



DIAMOND DRILLING

TOWNSHIP: GEARY TLOWNSHIP

REPORT NO: #22

WORK PERFORMED FOR: FALCONBRIDGE LTD.

RECORDED HOLDER: SAME AS ABOVE [X]

: OTHER []

<u>CLAIM NO.</u>	<u>HOLE NO.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
P 1030607	GY33-03	145 M.	AUGUST /90	(1)
P1059251-P1059252	GY31-05	257.00 M	AUGUST /90	(1)
P1059250,P1059253	GY31-04	253.00 M	JULY_AUGUST /90	(1)
P1033334	GY33-02	194 M	AUGUST /90	(1)

209m

NOTES: (1) W9106.00027, FILED MARCH 18TH, 1991

FALCONBRIDGE LTD
DRILL HOLE RECORD

HOLE NUMBER: GY33-03

DATE: 30-August-1990
METRIC UNITS: X

IMPERIAL UNITS:

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

PLOTTING COORDS GRID: UTM
NORTH: 5409230.00M
EAST: 449880.00E
ELEV: 300.00

ALTERNATE COORDS GRID: LINE
NORTH: 4+25N
EAST: 7+ 0W
ELEV: 300.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 145.00m
START DEPTH: 0.00m
FINAL DEPTH: 145.00m

COLLAR ASTRONOMIC AZIMUTH: 180° 0' 0"

GRID ASTRONOMIC AZIMUTH: 180° 0' 0"

DATE STARTED: August 13, 1990
DATE COMPLETED: August 15, 1990
DATE LOGGED: August 15, 1990

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
ROD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
MOLE SIZE: BQ

CONTRACTOR: BRADLEY BROS.
CASING: 56m PULLED.
CORE STORAGE: MINESITE

PURPOSE: To test HLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
138.00	181° 0'	-52° 0'	SING.SHOT	OK		
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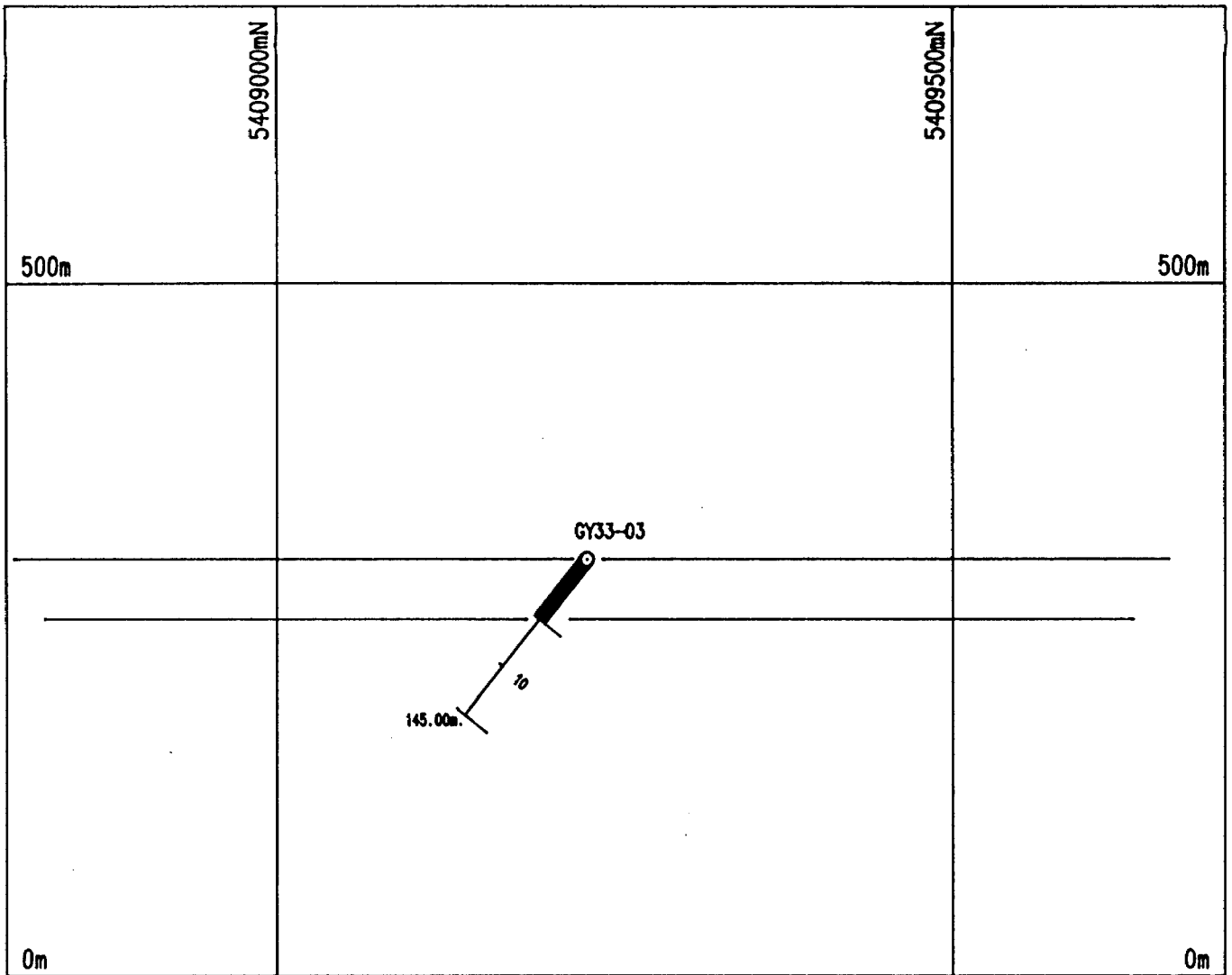
P. Roos

HOLE NUMBER: GY33-03

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 56.00	OVERBURDEN «{ob}»					-casing pulled. -pulled both casings.
56.00 TO 145.00	DIABASE «10»	-massive, felted texture. -fine grained from 84.3 to 88.8m. -coarse grained downhole of 120.0m. -blocky from 73.0 to 78.0m, 98.2 to 98.6m.		-fracture controlled epidote and carbonate-quartz alteration is weak.	-nil.	-slightly magnetic.
145.00 TO 145.00	E.O.H.					



LEGEND

Geology

MAJOR ROCK DIVISIONS

- 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/GEOCHEMICAL MODIFIERS

- a Fine Grained
- b Medium Grained
- br Breccia
- c Coarse Grained
- cd Quartz-Feldspar Pyrite
- o Amphibolite/Vesicular
- t Primary Pyroxenite
- r Granitic/Trachytic
- s Sulfidic
- u Alkalic
- v Calc-Alkalic
- w Kamafitic
- x Fine
- y Massive
- z Varicose/Spherulitic
- aa Pillowed
- ab Quartz Pyrite
- ac Calc Iron Formation
- ad Sulfidic, Chertlike
- ae Pyroxenitic
- af High Mg
- ag High Fe
- ah High Al
- ai Anorthitic
- aj Isotaxitic
- ak Text

Flow

FALCONBRIDGE LIMITED		
Exploration Division	Timmins, ONTARIO	
GEARY 33		
DIAMOND DRILL SECTION 449880 m E		
LOOKING WEST		GEARY Tap.
Traced : <i>PRZES</i>	<i>22/01/01</i>	NTS : <i>42-4/23</i> PROJECT No: <i>0100</i>
Drawn : <i>d o l</i>	<i>22/01/01</i>	NMP No: FILE: <i>0100 G</i>
Supervised : <i>P Ross</i>	<i>22/01/01</i>	Scale : 1 : 5000 (metres)
Revised :		

HOLE NUMBER: GY31-05

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 27-August-1990
IMPERIAL UNITS: METRIC UNITS: X

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

PLOTTING COORDS GRID: UTM
NORTH: 5408740.00N
EAST: 447680.00E
ELEV: 305.00

ALTERNATE COORDS GRID: LINE
NORTH: 4+ ON
EAST: 15+ 0E
ELEV: 302.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 257.00m
START DEPTH: 0.00m
FINAL DEPTH: 257.00m

COLLAR ASTRONOMIC AZIMUTH: 180° 0' 0"

GRID ASTRONOMIC AZIMUTH: 180° 0' 0"

DATE STARTED: August 3, 1990
DATE COMPLETED: August 9, 1990
DATE LOGGED: August 13, 1990

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

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

CONTRACTOR: BRADLEY BROS.
CASING: 55m LEFT IN HOLE
CORE STORAGE: MINESITE

PURPOSE: To test double NLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
160.00	-	-48° 0'	ACID	OK		
100.00	182° 0'	-49° 30'	SING.SHOT	OK		
220.00	190° 0'	-45° 0'	SING.SHOT	OK		
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P. Roos

HOLE NUMBER: GY31-05

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 55.00	OVERBURDEN « ob »					-55.0m of BW casing left in hole. -NW casing pulled.
55.00 TO 65.10	ULTRAMAFIC «1»	-green coloured, fine grained unit. -soft, talcose, strongly foliated unit. -foliation is at 40° to CA. -spotted appearance due to chlorite blotches. -fault zone occurs from 65.0 to 65.1m marking the downhole contact, also marked by fault gouge.		-fracture controlled quartz-carbonate alteration is strong throughout the unit.	-nil.	
65.10 TO 159.40	MAFIC VOLCANIC «2»	-grey-green coloured, fine grained unit. -uphole contact marked by fault zone which extends from 65.1 to 65.4m. -faults also occur from 69.6 to 69.8m and 73.7 to 73.9m, 81.4 to 81.6m. -mafics are strongly sheared due to nearby faults and well defined by the carbonate alteration. -minor phenocrysts of magnetite occur through the upper 30m of the unit. -the tuffaceous appearance is probably due to the shearing. -sections of harder more siliceous mafic occur from 87.0 to 87.4m and 91.35 to 95.0m. -narrow sections also contain a large amount of feldspar-straw yellow quartz-magnesite. -these "dykes" also contain rounded phenocrysts of quartz but may be amygdules. -where no quartz stringers occur the unit is massive mafic. -intercalated with massive sections are chlorite streaked and spotted sections ie. from 102.7 to 107.2m, 107.53 to 107.6m, 107.7 to 110.15m, 110.35 to 110.85m all of which may be finer grained equivalents to the straw-yellow altered intercalations of dykes. -the chlorite spots have quartz centres 20% of the time. -foliation is at 60° to CA at 114.0m. -further intrusions of "mafics" occur from 116.0 to 135.3m. -"amygdale looking" phenocrysts of dark hard material occur within this section (116.0 to		-pervasive and fracture controlled carbonate alteration is moderate throughout the unit. -a straw-yellow coloured, hard mineral occurs downhole of 85.4 to 95.0m and is probably magnesite. -acicular to rounded phenocryst of feldspar occur through the same section as magnesite. -fracture controlled quartz stringers are common at or near the margins of the dykes.	-nil to minor disseminated pyrite occurs throughout most of the unit.	-took thin sections at: 87.3m (mafic tuff - Si), 87.6m (mafic with magnetite), 94.0m (mafic tuff or Q.F.P.), 105.5m (massive mafic - chl., qtz). -possible dykes may be of mafic origin or Q.F.P. in nature.

