

DIAMOND DRILLING



41016SW0043 20 HEENAN

010

TOWNSHIP: Heenan

REPORT No.: 20

WORK PERFORMED BY: Falconbridge Ltd.

<u>CLAIM No.</u>	<u>HOLE No.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
P 554679	668-5-84	450'	June/84	(1)
P 554690	668-10-84	603'	Aug/84	(1)
	668-11-84	302'	July/84	(1)
	668-12-84	119'	Aug/84	(1)
	<u>4</u>	<u>1474'</u>		

NOTES: (1) #32-85

Falconbridge Ltd.

HOLE NO: 668-5-84

PAGE:

Drilled by: Dominik Diamond Drilling
 Started: June 15/84
 Ended: June 18/84

Property: Heenan - P.N. 668
 Township: Heenan (Claim ^{SS 4679} 549679) *mm*
 Logged by: B. Manchuk

Latitude: L214+49E/183+97N
 Azimuth: 085°
 Élévation:

Longitude:
 Dip: collar (-45°₄₃) 350'
 Length: 450' (AQ)

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T. AU
0	12.0'	Casing						
12.0'	101.5'	Felsic Dimict Breccia (Protolahar)						
101.5'	109.5'	Feldspar Porphyry Dike						
109.5'	117.0'	Felsic Dimict Breccia						
117.0'	252.0'	Laharic Breccia	6113 (S)	196.0'	200.0'	4.0'		
252.0'	277.5'	Feldspar porphyry						
277.5'	415.5'	Laharic Breccia						
415.5'	450.0'	Tholeiite Dyke						
	450.0'	END OF HOLE (Casing pulled)						

Benny Manchuk

Falconbridge Ltd.

HOLE NO: 668-5-84

PAGE: 1 of 4

Drilled by: Dominik Diamond Drilling
 Started: June 15/84
 Ended: June 18/84

Property: Heenan (P.668)
 Township: Heenan (Claim ~~549679~~ ⁵⁵⁴⁶⁷⁹ *ML*)
 Logged by: B. Manchuk

Latitude: L214+49E/183+97N
 Azimuth: 085°
 Longitude: Dipcollar(-45°); 350' 43" cor
 Élévation: Length: 450' (AQ)

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
0	12.0'	Casing								
12.0'	101.5'	<p>Felsic Dimict Breccia (Protolabar) Coarse breccia, 60% angular to subrounded felsic fragments ½"-9", commonly ¾". Felsic fragments, pale green, sericitic, rhyolitic with 10-15 (2mm-5mm)qtz. eyes per sq.in. in an aphanitic ground mass. 20% int.-dark green subrounded to angular fragments (andesitic), generally ½". Matrix of breccia consists of lithic angular fragments ranging in size from ½" to microfragments. -Matrix sericitic and occasionally chloritic with odd speck pyrite -Silicified -61.0-65.0 several 3-5mm qtz. veins; flooding of fragments with potash giving red coloration to core -65.0-101.5 numerous hairline fractures, irregular but mainly 35° to c.a., moderate potash alteration of fragments (possibly highly sheared feldspar porphyry dikes.</p>								
	12.0- 61.0'	Felsic Rhyo. Bx., tr. py., (composite)	6098 (C)	12.0'	61.0'	49.0'				
	61.0- 73.0'	" " " , moderate potash-qtz. fracture tr. py., (split)	6100 (S)	61.0'	73.0'	12.0'				
	73.0- 83.0'	" " " , pervasive potash-qtz. fracture 3% py. (split)	6099 (S)	73.0'	83.0'	10.0'				
	83.0- 91.0'	" " " , moderate potash-qtz. fracture tr. py., (split)	6101 (S)	83.0'	91.0'	8.0'				
	91.0- 96.0'	" " " " " "	6102 (S)	91.0'	96.0'	5.0'				
	96.0-101.5'	" " " moderate potash-qtz. fracture 1% py. (split)	6103 (S)	96.0'	101.5'	5.5'				
101.5'	109.5'	<p>Feldspar Porphyry Dike -Massive; where unaltered grey with 50% 3mm anhedral-sub-hedral creamy white feldspar crystals; groundmass aphanitic. Where altered pervasive potash flooding of groundmass</p>								

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
		along numerous hairline-1mm qtz. fractures at 50° to c.a. imparting brick red coloration to core. Commonly dusty disseminations of pyrite (to semi massive) adjacent to fractures.								
109.5'	117.0'	101.5-109.5' Feld. porph., red, several 2mm qtz. fractures 1% py split	6104 (S)	101.5'	109.5'	8.0'				
		Felsic Dimict Breccia -As from (12.0-101.5)								
117.0'	252.0'	109.5-117.0' Felsic Rhyo. Bx., tr. py. (composite)	6105 (C)	109.5'	117.0'	7.5'				
		Laharic Breccia -Massive laharic breccia, matrix supported; predominately monomictic; consisting of 40%-50% qtz. porphyritic rhyolitic fragments as in (12.0-101.5). Felsic fragments commonly have a distinctive pinkish tinge due to potash flooding. Fragments generally subrounded, occasionally angular ½"-3". Matrix dark green, chloritic microlithic to fine grained, moderately to strongly magnetic. -Occasionally; and in places commonly qtz. potash veinlets ½"-3" at 30° to 50° to c.a. Pyrite adjacent to fractures and veinlets diss. to semi-massive. Potash and pyrite form halo's around fracture system. -Matrix and fractures carbonatized. -196.0-200.0 pervasive potash metasomatism.								
		117.0-137.5' Lahar, tr., py., occ. qtz. potash fracture (composite)	6106 (C)	117.0'	137.5'	20.5'				
		137.5-139.5' Lahar, five 3-8mm, qtz. potash veins, 4% py (split)	6107 (S)	137.5'	139.5'	2.0'				
		139.5-169.5' Lahar, occ. qtz. potash pyrite vein (Ø'-2' spacing) (composite)	6108 (C)	139.5'	169.5'	30.0'				
		169.5-181.5' " " " " " " " "	6109 (C)	169.5'	181.5'	12.0'				
		181.5-183.5' Lahar, eight 1mm qtz. potash py veins, 3% py (split)	6110 (S)	181.5'	183.5'	2.0'				
		183.5-191.0' Lahar, occ. fracture (composite)	6111 (C)	183.5'	191.0'	7.5'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T./ AU
		191.0-196.0' Lahar, occ., five 1mm qtz.-pot-py veins (split)	6112(S)	191.0	196.0	5.0'		
		196.0-200.0' Lahar, extensively altered, qtz-pot-py veins 5% py (split)	6113(S)	196.0	200.0	4.0'		
		200.0-216.5' Lahar, unaltered, occ. fracture, (composite)	6114(C)	200.0	216.5	16.5'		
		216.5-220.0' Lahar, moderately altered (split)	6115(S)	216.5	220.0	3.5'		
		220.0-230.0' Lahar, unaltered (composite)	6116(C)	220.0	230.0	10.0'		
		230.0-234.0' Lahar, three qtz-pot-py fracture 1% py (split)	6117(S)	230.0	234.0	4.0'		
		234.0-239.0' Lahar, relatively unaltered (composite)	6118(C)	234.0	239.0	5.0'		
		239.0-245.0' " " " 3-5% py (split)	6119(S)	239.0	245.0	6.0'		
252.0'	277.5'	245.0-252.0' " " " (split)	6120(S)	245.0	252.0	7.0'		
		Feldspar Porphyry -As from (101.5-107.5) -Brick red -Several 3mm qtz. veins at 60° to c.a.						
		252.0-265.0' Feldspar porphyry (red), several hairline qtz-potash-py (split)	6121(S)	252.0	265.0	13.0'		
277.5'	415.5'	265.0-277.5' " " " " "	6122(S)	265.0	277.5	12.5'		
		Laharic Breccia -As from (117.0-252.0)						
		277.5-280.5' Lahar, occasional qtz.-py-potash, 1% py (split)	6123(S)	277.5	280.5	3.0'		
		280.5-285.0' Lahar, moderately altered, 4% py (split)	6124(S)	280.5	285.5	4.5'		
		285.0-289.0' Lahar, 10% qtz.-py-potash veins, 4% py (split)	6125(S)	285.0	289.0	4.0'		
		289.0-295.0' Lahar, relatively unaltered (composite)	6126(C)	289.0	295.0	6.0'		
		295.0-301.0' Lahar, moderately altered 10% qtz.-py-potash 5% py (split)	6127(S)	295.0	301.0	6.0'		
		301.0-304.0' " " " 1% py (split)						
		304.0-318.5' Lahar unaltered (composite)	6128(S)	301.0	304.0	3.0'		
		318.5-322.0' Lahar, moderately altered (split)	6129(C)	304.0	318.5	14.5'		
		322.0-327.0' Lahar, occasional fracture (split)	6130(S)	318.5	322.0	3.5'		
		327.0-331.0' " " " " "	6131(S)	322.0	327.0	5.0'		
		331.0-338.0' Lahar, relatively unaltered (composite)	6132(S)	327.0	331.0	4.0'		
		338.0-345.0' Lahar, 10% qtz-py-potash, (split)	6133(C)	331.0	338.0	7.0'		
		345.0-349.0' Lahar, occasional fracture (split)	6134(S)	338.0	345.0	7.0'		
		349.0-354.5' " " " " "	6135(S)	345.0	349.0	4.0'		
		354.5-355.5' Lahar, extensive alt., 10% qtz., 25% py (split)	6136(S)	349.0	354.5	5.5'		
			6137(S)	354.5	355.5	1.0'		

