DIAMOND DRILLING

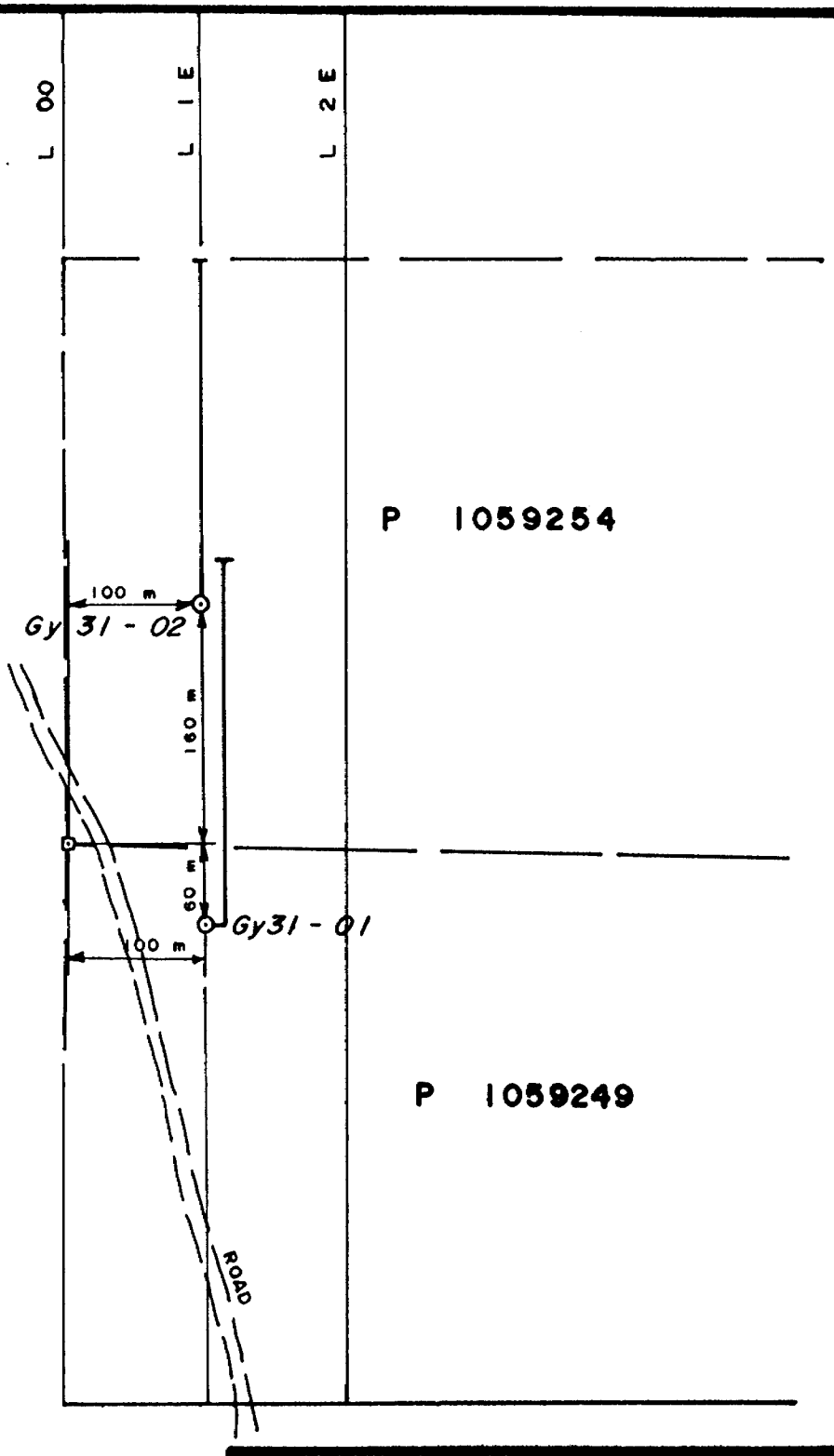
TOWNSHIP: GEARY **REPORT NO:** #19

WORK PERFORMED FOR: Falconbridge Ltd.

RECORDED HOLDER: Same as Above (xx)
: Other ( )

Claim No.	Hole No.	Footage	Date	Note
P1059249	Gy31-01	332.0m	Sept/88	(1)
P1059254	Gy31-02	344.0m	Sept/88	(1)

