



42A13SE0060 52 REID

010

DIAMOND DRILLING

TOWNSHIP: REID TOWNSHIP

REPORT NO: #52

WORK PERFORMED FOR: FALCONBRIDGE LTD.

RECORDED HOLDER: SAME AS ABOVE

: OTHER

<u>CLAIM NO.</u>	<u>HOLE NO.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
P 865392	MF12-12	239.00 M	MAY/90	(1)
865395-865391	MF12-13	545.00 M	MAY/90	(1)

NOTES:

(1) FILED JANUARY 14TH, 1990



HOLE NUMBER: MF13-01

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 25-January-1990

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 75.50	« ob »					
75.50 TO 95.30	MASSIVE MAFIC INTRUSIVE «7a»	-medium green, fine grained. -very massive, intrusive looking. -87.0-94.0: highly brecciated interval, broken core. -carbonate phenocrysts weathered out locally.  ↓95.3-95.6 « S2 * » strongly sheared, and brecciated, possible fault zone.		-weak pervasive carbonate alteration. -strong fracture controlled chlorite.	-trace to 1% pyrite.	-1-2% quartz/carbonate veining.
95.30 TO 141.20	FELSIC VOLCANIC «4»	-variable appearance, dark grey to medium yellow-green, fine grained. -2-3% quartz eyes, 1-2mm subround. -weak variable foliation.  ↓140.8-140.8 « FA1 » -10cm ground rock.		-weak to moderate patchy sericite. -weak carbonatization. -5% black, very hard fracture filling material. -unknown composition, form in thin fractures or in situ brecciated patches.	-1-1% pyrite, disseminated and fracture controlled. -trace sphalerite, commonly with pyrite and black fracture filling material.	-1-2% quartz/carbonate veins.
141.20 TO 142.20	GRAPHITIC AND CARBONA-CEOUS TUFF «5g»	-medium to dark grey. -fine grained, minor ash-lapilli size felsic component. -bedding at 40-60° to core axis. -unit made up of alternating graphite and dirty carbonaceous tuff.			-5% disseminated and roughly bedded pyrite.	
142.20 TO 149.10	FELSIC VOLCANIC «4»	-medium grey, fine grained. -weak to moderate foliation at 35° to core axis. -3-4% quartz phenocrysts, 1-2mm, subround, equal distribution.  ↓143.1-143.1 « FA1 30° » -strongly sheared adjacent rock.		-moderate fracture controlled sericite. -moderate patchy silicification.	-5% pyrite, occurs in dark irregular patches.	
149.10 TO 183.00	GRAPHITE AND CARBONA-CEOUS ARGILLITE «5g»	-75% graphite, fine grained, dark grey to black. -25% carbonaceous argillite, medium grey, fine ash. -bedding at 40° to core axis. -minor (3%) pyritic beds from 1mm to 3mm. -unit moderate to strongly conductive throughout.			-5% pyrite, occurs in beds or as large subround clots up to 2cm, locally as colloform growths.	-loading and fining uphole suggest tops to the north.

HOLE NUMBER: MF13-01

DRILL HOLE RECORD

LOGGED BY: J. CECCHETTO

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FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 25-January-1990