Falconbridge Ltd.

HOLE NO: 668-10-84

PAGE:

Drilled by: Dominik Diamond Drilling

Property: Heenan-Marion P.N. 668

Latitude: L289+60E/200+15N

Longitude:

Started: July 27/84 July 31/84

Township: Heenan (Claim 554690)

Azimuth: 185°

Dip: collar (-45) 300-40°

Ended: July 28/84 Aug. 4/84 (Deepening) Logged by: B. Manchuk

Élévation:

Length: 603' 600-34°

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T./ AU		
0	18.0'	Casing								
18.0'	81.0'	Cherty Iron Formation								
81.0'	98.5'	Feldspar Porphyry								
98.5'	161.5'	Chert, Pyrite, Magnetite, Iron Formation								
161.5'	170.5'	Tuffwacke								
170.5'	219.5'	Banded Iron Formation Mostly chert, magnetite, pyrite; 80,15,5								
219.5'	223.0'	Feldspar Porphyry								
223.0'	229.0'	Banded Iron Formation								
229.0'	233.0'	Feldspar Porphyry								
233.0'	248.0'	Banded Iron Formation Chert, magnetite, pyrite; 52,30,12								
248.0'	258.5'	Diorite								
258.5'	427.0'	Banded Iron Formation								
427.0'	441.0'	Feldspar Porphyry								
441.0'	486.0'	Banded Iron Formation Chert, magnetite, pyrite; 40,50,10								
486.0'	492.0'	Feldspar Porphyry								
492.0'	603.0'	Banded Iron Formation								
	603.0'	END OF HOLE								

B. Manchuk

Falconbridge Ltd.

