195.0-196.2 barren, irregular, milky quartz vein. 196.2-220.0 5-10% pegmatite injections, gneissosity at 35° -50° to Core Angle. 220.0-239.0 gneissosity at 60° to Core Angle. Two - 2 inch, 6 inch irregular milky quartz veins with traces pyrite, minor pegmatite injections. 239.0-249.0 10% pegmatite injections.						
249.0	257.0	Pegmatite-pink, hematized feldspars, no Radio Activity. In contact at 80° to Core Angle.						
257.0	270.5	Biotite gneiss-10% pegmatite injections.						
270.5	319.8	Pegmatite-minor biotite gneiss in places - no Radio Activity. 270.5-273.5 brecciated, hematized feldspar phenocrysts, contacts at 65° to Core Angle. No Radio Activity. 273.5-281.0 mixed biotite gneiss and pegmatite. 281.0-319.8 pegmatite, no Radio Activity.						
319.8	404.2	Biotite gneiss. 319.8-327.5 gneissosity at 60° -45° to Core Angle. 6 inches pegmatite around 323.3 feet. 327.5-328.0 fault zone-broken, Vuggy Core-No Radio Activity. 328.0-338.0 gneissosity at 60° to Core Angle, but contorted in places.						

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-13 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 CORE ASSAYS
		338.0-359.0 probable faulting at 339.0 and 355.0-356.0					
		359.0-369.0 gneissosity at 65° to Core Angle, in some places contorted.					
		369.0-375.0 minor serpentinization in places					
		375.0-396.5 traces pyrite throughout, gneissosity generally at 35° to Core					
		Angle, but some crumpling in places.					
404.2	405.7	Pegmatite - No Radio Activity.					
405.7	406.0	Biotite gneiss.					
		406.0 - End of Hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location: Small Lake, 1 1/4 mile N. W. of Cherry Lake
Claim No.:
Location of Core: Left at drill site

Surveys

At	Dip	Bearing
Collar	-45°	0 90° (due East)
425'	-42°	(corrected for capillarity)

Hole No. 68 - 14 Sheet No. 1
Length of Hole 425'
Date Started 21 October 1968 Completed 24 Oct. 1968
Core Logged by W. H. Thorpe
Date 24 October 1968
Elevation Surface Datum
Co-ordinates of Collar
North 2 + 63 } Small Lake Grid
East 0 + 05 }

" Ax " Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8	CORE ASSAYS
0.0	6.0	Casing						
6.0	132.0	Quartz-feldspar-biotite gneiss with minor pegmatite intrusions, traces pyrite throughout, occasional trace chalcopyrite, molybdenite, pyrrhotite.						
		6.0 - 9.0 Two - 6", 10" irregular pegmatite dykes, general gneissosity at 65° to C.A., slight radioactivity.	9328	6.0	9.0	3.0	Tr	
		9.0 - 14.0 Two - 18", 10" brecciated pegmatite dykes at 60° to CA, slight radioactivity	9329	9.0	14.0	5.0	0.02	
		14.0 - 19.5 Two - 18", 6" pegmatite dykes at 65° to C.A. Includes 18" lost core, slight radioactivity.	9330	14.0	19.5	5.5	Tr	
		19.5 - 21.0 - 12" brecciated pegmatite dyke, contacts lost, slight radioacitvity	9331	19.5	21.0	1.5	0.01	
		21.0 - 25.0 - 40% pegmatite intrusions, no radioactivity, gneissosity at 55° - 45° to C.A.						
		25.0 - 30.0 augen texture, slight to moderate radioactivity	9332	25.0	30.0	5.0	Tr	
		30.0 - 35.0 as preceding, gneissosity at 45° to C.A.	9333	30.0	35.0	5.0	0.03	
		35.0 - 40.0 25% pegmatite injections	9334	35.0	40.0	5.0	0.03	
		40.0 - 44.0 last 12" is brecciated pegmatite	9335	40.0	44.0	4.0	0.02	
						"		