NOTES: (1) W8906-452 date filed Oct/89



FALCONBRIDGE LIMITED

Exploration Division — Timmins, ONTARIO

GEARY 31

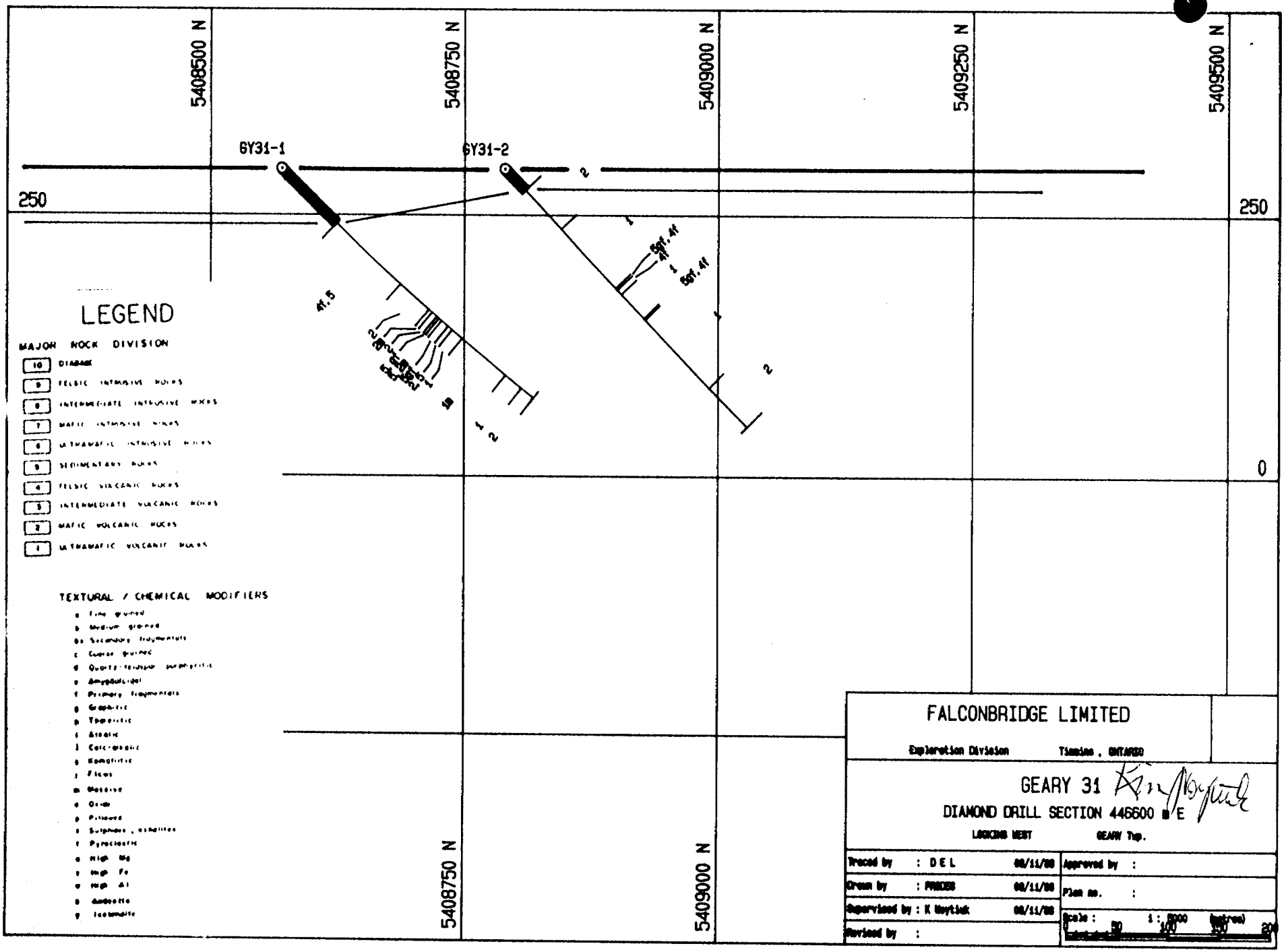
GEARY Twp.

Kam Woytiuk

DRILL HOLES

Gy 31 - 01 , 02

SCALE: 1 : 5,000		Data: Woytiuk
Drawn: DEL	Project N°: 8180	Date: 19/11/88


5408500 N
5408750 N
5409000 N
5409250 N
5409500 N
GY31-1
GY31-2
250
250
0
41.5
Sect. 41
Sect. 41
LEGEND
MAJOR ROCK DIVISION
10 DIABASE
9 FELSIC INTRUSIVE ROCKS
8 INTERMEDIATE INTRUSIVE ROCKS
7 MAFIC INTRUSIVE ROCKS
6 ULTRAMAFIC INTRUSIVE ROCKS
5 SEDIMENTARY ROCKS
4 FELSIC VOLCANIC ROCKS
3 INTERMEDIATE VOLCANIC ROCKS
2 MAFIC VOLCANIC ROCKS
1 ULTRAMAFIC VOLCANIC ROCKS
TEXTURAL / CHEMICAL MODIFIERS
a Fine grained
b Medium grained
bx Secondary fragmentals
c Coarse grained
d Quartz-feldspar porphyritic
e Amygdaloidal
f Primary fragmentals
g Graphitic
h Tourmalitic
i Biotite
j Calc-silicate
k Hematitic
l Flows
m Massive
o Oxide
p Pillowed
s Sulphides, oxidation
t Pyroclastic
u High Mg
v High Fe
w High Al
x Andesite
y Komatiite
FALCONBRIDGE LIMITED
Exploration Division Timmins, ONTARIO
GEARY 31
DIAMOND DRILL SECTION 446600 E
LOOKING WEST GEARY Twp.
Traced by : D E L 88/11/08
Drawn by : PRICES 88/11/08
Supervised by : K Moylick 88/11/08
Revised by :
Approved by :
Plan no. :
Scale : 1 : 2000 (metres)
0 50 100 150 200

HOLE NUMBER: GY31-1

FALCONBRIDGE LTD
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: 8180
PROJECT NUMBER: 008180
CLAIM NUMBER:
LOCATION: GEARY TWP.

PLOTTING COORDS GRID:
NORTH: 5408570.00N
EAST: 446600.00E
ELEV: 295.00

ALTERNATE COORDS GRID: LINE
NORTH: 3+40N
EAST: 1+ 0E
ELEV: 0.00

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 332.00m
START DEPTH: 0.00m
FINAL DEPTH: 332.00m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: September 13, 1988
DATE COMPLETED: September 18, 1988
DATE LOGGED: September 19, 1988

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: YES
PLUGGED: NO
HOLE SIZE: BQ

CONTRACTOR: BRADLEY BROS.
CASING: IN HOLE
CORE STORAGE: MINESITE

PURPOSE: To test HLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
127.00	356° 0'	-44° 0'	SING.SHOT	OK	
226.00	2° 0'	-38° 0'	SING.SHOT	OK	
320.00	4° 0'	-39° 0'	SING.SHOT	OK	