HOLE NO:668-10-84

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FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
		93.5-100.5' Chert, Mgt., Py; 10,80,10 R=100 (Split) Pyrite disrupted, recrystallised.	6382 (S)	98.5'	100.5'	2.0'				
		100.5-106.0' Chert, mgt., py., 60,38,2, disrupted, R=100 (split)	6383 (S)	100.5'	106.0'	5.5'				
		106.0-109.7' Mgt., py.; 50,50, disrupted, R=100 (split)	6384 (S)	106.0'	109.7'	3.7'				
		109.7-112.0' Chert, Mgt., py.; 45,45,10 R=100 (split)	6385 (S)	109.7'	112.0'	2.3'				
		112.0-116.0' " " " ; 60,35, 5 " " "	6386 (S)	112.0'	116.0'	4.0'				
		116.0-120.0' " " " ; 75,23, 2 R=100 (split) py. as diss. in mgt.	6387 (S)	116.0'	120.0'	4.0'				
		120.0-126.5' " " " ; 80,14, 6 R=100 (split)	6388 (S)	120.0'	126.5'	6.5'				
		126.5-130.3' " " " ; 10,70,20 R=100 (split)	6389 (S)	126.5'	130.3'	3.8'				
		130.3-136.5' " " " ; 90, 6, 4 R=100 (split)	6390 (S)	130.3'	136.5'	6.5'				
		136.5-144.0' " " " ; 85, 5, 5 R=100 (split) py diss., rexl., remob., minor carb.	6391 (S)	136.5'	144.0'	7.5'				
		144.0-149.0' " " " ; 82,10, 8 R=100 (split) py diss., rexl., remob., minor carb., potash	6392 (S)	144.0'	149.0'	5.0'				
		149.0-152.0' " " " ; 85, 5, 5 R=100 (split) py diss., rexl., remob., minor carb., potash	6393 (S)	149.0'	152.0'	3.0'				
		152.0-157.0' " arenite " ; 85,10, 5 R=100 (split) py diss., rexl., remob., minor carb., potash	6394 (S)	152.0'	157.0'	5.0'				
		157.0-161.5' " " " ; 85,10, 5 R=100 (split) py diss., rexl., remob., minor carb., potash	6395 (S)	157.0'	161.5'	4.5'				
161.5'	170.5'	Tuffwacke =Dark green, fine grained, no sulphides, bedding at 50° to c.a.								
		161.5-170.5' Tuffwacke, no sulphide (split)	6396 (S)	161.5'	170.5'	9.0'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
170.5'	219.5'	Banded Iron Formation -Mostly chert, magnetite, pyrite, with generally 80% chert. 15% mgt., 5% pyrite. Bedding somewhat disrupted, pyrite accompanies mgt. as diss. (sand size) and irregular short stringers. Occasional short hematitic sections.								
		170.5-177.0' Chert, mgt., py., 85, 5, 5 py diss. in mgt.	6397	170.5'	177.0'	6.5'				
		177.0-187.0' " " " , 80, 15, 5 " " "	6398	177.0'	187.0'	10.0'				
		187.0-193.0' " " " , 77, 15, 8 " " " "	6399	187.0'	193.0'	6.0'				
		c.a. 35° to c.a.								
		193.0-203.0' " " hematite, py, 25, 60, 10, 5 well	6400	193.0'	203.0'	10.0'				
		bedded 30° to c.a.								
		203.0-208.0' " " " " , 30, 60, 5, 5 py. with	6434	203.0'	208.0'	5.0'				
		mgt. as diss.								
		208.0-213.0' " " py., 45, 50, 5 py. with mgt. as	6435	208.0'	213.0'	5.0'				
		diss.								
		213.0-219.5' " " " , 45, 50, 5 " " " "	6436	213.0'	219.5'	6.5'				
219.5'	223.0'	Felspar Porphyry -Altered, pale green to pink, silicified.								
		219.5-223.0' Feldspar porphyry, altered, sericite, potash, zoisite, silicified.	6437	219.5'	223.0'	3.5'				
223.0'	229.0'	Banded Iron Formation -Chert, magnetite, hematite, pyrite; 20, 57, 15, 8; as in previous sections.								
		223.0-229.0' Chert, mgt., hem., py.; 20, 57, 15, 8 py. as diss. and semi-massive beds.	6438	223.0'	229.0'	6.0'				
229.0'	233.0'	Feldspar Porphyry -As in previous sections.								
		229.0-233.0' Feldspar porphyry, altered sil., zoisite, potash, no sulphides.	6439	229.0'	233.0'	4.0'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
233.0'	248.0'	Banded Iron Formation -Chert, magnetite, pyrite; 52,30,12. -As in previous sections. Bedding at 50° to c.a., somewhat brecciated, chert fragments in magnetite.								
		233.0-236.0' Chert, mgt., hem., py.; 25,50,20, 5	6440	233.0'	236.0'	3.0'				
		236.0-241.0' Chert, mgt., py.; 65,25,10, somewhat bx., py. rexl.	6441	236.0'	241.0'	5.0'				
		241.0-248.0' " " " ; 60,32,8, somewhat bx., py. rexl., py with mgt.	6442	241.0'	248.0'	7.0'				
248.0'	258.5'	Diorite -Int. green, massive, some pink alteration, possibly altered feldspar porphyry.								
		248.0-258.5' Feldspar porphyry (dark possibly diorite dyke)	6443	248.0'	258.5'	10.5'				
258.5'	427.0'	Banded Iron Formation -Chert, magnetite, pyrite. Generally the pyrite content varies from 5-15% with py occurring as disseminations and irregular stringers within magnetite. Chert (cryptocrystalline, grey) varies from 40% - 90% and occurs in ½" - 2" mesobands or as fragments (soft sediment features) in magnetite. -269.0-304.0, 15% jasper/hematite along with chert, magnetite, pyrite. -352.0-355.0 Massive pyrite, with some chert fragments. Fabric bedding? at 40° to c.a. -392.0-396.0 ground core. Bedding 260°-60°, 276° - 45°, 355' - 65°. Elsewhere fragments of chert in magnetite (disrupted bedding).								
		258.5-264.0' Chert, mgt., py.; 72,20,8, py with mgt. (diss.) bx.	6444	258.5'	264.0'	5.5'				
		264.0-269.0' " " " ; 72,20,8, " " "	6445	264.0'	269.0'	5.0'				
		269.0-276.0' Chert, mgt., jasper/hem., py; 30,30,35,5, well bedded.	6446	269.0'	276.0'	7.0'				
		276.0-281.0' " " " " " , 20,65,10,5, well bedded.	6447	276.0'	281.0'	5.0'				

Falconbridge Ltd.