HOLE NUMBER: GY31-05

DRILL HOLE RECORD

LOGGED BY: P. ROOS

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HOLE NUMBER: GY31-05

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>135.3m) and may be immiscible textures.</p> <ul style="list-style-type: none"> -a short silicified section from 137.5 to 138.0m occurs within the sheared mafics. -shearing has obscured all mafic textures however some minor pyrrhotite with pyrite (5%) occurs from 144.65 to 144.75m may be selvage controlled. -downhole contact is sharp. -mafic at 159.0m are foliated at 45° to CA. 		<ul style="list-style-type: none"> -minor epidote alteration occurs in silicified section. -fracture controlled quartz-carbonate alteration is moderate to strong downhole to 159.4m. 	<ul style="list-style-type: none"> -up to 2% disseminated and cubed pyrite occurs from 137.5 to 138.0m. 	
159.40 TO 166.90	IRON FORMATION «5s,5c»	<ul style="list-style-type: none"> -white to black, brass coloured, fine grained unit. -alternating bands/beds of chert, siliceous quartz, magnetite, pyrite and pyrrhotite. -abundances are as follows: 65% chert + quartz, 10% magnetite, 15% pyrite, 10% pyrrhotite. 		<ul style="list-style-type: none"> -siliceous throughout the unit. -minor fractures are carbonate filled. 	<ul style="list-style-type: none"> -sulphides occur as follows: 159.4-159.7m (30% mag, 40% po, 30% chert), 159.7-163.0m (70% chert + quartz, 20% py, 10 mag), 163.0-164.85m (85% py + po, (50:50), 15% siliceous material), 164.85-166.25m (90% chert, 10% pyrite), 166.25-166.9m (80% py, 20% chert). 	<ul style="list-style-type: none"> -tops not well defined by one example of bedding. -textures in magnetite show uphole tops (ie. north).
166.90 TO 214.50	KOMATIITIC BASALT «2k,5g»	<ul style="list-style-type: none"> -grey-green coloured, fine grained unit. -fine, randomly oriented spinifex. Needles are up to 0.5cm in length. -spinifex is not apparent downhole. -graphitic argillite occurs from 178.85 to 179.7m in with mafic from 179.0 to 179.3m. -bedding is at 55° to CA. -sheared from 193.0 to 203.6m. -siliceous and slightly pyritic section occurs from 196.7 to 198.0m. The section shows marked zoned margins from fluids and alteration, possibly by a conduit. -pillow selvages are visible from 200.0 to 203.0m. -selvages are slightly chloritic. -a small section of tuffaceous and siliceous material (possible felsic tuff) occurs from 203.6 to 204.8m. -unit becomes strongly sheared downhole of 204.8m. 		<ul style="list-style-type: none"> -fracture controlled carbonate alteration is moderate. -fracture controlled quartz alteration is moderate. 	<ul style="list-style-type: none"> -up to 0.5% disseminated pyrite occurs throughout the unit. -up to 1% disseminated and cubed pyrite occurs from 196.7 to 198.0m. -from 172.75 to 173.0m, there is 60% (massive) pyrite and pyrrhotite possibly selvage controlled. -from 171.6 to 172.75m, there is up to 2% disseminated pyrite. -from 178.65 to 178.85m, there is massive pyrrhotite with siliceous inclusions. -from 178.85 to 179.7m, there is up to 2% disseminated pyrrhotite with graphite. 	

HOLE NUMBER: GY31-05

DRILL HOLE RECORD

LOGGED BY: P. ROOS

PAGE: 3

HOLE NUMBER: GY31-05

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
214.50 TO 225.20	ULTRAMAFIC «1»	-grey-green coloured, fine grained unit. -sheared, talcose and soft. -fault occurs at 224.4m with gouge. -rubbly downhole of 223.15m. -foliation is at 45° to CA. -sheared and faulted as well from 214.5 to 215.0m with gouge.		-spotted chlorite alteration is moderate. Spotted due to shearing. -fracture controlled quartz alteration is strong.	-nil.	
225.20 TO 255.15	MAFIC INTRUSIVE OR VOLCANIC «2k»	-grey-green coloured, fine grained unit. -fault occurs at 228.4m. -pyroxene spinifex is fine grained but present. -massive, felted texture. -sheared downhole of 248.0m.		-fracture quartz-carbonate alteration is weak to moderate. -chlorite is ribbonny due to shearing.	-nil.	
255.15 TO 257.00	SILICIFIED MAFIC? OR FELSIC TUFF	-green coloured, fine grained unit. -massive, no quartz eyes. -unit may be silicified conduit as from 196.7 to 198.0m.		-fracture controlled quartz is weak.	-up to 1% disseminated pyrite.	-hole shut down due to budgeted meterage. -both conductors tested however may want to extend the hole in the future.
257.00 TO 257.00	E.O.H.					

HOLE NUMBER: GY31-05

ASSAY SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	ASSAYS						COMMENTS
				Cu ppm	Zn ppm	Au ppb	Ag ppm	Pb ppm	Ni ppm	
AL00746	159.40	161.00	1.60	43	52	10	<.2	<2	50	iron formation; chert, magnetite, py, po. komatiitic basalt.
AL00747	161.00	162.50	1.50	39	23	10	0.4	2	47	
AL00748	162.50	164.00	1.50	53	24	55	0.2	2	49	
AL00749	164.00	165.50	1.50	59	80	85	0.2	3	82	
AL00750	165.50	166.90	1.40	37	58	45	0.2	8	45	
AJ06010	166.90	168.50	1.60	27	56	10	<.2	<2	120	
AJ06011	168.50	168.80	0.30	195	35	10	0.2	<2	100	
AJ06012	168.80	170.00	1.20	38	32	10	0.2	<2	81	
AJ06013	170.00	171.50	1.50	52	39	10	<.2	2	165	
AJ06014	171.50	173.00	1.50	80	44	10	0.2	<2	175	
AJ06015	173.00	174.50	1.50	27	35	5	0.2	<2	170	
AJ06016	177.00	178.50	1.50	33	36	5	0.2	<2	99	
AJ06017	178.50	179.80	1.30	205	1710	10	0.6	<2	165	
AJ06018	179.80	181.30	1.50	37	90	5	0.2	4	74	
AJ06019	181.30	182.70	1.40	25	81	10	<.2	<2	94	
AJ06020	182.70	183.50	0.80	20	73	5	0.2	<2	54	
AJ06021	183.50	185.00	1.50	23	68	10	0.2	3	61	
AJ06022	196.70	198.00	1.30	56	89	10	0.6	15	82	
AJ06023	198.00	199.50	1.50	44	115	10	4.0	<2	53	

Total amount of samples = 19
Total length sampled = 25.9M

HOLE NUMBER: GY31-05

GEOCHEM. SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	TiO2 %	P2O5 %	MnO %	CR2O3 %	LOI %	SUM %	Y PPM	Zr PPM	BA PPM	RB PPM	SR PPM	NB PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AL02000	56.00	59.00	3.00	44.92	5.45	5.28	23.32	<0.01	0.12	8.75	0.23	0.08	0.13	0.27	12.17	100.69	8	40					55	55	1190	VUA	UMK	I	101
AL03301	71.00	74.00	3.00	44.69	11.67	3.93	12.41	0.83	0.68	16.92	1.34	0.34	0.42	0.08	6.67	99.97	22	120					55	105	350	VMA	THM	\$	215
AL03302	92.00	95.00	3.00	49.58	15.35	9.39	3.71	2.41	0.38	11.79	1.62	0.46	0.25	0.05	3.42	98.41	30	140					55	80	190	VMA	CAM	\$	126
AL03303	104.00	107.00	3.00	50.58	14.29	8.25	4.90	1.78	0.50	14.63	1.56	0.46	0.40	0.03	3.06	100.41	28	140					45	65	140	VMA	CAM	\$	136
AL03304	119.00	122.00	3.00	56.26	14.44	8.78	3.25	2.07	0.26	10.90	1.35	0.36	0.35	0.03	2.19	100.25	26	120					20	80	120	VMA	Ice	\$	130
AL03305	131.00	134.00	3.00	53.74	13.25	8.07	3.23	1.20	0.32	13.65	1.39	0.40	0.42	0.03	2.37	98.06	28	120					25	95	160	VMA	THM	\$	138
AL03306	155.00	158.00	3.00	46.81	13.53	8.63	3.78	0.05	1.02	18.42	1.65	0.36	0.60	0.03	2.99	97.87	30	120					40	110	130	VMA	THM	\$	139
AL03307	170.00	172.80	2.80	52.43	16.06	8.12	5.56	2.16	0.28	9.60	0.84	0.08	0.13	0.12	3.51	98.88	18	70					30	70	160	VMA	Int	\$	152
AL03308	194.00	196.80	2.80	49.70	12.59	9.98	5.64	2.89	0.48	7.99	0.56	0.12	0.18	0.08	8.00	98.20	14	90					45	145	130	VMA	Kom	\$	94
AL03309	200.00	203.00	3.00	50.36	14.52	10.90	5.43	0.91	0.08	9.98	0.68	0.02	0.17	0.03	4.89	97.98	18	60					50	190	60	VMA	???	\$	122
AL03310	203.60	204.50	0.90	54.31	13.97	8.00	4.15	0.09	3.64	5.25	0.45	0.46	0.10	0.01	7.55	97.97	18	120					45	55	30	TFA?	Kom	\$	119
AL03311	206.00	209.00	3.00	42.00	10.41	10.28	9.11	1.12	0.82	10.26	0.58	0.56	0.21	0.11	13.29	98.74	24	110					60	95	180	VMA	Kom	I	85
AL03312	215.00	218.00	3.00	37.50	4.41	4.73	26.55	0.02	<0.02	8.95	0.22	0.06	0.13	0.21	16.21	99.00	6	30					<5	<5	420	VUA	UMK	I	93
AL03313	242.00	245.00	3.00	49.48	13.43	9.39	8.09	1.94	0.08	10.01	0.63	0.08	0.18	0.05	4.55	97.91	16	60					75	70	150	VMA	THM	\$	118
AL03314	256.00	257.00	1.00	50.54	13.55	7.69	4.02	6.47	1.00	7.64	0.67	0.40	0.15	0.11	5.45	97.69	26	230					50	65	120	TFA?	THM	\$	89