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	

HOLE NUMBER: GY31-1

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 8-November-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 76.00	CASING «{ob}»					
76.00 TO 161.80	SHEARED QUARTIZITE OR FELSIC VOLCANIC «4f,5»	-76.0 - 77.0m lost 1.5m of core. -colour - pale green -moderate to strong foliation at 50° to core axis. «{S2 50°}» -soft - can scratch easily with knife. -broken core at 77.8m. -fine to medium ? grain (could be medium grain 50% quartz ? cannot tell). -77.8 -85.4m QUARTZITE OR FELSIC ASH TUFF? -cannot see contact at 77.8m. -pale grey colour. -very hard. -weak foliation at 50° to core axis. -fine to medium grain. -up to 50% quartz clasts (mm x mm size) 10% feldspar - white phenocrysts. -80.0 to 99.5m - very broken core. -80.0 to 86.0m - lost 4.5m of core. -85.4 - 130.0m - chlorite sericite schist. -note could be same rock as 77.8 to 85.4m except more chlorite + sericite alteration + more sheared. -pale green colour. -{91.2-91.4} «{FAI}» FAULT - 2cm wide fault gouge. -91.4m - 1cm wide fault gouge - broken core. -moderate to strong foliation at 50° to core axis. -can scratch with knife fairly soft. -2-3% white feldspar (very hard can't scratch with a knife) phenocrysts - (3mm x 3mm) locally 5% + can be as large as 1cm x 1cm. -2-3% grey quartz phenocrysts (1mm x 1mm). -fine grain. -5% mm white quartz veinlets - parallel to foliation. -note locally looks like good rhyolite eg. 113.0 - 113.1m - white colour with minor lime green fuschite. -122.0 - 123.2m - badly broken core, minor gouge along fracture planes. -128.2 - 130.0m - no more feldspar phenocrysts.		-very weak sericite + chlorite alteration in fracture.	-less than 1% disseminated pyrite.	-85.4 - 119.7m - weakly broken core.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-strong foliation at 50° to core axis. -130.0 - 161.8m -colour pale grey. -very hard. -moderate to strong foliation at 50° to core core axis. «|S2 50°|» -can see good banding average 1cm wide - from pale cream to light grey to pale yellow green to dark grey. -varies locally from fine grain to medium grain. -130.0 - 131.6m - 25-30% quartz eyes (1mm x 1mm) in fine grain matrix. -131.6 - 133.0m - fine grain, aphyric. -133.0 - 133.4m - chlorite schist. -colour dark green. -soft. -133.4 - 134.7m - fine grain (see description as per 131.6 - 133.0m). -134.7 - 151.2m -medium grain. -pale grey colour. -banding from dark grey to pale grey. -20% white feldspar phenocrysts - 20% grey quartz phenocrysts (2mm x 2mm). -moderate to strong foliation. -151.2 - 152.0m - fine grain. -152.0 - 161.2m - medium grain - similar to 134.7 to 151.2m. -161.2 - 161.8m - fine grain.		-locally spotty silicification ie. 147.7 to 147.9m. -{151.5-161.8} «Ch» moderate pervasive to fracture controlled chlorite - colour change pale grey green also in quartz veins strong chlorite infractures. -148.0 - 161.0m - pink tinge in fractures parallel to foliation.	-less than 1% disseminated pyrite + in mm veinlets parallel to foliation. -134.7 - 152.0m - 3-5% pyrite + pyrrhotite in mm to 3mm wide veinlets parallel to foliation + contorted stringers. -148.0m - 4cm wide massive pyrite stringer at 50° to core axis. -150.2 - 150.4m - contorted white quartz vein with 2% chlorite infractures with 3% pyrite in blebs. -152.0 - 161.8m - 2-3% disseminated pyrite + in mm wide fractures. -153.1 - 153.4m - white quartz vein contorted at 05° to core axis 1cm wide with locally strong chlorite alteration in fractures + 2-3% pyrite in cubes. -158.0m - quartz vein at 30° to core axis 5cm wide - 2-3% pyrite in cubes.	
161.80 TO 199.10	CHLORITE SCHIST OR SHEARED MAFIC VOLCANICS «2»	-no definite contact at 161.8m. -gradational increase in chlorite. -colour dark green. -fine grained. -strong foliation at 35° to 45° to core axis. «|S2 40°|» -15-20% mm wide white carbonate veinlets parallel to foliation.		-moderate chlorite in fractures. -moderate pervasive carbonate alteration (fizzes with HCl). «Ch»	-161.8 - 184.0m - 2-5% disseminated pyrite. -locally 1% pyrrhotite + pyrite in fracture + blebs.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-3-10% 2mm x 2mm white carbonate amygdules. -at 184.5m - looks like 5% mm x mm black quartz ? eyes. -locally minor banding dark green + light green + dark brown (sericite?). -192.0 - 196.4m -colour change - dark black green. -fairly soft. -fine to medium grained. -20-25% carbonate veinlets. -196.4 - 197.5m Sheared Mafic Volcanic -moderate to strong foliation. -dark green colour. -197.5 - 198.3m -dark green black colour. -25-30% mm x mm carbonate blebs. -strong foliation at 55° to core axis. -[198.3-199.1] «2m» MASSIVE MAFIC VOLCANIC -massive, light green colour - may be same as 199.1 to 199.3m without feldspar.		-[197.5-198.3] «Cb» strong pervasive to centred on amygdules carbonate (fizz with HCl) alteration.	-trace chalcopyrite in pyrrhotite. -192.0 - 196.4m - could be ultramafic?	
199.10 TO 203.30	MASSIVE FELDSPAR PORPHYRITIC MAFIC VOLCANIC «2m»	-199.1 - 199.3m - Porphyritic Mafic Volcanic. -dark to light green. -sharp contacts at 199.1 + 199.3m at 50° to core axis. -35-40% white feldspar porphyry 2mm x 2mm. -199.3 - 199.4m - Massive Feldspar Porphyritic. -2-3% white feldspar phenocrysts. -199.4-199.6m - Feldspar Porphyritic Massive Mafic Volcanic. -35-40% white feldspar phenocrysts. -see description as per 199.1 - 199.3m. -199.6 - 203.3m - contact at 50° to core axis. -massive, fine grain. -light green colour to dark green. -weak foliation at 45° to core axis. -locally look more medium ? granular texture. -2-3% carbonate veinlets parallel to foliation. -2-3% white feldspar phenocrysts 3mm x 3mm. -201.8 - 203.3m - 25-35% white feldspar phenocrysts 2mm x 2mm.			-less than 1% disseminated pyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
203.30 TO 209.30	SHEARED MAFIC VOLCANIC «2»	-contact at 203.3m is at 60° to core axis. -colour pale to dark green. -strong foliation at 45-50° to core axis. -«{S2 45°}» -15-20% mm wide carbonate veinlets parallel to foliation. -note locally ie. 204.5 see folding of veins.		-moderate to strong pervasive carbonate alteration (fizz with HCl). «Cb» -208.6 - 209.3m - moderate spotty bleaching (hard) pale white-cream colour.	-overall less than 1% pyrrhotite + pyrite in carbonate blebs.	
209.30 TO 212.20	GRAPHITIC ARGILLITE + ARGILLITE «5,gf»	-209.3m - contact is at 60° to core axis. -209.3 - 210.4m - GRAPHITIC ARGILLITE -minor greywacke + argillite. -beds vary from 1mm to 1cm wide. -bedding varies from 50-60° to core axis. -colour black. «{S0 50°}» -5-15% mm wide carbonate veinlets parallel to bedding (fizz with HCl). -210.4 - 210.6m - ARGILLITE -grey, non graphitic. -210.6 - 211.10m - GRAPHITIC ARGILLITE -211.10 - 212.2m - ARGILLITE		-{209.3-210.4} «gf» graphite in fracture planes, locally 4cm zones where massive. -{210.6-211.10} «gf» -minor graphite in fracture planes.	-209.3 - 210.4m - 3% colloform pyrite + blebs predominantly in carbonate blebs + veinlets parallel to bedding. -210.4 - 210.6m - less than 1% pyrite in carbonate veinlets. -3% colloform pyrite.	-209.3 - 210.4m - moderate conductivity along bedding planes, weak conductivity over entire length.
212.20 TO 215.60	GREYWACKE ? INTER-CALATED WITH FELDSPAR PORPHYRITIC MAFIC «5,2m»	-212.2 - 215.6m -colour dark grey black. -contact at 212.2m is at 50° to core axis. -medium grain matrix of mafic, quartz clasts. -20% feldspar (white) clasts. -strong foliation at 50° to core axis. -213.9 - 214.2m - Feldspar Porphyritic Mafic. -2-3% feldspar phenocrysts, dark green colour, massive.		-weak fracture controlled graphite. -weak fracture controlled carbonate.	-212.2 - 214.7m - less than 1% disseminated pyrite. -214.7 - 215.6m - 5% pyrite in blebs + fractures.	
215.60 TO 223.90	GRAPHITIC ARGILLITE + ARGILLITE «5gf»	-215.6 - 216.6m - Graphitic Argillite see description as per 209.3 - 212.2m. -216.6 - 217.4m - Argillite - minor graphite in fractures. -217.4 - 218.10m - Graphitic Argillite. -218.0 - 218.9m - Argillite - minor graphite in fractures. -218.9 - 219.3m - Graphitic Argillite -219.3 - 219.7m -greywacke ? see description as per 212.2 - 215.6m. -weak foliation at 50° to core axis.		«gf» -219.3 - 219.7m - weak fracture controlled chlorite (dark green-black) parallel to foliation.	-217.7 - 218.0m - Semi Massive Pyrite -30% colloform pyrite in carbonate blebs in graphitic argillite. -218.0 - 219.7m - 1-2% pyrite in blebs + colloform + carbonate veinlets.	-219.3 - 219.7m - could be sheared feldspar porphyritic mafic?