EXPLORATION DEPARTMENT

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 68-14 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8
		44.0 - 49.0 gneissosity at 55° to C.A., brecciated	9336	44.0	49.0	5.0	0.02
		49.0 - 52.0 slight radioactivity	9337	49.0	52.0	3.0	Tr
		52.0 - 57.0 slight radioactivity	9338	52.0	57.0	5.0	Tr
		57.0 - 58.0 Pegmatite dyke, moderate radioactivity. Contact at 70° to C.A.	9339	57.0	58.0	1.0	0.07
		58.0 - 62.0 low radioactivity, greenish yellow alteration on feldspars	9340	58.0	62.0	4.0	0.02
		62.0 - 67.0 low radioactivity, greenish yellow alteration on feldspars, 10 %	9341	62.0	67.0	5.0	Tr
		pegmatite inclusions					
		67.0 - 71.0 10" pegmatite dyke at 55° to CA, some hematization traces pyrite	9342	67.0	71.0	4.0	Tr
		at contacts					
		71.0 - 75.0 18" pegmatite, irregular contacts, crushed and broken feldspar	9343	71.0	75.0	4.0	0.04
		phenocrysts up to 1"					
		75.0 - 80.0 gneissosity at 45° to C.A., slight, spotty radioactivity contact at	9344	75.0	80.0	5.0	0.01
		79.0 with following rock type					
		79.0 - 86.0 porphyritic gneiss, some hematization. In at 30°, out at 45° to					
		C.A., no radioactivity.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68 - 14 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8
		86.0 - 103.0 porphyritic in places, no radioactivity, slight hematization in places					
		103.0 - 116.0 very minor pegmatite injections, less than 10%, local hematiz -					
		ation, no radioactivity.					
		116.0 - 124.0 pegmatite, no radioactivity, end contact at 55° to C.A.					
		124.0 - 132.0 gneissosity at 55° to C.A.					
132.0	161.5	Pegmatite					
		132.0 - 154.0 some hematization, no radioactivity, minor quartz-feldspar -					
		biotite gneiss in places (less than 10%) at 45° - 20° to C.A.					
		154.0 - 158.0 slight radioactivity	9345	154.0	158.0	4.0	Tr
		158.0 - 161.5 brecciated, slight to moderate radioactivity, gneissosity at 60°	9346	158.0	161.5	3.5	0.06
		to C.A.					
161.5	270.5	Quartz-feldspar-biotite gneiss, traces pyrite throughout					
		161.5 - 163.3 moderate radioactivity, traces pyrite, molybdenite	9347	161.5	163.3	1.8	0.04
		163.3 - 168.3 slight to moderate radioactivity, brecciated, gneissosity at 45°	9348	163.3	168.3	5.0	0.03
		to C.A., 20% pegmatite					
		168.3 - 173.0 brecciated, 25% pegmatite, slight radioactivity	9349	168.3	173.0	4.7	0.06

0.0 / 0.047 / 15.0'

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 68 - 14 Sheet No.: 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:
Co-ordinates of Collar
North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	% U3O8	CORE ASSAYS
		173.0 - 178.0 slight radioactivity, gneissosity at 45° - 55° to C.A.	9350	173.0	178.0	5.0	Tr	
		178.0 - 185.5 gneissosity pronounced at 50° to C.A., 5% pegmatite. Includes	9838	178.0	185.5	7.5	Tr	
		30" lost core, slight radioactivity						
		185.5 - 190.5 much folding and brecciation, gneissosity at 45° - 65° to C.A.,	9839	185.5	190.5	5.0	Tr	
		slight radioactivity						
		190.5 - 195.5 20% pegmatite, considerable hematization, slight radioactivity	9840	190.5	195.5	5.0	Tr	
		195.5 - 199.5 mainly pegmatite, pronounced brecciation, hematization, large						
		broken feldspar patches up to 1", no radioactivity						
		199.5 - 201.5 hematized, less brecciated, gneissosity at 60° to C.A. no						
		radioactivity						
		201.5 - 203.0 pronounced hematization, slight radioactivity	9841	201.5	203.0	1.5	0.03	
		203.0 - 218.5 variable gneissosity with cross-fracturing at right angles, no						
		radioactivity, 5 - 10% pegmatite. At 218.5, 5" barren, irregular milky quartz						
		218.5 - 227.0 gneissosity at 45° - 55° to C.A.						
		227.0 - 235.0 mainly pegmatite, brecciated, no radioactivity						