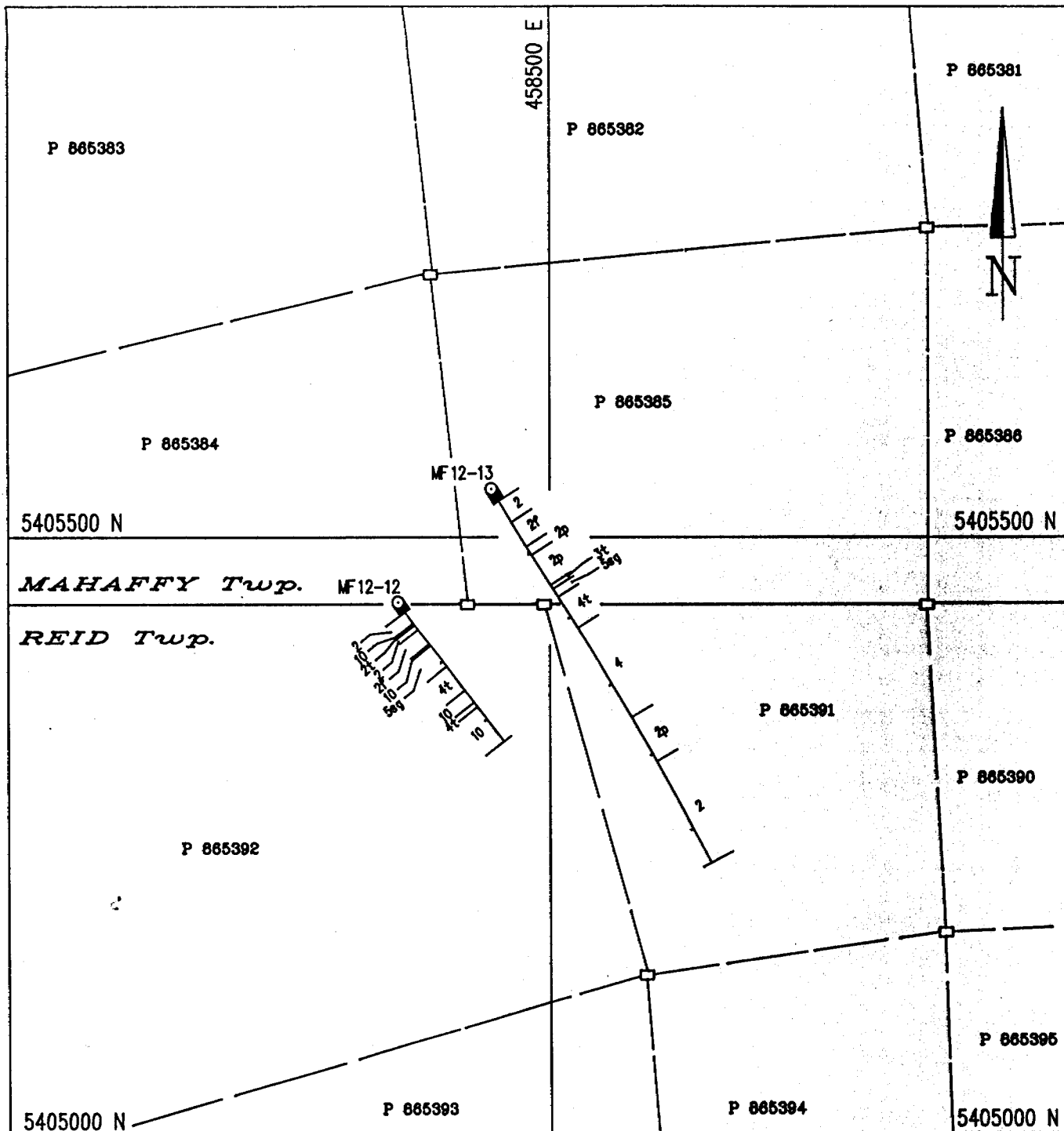
FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
183.00 TO 209.50	CARBONA-CEOUS MAFIC TUFF «2»	-medium to dark grey, medium grained. -carbonaceous in filling. -no distinct fragments.		-moderate carbonaceous contamination. -moderate to strong pervasive carbonate alteration. -4% carbonate rhombs and blebs.	-½-1% disseminated pyrite.	-1% carbonate veinlets, from 2-3mm.
209.50 TO 213.00	CARBONA-CEOUS ARGILLITE «5»	-dark grey to black, very fine grained. -massive. -no primary textures or structures. -weak foliation at 50° to core axis.			-trace pyrite.	-no veining.
213.00 TO 218.20	INTER-MEDIATE ASH TUFF «3t»	-medium grey, medium grained. -weak to moderate foliation at 40° to core axis. -grainy texture, homogeneous throughout interval.		-weak pervasive carbonate. -weak fracture controlled chlorite and sericite.	-trace pyrite.	-no veining.
218.20 TO 248.00	FELSIC VOLCANIC «4»	-medium to dark green, fine grained. -2% amygdaloidal, 3-8mm, subround to anhedral, quartz/carbonate filled, possibly quartz eyes. -weak foliation at 40° to core axis.		-moderate pervasive chlorite. -strong fracture controlled chlorite. -moderate fracture controlled sericite.	-½% disseminated pyrite.	-1-2% quartz/carbonate veining. -originally logged as mafic volcanic however chemistry suggests felsic volcanic.
248.00 TO 320.00	FELSIC VOLCANIC «4m»	-medium grey, fine grained. -3% quartz phenocrysts, 1-3mm, subround. -hyaloclastitic or in situ brecciated patches locally. -micro fracturing throughout. -288.0-downhole: unusual fracture filling material, dark grey, very fine grained and hard. -composes 5% of unit, forms very sharp contacts and has highly irregular orientations. -310.0-downhole: unit has an irregular appearance, appears to be compositionally uniform with variable alteration causing colour change, possible proximity to intrusive.		-strong patchy silicification. -strong fracture controlled sericite. -249.0-256.0: intense silicification, strong fracture controlled sericite 20% quartz dumping.	-1-2% fracture controlled and disseminated pyrite. -local sphalerite blebs and fracture fillings. -256.0-258.0: ½-1% sphalerite. -289.0-293.5: ½% disseminated sphalerite.	-249.0-256.0: 20% silica veining and dumping.
320.00 TO 320.00	END OF HOLE					

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DRILL HOLE RECORD

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**LEGEND**

MAJOR ROCK DIVISION	TEXTURAL/CHEMICAL MODIFIERS
10 DIABASE	a FINE GRANED
9 FELSIC INTRUSIVE ROCKS	b MEDIUM GRANED
8 INTERMEDIATE INTRUSIVE ROCKS	in SECONDARY FRAGMENTALS
7 MAFIC INTRUSIVE ROCKS	o COARSE GRANED
6 ULTRAMAFIC INTRUSIVE ROCKS	d QUARTZ-FELDSPAR PORPHYRIC
5 SEDIMENTARY ROCKS	e AMYGDALOIDAL
4 FELSIC VOLCANIC ROCKS	f PRIMARY FRAGMENTALS
3 INTERMEDIATE VOLCANIC ROCKS	h GRAPHIC
2 MAFIC VOLCANIC ROCKS	i VOLCANIC
1 ULTRAMAFIC VOLCANIC ROCKS	j ALKALIC
	k CALD-ALKALIC
	l KENATIC
	m FLOWB
	n SARRIF
	p FLOWED
	q QUARTZ PORPHYRIC
	r SULPHIDES, CHALCITES
	s PYROCLASTIC
	t HIGH Mg
	u HIGH Fe
	v HIGH Al
	w ANDREIC
	y KILANDITE

*Flow*

**FALCONBRIDGE LIMITED**

Exploration Division      Timmins, ONTARIO

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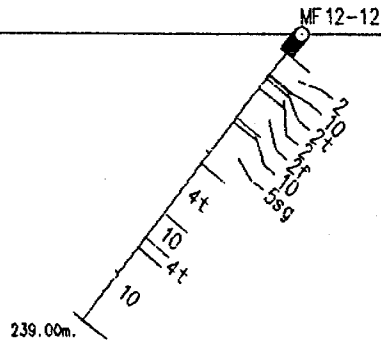
**KARIVINEN OPTION (MAHAFFY 12)**  
**DIAMOND DRILL PLAN (GEOLOGY)**  
 MAHAFFY Twp.