HOLE NUMBER: GY31-05

LITHOGEOCHEMISTRY RESULTS - TRACE ELEMENT

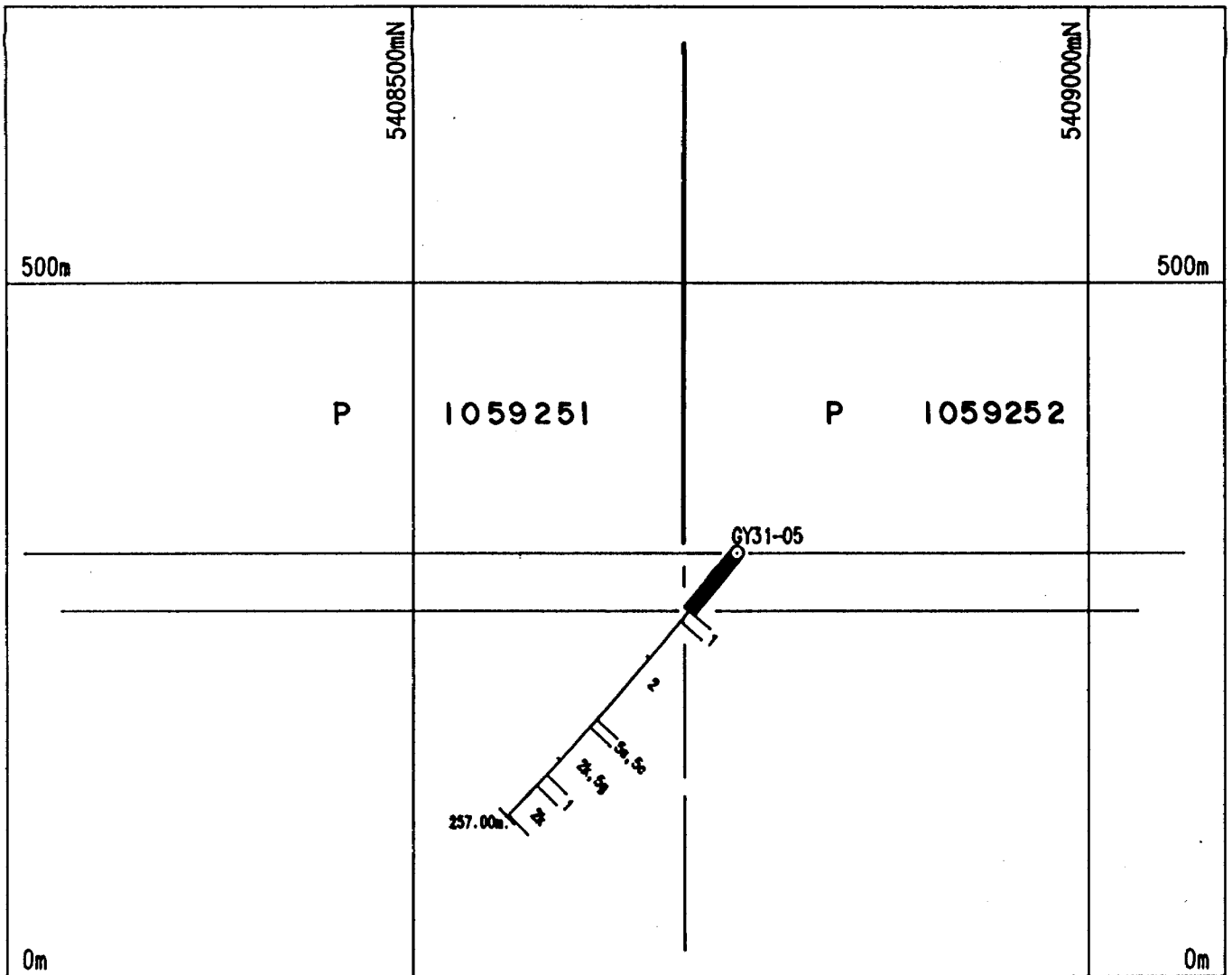
DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	AG PPH	AU PPB	CO PPH	PB PPH	S PPH	V PPH	AS PPH	SN PPH	CD PPH	SB PPH	BI PPH	SE PPH	HF PPH	TA PPH	W PPH	MO PPH	TH PPH	U PPH	B PPH	CS PPH	FIELD NAME	CHEM ID	ALUM	
AL02000	56.00	59.00	3.00			80		300																			
AL03301	71.00	74.00	3.00			55		300							0.2										VJA LMK	I	101
AL03302	92.00	95.00	3.00			55		1000																	VNA THM	\$	215
AL03303	104.00	107.00	3.00			50		2700																	VNA CAM	\$	126
AL03304	119.00	122.00	3.00			45		4100																	VNA CAM	\$	136
AL03305	131.00	134.00	3.00			50		600																	VNA Ice	\$	130
AL03306	155.00	158.00	3.00			50		11700																	VNA THM	\$	138
AL03307	170.00	172.80	2.80			30		2700																	VNA THM	\$	139
AL03308	194.00	196.80	2.80			25		1000																	VNA Int	\$	152
AL03309	200.00	203.00	3.00			30		400																	VNA Kom	\$	94
AL03310	203.60	204.50	0.90			15		600																	VNA? ???	\$	122
AL03311	206.00	209.00	3.00			50		2500																	TFA? Kom	\$	119
AL03312	215.00	218.00	3.00			25		1800																	VNA Kom	I	85
AL03313	242.00	245.00	3.00			50		4200																	VJA LMK	I	93
AL03314	256.00	257.00	1.00			30		1600																	VNA THM	\$	118
																									TFA? THM	\$	89

HOLE NUMBER: GY31-05

GEOCHEM. SHEET

PAGE: 2



LEGEND

Geology


MAJOR ROCK DIVISIONS

- 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/GEOCHEMICAL MODIFIERS

- Fine Grained
- Medium Grained
- Coarse Grained
- Coarse Grained
- Crystalline/Volcanic
- Primary Crystalline
- Granular/Amphibolous
- Porphyritic
- Micro
- Calc-Albite
- Kamafitite
- Pyrox
- Basaltic
- Porphyritic/Amphibolous
- Porphyritic
- Quartz Pyritic
- Chlorite Iron Formation
- Schistose, Schistose
- Porphyritic
- High Fe
- High Ni
- Amphibolous
- Isomorphous
- Int.

P. Ross

FALCONBRIDGE LIMITED		
Exploration Division Timmins, ONTARIO		
GEARY 31		
DIAMOND DRILL SECTION 447680 m E		
LOOKING WEST		GEARY Twp.
Treced :	ARZES 22/1/01	NTS : 42-4/23 PROJECT No: 8100
Drawn :	d o l 22/1/01	MAP No: FILE: 8100 E
Supervised :	P. Ross 22/1/01	Scale : 1 : 5000 (metres)
Revised :		0 50 100 150 200

HOLE NUMBER: GY31-04

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 17-December-1990
IMPERIAL UNITS: METRIC UNITS: X

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

PLOTTING COORDS GRID: UTM
NORTH: 5408630.00N
EAST: 447190.00E
ELEV: 299.00

ALTERNATE COORDS GRID: LINE
NORTH: 3+ 0N
EAST: 6+ 0E
ELEV: 299.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 253.00m
START DEPTH: 0.00m
FINAL DEPTH: 253.00m

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

GRID ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: July 27, 1990
DATE COMPLETED: August 2, 1990
DATE LOGGED: August 8, 1990

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
ROD LOG: NO

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

CONTRACTOR: BRADLEY BROS.
CASING: 67m PULLED
CORE STORAGE: MINESITE

PURPOSE: To test HLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
126.00	357° 0'	-48° 30'	SING. SHOT	OK		
186.00	354° 0'	-49° 30'	SING. SHOT	OK		
246.00	359° 0'	-50° 0'	SING. SHOT	OK		
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P. Roos

FALCONBRIDGE LTD
DRILL HOLE RECORD

HOLE NUMBER: GY31-04

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 67.00	OVERBURDEN « ob »					-casing pulled.
67.00 TO 128.20	MAFIC VOLCANIC «2»	-grey-green coloured, fine grained unit. -sheared, carbonate veining follows shears and foliation. -foliation is at 35° to CA. -some sections look tuffaceous but definitely mafic. -core is weakly broken to 128.2m. -a thin argillaceous seam occurs from 127.45 to 127.5m with 1% pyrite and filled by quartz-carbonate.		-fracture controlled carbonate alteration is moderate. -pervasive carbonate alteration is strong to moderate.	-0.5% finely disseminated pyrite occurs from 67.0 to 71.0m. -up to 1% disseminated pyrite occurs at the edges of a white-grey quartz vein.	
128.20 TO 133.30	MAFIC OR FELSIC TUFF «2t or 4t»	-light green to grey coloured unit. -strongly sheared and weathered, due to faulted and rubbly ground from 130.7 to 133.3m. -unit contains fragments of feldspar-quartz material but are possibly phenocrysts. -foliation is at 40° to CA.		-pervasive alteration is moderate.	-less than 0.2% disseminated pyrite occurs throughout the unit but most of it is well rusted.	
133.30 TO 134.00	ARGILLITE «5»	-black to grey coloured. -bedding at 40° to CA. -may be sheared mafic however not pervasively carbonate altered.		-unit looks slightly phyllitic (sheen). -fracture carbonate alteration is moderate.	-slightly pyritic as we approach the graphitic horizon.	
134.00 TO 134.35	GRAPHITIC AND PYRITIC ARGILLITE «5gs»	-appears to be bedded at 40° to CA. -beds are well defined according to soft sediment (argillite) deformation.		-weakly carbonate altered (both fracture controlled and pervasive).	-up to 20% brecciated nodular pyrite occurs from 134.2 to 134.3m. -disseminated and clumped pyrite occurs from 134.0 to 134.12m with up to 10% abundance.	-tops appear downhole i.e. to the north, but not the best example for a reliable tops indicator.
134.35 TO 137.00	ARGILLITE «5»	-bedding is at 30° to core axis. -downhole contact is rubble and fractured.				
137.00 TO 144.20	MAFIC TUFF «2,2t»	-grey-green coloured, fine grained unit. -strongly sheared. -banded as if tuffaceous. -tuffaceous appearance may be due to strong		-spotty to acicular chlorite alteration is moderate to strong from 137.0 to 140.0m.	-nil.	