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option. N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 68 - 14 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	Cu %	Ni %	Au oz	Ag oz
		235.0 - 244.5 10% pegmatite, both greenish-yellow and white angular to									
		rounded feldspar phenocrysts up to 1/2", scarcely detectable radioactivity									
		244.5 - 249.5 gneissosity at 45° - 60° to C.A., brecciation along gneissosity,									
		slight hematization, considerable granitization, very slight radioactivity									
		249.5 - 253.0 white and greenish-yellow feldspar phenocrysts up to 1/2",									
		broken and elongated along gneissosity at 65° to C.A., very slight radioactivity									
		253.0 - 260.0 50% pegmatite injections, porphyritic in places, gneissosity at									
		65° to C.A., some brecciation of feldspar phenocrysts, some greenish-yellow									
		staining of feldspars, slight hematization, very slight radioactivity in places									
		260.0 - 270.5 porphyritic, feldspars up to 1", broken in places, gneissosity in									
		places at 65° to C.A.									
270.5	425.0	Quartz-feldspar-biotite porphyry. Feldspar phenocrysts up to 1 1/2", in places	9845								
		resembling chicken feed lava, occasional hornblende crystals, 1% dissemin -	~~9846~~	276.0	281.0	5.0	Tr	0.01	Tr	N.I	N.I
		ated pyrite throughtout									
		328.0 - 345.0 slightly gneissose in places at 65° to C.A., some brecciation of									

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. 68 - 14 Sheet No. 6
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		feldspars which appear to be of two different ages, 1% pyrite throughout					
		345.0 - 403.0 much as preceding but quartz-feldspar section from 364.0 -					
		366.0 no radioactivity but trace molybdenite, chalcopyrite					
		403.0 - 404.5 scarcely detectable radioactivity					
		404.5 - 425.0 fairly massive, no radioactivity					
425.0		End of Hole					

Sulfur

Sample No.	Footage	% U_3O_8
153.0 - 163.0	10.0	0.06
163.0 - 173.0	10.0	0.06
173.0 - 203.0	10.0	0.02

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location: Small Lake, 1 1/4 miles N. W. of Cherry Lake
Claim No.:
Location of Core: Left at drill site

Surveys

At	Dip	Bearing
Collar	-46°	090° (due East)
280'	-45°	(corrected for capillarity)
480'	-41°	(" " ")

"AX" Core

Hole No. 69-1 Sheet No. 1
Length of Hole 482.0 feet
Date Started January 11, 1969 Completed Jan 17, 1969
Core Logged by W. H. Thorpe [redacted]
Date January 17, 1969
Elevation Surface Datum
Co-ordinates of Collar
North 2 + 63 } Little Lake Grid
East 1 + 00 W }