Traced by : <i>ARZES</i> 12/02/00	Approved by :
Drawn by : <i>dol</i> 18/07/00	Plan no. : <i>0150 AL</i>
Supervised by : <i>P.A. Ross</i> 12/06/00	Scale : 1 : 2000 (metres)
Revised by :	0 50 100 150

5405500 N

500

500



0

0

**LEGEND**

MAJOR ROCK DIVISION	TEXTURAL/CHEMICAL MODIFIERS
10 DIABASE	a FINE GRAINED
9 FELSIC INTRUSIVE ROCKS	b MEDIUM GRAINED
8 INTERMEDIATE INTRUSIVE ROCKS	bc SECONDARY FRAGMENTALS
7 MAFIC INTRUSIVE ROCKS	c COARSE GRAINED
6 ULTRAMAFIC INTRUSIVE ROCKS	d QUARTZ-FELDSPAR PORPHYRITIC
5 SEDIMENTARY ROCKS	e ANHYDROUS
4 FELSIC VOLCANIC ROCKS	f PRIMARY FRAGMENTALS
3 INTERMEDIATE VOLCANIC ROCKS	g GRAPHITIC
2 MAFIC VOLCANIC ROCKS	h1 TRACHEITIC
1 ULTRAMAFIC VOLCANIC ROCKS	i ALKALIC
	j CALC-ALKALIC
	k KIMATIITIC
	l FLOWS
	m MASSIVE
	n PILLLOWED
	o QUARTZ PORPHYRITIC
	p SULPHIDES, EXHALITES
	q PYROCLASTIC
	r HIGH Mg
	s HIGH Fe
	t HIGH Al
	x ANDESITIC
	y ICCLANDITIC

**FALCONBRIDGE LIMITED**

Exploration Division Timmins, ONTARIO



**KARIVINEN OPTION (MAHAFFY 12)**

**DIAMOND DRILL SECTION 458370 E**

LOOKING SOUTHWEST (235°) MAHAFFY Twp.

Traced by : <i>ARDES</i> 03/08/90	Approved by :
Drawn by : <i>d e l</i> 23/07/90	Plan no. : <i>0158 AU</i>
Supervised by : <i>P.A. Ross</i> 11/08/90	Scale : 1 : 5000
Revised by :	0 50 100 200







HOLE NUMBER: MF12-12

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 16.00	OVERBURDEN « ob »					
16.00 TO 34.00	MAFIC VOLCANIC «2»	-dark green, fine grained. -8-10% carbonate rhombs, patches, and small veins, fizz moderately in acid. -no observed extrusive textures or structures (ie. selvages or amygdules). -may be an intrusive.		-moderate fracture controlled chlorite locally.	-trace to 0.5% pyrite.	-33.3-33.5m: quartz vein, 10% host inclusions, trace sulphide.
34.00 TO 35.00	DIABASE «10»	-fine grained, dark grey, 3% green feldspar. -moderately magnetic. -very blocky core.				
35.00 TO 37.60	MAFIC LAPILLI TUFF «2t»	-medium to dark green, fine grained matrix, lapilli fragments up to 5cm. -15-20% very distinct felsic lapilli, subround to subangular stretches in plane of foliation at 50° to core axis.		-moderate fracture controlled chlorite.	-0.5% disseminated pyrite.	
37.60 TO 45.20	MAFIC VOLCANIC «2»	-very similar to unit at 16.0 to 34.0m with less carbonate (5% range). -very featureless, possible amygdules locally.			-0.5% disseminated pyrite.	
45.20 TO 70.00	MAFIC BRECCIA «2f»	-mafic flow breccia, possible exotic fragments, all mafic in composition. -fine grained, very variable colour from light grey-tan to dark green-grey. -variable colour gives unit a distinct breccia appearance. -possible amygdules locally. -foliated chloritic bands may represent pillow selvages.  60.6-63.4 «10» diabase, fine grained, magnetic, very blocky core.  -more homogeneous downhole, unit looks like a flow.		-moderate bleaching. -moderate fracture controlled chlorite. -3-4% carbonate as variable size rhombs, as irregular patches and as small veins (moderate fizz in acid).	-0.5-1.0% disseminated pyrite from 45.2-50.0m.	
70.00 TO 73.00	DIABASE «10»	-fine grained, dark grey, magnetic.				

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DRILL HOLE RECORD

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FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
73.00 TO 108.50	GRAPHITE, CARBONACEOUS ARGILLITE, CHERY TUFF AND MASSIVE PYRITE «5sg»	<ul style="list-style-type: none"> <li>-overall interval contains approximately 25% pyrite, 25% graphite, 40% carbonaceous argillite and 10% chery tuff.</li> <li>-interval is variable as described below.</li> <li>-73.0-73.7m: fine ash to lapilli tuff, felsic to intermediate.</li> <li>-73.7-74.5m: carbonaceous argillite, 5% pyrite.</li> <li>-74.5-75.0m: banded pyrite, at 60° to core axis, inter layered carbonaceous argillite and graphite.</li> <li>-75.0-76.8m: 10-15% pyrite, rough bedding with graphite and carbonaceous argillite.</li> <li>-76.8-84.6m: bedded and intercalated carbonaceous argillite and chery tuff. Beds range from mm to cm size, no distinct tops determination.</li> <li>-chery tuff can be very siliceous.</li> <li>-2-3% disseminated pyrite.</li> <li>-84.5m: 2cm band of red mineral (hematite, red streak).</li> <li>-84.6-90.5m: felsic lapilli tuff.</li> <li>-distinct lapilli fragments, siliceous looking.</li> <li>-1-2% pyrite.</li> <li>-90.5-96.0m: carbonaceous argillite with 10-15% pyrite and graphite.</li> <li>-96.0-98.0m: 90% pyrite, 10% graphite.</li> <li>-pyrite is fine to medium grained and brecciated.</li> <li>-98.0-99.0m: 90% graphite, 10% quartz/pyrite.</li> <li>-99.0-101.5m: as 96.0-98.0m.</li> <li>-101.5-102.5m: graphite.</li> <li>-102.5-108.5m: carbonaceous argillite with 10-15% pyrite.</li> </ul>				<ul style="list-style-type: none"> <li>-interval contains patches of very conductive material.</li> <li>-all sulphide and graphitic intervals are extremely conductive.</li> </ul>
108.50 TO 150.00	FELSIC TUFF «4t»	<ul style="list-style-type: none"> <li>-lapilli tuff, very variable colour from yellow-green to dark grey.</li> <li>-30% dark grey, irregular shaped fragments, fairly hard.</li> <li>-5% white, angular siliceous fragments.</li> <li>‡130.0-130.0‡«FAI‡» 1cm ground rock at 45° to the core axis.</li> </ul>		-strong fracture controlled sericite.	-trace disseminated pyrite.	-3-4% quartz veining, trace pyrite.
150.00 TO 170.50	DIABASE «10»	<ul style="list-style-type: none"> <li>-dark grey, black, fine to medium grained.</li> <li>-magnetic.</li> </ul>				