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-25% mm x mm feldspar ? white clasts in pale grey green fine grained matrix. -219.7 - 220.0m - Siltstone + Argillite -pale grey cream colour bands approximately 1cm wide alternating with dark black argillite beds. -bedding at 40° to core axis. -fine grained. «|S0 40°|» -220.0 - 223.9m - argillite + minor graphitic argillite, minor greywacke.			-nil sulphides. -2-3% pyrite.	
223.90 TO 229.20	SHEARED MAFIC VOLCANICS MINOR GREYWACKE «2,5»	-contact at 223.9m is at 40° to core axis. -colour dark green. -strong foliation to moderate at 40° to core axis. «|S2 40°|» -fine grained matrix with 30% white feldspar + quartz ? (grey) phenocrysts 1mm x 1mm - speckled look. -Sheared Felsic Ash Tuff intercalated with greywacke as follows: |226.10-227.10| «4f» |227.6-227.9| «4f» and |228.9-229.2| «4f» -colour white-cream. -very hare, siliceous cherty. -alternating bands or beds of dark black 1cm to 1mm wide. -fine grained. -strong foliation at 45° to core axis.		-weak fracture controlled carbonate.	-less than 1% disseminated pyrite. -2-3% pyrite in fractures.	
229.20 TO 241.80	SHEARED ULTRAMAFIC «1»	-contact at 229.2m is at 50° to core axis. -229.2 - -strong foliation at 45° to core axis. «|S2 45°|» -pale green colour. -very soft, can scratch with fingernail. -talc in fracture planes. -spinifex texture visible. -fine grained. -not magnetic. -5% carbonate veins 1cm x 1mm wide parallel to foliation. -|240.5-240.5| «|FA1,75°|» -1cm wide fault gouge. -core on adjacent side sheared at 75° to core			-approximately 1% disseminated pyrite. -less than 1% disseminated pyrite - minor pyrrhotite in blebs.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		axis.				
241.80 TO 296.70	MASSIVE ULTRAMAFIC «1m»	-contact at 241.8m is at 45° to core axis. -massive, equigranular. -colour black. -fine to medium ? grain. -not as soft as unit from 229.2 - 241.8m cannot scratch with fingernail but can scratch with knife. -20% controlled white carbonate veinlets with 1% talc in veins (pale green) very magnetic. -{243.2-243.2} «|FAI|» FAULT -3cm wide fault gouge. -267.8 - 268.2m -colour change - pale green black colour with 20% black magnetic crystals. -no visible contact at 267.8m. -note overall magnetite varies from 1-20% locally. -291.4 - 291.9m - carbonate vein contorted with 1% pyrite. -{296.67-296.7} «|FAI|» FAULT gouge sheared adjacent to fault on downhole side at 35-45° to core axis. «|S2 45°|»				
296.70 TO 316.90	SHEARED ULTRAMAFIC «1»	-strong foliation at 35-45° to core axis. -colour black. -296.9 - 298.0m - contorted folding. -25-35% carbonate blebs + veins. -colour dark green. -296.9 - 303.0m - dark green. -303.0 - 305.1m - dark black sheared ultramafics looking like argillite + greywacke so sheared up. -carbonate veins are sheared into tiny blebs. -305.1 - 316.9m - dark green colour strongly sheared at 60° to core axis.		-{305.1-316.9} «Ch» -strong chlorite in fractures.	-296.7m - 1-2% pyrite in cubes.	
316.90 TO 332.00	SHEARED MAFIC VOLCANIC «2»	-contact at 316.9m is at 35° to core axis. -316.9 - 317.0m - light grey colour + silicified. -{316.9-325.3} «|S2 45°|» -strong foliation at 40-45° to core axis. -colour dark green, fine grained. -harder can scratch with knife. -20% - 5% magnetite crystals.		-moderate fracture controlled chlorite.	-3% pyrite in cubes.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-5% contorted carbonate veins. -very magnetic. -324.5 - 329.5m - pale grey colour silicified very hard (could be just baked as located adjacent to quartz vein). -325.3 - 329.3m - weak foliation to massive. -329.5 - 332.0m - moderate foliation at 45° to core axis. -dark green colour. -locally magnetic.		-324.5 - 329.5 - pale grey moderate pervasive silicification. -329.5 - 332.0m - weak fracture controlled chlorite.	-325.3 - 325.7m - white quartz vein at 60° to core axis. -20cm adjacent to quartz vein on either side is 10% disseminated. -quartz vein has 2% cubic pyrite.	-Note 329.5 - 332.0m - not sure if ultramafic?
332.00 TO 332.00	END OF HOLE					