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0	5	CASING					
5.0	190.0	Pink biotite granite, traces pyrite throughout					
		5.0 - 19.0 Slightly gneissic at 45° to the line of hole, no appreciable radioactivity					
		19.0 - 40.0 fairly massive, slightly brecciated from 19.0-21.0, no appreciable radioactivity					
		40.0-61.0 fairly massive, occasionally porphyritic with feldspar phenocrysts up to 1/4"					
		61.0-74.5 massive, medium grained to coarse grained					
		74.5-79.5 30% quartz-feldspar-biotite gneiss, gneissosity at 70° -55° to the line of hole					
		79.5-99.0 coarser grained than preceding, occasional minor quartz-feldspar-biotite gneiss up to 10%, no radioactivity					
		99.0-118.0 becoming coarser grained and approaching pegmatite in character, no radioactivity					
		118.0-137.0 10% pegmatite in patches, feldspars are much fractured, no radioactivity					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 69-1 Sheet No.: 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:
Co-ordinates of Collar
North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %
		137.0-156.5 feldspar phenocrysts up to 1" in diameter, occasional trace					
		molybdenite, pyrite					
		156.5-177.0 up to 20% quartz-feldspar-biotite gneiss with gneissosity at 45° to					
		line of hole, traces molybdenite, pyrite					
		177.0-190.0 partly pegmatitic, slight spotty radioactivity					
190.0	238.0	Quartz - Feldspar - Biotite Gneiss					
		190.0-194.0 gneissosity at 60° to the line of hole, slight radioactivity in local,					
		very limited, spots					
		194.0-200.0 increase in radioactivity	9730	196.0	200.0	4.0	0.03
		200.0-219.0 slight gneissosity at 50° -65° to line of hole, traces pyrite, local					
		pegmatite inclusions					
		219.0-232.0 5% pegmatite intrusions, very faint radioactivity, up to 1% pyrite					
		232.0-234.0 slight radioactivity, mainly pegmatite with hematite stain on					
		feldpars	9731	232.0	234.0	2.0	0.02
		234.0-238.0 50% pegmatite					
238.0	298.5	Pegmatite					

EXPLORATION DEPARTMENT

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 3
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	CORE ASSAYS MoS_2 %
		238.0-243.0 slightly radioactive, hematite stained feldspars	9732	238.0	243.0	5.0	0.01	
		243.0-251.0 still hematite stain but no radioactivity						
		251.0-256.5 some undigested quartz-feldspar-biotite gneiss, no radioactivity						
		256.5-276.0 varies from coarse grained to fine grained, some sections						
		porphyritic, hematite stain on feldspars but no radioactivity						
		276.0-298.5 feldspars with slight hematite stain but generally norardioactivity						
		4" of slight radioactivity around 288.5. Gneissosity at 60° to line of hole						
298.5	315.5	Quartz-Feldspar-Biotite Gneiss						
		298.5-300.0 no radioactivity						
		300.0-302.5 pegmatite dyke, slight radioactivity in places, possibly traces						
		molybdenite	9733	300.0	302.5	2.5	0.04	0.06
		302.5-307.5 slight to moderate radioactivity, 50% pegmatite, possibly traces						
		molybdenite, brecciated	9734	302.5	307.5	5.0	0.06	0.06
		307.5-315.5 mainly pegmatite. Quartz-rich section from 309.5 to 313.0 which						
		could be metamorphosed quartzite						
315.5	337.0	Pegmatite						

EXPLORATION DEPARTMENT

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 4
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		315.5-337.0-20% quartz-feldspar-biotite gneiss, no radioactivity. Slight						
		gneissosity at 55° to the line of hole						
337.0	358.0	Fault zone-mainly brecciated quartz-feldspar-biotite gneiss, 5% pegmatite						
		337.0-341.5 greenish tinged brecciated feldspars, no radioactivity						
		341.5-342.5 red mud, no radioactivity						
		342.5-358.0 occasional minor hematite stain on feldspars which are often						
		fractured. Fracture with slight radioactivity around 357.5'						
358.0	482.0	Quartz-feldspar-biotite gneiss						
		358.0-384.5 gneissosity at 65° to the line of hole, 35% pegmatite injections, no						
		radioactivity						
		399.0-405.0 occasional large feldspar phenocrysts up to 3/4", 20% pegmatite						
		no radioactivity						
		405.0-424.0 biotite rich, quartz poor, traces pyrite, no radioactivity,						
		gneissosity at 55° to the line of hole						
		424.0 - 445.0 occasionally porphyritic, sometimes gneissose at 60° to the line						

EXPLORATION DEPARTMENT

Property New Senator Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys		
At	Dip	Bearing

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Hole No. 69-1 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum
Co-ordinates of Collar
North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		of hole, very slight radioactivity on local fractures						
		445.0-455.0 as before						
		455.0-460.0 slight radioactivity	9735	455.0	460.0	5.0	0.03	
		460.0-465.0 slight hematite stain on feldspars, very slight radioactiviity.						
		Gneissosity at 55° to the line of hole						
		465.0-482.0 no radioactiviity						
	482.0	End of Hole						