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DRILL HOLE RECORD

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HOLE NUMBER: MF12-12

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
170.50 TO 178.50	FELSIC TUFF «4t»	-as 108.5 to 150.0m. -more homogeneous, 20% in situ brecciation.			-177.0-177.5m: 1% pyrrhotite, 1% pyrite.	* whole rock sample at this interval indicates intermediate composition (mixed tuff ? or diabase contamination?)
178.50 TO 239.00	DIABASE «10»	-as 150.0-170.5m -medium grained to coarse at end of hole.				
239.00 TO 239.00	END OF HOLE					

HOLE NUMBER: MF12-12

DRILL HOLE RECORD

LOGGED BY: J. CECCHETTO

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865395 + 865391

HOLE NUMBER: MF12-13  
 PROJECT NAME: 8158  
 PROJECT NUMBER: 008158  
 CLAIM NUMBER: 865395 + 865391  
 LOCATION: MANAFFY TWP.

FALCONBRIDGE LTD  
 DRILL HOLE RECORD

DATE: 1-May-1990  
 IMPERIAL UNITS:  
 METRIC UNITS: X

PLOTTING COORDS GRID: UTM  
 NORTH:  
 EAST:  
 ELEV: 290.00

ALTERNATE COORDS GRID: LINE  
 NORTH: 1+ 0N  
 EAST: 5+30E  
 ELEV: 290.00

COLLAR DIP: -50° 0' 0"  
 LENGTH OF THE HOLE: 545.00m  
 START DEPTH: 0.00m  
 FINAL DEPTH: 545.00m

COLLAR ASTRONOMIC AZIMUTH: 150° 0' 0"  
 GRID ASTRONOMIC AZIMUTH: . . .

DATE STARTED: February 19, 1989  
 DATE COMPLETED: February 27, 1989  
 DATE LOGGED: February 27, 1989

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

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

CONTRACTOR: BRADLEY BROS.  
 CASING: 19m LEFT IN HOLE  
 CORE STORAGE: MINESITE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
100.00	145° 0'	-52° 0'	SING.SHOT	OK		.	.	.	.	.	.
200.00	148° 0'	-50° 0'	SING.SHOT	OK		.	.	.	.	.	.
300.00	150° 0'	-47° 0'	SING.SHOT	OK		.	.	.	.	.	.
400.00	150° 0'	-45°30'	SING.SHOT	OK		.	.	.	.	.	.
500.00	152° 0'	-44° 0'	SING.SHOT	OK		.	.	.	.	.	.
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*Flaw*

HOLE NUMBER: MF12-13

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 19.00	« ob »					
19.00 TO 52.00	MAFIC VOLCANIC «2»	-dark green, fine grained. -1-2% amygdules, 3-5mm, irregular shaped, carbonate filled. -no distinct selvages. -1-2% carbonate rhombs locally.		-weak to moderate pervasive carbonatization. -3-4% carbonate fractures, veins and irregular patches, fizz in acid. -weak to moderate fracture controlled chlorite.	-1% disseminated pyrite.	
52.00 TO 90.00	MAFIC BRECCIA «2f»	-variable colour from light grey to dark green, fine grained. -up to 2% amygdules locally, 5mm, subround to amoeboid, carbonate filled. -unit contains distinct intervals of hyaloclastite, flow breccia, tuff and massive sections. -52.0-55.5m: hyaloclastite, distinct dark angular fragments. -71.5-76.0m: 5-8% distinct lapilli fragments, cream coloured, carbonatized, subround irregular shapes. -86.0-90.0m: flow breccia. -other intervals are generally massive with amygdules and possible selvages locally. -74.5-74.8m: possible ash tuff, appears to be bedded at 50° to core axis, some bands are very siliceous.		-moderate bleaching. -moderate pervasive carbonatization. -weak to moderate fracture controlled chlorite. -up to 3% carbonate rhombs locally.	-0.5 to 1.0% disseminated pyrite.	-3% carbonate veining, <2.0cm in size, random orientations.
90.00 TO 103.00	MAFIC VOLCANIC «2p»	-medium grey, fine grained. -1-2% amygdaloidal, distinct chloritic selvages. -similar composition to above units.		-weak bleaching. -weak to moderate pervasive carbonatization. -strong fracture controlled chlorite, chloritic selvages.	-0.5% disseminated pyrite. -1 small fleck of sphalerite at 89.5m.	
103.00 TO 150.30	MAFIC VOLCANIC «2p»	-medium grey, fine grained. -3-4% amygdules throughout, variable sizes, distinct selvages. -amygdules are carbonate/chlorite and very rarely quartz filled. -moderate foliation at 50° to core axis. {112.6-112.6}« FA1 » -0.5cm of ground rock/paste at 50° to core axis. -139.0m-downhole: unit becomes darker in colour, majority of amygdules are chlorite		-moderate bleaching. -moderate pervasive carbonatization. -strong fracture controlled chlorite.  -strong fracture controlled sericite locally. -tan or mauve coloured.	-0.5% disseminated pyrite.  -149.0m-downhole: 2% pyrite, commonly as euhedral cubes up to 0.75cm in size.	