HOLE NUMBER: GY31-2

FALCONBRIDGE LTD
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: 8180
PROJECT NUMBER: 008180
CLAIM NUMBER:
LOCATION: GEARY TWP.

PLOTTING COORDS GRID:
NORTH: 5408790.00N
EAST: 446600.00E
ELEV: 295.00

ALTERNATE COORDS GRID: LINE
NORTH: 5+60N
EAST: 1+ 0E
ELEV: 0.00

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 344.00m
START DEPTH: 0.00m
FINAL DEPTH: 344.00m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: September 18, 1988
DATE COMPLETED: September 22, 1988
DATE LOGGED: September 23, 1988

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: YES
PLUGGED: NO
HOLE SIZE: BQ

CONTRACTOR: BRADLEY BROS.
CASING: IN HOLE
CORE STORAGE: MINESITE

PURPOSE: To test HLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	-47° 0'	ACID	OK	
344.00	-	-45° 0'	ACID	OK	

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments

HOLE NUMBER: GY31-2

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 10-November-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 29.00	OVERBURDEN «|ob|»					
29.00 TO 80.50	MAFIC VOLCANIC «2»	-29.0 - 29.2m -Sheared Mafic Volcanic?? -moderate to strong foliation at 40° to core axis. -banding in core, colour cream pale grey to dark green bands. -possibly just silicified sheared mafic no contact at 29.2m. -29.2 - 80.5m - Mafic Volcanic -fine grain. -dark green colour. -weak foliation at 35-40° to core axis. -note possible pillow selvages look amygdaloidal infilled with chlorite approximately 5-10cm wide. -5% average size 1-2cm wide carbonate (fizz with HCl) veins parallel to foliation with 5% disseminated magnetite (black) in veins + 5% cubic pyrite. -entire unit is very magnetic. -|35.4-37.10| «Quartz Vein» -43.5 - 43.8m - 10% quartz carbonate veins contorted with 1% disseminated pyrite + in cubes associated with moderate spotty chlorite alteration of host rock. -note dark grey silicified zones occur up to 1m on either side adjacent to quartz veins. -55.5 - 60.0m - pale green colour with 1% feldspar phenocrysts - but cannot break out as separate unit. -no visible contacts. -77.0 - 80.5m - locally broken core. -78.5 - 80.5m - weak foliation at 35° to core		-20.0 - 20.9m - moderate spotty silicification? -«Ch» -moderate to strong fracture controlled chlorite alteration. -locally weak to moderate pervasive carbonate alteration (fizz with HCl). -locally 10cm to 0.5m adjacent to quartz veins is moderate pervasive silicification (very hard) + pale grey-brown colour. -|68.0-84.5| «Si» grey colour, moderate pervasive silicification.	-overall 2-5% disseminated pyrite in host rock. -average of 5% cubic pyrite in carbonate veins. -often in host rock adjacent to a quartz vein - get 1cm zone of approximately 10-15% disseminated pyrite. -some of the more predominant quartz veins occur as follows + all have minor dravite + chlorite: 35.4 - 37.10m - Quartz Vein. -colour white. -spotty brown weathered surface. -with minor fractures of chlorite and dravite. -5-10% disseminated pyrite + in cubes. -contact at 35.4m is at 40° to core axis. -contact at 37.10m is at 20° to core axis. -41.8 - 42.10m - Quartz Vein. -contact at 41.8m is at 25° to core axis. -2% disseminated pyrite. -43.0 - 43.10m - Quartz Vein. -2% disseminated pyrite. -contact at 30° to core axis. -47.5 - 47.9m - Quartz Vein. -2-5% disseminated + in cubes of pyrite.	-possibly pillowed.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		axis.				
80.50 TO 158.50	ULTRAMAFIC VOLCANIC «1»	-contact at 80.5m is at 35° to core axis. -dark green colour. -massive to weakly foliated at 45-50° to core axis. -locally up to 40% carbonate amygdules. -5% carbonate (white) veinlets. -rock is very soft can scratch with fingernail. -locally spinifex visible. -fine grain. -114.5 - 152.0m - strong foliation at 30-45° to core axis. -┤114.5-152.0├ «┤S2 40°├» -20-40% carbonate blebs looks brecciated - may be just in situ brecciation + looks like this due to shearing. -locally up to 40% white feldspar phenocrysts? + circular fragments? -145.2 - Fault -┤145.2-145.2├ «┤FA1,45°├» -145.2m - 1cm talc gouge. -151.4m - 1cm talc gouge. -143.0 - 152.0m - strong foliation at 45° to core axis, but not as much carbonate blebs, doesn't look like a breccia. -5-10% carbonate in veinlets. -152.0 - 157.0m - massive to weak foliation. -157.0 - 158.5m - pale grey more bleached colour.		-moderate pervasive carbonate alteration. -«Cb» -┤114.5-143.0├ «Ch» -strong fracture controlled chlorite. -116.6 - 117.9m - moderate spotty to pervasive silicification pale grey colour.	-less than 1% disseminated pyrite. -116.6 - 117.9m - 5-7% disseminated pyrite. -126.0 - 127.4m - 80% quartz carbonate veining with 2-3% disseminated pyrite + adjacent rock has weak epidote/ sericite alteration. -136.0 - 139.3m Quartz (white) Vein -contact at 136.0m is at 45° to core axis. -up to 5% disseminated pyrite. -139.3 - 139.5m - 20% carbonate veins contorted. -136.4 - 137.0m - brown weathering. -minor chlorite in vein. -157.0 - 158.5m - 5-7% disseminated + in fractures + in blebs - pyrrhotite, minor pyrite.	-note probably a flow. -157.0 - 158.5m - cannot tell if separate unit - could be mafic volcanic?