Sludges

Sample No.	Footage	Width	U_3O_8 %
9736	280.0-290.0	10.0'	0.01
9737	300.0-310.0	10.0'	0.04
9738	320.0-330.0	10.0'	0.04

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, NE Alberta
Location: Approximately 1 1/4 miles NW of Cherry Lake
Claim No.:
Location of Core: North shore of Small Lake

Surveys		
At	Dip	Bearing
Collar	-45°	090° (due East)
450'	-39°	(corrected for capillarity)

Hole No. 69 - 2 Sheet No. 1
Length of Hole 461.0 feet
Date Started January 19, 1969 Completed Jan 22, 1969
Core Logged by W. H. Thorpe [redacted]
Date 20 - 22 January 1969
Elevation Surface Datum
Co-ordinates of Collar
North Surface 3 + 33)Small Lake Grid
~~East~~ 1 + 50 W)

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	MoS_2 %	CORE ASSAYS
0.0	4.0	CASING							
4.0	59.5	Pink biotite granite, traces pyrite throughout							
		4.0 - 24.0 massive, no radioactivity							
		24.0 - 46.0 occasional minor fracture at 55° to the line of hole no radioactivity							
		46.0 47.0 lost core							
59.5	320.5	Quartz-feldspar-biotite gneiss, traces pyrite throughout							
		59.5 - 66.2 mainly quartz-biotite, considerably folded and contorted, no radioacvity							
		66.2 - 82.0 50% pegmatite, no radioactivity							
		82.0 - 84.5 biotite rich, slightly radioactive	9739	82.0	84.5	2.5	0.04		
		84.5 - 89.0 biotite rich sections but only very slight radioactivity in places							
		89.0 - 93.0 biotite rich, slight radioactivity	9740	89.0	93.0	4.0	0.03		
		93.0 - 106.0 30% pegmatite							
		106.0 - 125.0 some quartz-rich sections very slight radioactivity onlocal							
		fractures local hematite stain							
		125.0 - 149.0 20% pegmatite, very slight radioactivity in places, very minor							

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Rouyn Option, N. E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 69-2 Sheet No. 2
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	MoS_2 %	CORE ASSAYS
		local hematite stain, some quartz rich sections, no radioactivity							
		149/0 - 161.0 gneissosity at 50° to the line of hole							
		161.0 - 164.0 slight radioactivity, traces pyrite, molybdenite	9741	161.0	164.0	3.0	0.03		
		164.0 - 181.0 porphyritic in places, fairly massive							
		181.0 - 186.0 traces pyrite throughout							
		186.0 - 187.0 slight radioactivity	9742	186.0	187.0	1.0	0.03		
		187.0 - 195.0 biotite rich in places, gneissosity at 55° - 60° to core axis							
		195.0 - 196.0 slight radioactivity	9743	195.0	196.0	1.0	0.02		
		196.0 - 198.0 biotite rich, very slight radioactivity							
		198.0 - 206.5 biotite rich, gneissosity at 50° to core axis							
		206.5 - 207.5 slight radioactivity	9744	206.5	207.5	1.0	0.02		
		207.5 - 214.0 gneissosity at 45° to core axis							
		214.0 - 219.0 slightly brecciated, slight to moderate radioactivity	9745	214.0	219.0	5.0	0.02		
		219.0 - 221.0 gneissosity at 50° to core axis, no radioactivity							
		221.0 - 223.5 slight to moderate radioactivity	9746	221.0	223.5	2.5	0.04		
		223.5 - 237.5 gneissosity at 60° to core axis, very slight radioactivity in places							
		237.5 - 240.0 slight radioactivity in places	9747	237.5	240.0	2.5	0.01		