HOLE NUMBER: MF12-13

DRILL HOLE RECORD

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HOLE NUMBER: MF12-13

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		filled.				
150.30 TO 156.50	INTER-MEDIATE TUFF «3t»	-dark grey, fine grained. -no distinct fragments, unit has a tuffaceous appearance. -host is very siliceous with 5% black clots strongly stretched in plane of foliation. -moderate foliation at 55 to 60° to core axis.		-carbonaceous infilling.	-150.3-154.0m: 1-2% disseminated pyrite. -154.0-156.5m: 5% disseminated pyrite.	
156.50 TO 169.00	CARBONACEOUS TUFF, GRAPHITE AND MASSIVE PYRITE «5sg»	-interval composed of 20% pyrite, 20% carbonaceous argillite and 60% graphite. -variable as described below. -156.5-158.1m: 90% graphite, 5% pyrite, 5% carbonate veins. -pyrite as brecciated clots up to 3cm. -158.1-158.35m: 50% pyrite, 50% graphite, pyrite as above. -158.35-158.6m: bedded graphite, at 55° to core axis. -158.6-159.5m: 50% pyrite, irregular blobs, 50% graphite. -159.5-164.3m: carbonaceous argillite with 10-15% graphitic bands. -164.3-165.5m: graphite. -165.5-166.9m: 90% massive pyrite, 5% graphite, 5% carbonate. -pyrite fine grained in massive and brecciated forms. -166.9-169.0m: carbonaceous argillite. -167.6-167.9m: 40% pyrite.			-see texture and structure for detailed description. -no observed sphalerite or chalcopyrite. -165.5-166.9m: 90% pyrite.	-156.5-167.9m: highly conductive interval.
169.00 TO 217.00	FELSIC TUFF «4t»	-variable colour from yellow-green to dark grey, fine grained matrix. -very irregular appearance, composition appears to be fairly homogeneous. -distinct fragment forms, from 2-6cm, subround. -fragments tend to be very siliceous with a sericitic matrix. -2% quartz phenocrysts/crystals locally. -very siliceous intervals have a crackle appearance locally. -matrix has a moderate very variable fabric, commonly parallels fragments.		-strong fracture controlled sericite. -moderate pervasive sericite. -strong silicification locally (primary?). -weak chlorite locally.	-0.5% disseminated pyrite. -195.5m: small fleck of sphalerite.	-2% quartz veining.