158.50 TO 161.00	GRAPHITIC ARGILLITE + FELSIC ASH TUFF «5gf,4f»	-contact at 158.5m is at 40° to core axis. -colour black. -158.5 - 159.2m - Graphitic Argillite. -159.2 - 159.5m - Felsic Ash Tuff - minor Argillite -colour grey, fine grain. -very hard. -bedding at 35° to core axis. «┤S0 35°├» -159.5 - 159.7m - Graphitic Argillite -very conductive/20cm		-┤158.5-159.2├ «gf» -graphite nearly massive. -159.2 - 159.5m - minor graphite in fractures. -159.5 - 159.7m - graphite.	-5% disseminated pyrite + in fractures. -159.2 - 159.5m - less than 1% disseminated pyrite. -159.5 - 159.7m - 2-5% fracture controlled pyrite, minor pyrrhotite.	-158.5 - 159.2m - very conductive/ 0.7m. -159.5 - 159.7m - very conductive over 20cm.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-159.7 - 161.0m -Felsic Ash Tuff intercalated with graphitic argillite + argillite. -bedding is at 40° to core axis.		-159.7 - 160.7m -graphite in fractures. -160.7 - 161.0m - graphite - very conductive.	-159.7 - 161.0m - 2-3% pyrite, trace pyrrhotite in fractures + blebs.	-160.7 - 161.0m - very conductive over 30cm.
161.00 TO 166.80	FELSIC ASH TUFF «4f»	-pale grey light green yellow colour. -very hard, siliceous. -weak foliation at 25-45° to core axis. -contact at 161.0m is at 50° to core axis. -fine grain. -25% mm x mm carbonate amygdules - cannot see quartz eyes. -5% contorted mm wide carbonate veinlets. -can't see true fragments.		-weak fracture controlled sericite/ epidote alteration (pale yellow green to bright green colour). -weak spotty silicification (very siliceous) grey colour.	-2-5% fracture controlled, blebs + cubes of pyrite, minor pyrrhotite. -165.5m - less than 1% disseminated sphalerite + 165.8m. -at 163.3m - 4cm wide stringer of massive (80%) pyrite + pyrrhotite.	
166.80 TO 198.80	ULTRAMAFIC VOLCANIC «1»	-contact at 166.8m is at 50° to core axis. -dark green colour, fine grain. -massive. -can scratch with knife, but not really soft. -non-magnetic. -locally spinifex from 166.8 - 173.0m - can't really see a gradation in lath size. -5% carbonate veins.		-strong fracture controlled carbonate alteration. «Cb» -198.4 - 198.8m - moderate pervasive bleaching (white grey colour).	-overall less than 1% disseminated pyrite. -198.4 - 198.8m - 2% pyrrhotite in fractures.	-flow.
198.80 TO 200.90	GRAPHITIC ARGILLITE INTERMIXED WITH FELSIC ASH TUFF «5gf,4f»	-198.8 - 198.9m - graphitic argillite, contact at 198.8m is at 50° to core axis. -198.9 - 199.3m - Felsic Ash Tuff? colour pale grey to pale yellow green. -hard, fine grain. -moderate foliation at 50° to core axis. -199.3 - 200.0m - Graphitic Argillite. «{50 50°}»		«gf» -198.8 - 198.9m - graphite (massive)/ 10cm very conductive. -198.9 - 199.3m - graphite in fractures. -199.3 - 199.4m - 80% graphite/10cm very conductive. -199.5 - 200.0m - 80% graphite very conductive/50cm.	-198.8 - 199.3m - 2-3% pyrrhotite in fractures (trace chalcopyrite). -199.3 - 200.0m - 5% colloform pyrite + pyrrhotite in fractures + blebs, trace chalcopyrite in pyrrhotite.	-note could this be just bleached mafic?
200.90 TO 290.80	ULTRAMAFIC VOLCANIC «1»	-see description as per 166.8 - 198.8m except 200.9 - 203.0m pale greyish colour. -{206.3-212.0} «2» Mafic Volcanic colour change, dark green - don't see any contact.		-«Cb»	-less than 1% disseminated pyrite. -206.10m - 1% disseminated + blebs of pyrrhotite with trace chalcopyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-212.0 - 219.5m - colour dark grey black with up to 30% carbonate veins contorted. -214.4 + 215.2m - 2cm of gouge, clay like FAULT. -{214.4-214.4} «{FAI}» -219.5 - 222.0m - weak foliation at 40° to core axis. -pale green grey colour to grey colour. -222.0 - 224.0m - dark green colour. -224.0 - 227.0m - pale grey black colour. -very soft, can scratch with nail. -{227.0-232.7} «{S2 70°}» -227.0 - 232.7m - Sheared Ultramafic -strong foliation at 70° to core axis. -colour change dark green. -spinifex visible. -232.7m - 1cm fault gouge. -{232.7-232.7} «{FAI}» FAULT -232.7 - 232.7m - fault -dark grey colour. -massive to weak foliation at 40-30° to core axis.		-219.5 - 222.0m - moderate pervasive baked, silicified probably due to being adjacent to quartz carbonate veins. -222.0 - 224.0m - weak pervasive chlorite alteration.	-219.5 - 222.0m - 5% fracture controlled pyrrhotite + pyrite. -1% chalcopyrite in pyrrhotite. -220.2 - 221.2m - 20% quartz carbonate veins at 40° to core axis with 2% disseminated pyrite in veins. -222.0 - 224.0m - 5% cubes of pyrite + in blebs. -224.0 - 293.2m - less than 1% disseminated pyrite.	-219.5 - 222.0m - ? not sure if just silicified mafic or rhyolite ? really siliceous, but don't see any contacts.
290.80 TO 344.00	SHEARED MAFIC VOLCANICS «2»	-{290.8-344.0} «{S2 35°}» -290.8 - 290.8m - FAULT -1cm fault gouge. -adjacent rock has strong foliation at 30° to core axis. -290.8 - 344.0m -dark green colour. -moderate to strong foliation at 30° to core axis. -5-10% carbonate veinlets. -311.3 - 311.7m - quartz-carbonate vein at 40° to core axis with 2-3% pyrite in cubes + disseminated. -317.0 - 344.0m - Sheared Chloritic Mafic Breccia ? (secondary brecciation). -could be just in situ brecciation due to chlorite in fractures + spotty epidote/ sericite alteration. -25% mafic pseudo ? - fragments. -strong foliation at 35-40° to core axis.		-«Ch» -290.8 - 317.0.m - weak to moderate fracture controlled chlorite. -317.0 - 344.0m - spotty moderate sericite/epidote alteration. -strong to moderate chlorite in fractures. -weak pervasive carbonate alteration.	-293.2 - 294.10m - semi-massive sulphides. -25% pyrite and pyrrhotite (1% chalcopyrite in pyrrhotite) in fractures, blebs + cubes. -often see pyrite + pyrrhotite mixed together. -overall all 25% carbonate veins + blebs. -294.10 - 300.5m - 1-2% pyrite in cubes. -300.5 - 302.6m - 5-15% pyrite in cubes + blebs with pyrrhotite very magnetic trace chalcopyrite + up to 20% carbonate veinlets. -317.0 - 344.0m - 2-3% pyrite in cubes + blebs + pyrrhotite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
344.00 TO 344.00	END OF HOLE					