HOLE NO: 668-10-84

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FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
	281.0-286.0'	Chert, mgt., jasper/hem., py: 40,37,20,3, well bedded.	6448	281.0'	286.0'	5.0'				
	286.0-291.0'	" " " " "; 20,70,5,5, somewhat bx., diss. py	6449	286.0'	291.0'	5.0'				
	291.0-296.0'	" " " " "; 80,5,13,2, well bedded	6450	291.0'	296.0'	5.0'				
	296.0-304.0'	" " " " "; 17,10,70,3, well bedded	6451	296.0'	304.0'	8.0'				
	304.0-309.0'	Chert, mgt., pyrite; 70,22, 8	6452	304.0'	309.0'	5.0'				
	309.0-316.0'	" " " ; 70,22, 8	6453	309.0'	316.0'	7.0'				
	316.0-321.0'	" " " ; 40,45,15, py diss. in mgt.	6454	316.0'	321.0'	5.0'				
	321.0-325.5'	" " " ; 40,55,5, somewhat bx., py diss. in mgt.	6455	321.0'	325.5'	4.5'				
	325.5-331.0'	" " hem., py.; 45,45,5,5	6456	325.5'	331.0'	4.5'				
	331.0-335.0'	Chert, mgt., py.; 40,45,15, py diss. in mgt.	6457	331.0'	335.0'	4.0'				
	335.0-340.0'	" " " ; 40,55, 5, " " " "	6458	335.0'	340.0'	5.0'				
	340.0-345.0'	" " " ; 40,55, 5	6459	340.0'	345.0'	5.0'				
	345.0-349.0'	" " " ; 45,40,15, py heavily diss. in mgt.	6460	345.0'	349.0'	4.0'				
	349.0-352.0'	" " " ; 75,15,10	6461	349.0'	352.0'	3.0'				
	352.0-355.0'	Chert, py.; 15,85, massive py. with disrupted chert beds.	6462	352.0'	355.0'	3.0'				
	355.0-358.0'	Chert, mgt., py.; 85,10, 5	6463	355.0'	358.0'	3.0'				
	358.0-363.0'	" " " ; 48,40, 4, somewhat bx., 1/2" mesobeds.	6464	358.0'	363.0'	5.0'				
	363.0-373.0'	" " " ; 94, 3, 3	6465	363.0'	373.0'	10.0'				
	373.0-378.0'	" " " ; 92, 3, 5	6466	373.0'	378.0'	5.0'				
	378.0-383.0'	" " " ; 92, 3, 5	6467	378.0'	383.0'	5.0'				
	383.0-388.0'	" " " ; 75,15,10, disrupted, diss. py with mgt.	6468	383.0'	388.0'	5.0'				
	388.0-392.0'	" " " ; 75,20, 5, disrupted, diss. py with mgt.	6469	388.0'	392.0'	4.0'				
	392.0-396.0'	Ground Core	--	392.0'	396.0'	4.0'				
	396.0-401.0'	Chert, mgt., py.; 50,40,10, somewhat bx.	6470	396.0'	401.0'	5.0'				
	401.0-406.0'	" " " ; 50,42, 8, somewhat bx., diss. py with mgt.	6471	401.0'	406.0'	5.0'				
	406.0-411.0'	" " " ; 30,45,15, somewhat bx., diss. py with mgt.	6472	406.0'	411.0'	5.0'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
		411.0-416.0' Chert, mgt., py.; 45,45,10, somewhat bx.,	6473	411.0'	416.0'	5.0'				
		diss. py with mgt.								
		416.0-421.0' " " " ; 50,35,15, somewhat bx.,	6474	416.0'	421.0'	5.0'				
		chert frag. in								
		mgt.								
		421.0-427.0' " " " ; 50,35,15, somewhat bx.,	6475	421.0'	427.0'	6.0'				
		chert frag. in								
		mgt.								
427.0'	441.0'	Feldspar Porphyry								
		-As in previous sections, minor tholeiite, possibly same								
		tensional feature occupied by feldspar porphyry and								
		tholeiite.								
		427.0-441.0' Feldspar porphyry with tholeiite? dyke,	6476	427.0'	441.0'	14.0'				
		inclusion?								
441.0'	486.0'	Banded Iron Formation								
		-Chert, magnetite, pyrite; 40,50,10.								
		-As in previous section, disrupted bedding, chert fragments								
		in magnetite, pyrite as disseminations within magnetite.								
		441.0-446.0' Chert, mgt., py.; 35,60, 5, somewhat bx., py	6477	441.0'	446.0'	5.0'				
		diss. in mgt.								
		446.0-451.0' " " " ; 35,60, 5, somewhat bx., py	6478	446.0'	451.0'	5.0'				
		diss. in mgt.								
		451.0-456.0' " " " ; 32,60, 8, chert frags. in	6479	451.0'	456.0'	5.0'				
		mgt.								
		456.0-461.0' " " " ; 45,50, 5, " " ""	6480	456.0'	461.0'	5.0'				
		461.0-466.0' " " " ; 35,50,15, chert py diss.	6481	461.0'	466.0'	5.0'				
		in mgt.								
		466.0-471.0' " " " ; 35,50,15, " " " " "	6482	466.0'	471.0'	5.0'				
		471.0-476.0' " " " ; 45,50, 5, " " " " "	6483	471.0'	476.0'	5.0'				
		476.0-481.0' " " " ; 40,50,10, " " " " "	6484	476.0'	481.0'	5.0'				
		481.0-486.0' " " " ; 40,50,10, " " " " "	6485	481.0'	486.0'	5.0'				
486.0'	492.0'	Feldspar Porphyry								
		-As in previous sections.								
		486.0-492.0' Feldspar porphyry, diss. pyrite, altered.	6486	486.0'	492.0'	6.0'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU(PPB)			
492.0'	603.0'	Banded Iron Formation -As from 441.0-486.0, disrupted beds, soft sediment features. Crude fabric generally at 50° to c.a. Chert, magnetite, pyrite; 50,30,10. -578.0-583.0 chert, magnetite, pyrite: 20,55,25								
		492.0-500.0' Chert, Mgt., Py.; 55,37, 8	6487	492.0'	500.0'	8.0'				
		500.0-506.0' " " " ; 5,80,15, chert frag. in mgt.	6488	500.0'	506.0'	6.0'				
		506.0-512.0' " " " ; 15,70,15, " " ""	6489	506.0'	512.0'	6.0'				
		512.0-517.0' " " " ; 45,50, 5, " " ""	6490	512.0'	517.0'	5.0'				
		517.0-522.0' " " " ; 50,45, 5, " " ""	6491	517.0'	522.0'	5.0'				
		522.0-527.0' " " " ; 50,45, 5, " " ""	6492	522.0'	527.0'	5.0'				
		527.0-532.0' " " " ; 65,30, 5, " " ""	6493	527.0'	532.0'	5.0'				
		532.0-537.0' " " " ; 60,35, 5, " " ""	6494	532.0'	537.0'	5.0'				
		537.0-542.0' " " " ; 85,13, 2	6495	537.0'	542.0'	5.0'				
		542.0-547.0' " " " ; 45,45,10	6496	542.0'	547.0'	5.0'				
		547.0-552.0' " " " ; 40,45,15	6497	547.0'	552.0'	5.0'				
		552.0-557.0' " " " ; 60,35, 5	6498	552.0'	557.0'	5.0'				
		557.0-562.0' " " " ; 60,35, 5	6499	557.0'	562.0'	5.0'				
		562.0-567.0' " " " ; 60,35, 5	6500	562.0'	567.0'	5.0'				
		567.0-573.0' " " " ; 60,32, 8	6501	567.0'	573.0'	6.0'				
		573.0-578.0' " " " ; 40,45,15	6502	573.0'	578.0'	5.0'				
		578.0-583.0' " " " ; 20,55,25	6503	578.0'	583.0'	5.0'				
		583.0-588.0' " " " ; 40,50,10, chert frag. in mgt.	6504	583.0'	588.0'	5.0'				
		588.0-593.0' " " " ; 35,40,15, " " ""	6505	588.0'	593.0'	5.0'				
		593.0-598.0' " " " ; 70,20,10, " " ""	6506	593.0'	598.0'	5.0'				
		598.0-603.0' " " " ; 55,40, 5	6507	598.0'	603.0'	5.0'				
	603.0'	END OF HOLE								

Postonbuk

Falconbridge Ltd.

HOLE NO: 668-11-84

PAGE:

Drilled by: Dominik Diamond Drilling
 Started: July 28/84
 Ended: July 31/84

Property: Heenan, Marion P.N. 668
 Township: Heenan (Claim 554690)
 Logged by: B. Manchuk

Latitude: L289+65E/200+18N Longitude:
 Azimuth: 185°/45 Dip: -45
 Élévation: Length: 302'

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T./ AU		
0	22.0'	Casing								
22.0'	94.0'	Cherty Pyritic Iron Formation In general, chert, pyrite; 80,20								
94.0'	123.0'	Feldspar Porphyry								
123.0'	132.5'	Chert, Magnetite, Pyrite Iron Formation								
132.5'	136.5'	Feldspar Porphyry								
136.5'	235.0'	Iron Formation								
235.0'	238.0'	Tuffwacke								
238.0'	302.0'	Iron Formation								
	302.0'	END OF HOLE								

B. Manchuk

Falconbridge Ltd.