HOLE NUMBER: MF12-13

DRILL HOLE RECORD

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HOLE NUMBER: MF12-13

FALCONBRIDGE LTD  
DRILL HOLE RECORD

DATE: 24-May-1989

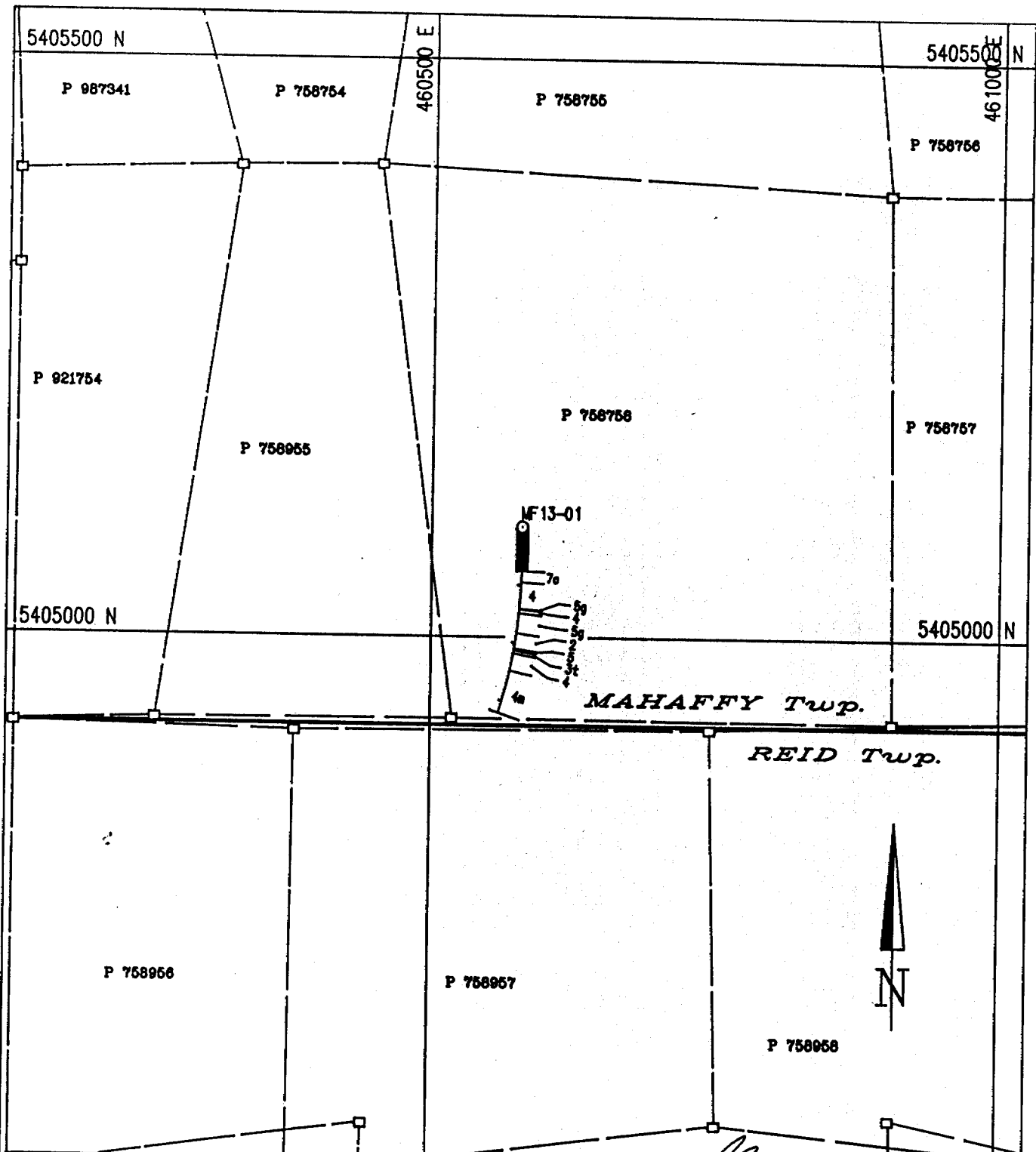
FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
217.00 TO 348.00	FELSIC VOLCANIC «4»	<ul style="list-style-type: none"> <li>-rock has a very variable appearance which may be in part primary, or alteration induced.</li> <li>-variable as described below.</li> <li>-217.0-230.0m: dark grey, fine grained, homogeneous colour, interval is cross cut with a high density of micro fractures filled with a cream coloured material.</li> <li>-230.0-244.0m: dominantly light to medium yellow-green, interval has a banded appearance due to strong fracture controlled sericite.</li> <li>-strong in situ brecciation due to alteration.</li> <li>-numerous small shear slips at 50° to core axis.</li> <li>-244.0m-downhole: medium grey host with dark grey anastomosing chlorite fractures.</li> <li>-fine grained, strongly in situ brecciated by incipient alteration.</li> <li>-host is very siliceous.</li> <li>{302.4-302.4} « FAI » fault, 0.5cm of paste at 40° to core axis.</li> <li>{305.1-305.1} « FAI » fault, 1cm of paste at 35° to core axis.</li> </ul>		<ul style="list-style-type: none"> <li>-217.0-230.0m: moderate fracture controlled sericite.</li> <li>-230.0-244.0m: strong fracture controlled sericite, moderate pervasive sericite.</li> <li>-strong fracture controlled chlorite.</li> <li>-244.0m-downhole: intense fracture controlled chlorite, forms in anastomosing veinlets up to 1cm wide.</li> <li>-300.0m-downhole: pervasive nature of chlorite intensifies in host to moderate.</li> </ul>	<ul style="list-style-type: none"> <li>-217.0-213.3m: 1-2% disseminated pyrite.</li> <li>-230.0-244.0m: 0.5% disseminated pyrite.</li> <li>-244.0-289.0m: 2% disseminated and fracture controlled pyrite.</li> <li>-270.4-270.5m: 1% chalcopyrite and 2-3% galena, fracture controlled.</li> <li>-295.0-295.5m: 1% sphalerite, light brown, disseminated.</li> <li>-300.4m: small speck of chalcopyrite.</li> <li>-289.0m: 3-5% pyrite, in patches, fracture controlled and disseminated.</li> </ul>	-336.0-336.25m: quartz vein, 2-3% pyrite.
348.00 TO 410.00	MAFIC VOLCANIC «2p»	<ul style="list-style-type: none"> <li>-contact zone, 348.0-348.5m, breccia, mafic and felsic.</li> <li>{348.5-349.0} « FAI » fault, ground rock, paste.</li> <li>-bleached light grey to medium green, fine grained.</li> <li>-1-2% amygdaloidal locally, 2-4mm, carbonate filled, euhedral.</li> <li>-distinct pillow selvages locally.</li> <li>-399.0-410.0m: distinct pillow breccia, subround fragments, irregular shapes.</li> </ul>		<ul style="list-style-type: none"> <li>-moderate bleaching dominantly from 348.0 to 358.0m.</li> <li>-moderate fracture controlled chlorite, in pillow selvages.</li> <li>-weak pervasive carbonate.</li> <li>-1-2% carbonate rhombs locally.</li> </ul>	<ul style="list-style-type: none"> <li>-348.0-358.0m: 3-5% pyrite, fracture controlled and disseminated.</li> <li>-2-3% pyrite throughout.</li> </ul>	-1% carbonate veinlets.
410.00 TO 545.00	MAFIC VOLCANIC «2»	<ul style="list-style-type: none"> <li>-medium green to dark grey, fine grained.</li> <li>-very massive with the exception of quartz carbonate veining.</li> <li>-similar composition to above unit.</li> </ul>		-weak to moderate pervasive carbonatization.	-0.5% disseminated pyrite.	-5-8% quartz/carbonate veining, very irregular orientations. -444.0m-downhole: 1-2% veining.
545.00 TO 545.00	END OF HOLE					