HOLE NUMBER: GY31-04

DRILL HOLE RECORD

LOGGED BY: P. ROOS

PAGE: 2

HOLE NUMBER: GY31-04

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<ul style="list-style-type: none"> -shearing throughout the unit. -massive from 140.0 to 144.2m. 				
144.20 TO 152.90	CHERTY AND ARGILLA-CEOUS SEDIMENTS «5a,5c»	<ul style="list-style-type: none"> -grey coloured, fine grained unit. -fault gouge occurs from 148.75 to 148.83m. -graphitic slips from 149.8 to 150.1m. -core very soft, due to possible alteration via fault zone. -cherty beds (however softened due to alteration) occur from 145.5 to 145.8m. -brecciated argillite occurs from 148.8 to 150.3m. 		<ul style="list-style-type: none"> -alteration appears to be moderate chlorite alteration. The unit appears preferentially altered depending on different beds of sediments. -a yellow-beige coloured alteration (siderite) occurs from 144.3 to 144.7m. -fracture controlled carbonate alteration is moderate. 	<ul style="list-style-type: none"> -minor stringer pyrite occurs however the 0.5% abundant pyrite occurs as laminated with argillite beds. 	
152.90 TO 156.45	MAFIC TUFF «2t»	<ul style="list-style-type: none"> -grey-green coloured, fine to coarse grained unit. -50% abundant phenocrysts (in this case fragments) of feldspar-quartz material occur throughout unit. -fragments are 1-2mm in size and are rounded in shape. 		<ul style="list-style-type: none"> -shearing has displaced the chlorite into ribbons. 	<ul style="list-style-type: none"> -nil. 	
156.45 TO 158.00	CHERTY SEDIMENT «5c»	<ul style="list-style-type: none"> -white to buff coloured. -finely laminated, sugary texture. -beds are commonly 1cm wide. -buff colour may be due to siderite alteration. -bedding is at 40° to CA. 		<ul style="list-style-type: none"> -possible siderite alteration in yellowish coloured sections. -fractures of quartz occurs as blebbed nodular shaped stringer at 157.15m. 	<ul style="list-style-type: none"> -nil. 	
158.00 TO 253.00	ULTRAMAFIC «1»	<ul style="list-style-type: none"> -dark green coloured, fine grained unit. -possible pyroxene spinifex occurs from 167.0 to 170.0m but may be due to foliation. -chlorite alteration gives the unit a spotted appearance. -the unit appears phyllitic from 158.0 to 164.0m. 		<ul style="list-style-type: none"> -fracture controlled carbonate and quartz alteration is strong throughout the unit. -unit from 164.0 to 170.0m appears to be large of chlorite in composition. -fracture controlled quartz alteration is very strong from 182.0 to 200.0m. -very minor epidote occurs throughout the unit. 	<ul style="list-style-type: none"> -nil to less than 0.1% disseminated pyrite. 	

HOLE NUMBER: GY31-04

DRILL HOLE RECORD

LOGGED BY: P. ROOS

PAGE: 3

HOLE NUMBER: GY31-04

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
253.00 TO 253.00	E.O.H.					

HOLE NUMBER: GY31-04

ASSAY SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	ASSAYS						COMMENTS
				Cu ppm	Zn ppm	Au ppb	Ag ppm	Pb ppm	Ni ppm	
AL00741	133.20	134.00	0.80	32	130	10	0.2	5	43	graphitic argillite.
AL00742	134.00	135.60	1.60	60	165	10	0.4	10	110	
AL00743	135.60	137.00	1.40	52	125	10	0.2	6	44	cherty sediment. ultramafic volcanic.
AL00744	156.50	158.00	1.50	23	48	10	<.2	4	35	
AL00745	158.00	159.50	1.50	39	32	10	<.2	4	215	
				Total amount of samples=				5		
				Total length sampled =				6.8M		

HOLE NUMBER: GY31-04

GEOCHEM. SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM %	Y PPM	ZR PPM	BA PPM	RB PPM	SR PPM	NB PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AL01991	71.00	74.00	3.00	48.84	12.96	6.53	5.36	2.22	0.38	12.80	1.35	0.16	0.24	0.01	6.88	97.72	34	110					60	160	80		VMA THM	\$	142
AL01992	101.00	104.00	3.00	45.67	12.34	9.65	4.60	2.06	0.64	11.51	1.22	0.14	0.25	<0.01	9.72	97.80	28	100					60	80	40		VMA THM	\$	100
AL01993	137.00	140.00	3.00	64.64	14.82	3.78	0.81	2.22	3.38	3.02	0.55	0.10	0.11	<0.01	4.35	97.80	14	120					15	115	30		TMA Int	\$	158
AL01994	140.00	143.00	3.00	53.71	16.29	2.00	6.51	2.45	1.16	9.77	0.69	0.40	0.12	0.02	4.42	97.52	16	100					70	100	90		TMA Int	\$	290
AL01995	153.00	155.00	2.00	52.35	16.93	4.47	7.23	1.80	0.32	10.45	0.61	0.22	0.13	0.02	4.36	98.88	16	70					75	115	110		TMA Int	\$	257
AL01996	176.00	179.00	3.00	38.77	4.81	5.61	26.85	0.09	0.04	9.17	0.22	0.08	0.15	0.41	13.66	99.84	6	20					55	60	1210		VJA UMK	I	84
AL01997	206.00	209.00	3.00	36.50	2.50	1.63	31.51	<0.01	<0.02	8.38	0.13	0.04	0.12	0.37	16.84	98.03	4	20					35	35	1900		VJA UMK	I	152
AL01998	236.00	239.00	3.00	33.30	2.37	4.64	29.84	<0.01	<0.02	6.99	0.12	0.02	0.12	0.48	20.12	98.00	4	20					20	35	1340		VJA UMK	I	51

HOLE NUMBER: GY31-04

GEOCHEM. SHEET

PAGE: 1

HOLE NUMBER: GY31-04

LITHOGEOCHEMISTRY RESULTS - TRACE ELEMENT

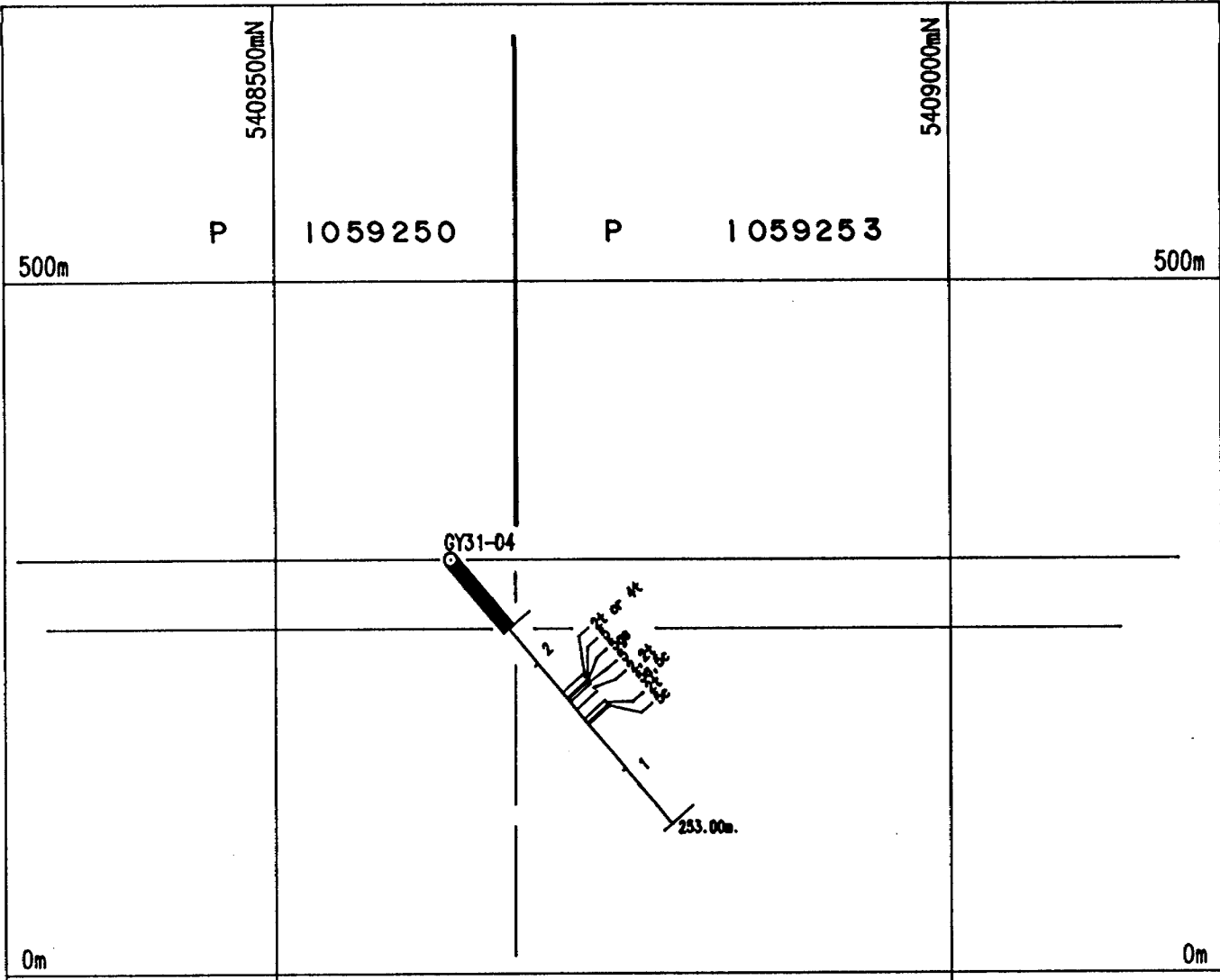
DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	FIELD NAME	CHEM ID	ALUM			
AL01991	71.00	74.00	3.00			55		7200																VMA	ThM	\$	142		
AL01992	101.00	104.00	3.00			50		800																	VMA	ThM	\$	100	
AL01993	137.00	140.00	3.00			15		1100																	TMA	Int	\$	158	
AL01994	140.00	143.00	3.00			45		33500																	TMA	Int	\$	290	
AL01995	153.00	155.00	2.00			50		800																	TMA	Int	\$	257	
AL01996	176.00	179.00	3.00			80		1200							0.2										VUA	UMK	I	84	
AL01997	206.00	209.00	3.00			100		700							0.2											VUA	UMK	I	152
AL01998	236.00	239.00	3.00			70		500							<0.1											VUA	UMK	I	51

HOLE NUMBER: GY31-04

GEOCHEM. SHEET

PAGE: 2



LEGEND

Geology


MAJOR ROCK DIVISIONS

- 10 DABASE
- 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/GEOCHEMICAL MODIFIERS

- Flow Oriented
- Medium Oriented
- Spindle
- Coarse Grained
- Quartz-Feldspar Pyrite
- Amphibole/Vesicular
- Primary Pyroxene
- Quartzite/Amphibole
- Basalt
- Ande
- Calc-Mafic
- Granulite
- Flow
- Flow
- Vesicular/Spinelite
- Flow
- Quartz Pyrite
- Calc Iron Formation
- Spinelite, Olivine
- Pyroxene
- High Mg
- High Py
- High Al
- Ande
- Ande
- Ande