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 69-2 Sheet No.: 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	U_3O_8 %	CORE ASSAYS
		240.0 - 252.0 biotite rich, gneissosity at 60° to core axis, no radioactivity						
		252.0 - 255.0 slight radioactivity	9748	252.0	255.0	3.0	0.02	
		255.0 - 257.5 slight to moderate radioactivity	9749	255.0	257.5	2.5	0.01	
		257.5 - 270.5 40% pegmatite, gneissosity at 60° to core axis, no radioactivity						
		270.5 - 272.5 pegmatite section, slight radioactivity	9750	270.5	272.5	2.0	0.02	
		272.5 - 287.5 mainly pegmatite						
		287.5 - 290.0 slight radioactivity, mainly pegmatite	11801	287.5	290.0	2.5	0.03	
		290.0 - 295.0 slight to moderate radioactivity, mainly pegmatite with biotite rich sections						
		295.0 - 298.5 slight radioactivity, gneissosity at 65° to core axis	11803	295.0	298.5	3.5	0.03	
		298.5 - 302.0 no radioactivity	11804	298.5	302.0	3.5	0.01	
		302.0 - 305.0 slight to moderate radioactivity	11805	302.0	305.0	3.0	0.01	
		305.0 - 314.0 very slight radioactivity in places						
		314.0 - 317.5 biotite rich, gneissosity at 65° to core axis, no radioactivity						
		317.5 - 320.5 5% pegmatite, slightly radioactive	11808	317.5	320.5	3.0	0.02	
320.5	369.0	Pegmatite						
		320.5 - 331.5 10% quartz-feldspar-biotite gneiss, no radioactivity						
		331.5 - 332.5 slightly radioactive	11809	331.5	332.5	1.0	0.04	

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Rouyn Option, N.E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 69-2 Sheet No.: 4
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		332.5 - 351.0 20% quartz - feldspar-biotite gneiss, some brecciation along gneissosity at 60° to core axis, very slight radioactivity in local spots					
		351.0 - 369.0 50% quartz-feldspar-biotite gneiss, very slight radioactivity in places, much brecciation along gneissosity at 65° to core.					
369.0	461.0	Quartz-feldspar-biotite gneiss					
		369.0 - 389.0 10% pegmatite, less brecciated than preceding, very slight radioactivity in places					
		389.0 - 409.0 15% pegmatite, slight brecciation along gneissosity at 55% - 65% to core axis, very slight radioactivity in places					
		409.0 - 429.0 gneissosity at 65° to core axis, considerable brecciation in places, very slight occasional radioactivity.					
		429.0 - 434.0 gneissosity at 60° to core axis, no radioactivity.					
		434.0 - 435.5 slight radioactivity	118.10	434.0	435.5	1.5	Tr
		435.5 - 448.0 slightly brecciated in places, very slight local radioactivity.					
		448.0 - 461.0 becoming porphyritic, no radioactivity					
461.0		End of hole.					

EXPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property New Senator Option, N.E. Alberta
Location
Claim No.
Location of Core

Surveys

At	Dip	Bearing

Hole No. 69-2 Sheet No. 5
Length of Hole
Date Started Completed
Core Logged by
Date
Elevation Datum

Co-ordinates of Collar

North
East

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
		SLUDGE SAMPLES					
		Sample No. Footage Width U_3O_8 %					
		11806 210.0-220.0 10.0 0.03					
		11807 220.0-230.0 10.0 0.02					
		11811 310.0-320.0 10.0 0.03					

XPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location: Small Lake, 1 1/4 miles N. W. of Cherry Lake
Claim No.:
Location of Core: north shore of Small Lake

Surveys

At	Dip	Bearing
Collar	-45°	090° (due East)

No dip tests taken-machine broke down at 342.0feet

Hole No.: 69-3 Sheet No.: 1
Length of Hole: 342.0 feet
Date Started: January 25, 1969 Completed: Jan 27, 1969
Core Logged by: W. H. Thorpe [redacted]
Date: January 26-27 1969
Elevation: Datum:

Co-ordinates of Collar
North: 1 + 60
East: 0 + 00 (on Base Line) } Small Lake Grid