HOLE NUMBER: MF12-13

DRILL HOLE RECORD

LOGGED BY: J. CECCHETTO


PAGE: 4



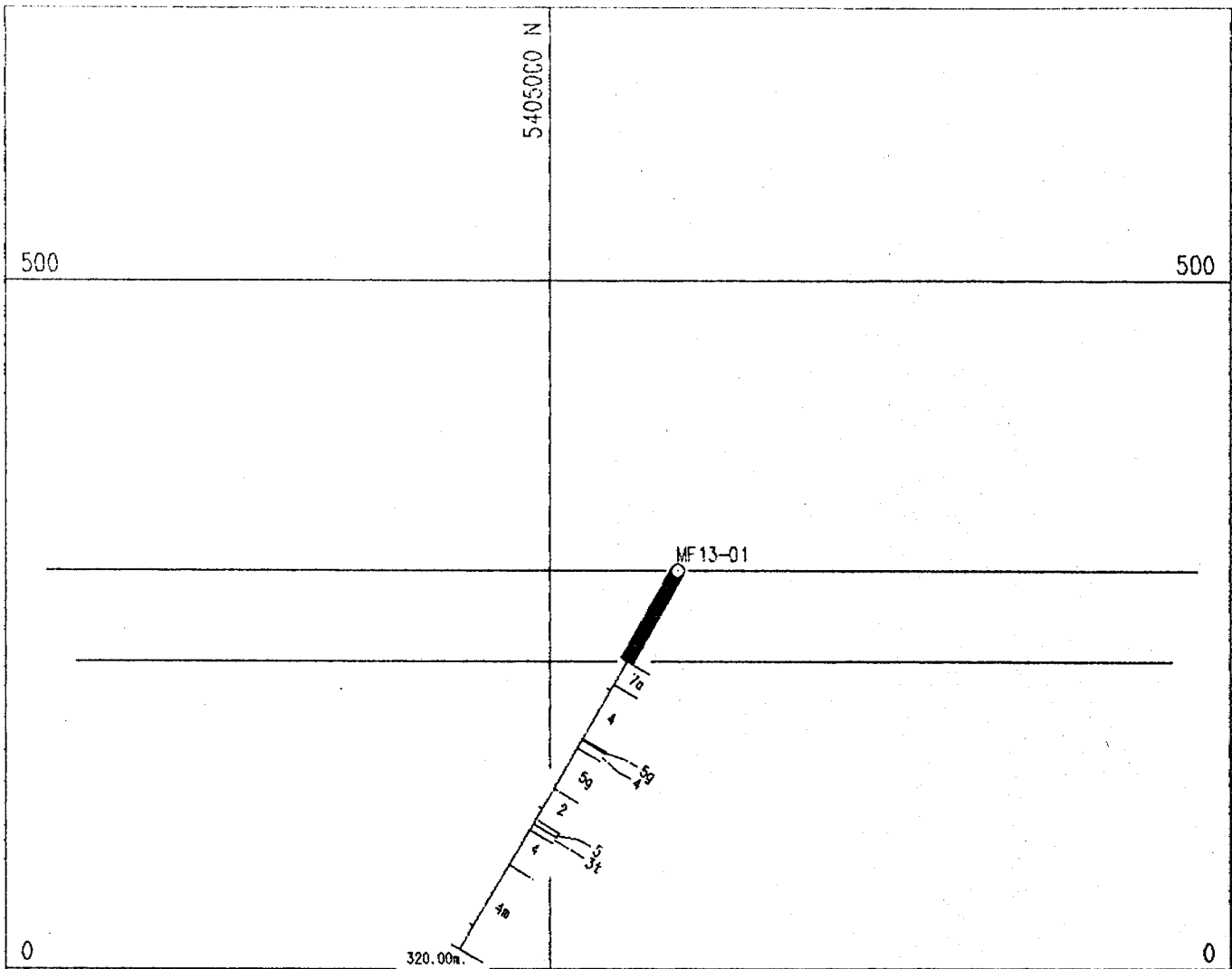
**LEGEND**

MAJOR ROCK DIVISION	TEXTURAL/CHEMICAL MODIFIERS
10 BASALT	a FINE GRAINED
9 FELSIC INTRUSIVE ROCKS	b MEDIUM GRAINED
8 INTERMEDIATE INTRUSIVE ROCKS	ca SECONDARY FRAGMENTALS
7 mafic INTRUSIVE ROCKS	c COARSE GRAINED
6 ULTRAMAFIC INTRUSIVE ROCKS	d SILICATE-VELDORIC PORPHYRITIC
5 SEDIMENTARY ROCKS	e METASILTSTONE
4 FELSIC VOLCANIC ROCKS	f PRIMARY FRAGMENTALS
3 INTERMEDIATE VOLCANIC ROCKS	g GRAPHITIC
2 mafic VOLCANIC ROCKS	h TALKIC
1 ULTRAMAFIC VOLCANIC ROCKS	i ALKALIC
	j CALD-ALKALIC
	k KRYPTITIC
	l FLAKE
	m MASSIVE
	n FOLDED
	o SILICATE PORPHYRITIC
	p SULPHIDES, OXALIDES
	q PYROCLASTIC
	r HIGH P <sub>2</sub>
	s HIGH P <sub>1</sub>
	t HIGH N
	u ANDESITIC
	v SCLANITIC

*Flora*

<b>FALCONBRIDGE LIMITED</b>		
Exploration Division      Timmins, ONTARIO		
<b>MAHAFFY CLAIMS PROJECT (MAHAFFY 13)</b>		
<b>DIAMOND DRILL PLAN (GEOLOGY)</b>		
MAHAFFY Twp.		
Traced by : <i>ARZES</i>	<i>11/07/80</i>	Approved by :
Drawn by : <i>dol</i>	<i>11/07/80</i>	Plot no. : <i>0150 A</i>
Supervised by : <i>P.A. Ross</i>	<i>12/06/80</i>	Scale : 1 : 5000 (metres)
Revised by :		0 50 100 150 200