Flow

FALCONBRIDGE LIMITED		
Exploration Division Timmins, ONTARIO		
GEARY 31		
DIAMOND DRILL SECTION 447190 m E		
LOOKING WEST		GEARY Top.
Traced :	ARZES 23/01/91	NTS : 42-1/2 PROJECT No: 8100
Drawn :	101 23/01/91	MAP No: FILE: 8100 D
Supervised :	P. Moor 26/01/91	Scale : 1 : 5000 (metres)
Revised :		0 50 100 150 200

HOLE NUMBER: GY33-02

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 30-August-1990
IMPERIAL UNITS: METRIC UNITS: X

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

PLOTTING COORDS GRID: UTM
NORTH: 5409120.00N
EAST: 450600.00E
ELEV: 293.00

ALTERNATE COORDS GRID: LINE
NORTH: 3+25N
EAST: 0+ 0E
ELEV: 293.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 194.00m
START DEPTH: 0.00m
FINAL DEPTH: 194.00m

COLLAR ASTRONOMIC AZIMUTH: 180° 0' 0"

GRID ASTRONOMIC AZIMUTH: 180° 0' 0"

DATE STARTED: August 10, 1990
DATE COMPLETED: August 13, 1990
DATE LOGGED: August 14, 1990

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

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

CONTRACTOR: BRADLEY BROS.
CASING: 22m LEFT IN HOLE
CORE STORAGE: MINESITE

PURPOSE: To test HLEM anomaly.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
67.00	185° 0'	-47° 0'	SING.SHOT	OK		
127.00	190° 0'	-42° 0'	SING.SHOT	OK		
187.00	189° 0'	-40° 0'	SING.SHOT	OK		
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HOLE NUMBER: GY33-02

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 22.00	OVERBURDEN «{ob}»					-22.0m of BW casing left in hole. -22.0m of NW pulled.
22.00 TO 63.20	AMYGDAL- DIDAL MAFIC VOLCANIC «2e»	-grey-green coloured, fine grained unit. -strongly sheared, foliated at 50° to CA. -amygdules are 1-3mm in size and are quartz filled. -quartz fragments occur in the particularly strongly sheared sections but they are most likely derived from crosscutting quartz veins.		-quartz veins are often stretched due to shearing. -fracture controlled quartz is moderate throughout the unit. -fracture controlled sericite alteration is moderate from 22.0 to 41.0m. -pervasive sericite alteration is moderate from 61.0 to 63.2m.	-nil to minor pyrite occurs as cubes.	
63.20 TO 139.50	ALTERED INTER- MEDIATE TUFF «4t»	-foliation is at 50° to CA. -fault occurs from 64.6 to 65.15m with gouge as well as more competent sections. -mafic intrusions occur from 94.7 to 97.35m and from 121.9 to 125.05m. -less sheared parts of this unit look like dacites. -fault zone at 110.4 to 110.5m. -foliation at 119.0m is 55° to CA. -less sheared dacites occur from 119.0 to 121.9m and from 125.05 to 139.5m.		-strongly sericite altered. Strong pervasive sericite occurs from 63.2 to 68.0m, moderate from 68.0 to 83.0m where it becomes fracture and foliation controlled. -fracture controlled and pervasive sericite alteration is moderate from 97.35 to 116.0m. -pervasive chlorite alteration occurs from 134.0 to 139.5m and is weak to moderate in strength. -fracture controlled quartz alteration is moderate downhole of 137.0 to 139.5m.	-less than 1% disseminated pyrite occurs from 134.0 to 139.5m. -there is also 1% disseminated and fracture controlled pyrrhotite from 137.0 to 139.5m.	
139.50 TO 147.50	MAFIC VOLCANIC «2»	-grey-green coloured, fine grained unit. -foliation is at 50° to CA. -a small feldspar rich intrusion occurs from 142.4 to 145.7m. -strongly sheared.		-fracture controlled quartz alteration is moderate throughout the unit. -pervasive chlorite alteration is moderate to weak throughout the unit. -shredded chlorite occurs in moderation from 146.0 to 147.5m. -fracture controlled and pervasive carbonate alteration is moderate.	-less than 1% pyrite and pyrrhotite occurs from 139.5 to 139.8m.	

HOLE NUMBER: GY33-02

DRILL HOLE RECORD

LOGGED BY: P. ROOS

PAGE: 2

HOLE NUMBER: GY33-02

FALCONBRIDGE LTD
DRILL HOLE RECORD

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
147.50 TO 150.05	ULTRAMAFIC «1»	-blue-grey-green coloured, fine grained unit. -foliation is at 50° to CA. -no spinifex.		-strongly quartz fractured throughout. -spotted with chlorite and quartz.	-minor pyrite (0.2cm wide) marks the downhole contact.	
150.05 TO 154.30	MAFIC INTRUSION OR MASSIVE MAFIC VOLCANIC «7 or 2m»	-grey-green coloured, fine grained unit. -massive. -fine leucoxenes occur disseminated throughout the unit, about 30% abundant.		-fracture and pervasive carbonate-quartz alteration is moderate.	-nil.	
154.30 TO 157.40	ULTRAMAFIC «1»	-same as above from 147.5 to 150.05m.				
157.40 TO 165.75	MAFIC VOLCANIC «2»	-grey-green coloured, fine grained unit. -uphole contact is baked or chilled but definitely fine grained. -amygdules are elongated due to moderate strain. -amygdules are carbonate-quartz filled.		-fracture carbonate alteration is moderate.	-fracture controlled pyrite and pyrrhotite is 0.5% abundant.	
165.75 TO 167.80	BEDDED CHERT, MASSIVE AND DISSEMINATED SULPHIDES «5c, 5s»	-blue-grey to white coloured, fine grained unit. -bedded chert occurs from 165.75 to 166.15m, 166.3 to 166.8m, 167.35 to 167.55m. -upper contact is sharp. -bedding is at 55° to CA. -intercalations of mafic volcanic or tuff occur from 166.6 to 166.7m, thin graphitic slips also occur throughout the unit.		-bedded carbonate occurs between chert layers from 165.6 to 167.55m. -mafic intercalations are strongly chlorite.	-semi-massive pyrrhotite occurs from 165.6 to 165.75m. -fracture controlled, bedded and stringer pyrrhotite is 2-10% abundant from 165.75 to 167.8m.	-conductive horizon from 165.6-167.8m caused NLEM anomaly.
167.80 TO 168.65	ULTRAMAFIC «1»	-grey-green coloured, fine grained. -sharp upper contact. -strongly sheared. -soft, very talcose unit.		-fracture controlled carbonate-quartz alteration is moderate throughout the unit.	-nil.	
168.65 TO 177.70	KOMATIITIC BASALT «2k»	-green-grey coloured, fine grained unit. -strongly sheared throughout. -foliation is at 55° to CA. -downhole contact is faulted.		-fracture controlled carbonate alteration is moderate.	-nil to very minor pyrite.	

HOLE NUMBER: GY33-02

DRILL HOLE RECORD

LOGGED BY: P. ROOS

PAGE: 3

FALCONBRIDGE LTD
DRILL HOLE RECORD

HOLE NUMBER: GY33-02

DATE: 12-October-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
177.70 TO 179.20	ULTRAMAFIC «1»	-grey-green coloured, fine grained unit. -fault zone from 177.7 to 178.1m. -soft, talcose. -no spinifex, could be intrusive instead of flow.		-fractured controlled carbonate is weak. -pervasive talc is strong.	-nil.	
179.20 TO 194.00	KOMATIITIC BASALT «2k»	-green-grey coloured, fine grained unit. -strongly sheared and foliated at 55° to CA. -same as above komatiite unit.		-fracture controlled quartz-carbonate alteration is moderate.	-nil.	
194.00 TO 194.00	E.O.H.					

HOLE NUMBER: GY33-02

ASSAY SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	ASSAYS						COMMENTS
				Cu ppm	Zn ppm	Au ppb	Ag ppm	Pb ppm	Ni ppm	
AJ06024	134.00	135.50	1.50	39	70	15	<.2	7	84	altered felsic tuff. mafic volcanic. iron formation. ultramafic. komatiite.
AJ06025	135.50	137.00	1.50	42	145	15	<.2	21	71	
AJ06026	137.00	138.50	1.50	57	65	15	<.2	<2	145	
AJ06027	138.50	140.00	1.50	61	55	10	<.2	6	195	
AJ06028	164.00	165.50	1.50	62	55	40	<.2	<2	75	
AJ06029	165.50	166.80	1.30	18	150	10	<.2	2	155	
AJ06030	166.80	167.60	0.80	53	380	15	0.2	<2	535	
AJ06031	167.60	168.65	1.05	46	76	5	<.2	<2	465	
AJ06032	168.65	170.00	1.35	48	57	10	<.2	<2	190	