Ministry of Northern Development and Mines
Ontario

Report of Work

DOCUMENT No. W 8906.452

Mining Act

42A13SE0007 19 GEARY

900

Name and Postal Address of Recorded Holder

Falconbridge Limited

P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: 2217.8

for Performance of the following work. (Check one only)

- [ ] Manual Work
- [ ] Shaft Sinking Drifting or other Lateral Work.
- [ ] Compressed Air, other Power driven or mechanical equip.
- [ ] Power Stripping
- [X] Diamond or other Core drilling
- [ ] Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.
	See attached schedule	

Mining Claim Prefix	Mining Claim Number	Work Days Cr.

Mining Claim Prefix	Mining Claim Number	Work Days Cr.

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE
OCT 13 1989
RECEIVED

All the work was performed on Mining Claim(s): P1059254, P1059249

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

A total of 676m of BQ diamond drill core was received and logged from holes GY31-1 and GY31-2 between September 13 and September 22, 1988.

This meterage equivalent to 221.8 days of work lies within claims P1059254 (576m or 1889.8 dy), and P1059249 (100m or 328 dy).

The holes were drilled by Bradley Bros. Ltd. Diamond Drill Contractors, Box 485, Timmins, Ontario P4N 7E7. The machine used on this job was a Boyles 35A.