HOLE NO: 668-11-84

PAGE: 1 OF 4

Drilled by: Dominik Diamond Drilling
 Started: July 28/84
 Ended: July 31/84

Property: Heenan, Marion
 Township: Heenan Claim 554690
 Logged by: B. Manchuk

Latitude: L239+65E/200+18N
 Azimuth: 185°/45
 Élévation:

Longitude:
 Dip: -45
 Length: 302

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
0	22.0'	Casing								
22.0'	94.0'	Cherty Pyritic Iron Formation -In general, chert, pyrite; 80,20. Chert, white-grey, cryptocrystalline, pyrite (fg), generally associated with arenaceous bands at roughly 50° to c.a. Commonly chert/arenite/pyrite show disrupted beds and slumping of chert in to arenite/pyrite beds. Pyrite occasionally remobilised and recrystallised at chert-pyrite interfaces. -27.0-32.5 - 85% py, chert frags. in pyrite. -49.0-62.0 Pyrite oxidised.								
	22.0-27.0'	Chert, py; 95,5, chert white to grey R=90% (split)	6401 (S)	22.0'	27.0'	5.0				
	27.0-30.0'	Chert, py; 10,90, py massive f.g., broken, chert frag. R=90% (split)	6402 (S)	27.0'	30.0'	3.0'				
	30.0-32.5'	Chert, py; 15,85, py massive f.g., chert fragments R=100% (split)	6403 (S)	30.0'	32.5'	2.5'				
	32.5-42.5'	" "; 98, 2, occasional py blotch, R=100% (split)	6404 (S)	32.5'	42.5'	10.0'				
	42.5-49.0'	" "; 90,10, py associated with arenaceous bands, R=100% (split)	6405 (S)	42.5'	49.0'	6.5'				
	49.0-53.0'	" "; 98, 2, py associated with arenaceous bands (oxidised) R=97% (split)	6406 (S)	49.0'	53.0'	4.0'				
	53.0-55.0'	Chert, arenite, pyrite: 10,80,10, (slumped) chert frags. in arenite R=100% (split)	6407 (S)	53.0'	55.0'	2.0'				
	55.0-62.0'	Chert, py; 98,7, broken core pyrite oxidised R= 95% (split)	6408 (S)	55.0'	62.0'	7.0'				
	62.0-83.0'	Chert, py; 98,7, pyrite as individual blebs and stringers, (composite) R=100%	6409 (C)	62.0'	83.0'	21.0'				
	83.0-87.0'	Chert, py; 95,5, py in slumped arenaceous layers, R=95% (split)	6410 (S)	83.0'	87.0'	4.0'				
	87.0-94.0'	Chert, py; 95,5, py in slumped arenaceous layers, R=100% (split)	6411 (S)	87.0'	94.0'	7.0'				

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU(PPB)			
		fractures in chert. Chert, grey to white, crptocrystalline. Very crude structure at 20-35° to c.a.								
		-172.0-188.0 chert, arenite, pyrite; 98,1,1. Massive, grey cryptocrystalline, arenite and pyrite as irregular patches and stringers.								
		-188.0-200.0 chert, arenite, pyrite; 87,10,3, arenite as irregular stringers, crude structure at 40° to c.a. Pyrite partialy recrystallised; py accompanies arenite stringers.								
		-200.0-235.0 chert, mgt., arenite, pyrite; 82,10,3,5. Magnetite within arenaceous layers (sandy), f.g. pyrite partially recrystallised accompanying magnetite as disseminations or irregular stringers (partially remobilised). Magnetite, commonly as ½" irregular mesobands crudely at 30° to c.a. Beds disrupted, chert clasts in magnetite, rip up textures/structures.								
		136.5-138.3' As sample 6414 (split)	6416 (S)	136.5'	138.3'	1.8'				
		138.3-145.0' Mgt., pyrite; 50,50, pyrite in irregular beds, blotches R=100 (split) (50-60° to c.a.)	6417 (S)	138.3'	145.0'	6.7'				
		145.0-151.0' Mgt., pyrite; 80,20, pyrite in irregular beds, partially rexl., R=100 (split) (45° to c.a.)	6418 (S)	145.0'	151.0'	6.0'				
		151.0-156.0' Chert, arenite, pyrite; 7.2,20,8, brecciated, py irregular, rexl., R=100 (split)	6419 (S)	151.0'	156.0'	5.0'				
		156.0-161.0' Chert, arenite, pyrite; 7.2,20,8, brecciated, py irregular, rexl., R=100 (split)	6420 (S)	156.0'	161.0'	5.0'				
		161.0-168.0' Chert, arenite, pyrite; 87,10,3, brecciated as previous (split)	6421 (S)	161.0'	168.0'	7.0'				
		168.0-172.0' " " " ; 80,13,7, brecciated as previous (split)	6422 (S)	168.0'	172.0'	4.0'				
		172.0-188.0' " " " : 98,1,1, py as diss. along fracture R=100 (composite)	6423 (C)	172.0'	188.0'	16.0'				
		188.0-200.0' Chert, arenite, py; 87,10,3, py as diss. in arenite R=100 (composite)	6424 (C)	188.0'	200.0'	12.0'				
		200.0-208.0' Chert, mgt., arenite, py; 82,8,7,3, py as diss. with mgt. R=100 (split)	6425 (S)	200.0'	208.0'	8.0'				
		208.0-214.5' Chert, mgt., py; 75,20,5, py as diss. stringers with mgt. R=100 (split)	6426 (S)	208.0'	214.5'	6.5'				

Falconbridge Ltd.

HOLE NO: 668-11-84

PAGE: 4 of 4

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU(PPB)			
		214.5-235.0' Chert, mgt., py; 75,22,3, py as diss. stringers with mgt. R=100 (composite)	6427 (C)	214.5'	235.0'	19.5'				
235.0'	238.0'	Tuffwacke -Dark green, sand size grains, chloritic, bedding at 40° to c.a., tectonic fabric at 30°-40° to c.a.								
		235.0-238.0' Tuffwacke, no visible sulphide. R=100 (composite)	6428 (C)	235.0'	238.0'	3.0'				
238.0'	302.0'	Iron Formation -238.0-275.0 chert, mgt., pyrite; 90,8,2, similar to 200.0-235.0, except more regular bedding? at 40° to c.a. -275.0-285.0 chert, mgt., py; 50,45,5, Similar to prev. sections, some disrupted beds, chert fragments in magnetite mesobands ½"-1". Pyrite as disseminations or stringers. General fabric, possibly bedding at 45° to c.a. -285.0-302.0 chert, mgt., py; 80,9,1. Similar to 275.0-285.0, disrupted beds. Crude structure/bedding at 40° to c.a.								
		238.0-258.0' I.F. chert, mgt., py; 90,8,2, py as diss. with mgt. R=100 (composite)	6429 (C)	238.0'	258.0'	20.0'				
		258.0-275.0' I.F. chert, mgt., py; 90,8,2, py as diss. with mgt. R=100 (composite)	6430 (C)	258.0'	275.0'	17.0'				
		275.0-280.0' I.F. chert, mgt., py; 48,42,10 py as diss. and stringers. R=100 (split)	6431 (S)	275.0'	280.0'	5.0'				
		280.0-285.0' I.F. chert, mgt., py; 65,32,3, py as diss. and stringers. R=100 (split)	6432 (S)	280.0'	235.0'	5.0'				
		285.0-302.0' I.F. chert, mgt., py; 80,9,1 R=100 (composite)	6433 (C)	285.0'	302.0'	17.0'				
	302.0'	END OF HOLE								

John Mitchell

Falconbridge Ltd.