Total amount of samples= 9
Total length sampled = 12.0M

HOLE NUMBER: GY33-02

ASSAY SHEET

PAGE: 1

HOLE NUMBER: GY33-02

GEOCHEM. SHEET

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	TiO2 %	P2O5 %	MnO %	CR2O3 %	LOI %	SUM %	Y PPM	Zr PPM	BA PPM	RB PPM	SR PPM	NB PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AL03316	32.00	35.00	3.00	48.94	13.40	4.99	5.49	1.81	0.96	10.45	1.64	0.60	0.26	0.05	9.25	97.84	28	150					20	45	110		FSM THM \$	173	
AL03317	63.50	65.00	1.50	61.48	13.30	4.52	2.15	1.72	3.08	2.71	0.45	0.08	0.08	<0.01	8.03	97.64	8	110					30	40	80		TFA PrF \$	143	
AL03318	68.00	71.00	3.00	66.66	13.70	3.37	1.75	2.51	2.10	1.98	0.34	0.06	0.04	<0.01	5.53	96.05	6	110					<5	30	40		TFA PrF \$	172	
AL03319	80.00	83.00	3.00	66.05	14.01	3.32	1.85	2.61	1.96	3.20	0.38	0.08	0.06	<0.01	4.71	96.23	8	90					<5	50	40		TFA PrF \$	178	
AL03320	89.00	92.00	3.00	59.19	12.71	6.06	3.29	1.97	1.62	4.65	0.52	0.10	0.11	0.04	7.92	96.19	10	110					10	55	130		TFA ??? \$	132	
AL03321	104.00	107.00	3.00	64.00	15.55	3.54	2.16	2.75	2.58	2.77	0.60	0.10	0.05	0.01	5.05	99.15	10	120					15	65	60		Int \$	175	
AL03322	119.00	122.00	3.00	62.29	14.31	4.00	2.53	3.80	1.40	3.86	0.64	0.18	0.06	0.02	4.97	96.05	12	150					15	70	100		Int \$	156	
AL03323	125.00	128.00	3.00	61.38	14.19	4.81	1.87	4.86	1.04	4.30	0.66	0.16	0.10	0.02	4.58	97.97	14	120					20	60	100		Int \$	132	
AL03324	137.00	139.00	2.00	66.32	13.08	1.89	3.35	3.31	1.10	7.28	0.60	0.20	0.10	0.02	2.85	100.10	14	120					30	40	130		??? \$	208	
AL03325	143.00	145.70	2.70	48.00	16.42	7.54	6.28	3.68	0.10	9.41	0.58	0.26	0.14	0.01	7.59	100.00	14	70					85	75	60		Kom \$	145	
AL03326	161.00	164.00	3.00	40.21	11.85	10.65	4.65	1.29	0.52	16.94	1.28	0.52	0.67	0.04	9.43	96.02	30	130					55	100	160		THM \$	95	
AL03327	170.00	173.00	3.00	50.44	13.56	8.05	5.87	3.87	0.02	9.11	0.76	0.06	0.18	0.07	8.70	100.71	18	70					70	85	140		THM \$	114	
AL03328	178.00	179.00	1.00	49.41	6.21	2.88	24.15	0.21	<0.02	8.75	0.31	0.08	0.11	0.23	6.83	99.20	8	40					40	30	1320		UNK \$	200	
AL03329	182.00	185.00	3.00	46.13	8.44	7.28	17.89	0.10	<0.02	10.65	0.41	0.08	0.17	0.24	6.70	96.08	12	30					50	65	670		BK \$	114	

HOLE NUMBER: GY33-02

GEOCHEM. SHEET

PAGE: 1

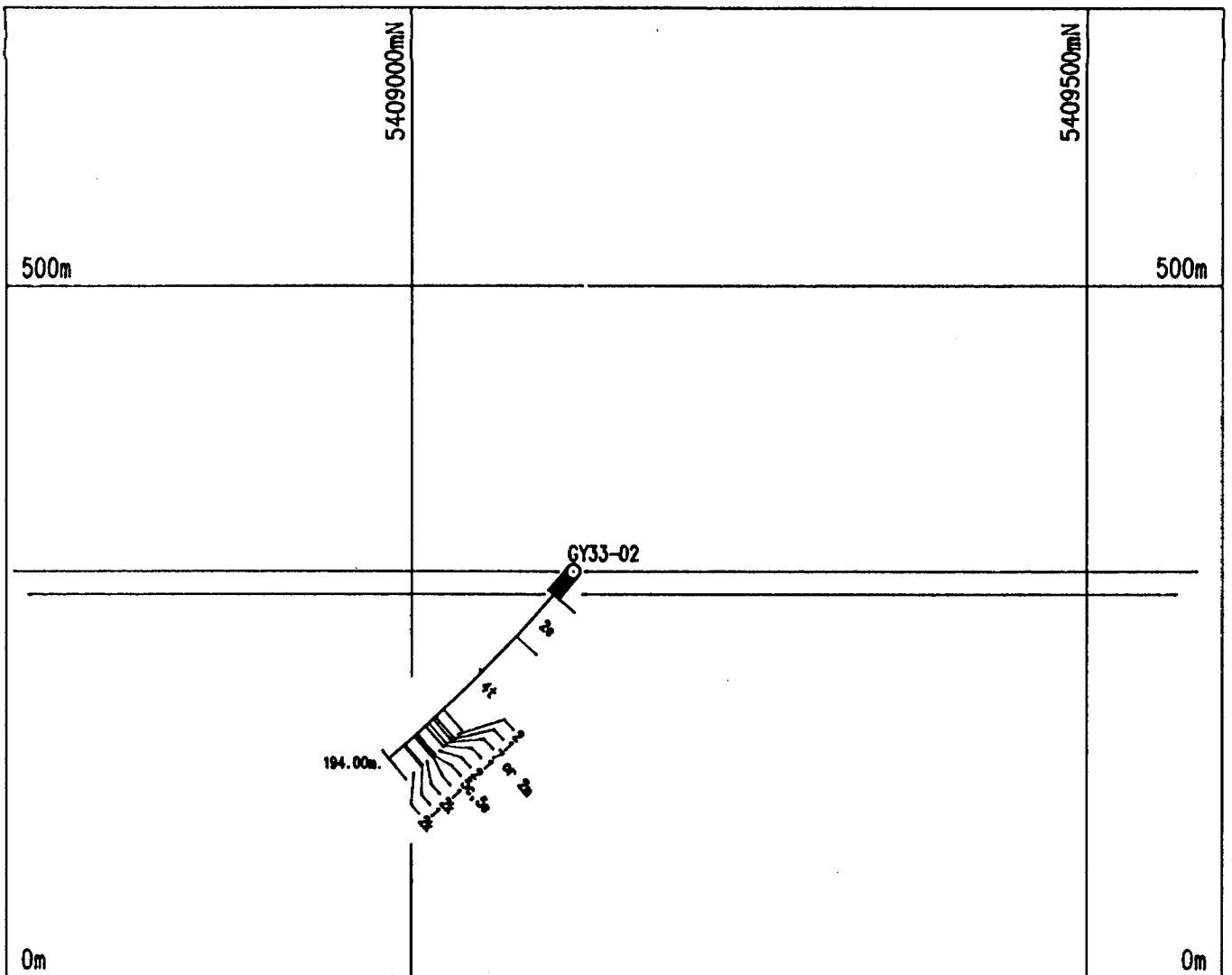
HOLE NUMBER: GY33-02

LITHOGEOCHEMISTRY RESULTS - TRACE ELEMENT

DATE: 12-October-1990

Sample	From (m)	To (m)	Length (m)	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPH	AS PPM	SN PPM	CO PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	FIELD CHEM NAME ID	ALUM	
AL03316	32.00	35.00	3.00			45		700																FSM THM \$	173	
AL03317	63.50	65.00	1.50			15		600																	TFA PrF \$	143
AL03318	68.00	71.00	3.00			<5		300																	TFA PrF \$	172
AL03319	80.00	83.00	3.00			<5		700																	TFA PrF \$	178
AL03320	89.00	92.00	3.00			20		2100																	TFA ??? \$	132
AL03321	104.00	107.00	3.00			10		700																	Int \$	175
AL03322	119.00	122.00	3.00			20		2700																	Int \$	156
AL03323	125.00	128.00	3.00			20		4900																	Int \$	132
AL03324	137.00	139.00	2.00			25		4100																	???	208
AL03325	143.00	145.70	2.70			40		6700																	Kom \$	145
AL03326	161.00	164.00	3.00			35		13400																	THM \$	95
AL03327	170.00	173.00	3.00			40		10200																	THM \$	114
AL03328	178.00	179.00	1.00			70		7400																	UNK \$	200
AL03329	182.00	185.00	3.00			75		7400																	BK \$	114

<0.1



LEGEND

Geology


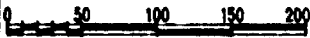
MAJOR ROCK DIVISIONS

- 10 DUNITE
- 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/GEOCHEMICAL MODIFIERS

- a Fine Grained
- b Medium Grained
- bc Breccia
- c Coarse Grained
- d Quartz-Feldspar Phyric
- e Argillaceous/Volcanic
- f Primary Porphyritic
- g Granitic/Argillaceous
- h Sphalitic
- i Alkalic
- j Calc-Alkalic
- k Kersantitic
- l Flow
- m Massive
- n Varicose/Spherulitic
- p Pilowed
- q Quartz Phyric
- r Oxide Iron Formation
- s Subvolcanic, Extrusive
- t Porphyritic
- u High Mg
- v High Fe
- w High Al
- x Andesitic
- y Intermediate
- z text

Flow

FALCONBRIDGE LIMITED		
Exploration Division Timmins, ONTARIO		
GEARY 33		
DIAMOND DRILL SECTION 450600 m E		
LOCKING NEST		GEARY Top.
Traced : <i>ARZES</i>	<i>22/01/01</i>	NTS : <i>42-4/23</i> PROJECT No: <i>0100</i>
Drew : <i>001</i>	<i>22/01/01</i>	MAP No: FILE: <i>0100 F</i>
Supervised : <i>P. Ross</i>	<i>10/01/01</i>	Scale : 1 : 5000 (metres)
Revised :		

LEGEND

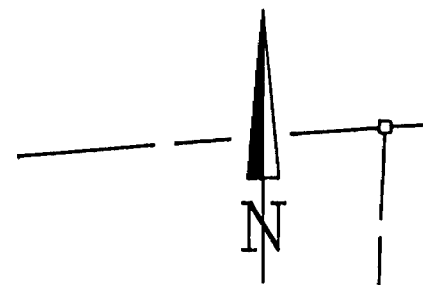
Geology

MAJOR ROCK DIVISIONS

- 10 DABASE
- 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/GEOCHEMICAL MODIFIERS

- g Fine Grained
- m Medium Grained
- Br Brocks
- c Coarse Grained
- Q Quartz-Feldspar Plagioclase
- Ap Amphibole/Anorthoclase
- P Primary Pyroxene
- G Graphite/Pyroclastic
- T Textitic
- A Anitic
- Ca-Calcic
- K Kersantitic
- F Felsic
- M Mesophic
- V Volcanic/Volcanic
- Pl Plagioclase
- Q Quartz Plagioclase
- Ca-Calcic Iron Formation
- S Sulfidation, Sulfidation
- P Pyroclastic
- H High Mg
- H High Fe
- H High Al
- A Anorthoclase
- Is Isotaxitic
- Is Isotaxitic