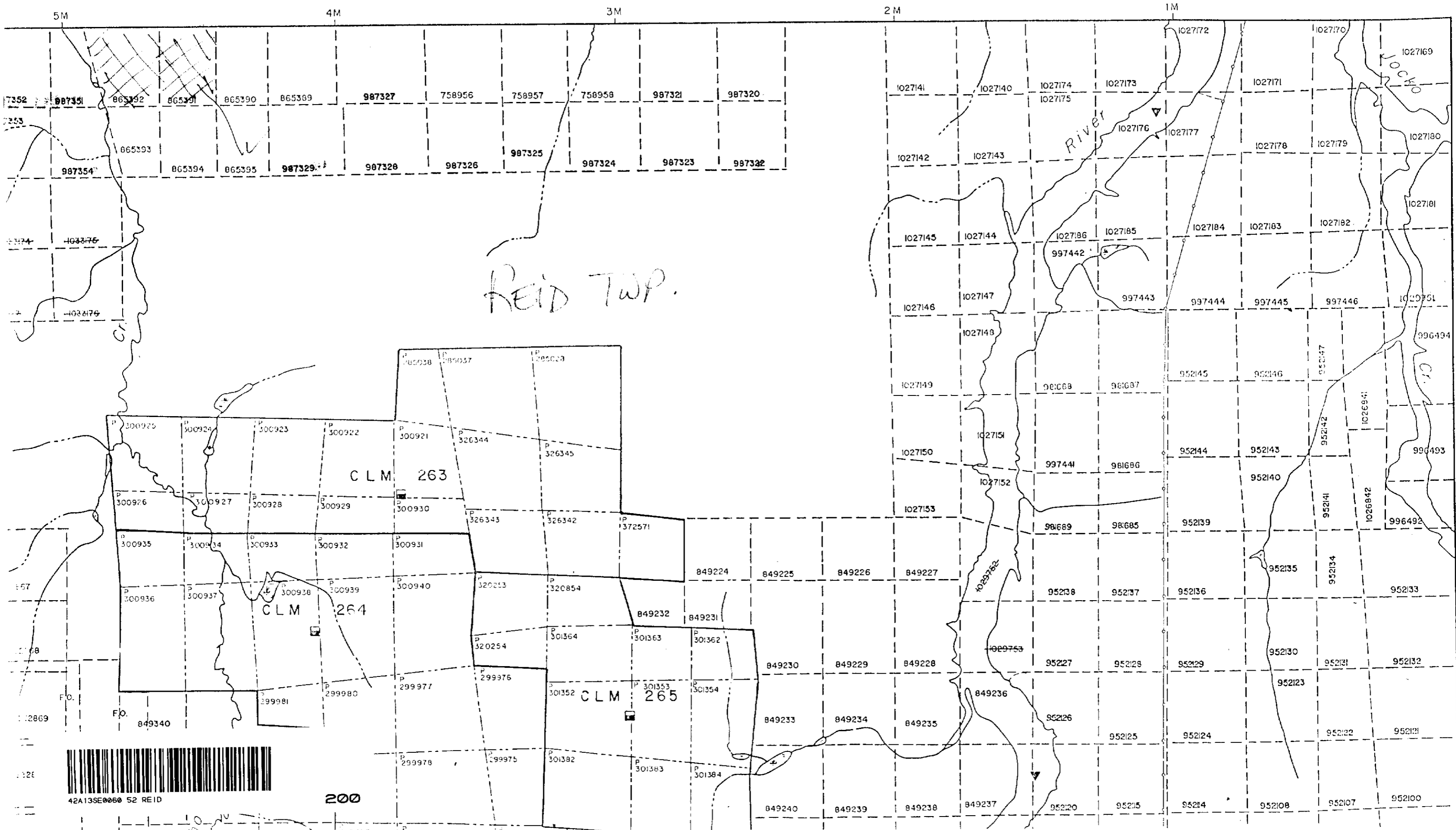
LEGEND	
MAJOR ROCK DIVISION	TEXTURAL/CHEMICAL MODIFIERS
10 DIABASE	a FINE GRAINED
9 FELSIC INTRUSIVE ROCKS	b MEDIUM GRAINED
8 INTERMEDIATE INTRUSIVE ROCKS	bw SECONDARY FRAGMENTALS
7 MAFIC INTRUSIVE ROCKS	c COARSE GRAINED
6 ULTRAMAFIC INTRUSIVE ROCKS	d QUARTZ-FELDSPAR PORPHYRITIC
5 SEDIMENTARY ROCKS	e ANHYDROBLIND
4 FELSIC VOLCANIC ROCKS	f PRIMARY FRAGMENTALS
3 INTERMEDIATE VOLCANIC ROCKS	g GRAPHITIC
2 MAFIC VOLCANIC ROCKS	h TRICLITIC
1 ULTRAMAFIC VOLCANIC ROCKS	i ALKALIC
	j CALC-ALKALIC
	k KEMATITIC
	l FLOWS
	m MASSIVE
	n PILLOVED
	o QUARTZ PORPHYRITIC
	p SULPHIDES, EXHALITES
	q PYROCLASTIC
	v HIGH Mg
	w HIGH Fe
	x HIGH Al
	y ANOCITIC
	z ICELANDITE

*P. Ross*

<b>FALCONBRIDGE LIMITED</b>		
Exploration Division	Timmins, ONTARIO	
<b>MAHAFFY TOWNSHIP CLAIMS (MAHAFFY 13)</b>		
<b>DIAMOND DRILL SECTION 460580 E</b>		
LOOKING WEST		MAHAFFY Twp.
Traced by : <i>ARDES</i>	<i>03/08/80</i>	Approved by :
Drawn by : <i>d e l</i>	<i>03/08/80</i>	Plan no. : <i>8150 D</i>
Supervised by : <i>P A Ross</i>	<i>03/08/80</i>	Scale : 1 : 2000 (metres)
Revised by :		0 50 100 150 200

865341  
865345

# MAHAFFY TOWNSHIP



42A13SE0060 52 REID

200