RECORDED
NOV 22 1988

PORCUPINE MINING DIVISION
RECEIVED
NOV 22 1988
3:10 PM

Date of Report: Nov 22/88

Recorded Holder or Agent (Signature): W Paul Benney

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

K. Woytiuk, Falconbridge Limited, P.O. Box 1140, 571 Moneta Ave.

Timmins, Ontario P4N 7H9

Date Certified: November 22, 1988

Certified by (Signature): Kim Woytiuk

Table of Information/Attachments Required by the Mining Recorder

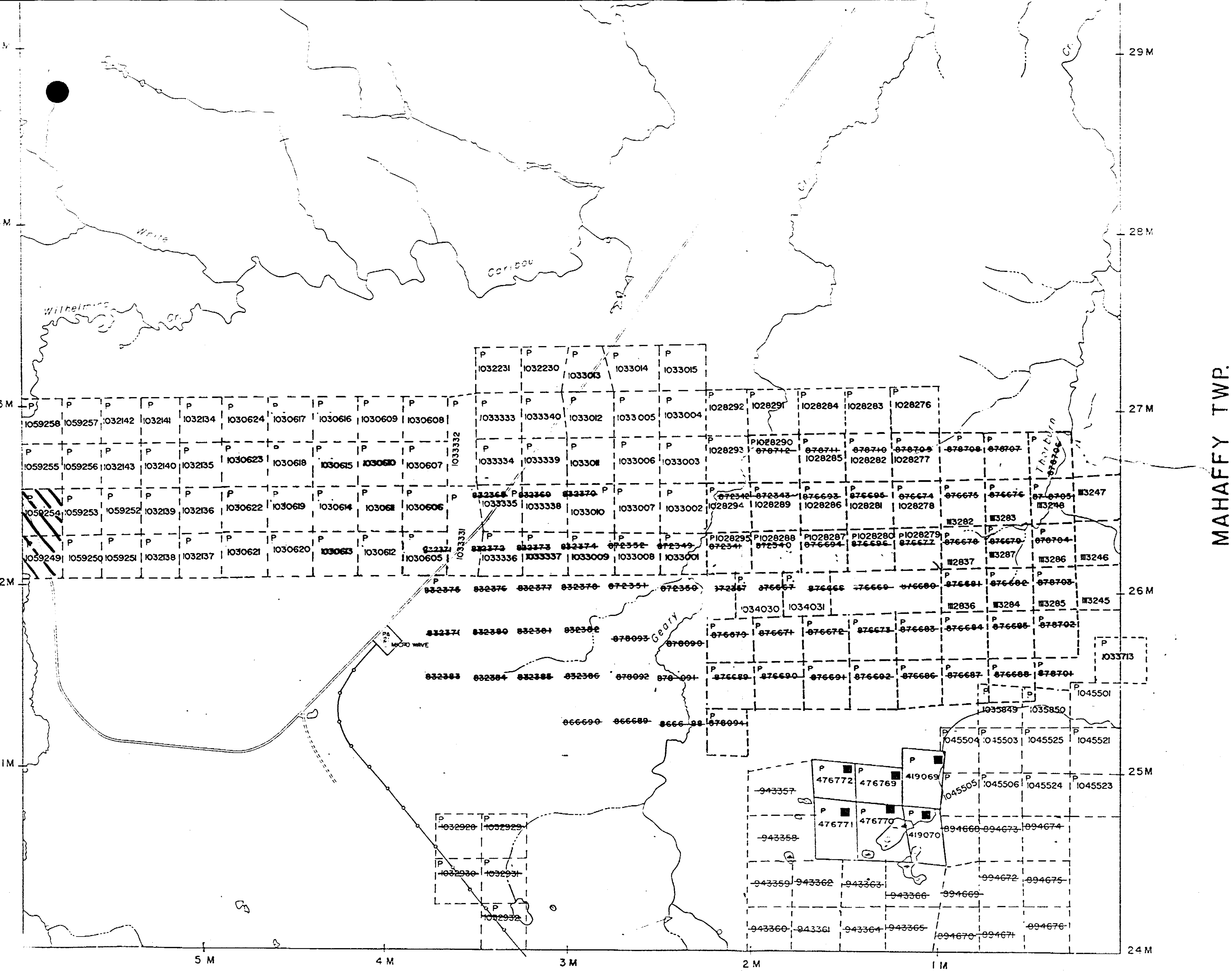
Type of Work	Specific information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted *within 30 days of recording.*	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core	Signed core log showing: footage, diameter of		Work Sketch (as

CLAIM. 8180

SCHEDULE

CLAIM #	NO. OF DAYS	TOWNSHIP
P-1030605	20.	GEARY
P-1030606	20.	
P-1030607	20.	
P-1030608	20.	
P-1030609	20.	
P-1030610	20.	
P-1030611	20.	
P-1030612	57.8	
P-1030613	60.	
P-1030614	60.	
P-1030615	20.	
P-1030616	20.	
P-1030617	20.	
P-1030618	20.	
P-1030619	60.	
P-1030620	60.	
P-1030621	60.	
P-1030622	60.	
P-1030623	20.	
P-1030624	20.	
P-1032134	20.	
P-1032135	20.	
P-1032136	60.	
P-1032137	60.	
P-1032140	20.	
P-1032141	20.	
P-1032142	20.	
P-1032143	20.	
P-1032230	20.	
P-1032231	20.	
P-1033001	20.	
P-1033002	60.	
P-1033003	60.	
P-1033004	60.	
P-1033005	60.	
P-1033006	60.	
P-1033007	60.	
P-1033008	20.	
P-1033009	20.	
P-1033010	60.	
P-1033011	60.	
P-1033012	60.	
P-1033013	20.	
P-1033014	20.	
P-1033015	20.	
P-1033331	60.	
P-1033332	60.	
P-1033333	60.	

CLAIM #	NO. OF DAYS	TOWNSHIP
P-1033334	60.	GEARY
P-1033335	60.	
P-1033336	20.	
P-1033337	20.	
P-1033338	60.	
P-1033339	60.	
P-1033340	60.	
P-1059255	20.	
P-1059256	20.	
P-1059257	20.	
P-1059258	20.	
TOTAL DAYS	2,217.8	



FLOODING OR FLOODING R…
SUBDIVISION OR COMPOSIT…
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF …

TYPE OF DOCUMENT

PATENT …
" SURFACE RIGHTS …
" , MINING RIGHTS ON…
LEASE, SURFACE & MINING …
" , SURFACE RIGHTS ON…
" , MINING RIGHTS ONLY
LICENCE OF OCCUPATION
ORDER-IN-COUNCIL
RESERVATION
CANCELLED
SAND & GRAVEL

NOTE: MINING RIGHTS IN PARC… 1913, VESTED IN ORIGIN… LANDS ACT, R.S.O. 1970

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000

0 200
METRES

TOWNSHIP

GEARY

M.N.R. ADMINISTRATIVE …

COCHRANE

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY

COCHRANE

Ministry of Natural