FALCONBRIDGE LIMITED

Exploration Division

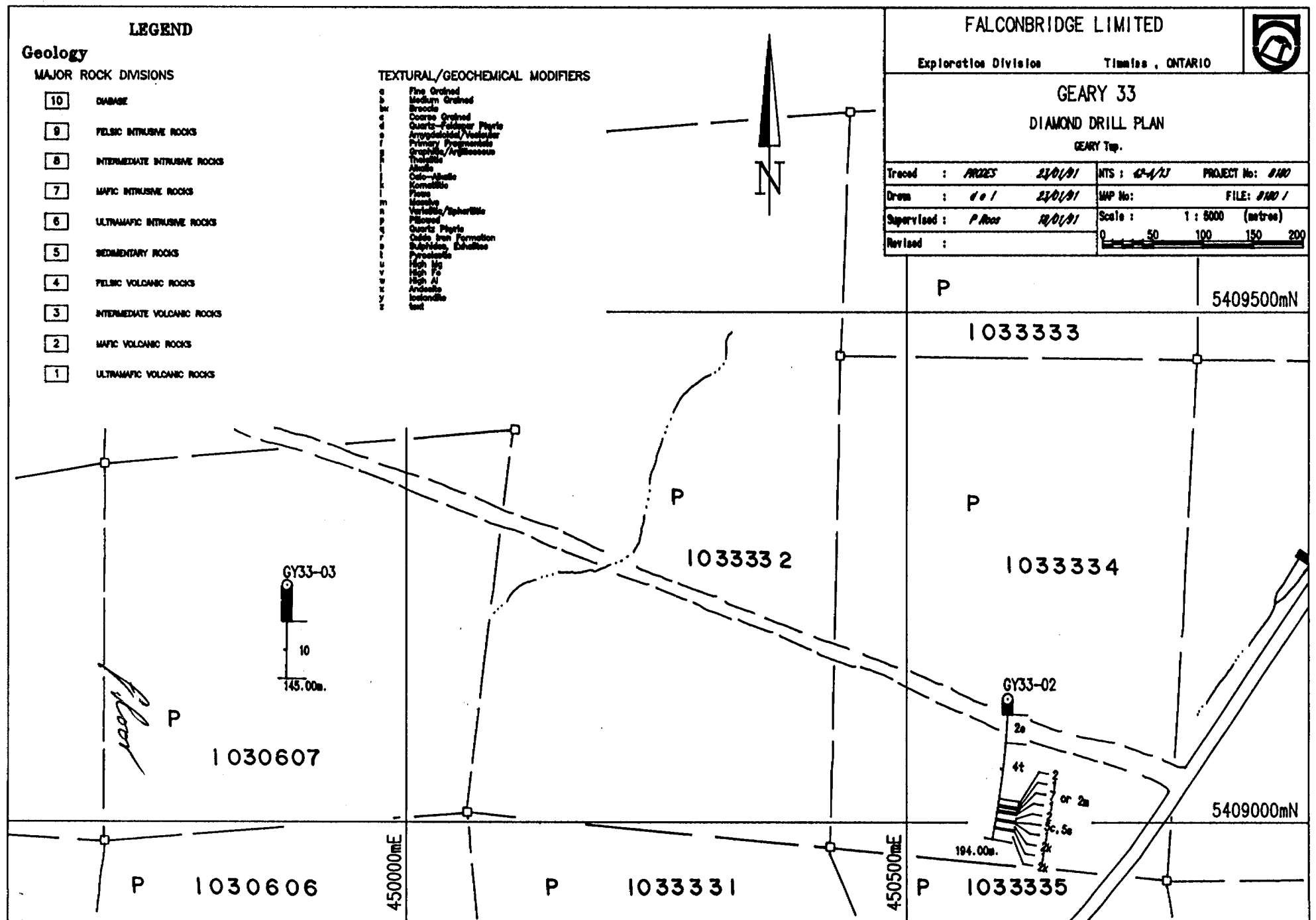
Timmins, ONTARIO



**GEARY 33
DIAMOND DRILL PLAN**

GEARY Top.

Traced :	ARDES	210/01	NTS :	62-1/3	PROJECT No :	0100
Drawn :	d o l	210/01	MAP No :		FILE :	0100 /
Supervised :	P Ross	12/01/01	Scale :	1 : 5000 (metres)		
Revised :						



LEGEND

Geology

MAJOR ROCK DIVISIONS

- 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/GEOCHEMICAL MODIFIERS

- a
 - b
 - c
 - d
 - e
 - f
 - g
 - h
 - i
 - j
 - k
 - l
 - m
 - n
 - o
 - p
 - q
 - r
 - s
 - t
 - u
 - v
 - w
 - x
 - y
 - z
- Fine Grained
 - Medium Grained
 - Brookite
 - Coarse Grained
 - Quartz-Feldspar Phytic
 - Amphibole/Viscidite
 - Primary Pyroxenoids
 - Graphitic/Amphibole
 - Thalassite
 - Albite
 - Calc-Albite
 - Kaersite
 - Film
 - Mossite
 - Variable/Spherulite
 - Blended
 - Quartz Phytic
 - Quartz Iron Formation
 - Subhedral, Euhedral
 - Pyroxenite
 - High Mg
 - High Fe
 - High Al
 - Amphibole
 - Isomorphite
 - Met

FALCONBRIDGE LIMITED

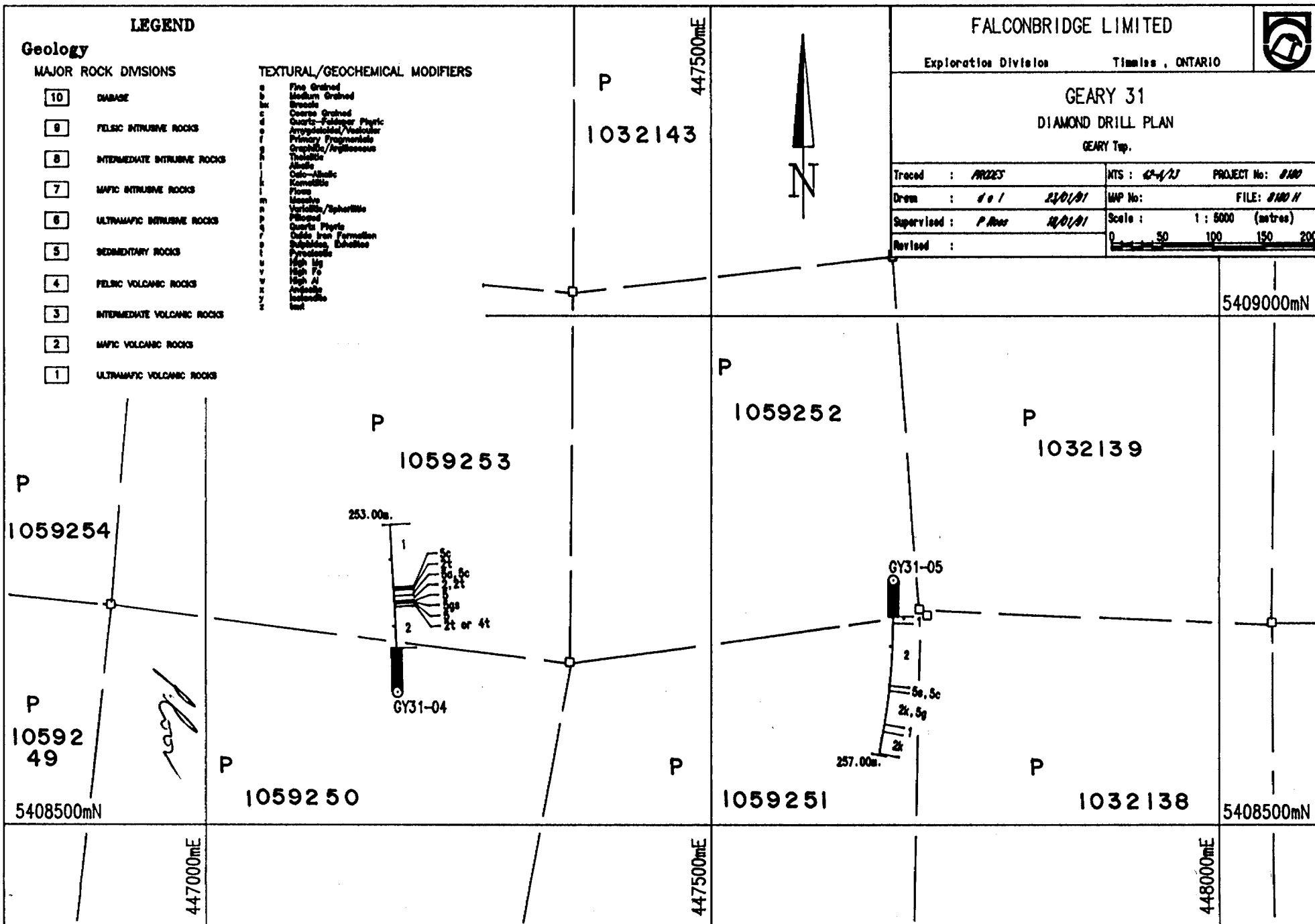


Exploration Division

Timmins, ONTARIO

**GEARY 31
DIAMOND DRILL PLAN
GEARY Twp.**

Traced : <i>ARDES</i>	ATS : <i>62-4/21</i>	PROJECT No: <i>8100</i>
Drawn : <i>d o l</i> <i>23/01/01</i>	MAP No:	FILE: <i>8100 H</i>
Supervised : <i>P. Ross</i> <i>10/01/01</i>	Scale : 1 : 5000 (metres)	
Revised :		



DOCUMENT No.
W 9106-00027



42A13SE0002 22 GEARY

900

requirements and the reverse side of this form for table of information.

Mining Act Report of Work

Name and Address of Recorded Holder Falconbridge Limited	Prospector's Licence No. A21647
P.O. Box 1140, 571 Moneta Avenue, Timmins, ON, P4N 7H9	Telephone No. (705)267-1188

Summary of Distribution of Credits and Work Performance

Mining Division	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.
	Prefix	Number		Prefix	Number		Prefix	Number	
Porcupine									
Township or Area Geary Township	See Attached Schedule of Days.								
Total Assessment Credits Claimed 2785.4									
Type of Work Performed (Check one only)									
<input type="checkbox"/> Manual Work									
<input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work									
<input type="checkbox"/> Mechanical equipment									
<input type="checkbox"/> Power Stripping other than Manual (maximum credit allowed - 100 days per claim)									
<input checked="" type="checkbox"/> Diamond or other Core drilling									
<input type="checkbox"/> Core Specimens									

Dates when work was performed From: July 27, 1990 To: August 15, 1990	Total No. of Days Performed 2785.4	Total No. of Days Claimed 2785.4	Total No. of Days to be Claimed at a Future Date 0
--	--	--	--

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. * (See note No. 1 on reverse side)	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
	P1059250	246.1	P1059251	646.3	P1059252	196.8	P1059253	584
	P1030607	475.7	P1033334	636.5				

Required Information eg. type of equipment, Names, Addresses, etc. (See Table on reverse side)
If space below is insufficient, attach schedules with required information and location sketches

A total of 849.0m of BQ diamond drill core was received and Logged from holes GY31-04, GY31-05, GY33-02 and GY33-03 between July 27 to August 15, 1990. This meterage is equivalent to 2785.4 days of work within claims P1030607 (145m of 475.7 dy), P1033334 (194m or 636.5 dy), P1059252 (60m or 196.8 dy), P1059251 (197m or 646.3 dy), P1059250 (75m or 246.1 dy) and P1059253 (1 78m or 584.0 dy). The holes were drilled by Bradley Bros. Ltd., Diamond Drill Contractors, P.O. Box 488, Timmins, ON, P4N 7E7. The machine used on these jobs was a Boyles 35.