HOLE NO: SUMMARY LOG
668-12-84 PAGE:

Drilled by: Dominik Diamond Drilling
Started: Aug. 5/84
Ended: Aug. 6/84

Property: Heenan-Marion P.N. 668
Township: Heenan (Claim 554690)
Logged by: B. Manchuk

Latitude: L290+40E/198+85N Longitude:
Azimuth: 185° Dip: -45
Élévation: Length: 119.0

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T./ AU
0	50.0'	Casing						
50.0'	74.0'	Tuffwacke, Siltstone						
74.0'	75.5'	Feldspar Porphyry						
75.5'	92.0'	Iron Formation Chert, Pyrite; 50,50	6511 (S) 6512 (S) 6513 (S)	75.5' 79.5' 82.5'	79.5' 82.5' 87.0'	4.0' 3.0' 4.5'		
92.0'	113.5'	Tholeiite Dyke (Fault Zone?)						
113.5'	119.0'	Iron Formation Chert, pyrite; 92,8						
	119.0'	END OF HOLE						

B. Manchuk

Falconbridge Ltd.

HOLE NO: 668-12-84

PAGE: 1 of 2

Drilled by: Dominik Diamond Drilling

Property: Heenan Marion

Latitude: L290+40E/198+85N

Longitude:

Started: Aug. 5/84

Township: Heenan Claim 554690

Azimuth: 185°

Dip: -45

Ended: Aug. 6/84

Logged by: B. Manchuk

Élévation:

Length: 119.0

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)			
0	50.0'	Casing								
50.0'	74.0'	Tuffwacke, Siltstone -Delicately bedded at 55° to c.a., paper thin to ½", pale-dark green, aphanitic to fine grained (siltstones). No visible sulphide. -57.0-66.0 oxidised zone -60.0-65.0 lost core (cavity)								
		50.0-57.0' Tuffwacke, siltstone, no sulphides (composite)	6508 (C)	50.0'	57.0'	7.0'				
		57.0-66.0' Oxidised tuffwacke (5' lost core) (composite)	6509 (C)	57.0'	66.0'	9.0'				
74.0'	75.5'	Feldspar Porphyry -Massive, silicified bleached, fine grained, original texture obliterated.								
		66.0-75.5' Tuffwacke, no sulphide, 1' feldspar porphyry (composite)	6510 (C)	66.0'	75.5'	9.5'				
75.5'	92.0'	Iron Formation -Chert, pyrite; 50,50 -75.5-79.5 chert, pyrite; 30,70, pyrite massive with irregular (slumped) chert beds at 40°-50° to c.a. -79.5-87.5 chert, pyrite; 50,50, massive py with ½" irregular mesobeds of grey chert. -82.5-87.0 chert, pyrite; 70,30, stringer to massive py, ½" chert beds or chert fragments in pyrite. -87.0-92.0 chert, pyrite; 97,3, grey chert massive, irregular pyrite blebs.								

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	AU (PPB)	O.P.T./ AU		
		75.5-79.5' Chert, py: 30,70, massive py. slumped irregular chert (split) R=100	6511 (S)	75.5'	79.5'	4.0'				
		79.5-82.5' " " : 50,50, massive py, 1/2" chert meso-beds (split) R=100	6512 (S)	79.5'	82.5'	3.0'				
		82.5-87.0' " " : 70,30, stringer to massive py, chert frags. (split) R=100	6513 (S)	82.5'	87.0'	4.5'				
		87.0-92.0' " " : 97, 3; massive chert, irregular py blebs (split) R=100	6514 (S)	87.0'	92.0'	5.0'				
92.0'	113.5'	Tholeiite Dyke (Fault Zone?) -Dark green, extensively altered, chloritic, disseminated carbonate. Pervasive tectonic fabric at 45°-55° to c.a., (almost schist). Possibly tectonised tuffwacke. -103.0-106.0 feldspar porphyry, silicified, pale green to pink (no sulphides).								
		92.0-113.5' Th. Dyke, foliated, chloritic, no visible sulph., carb., (composite).	6515 (C)	92.0'	113.5'	21.5'				
113.5'	119.0'	Iron Formation -Chert, pyrite: 92,8. Pyrite as irregular stringers and blotches, recrystallised and remobilised. Chert grey. cryptocrystalline.								
		113.5-119.0' Chert, pyrite: 92,8, massive chert, irregular rexl., remob. py (split) R=100	6516 (S)	113.5'	119.0'	5.5'				
	119.0'	END OF HOLE								

McLachlan



#032/85



41016SW0043 20 HEENAN

The Mining

900

Name and Postal Address of Recorded Holder

Falconbridge Ltd

167 Wilson Ave, Timmins, Ontario

P4N2T2

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.
	Prefix	Number		Prefix	Number		Prefix	Number	
3229									
for Performance of the following work. (Check one only)	See Attached List A								
	<input type="checkbox"/>	Manual Work							
	<input type="checkbox"/>	Shaft Sinking Drifting or other Lateral Work.							
	<input type="checkbox"/>	Compressed Air, other Power driven or mechanical equip.							
	<input type="checkbox"/>	Power Stripping							
	<input checked="" type="checkbox"/>	Diamond or other Core drilling							
<input type="checkbox"/>	Land Survey								

All the work was performed on Mining Claim(s): P619128, 628436-437, 555040, 554690, 554679

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

Dominic Diamond Drilling

P.O Box 479

420 King

Porcupine, Ontario

Ph 235 4545

NOTE 3229.0 DAYS Submitted

USED 3008.6 DAYS RECEIVED

Hold 220.4 DAYS IN Reserve

B. Barwick

RECORDED

JAN 1985
Receipt No. 9

RECEIVED
JAN 1985
7:18:00 PM

Date of Report

Jan 17/85

Recorded Holder or Agent (Signature)

B. Barwick

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

BARRY MANCHUK 167 Wilson Ave Timmins, Ontario

P4N2T2

Date Certified

Jan 17/85

Certified by (Signature)

B. Barwick

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	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing: footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

LIST 'A'