"AX" Core

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
0.0	8.0	CASING					
8.0	38.5	Pink biotite granite					
		8.0-24.0 pegmatitic in places, no radioactivity					
		24.0-38.5 includes minor amount of undigested quartz-feldspar-biotite gneiss					
		no radioactivity					
38.5	51.5	Quartz-feldspar-biotite gneiss. In contact at 80° to the line of hole					
		38.5-44.0 5% pegmatite, gneissosity at 40° to the line of hole, no radioactivity					
		44.0 - 51.5 fairly massive, no radioactivity					
515	63.0	Pegmatite, no radioactivity					
63.0	342.0	Quartz-Feldspar-Biotite Gneiss					
		63.0-80.5 slight gneissosity at 50° to the line of hole, no radioactivity					
		80.5-97.5 considerable granitization, no radioactivity					
		97.5-98.5 very slight radioactivity, porphyritic texture and somewhat brecciated					
		98.5-100.0 feldspar phenocrysts up to 1/2", no radioactivity					
		100.0-124.0 gneissosity at 60° to the line of hole, very slight radioactivity in					
		places, some brecciation along gneissosity					

XPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No. 69-3 Sheet No. 2
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS U_3O_8 %	CORE ASSAYS MoS_2 %
		124.0-129.0 slight to moderate radioactivity, 10% pegmatite, trace molybdenite	11812	124.0	129.0	5.0	0.02	tr
		or graphite						
		129.0-134.0 slight to moderate radioactivity, gneissosity at 50° to the line of						
		hole biotite rich, traces molybdenite or graphite	11813	129.0	134.0	5.0	0.03	0.02
		134.0-139.0 as before	11814	134.0	139.0	5.0	0.02	0.01
		139.0-142.5 slight radioactivity-in places only						
		142.5-162.5 gneissosity at 50° to the line of hole slight radioactivity from						
		151.5 to 152.5						
		162.0-182.0 5-10% pegmatite, slight radioactivity in places						
		182.0-206.0 slight gneissosity at 40° to the line of hole, 20% pegmatite, very						
		slight radioactivity in places 206.0-213.0 slight gneissosity at 65° to the line						
		of hole, nor radioactivity, 20% pegmatite						
		213.0-218.0 slight radioactivity, some brecciation, slight hematization of	11815	213.0	218.0	5.0	0.04	0.03
		feldspars, trace molybdenite or graphite						
		218.0-242.5 biotite rich, no radioactivity, gneissosity at 55° to the line of hole						
		242.5-243.5 pegmatite, brecciated, moderate radioactivity	11816	242.5	243.5	1.0	0.05	

XPLORATION DEPARTMENT

McINTYRE
PORCUPINE MINES LIMITED

DIAMOND DRILL LOG

Property: New Senator Option, N. E. Alberta
Location:
Claim No.:
Location of Core:

Surveys

At	Dip	Bearing

Hole No.: 69-3 Sheet No.: 3
Length of Hole:
Date Started: Completed:
Core Logged by:
Date:
Elevation: Datum:

Co-ordinates of Collar

North:
East:

From	To	Description of Core	Sample No.	FOOTAGE From	FOOTAGE To	Width	CORE ASSAYS
	259.0	278.5 gneissosity at 50° -70° to core axis, brecciated from 274.5 to 275.2 but no radioactivity, some hematization					
		278.5-303.0 slight hematization in places, brecciated from 301.0 to 302.0 but very slight radioactivity. General gneissosity at 45° to the line of hole					
		303.0-312.0 pronounced hematite stain, some brecciation along gneissosity at 60° to the line of hole, no radioactivity					
		312.0-325.0 brecciated feldspar phenocrysts in places along gneissosity at 60° to the line of hole, very slight radioactivity over a few inches					
		325.0-342.0 5-10% pegmatite, more massive and less breciated than preceding gneissosity in places at 60° to core axis, no radioactivity. Tendency to porphyritic texture in places.					
342.0		End of Hole					

Sludge Sample

Sample No.	Footage	Width	U_3O_8 %
11817	320.0-330.0	10.0	tr