RECEIVED

FEB 11 1991

OFFICE

ASSESSMENT FILES

ONTARIO GEOLOGICAL SURVEY

Certification of Beneficial Interest * (See Note No. 2 on reverse side)

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.	Date January 28, 1991	Recorded Holder or Agent (Signature) <i>Roos</i>
--	---------------------------------	---

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 Address of Person Certifying Paul Roos, Falconbridge Limited, P.O. Box 1140, 571 Moneta Avenue, Timmins, ON, P4N 7H9	Telephone No. (705)267-1188	Date January 28, 1991	Certified By (Signature) <i>Roos</i>
---	---------------------------------------	---------------------------------	---

For Office Use Only

Work Assignments	Received Stamp RECEIVED JAN 29 1991
------------------	---

RECORDED

JAN 29 1991

SCHEDULE OF DAYS ASSIGNED BY CLAIM

GEARY TOWNSHIP

CLAIM	# OF DAYS
P- 1030605	40.0
P- 1030606	40.0
P- 1030607	40.0
P- 1030608	40.0
P- 1030609	40.0
P- 1030610	40.0
P- 1030611	40.0
P- 1030612	40.0
P- 1030613	40.0
P- 1030614	30.0
P- 1030615	30.0
P- 1030616	30.0
P- 1030617	40.0
P- 1030618	40.0
P- 1030619	40.0
P- 1030620	40.0
P- 1030621	40.0
P- 1030622	40.0
P- 1030623	40.0
P- 1030624	40.0
P- 1032134	40.0
P- 1032135	40.0
P- 1032136	40.0
P- 1032137	40.0
P- 1032138	40.0
P- 1032139	40.0
P- 1032140	60.0
P- 1032141	60.0
P- 1032142	60.0
P- 1032143	60.0
P- 1032230	40.0
P- 1032231	40.0
P- 1033001	80.0
P- 1033002	30.0
P- 1033003	30.0
P- 1033004	20.0
P- 1033005	30.0
P- 1033006	30.0
P- 1033007	30.0
P- 1033008	80.0
P- 1033009	80.0
P- 1033010	30.0
P- 1033011	30.0
P- 1033012	30.0

[Handwritten signature]

P- 1033013	80.0
P- 1033014	80.0
P- 1033015	80.0
P- 1033331	0.0
P- 1033332	0.0
P- 1033333	0.0
P- 1033334	0.0
P- 1033335	0.0
P- 1033336	80.0
P- 1033337	80.0
P- 1033338	30.4
P- 1033339	30.0
P- 1033340	30.0
P- 1059249	35.0
P- 1059250	30.0
P- 1059251	30.0
P- 1059252	30.0
P- 1059253	30.0
P- 1059254	30.0
P- 1059255	80.0
P- 1059256	80.0
P- 1059257	60.0
P- 1059258	60.0

TOTAL DAYS	2,785.40
------------	----------

J. H. ...

SCHEDULE OF DAYS ASSIGNED BY CLAIM

GEARY TOWNSHIP

CLAIM	# OF DAYS
P- 1030605	40.0
P- 1030606	40.0
P- 1030607	40.0
P- 1030608	40.0
P- 1030609	40.0
P- 1030610	40.0
P- 1030611	40.0
P- 1030612	40.0
P- 1030613	40.0
P- 1030614	30.0
P- 1030615	30.0
P- 1030616	30.0
P- 1030617	40.0
P- 1030618	40.0
P- 1030619	40.0
P- 1030620	40.0
P- 1030621	40.0
P- 1030622	40.0
P- 1030623	40.0
P- 1030624	40.0
P- 1032134	40.0
P- 1032135	40.0
P- 1032136	40.0
P- 1032137	40.0
P- 1032138	40.0
P- 1032139	40.0
P- 1032140	60.0
P- 1032141	60.0
P- 1032142	60.0
P- 1032143	60.0
P- 1032230	40.0
P- 1032231	40.0
P- 1033001	80.0
P- 1033002	30.0
P- 1033003	30.0
P- 1033004	20.0
P- 1033005	30.0
P- 1033006	30.0
P- 1033007	30.0
P- 1033008	80.0
P- 1033009	80.0
P- 1033010	30.0
P- 1033011	30.0
P- 1033012	30.0



P- 1033013	80.0
P- 1033014	80.0
P- 1033015	80.0
P- 1033331	0.0
P- 1033332	0.0
P- 1033333	0.0
P- 1033334	0.0
P- 1033335	0.0
P- 1033336	80.0
P- 1033337	80.0
P- 1033338	30.4
P- 1033339	30.0
P- 1033340	30.0
P- 1059249	35.0
P- 1059250	30.0
P- 1059251	30.0
P- 1059252	30.0
P- 1059253	30.0
P- 1059254	30.0
P- 1059255	80.0
P- 1059256	80.0
P- 1059257	60.0
P- 1059258	60.0

TOTAL DAYS	2,785.40
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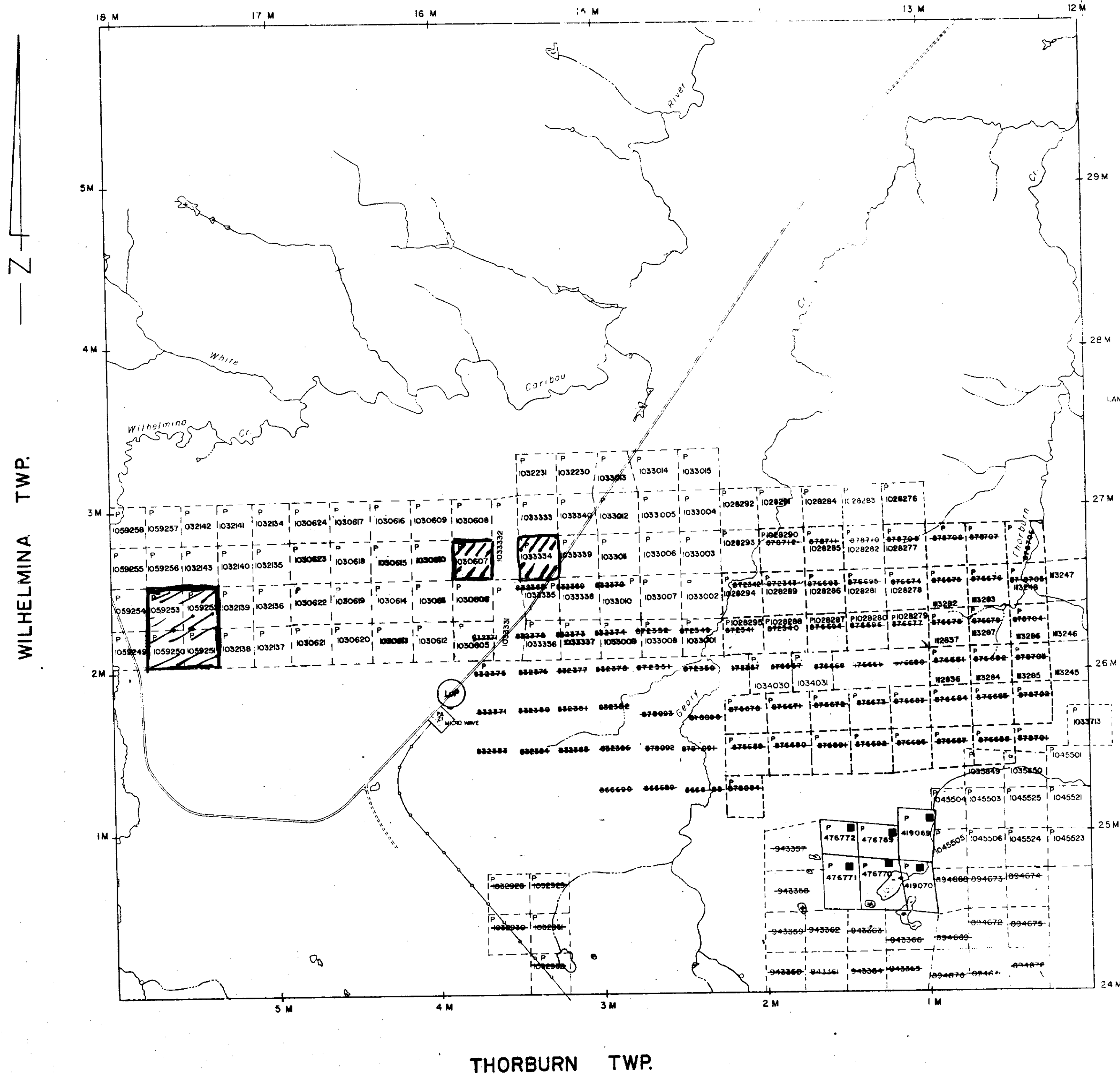


REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

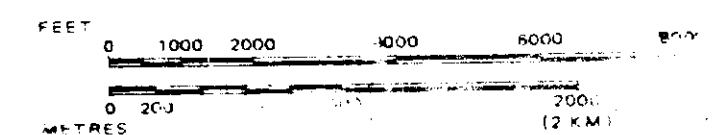
LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

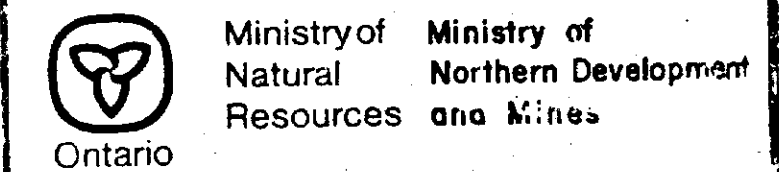
DISPOSITION OF CROWN LANDS

- | TYPE OF DOCUMENT | Symbol |
|--------------------------------|--------|
| PATENT, SURFACE RIGHTS ONLY | □ |
| " SURFACE RIGHTS ONLY | □ |
| " MINING RIGHTS ONLY | □ |
| LEASE, SURFACE & MINING RIGHTS | □ |
| " SURFACE RIGHTS ONLY | □ |
| " MINING RIGHTS ONLY | □ |
| LICENCE OF OCCUPATION | □ |
| ORDER-IN-COUNCIL | OC |
| RESERVATION | □ |
| CANCELLED | □ |
| SAND & GRAVEL | □ |
| LAND USE PERMIT | □ |
- NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MARCH 1913, VESTED IN ORIGINAL PATENTEES BY THE CROWN LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP *FEB 6th / 91*
GEARY
 M.N.R. ADMINISTRATIVE DISTRICT
COCHRANE
 MINING DIVISION
PORCUPINE
 LAND TITLES / REGISTRY DIVISION
COCHRANE



Date NOVEMBER 1986

Number

Revised Feb 23/87

G-3503