Diamond Drill credits

121 Diamond

CLAIM No.	DAYS	CLAIM No.	DAYS	CLAIM No.	DAYS
P 536782	72.7	554501	20	554701	0
536791	40	554502	80	554702	0
536792	72.7	554503	20	554703	0
536793	40	554504	0	554704	0
536851	0	554505	20	555037	12.7
536852	72.7	554506	40	555038	20
536716	40	554507	0	555039	12.7
536917	0	554508	40	555040	40
536918	40	554509	40		
536919	40	554510	40		
536920	40	554511	40		
536921	40	554512	40		
536922	0	554513	0		
549240	12.7	554514	40	622999	32.7
549241	12.7	554515	20	623000	32.7
549242	12.7	554516	0	624001	32.7
549613	0	554517	40	624002	32.7
549614	0	554518	40	627003	40
549615	0	554519	40	634322	32.7
553222	0	554665	40	634323	32.7
553223	60	554666	20		
553224	40	554667	20		
553225	20	554668	0		
553226	40	554669	12.7		
553227	40	554670	40		
553228	0	554671	60		
553229	0	554672	32.7		
553230	0	554673	0		
553231	0	554674	0		
553232	40	554675	0		
553233	40	554676	0		
553234	0	554677	0		
553235	0	554678	92.7		
553236	0	554679	52.7		
553237	0	554680	0		
553238	40	554686	20		
553239	0	554687	20		
554011	40	554688	40		
554012	40	554689	40		
554013	40	554690	40		
554014	40	554691	40		
554015	40	554692	40		
554016	40	554693	60		
554017	0	554694	40		
554018	0	554695	40		
554019	0	554696	60		
554020	0	554697	0		
554021	0	554698	60		
554022	0	554699	40		
554500	80	554700	40		

3008.6

21.11.12

NEWTON TWP.









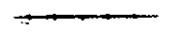
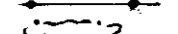





THE TOWNSHIP OF HEENAN.

DISTRICT OF SUDBURY

PORCUPINE MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

- PATENTED LAND 
- CROWN LAND SALE 
- LEASES 
- LOCATED LAND 
- LICENSE OF OCCUPATION 
- MINING RIGHTS ONLY 
- SURFACE RIGHTS ONLY 
- ROADS 
- IMPROVED ROADS 
- KING'S HIGHWAYS 
- RAILWAYS 
- POWER LINES 
- MARSH OR MUSKEG 
- MINES 
- CANCELLED 

NOTES

400' Surface rights reservation around the shores of all lakes and rivers.

PLAN NO. M-925

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

DORE TWP. M-763

MARION TWP. M-853

HEENAN TWP.

BENTON TWP. M-659



NEWTON TWP.

THE TOWNSHIP
OF
HEENAN

DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

- PATENTED LAND (P)
- CROWN LAND SALE C.S.
- LEASES (L)
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED C

NOTES

400' Surface rights reservation around the shores of all lakes and rivers.

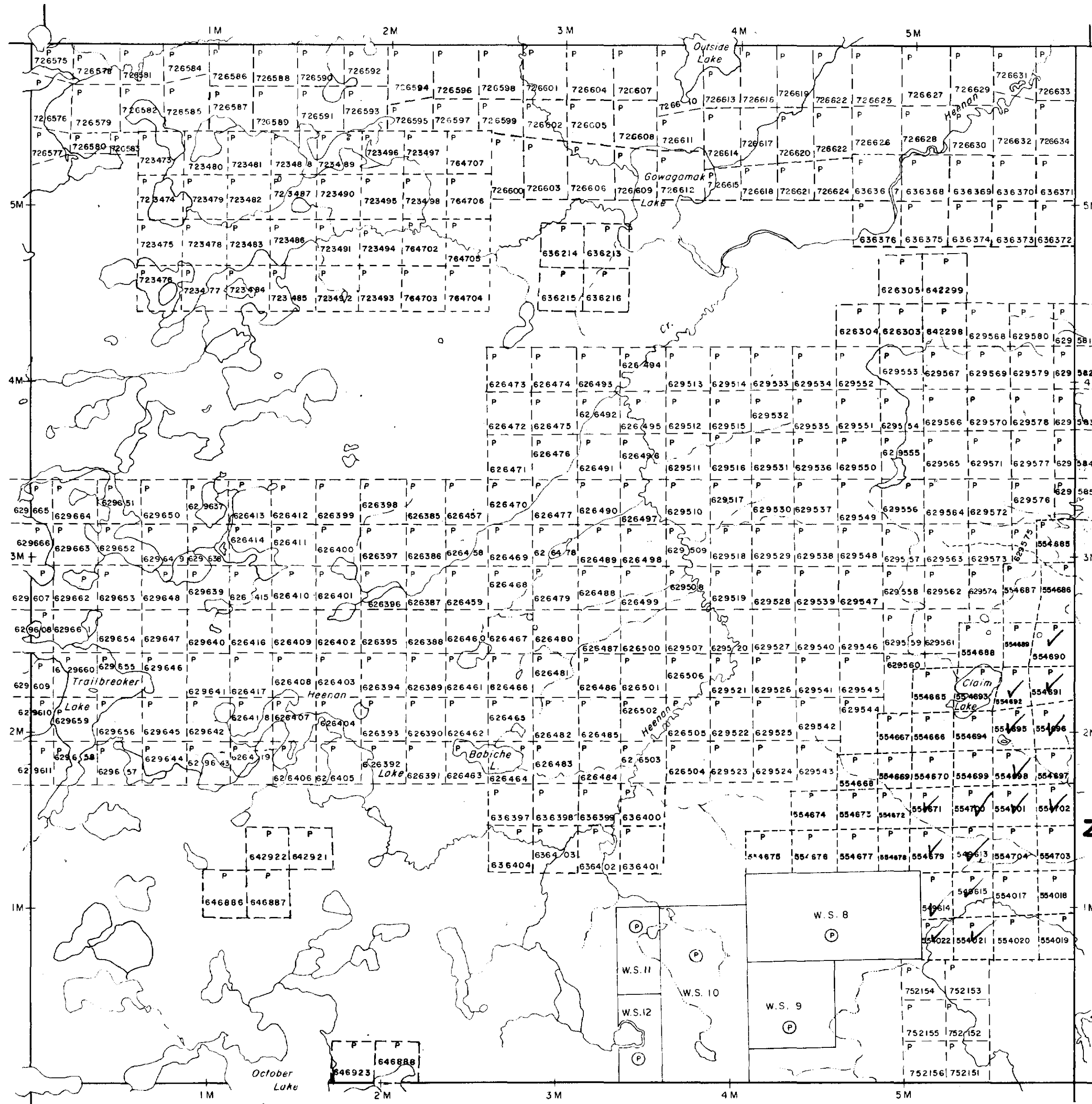
DATE OF ISSUE
DEC 31 1983
Ministry of Natural Resources
TORONTO

PLAN NO. **M-925**
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

DORE TWP. M-763

MARION TWP. M-853

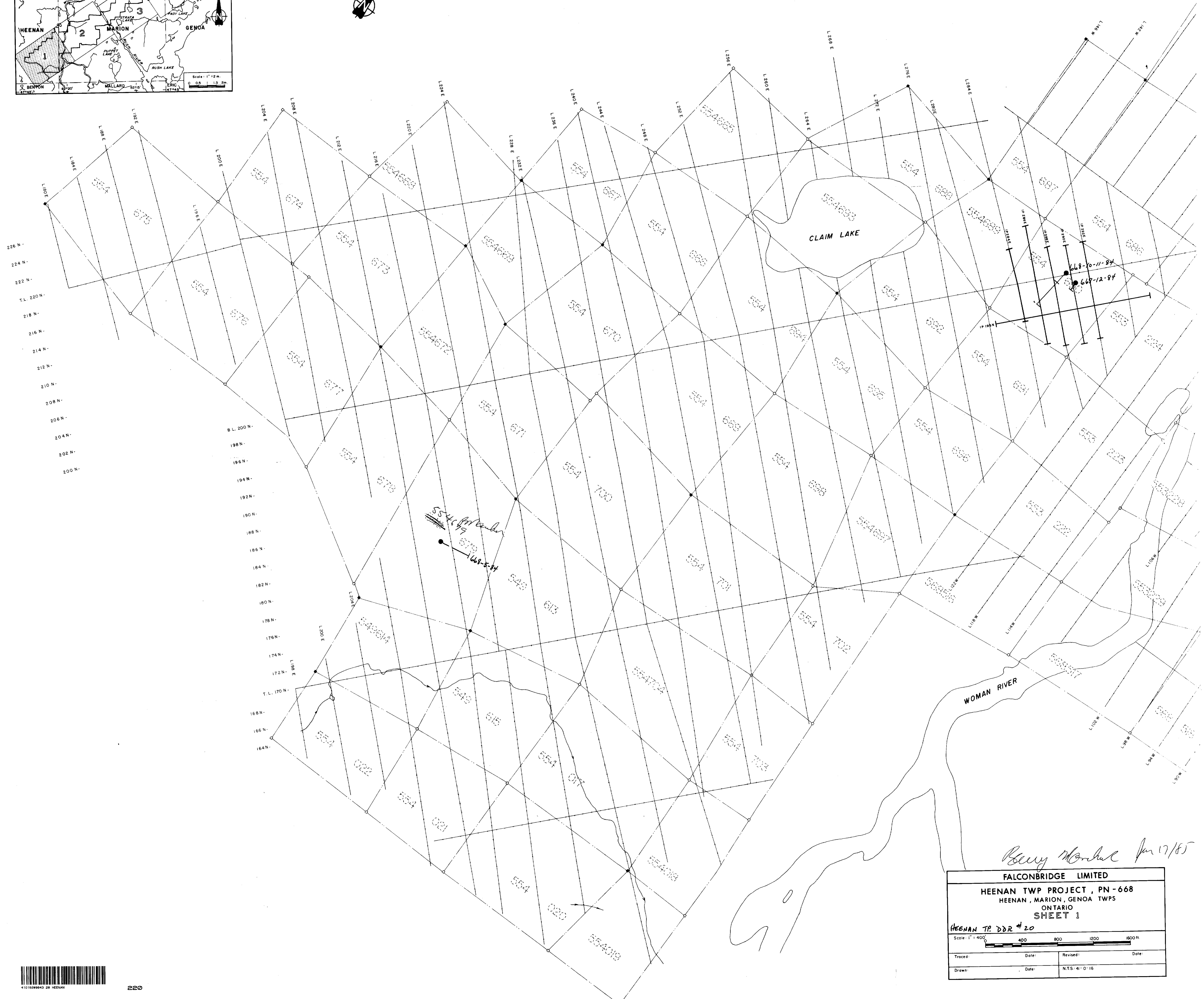
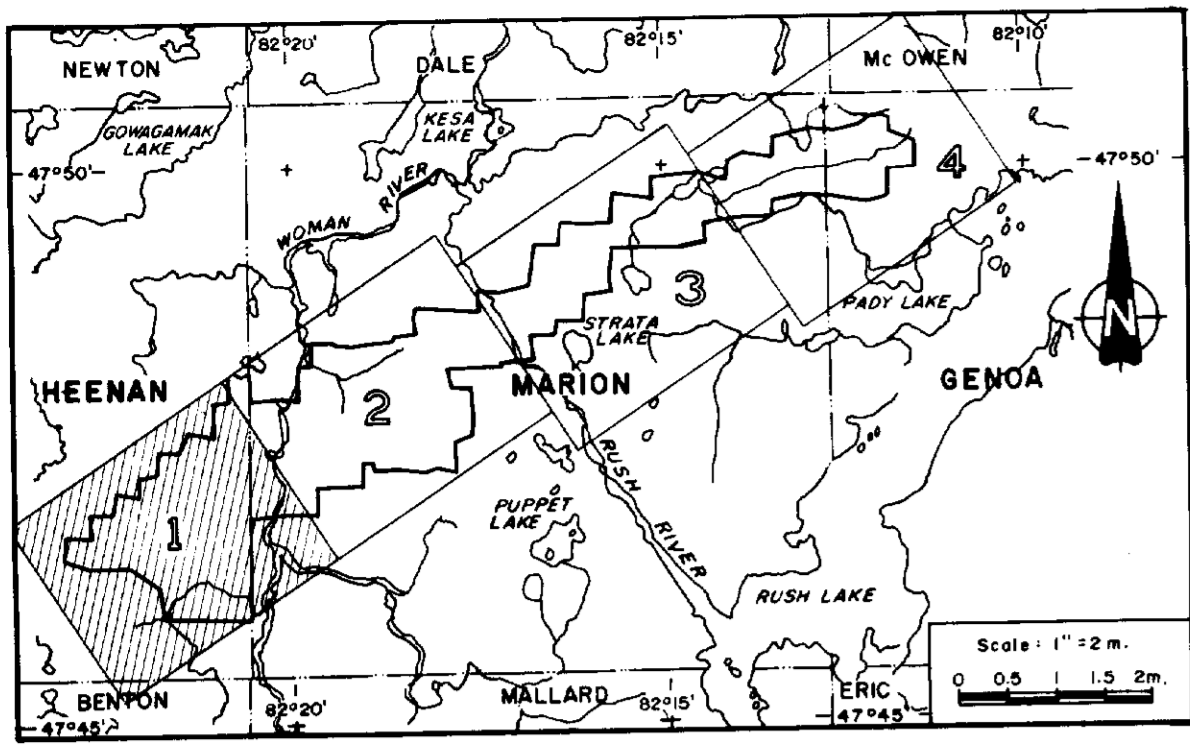
2.5944



BENTON TWP. M-659

47° 45' 30" Approx.
82° 20' 45"





Bobby Woodhouse Jan 17/85

FALCONBRIDGE LIMITED			
HEENAN TWP PROJECT, PN-668			
HEENAN, MARION, GENOA TOWNSHIPS			
ONTARIO			
SHEET 1			
HEENAN TWP DDR # 20			
Scale: 1" = 400'			
Traced:	Date:	Revised:	Date:
Drawn:	Date:	N.T.S. 4" = 0' = 16"	

