010

TOWNSHIP: Scadding

REPORT No.: 20

WORK PERFORMED BY: Scadding Gold Mines Ltd./Northgate Exploration Ltd

CLAIM No.	HoLE No.	FOOTAGE	DATE	Note
s 373196	N-1	257.0	Oct/80	(1) (2)
	N-2	401.5	Oct/80	(1) (2)
	N-3	464.0	Oct/80	(1) (2)
	N-5	507.0	Oct/80	(1) (2)
	N-6	627.0	Nov/80	(1) (2)
	N-7	342.0	Nov/80	(1) (2)
	N-8	475.0	Nov/80	(1) (2)
	N-9	532.0	Nov/80	(1) (2)
	N-10	418.0	Nov-Dec/	80 (2)
	N-11	286.0	Dec/80	(2)
	N-26	452.0	Oct/80	(2)
	N-28	205.0	Nov/80	(2)
	N-29	280.0	Nov/80	(2)
	N-30	325.0	Nov/80	(2)
	N-31	411.0	Nov/80	(2)
	N-32	320.0	Nov/80	(2)
S 357994	N-22	251.0	Oct/80	(1) (2)
	N-23	276.0	Oct/80	(1) (2)
	N-24	243.0	Oct/80	(1) (2)
	N-27	377.5	Oct/80	(1) (2)
	N-33	213.0	Nov/80	(1) (2)
	N-34	148.0	Dec/80	(1) (2)
	N-35	162.6	Dec/80	(1) (2)
	N-36	147.0	Dec/80	(1) (2)
	N-37	307.0	Dec/80	(1) (2)
257000	N-38	605.0	Dec/80	(1) (2)
S 357990	N-20	427.0	Oct/80	(1) (2)
	N-21	401.0	Oct/80	(1) (2)
0.046035	N-25	398.0	Oct/80	(1) (2)
S 346915	N-4	601.0	Oct/80	(1) (2)
	N-12	615.0	Dec/80	(1) (2)
	N-13	55.0	Dec/80	(1) (2)
	N-14	54.0	Dec/80	(1) (2)
	N-15	82.0	Jan/81	(1)
	N-16	58.0	Jan/81	(1)
	N-17	76.0	Jan/81	(1)
	N-18	57.0	Jan/81	(1)
	N-19	56.ú	Jan/81	(1)
	N-43	164.0	Jan/81	(1)
	N-44	307.0	Jan/81	(1)
	N-45	209.0	Jan/81	(1)
	N-46	127.0	Jan/81	(1)
Notes: (1)	#91-81 : 42 DM	12719	· b	
(2)		•		



Property: 772, D.R. Watt Property

Location: Scadding Twp, Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1. Core size:

Dip Tests:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation:318.9m Azimuth: S65°W Dio: -45°

Started: Oct. 2/80 . Completed: Oct. 5/80 Logged by: P. McLean

	DRILL LO	G Drill Contractor - N. Morissette Azimut	ion:318.9m :h:S65°W Dip: -45	,0	Comple Logge	eted: (d by: P.	Oct. 5/80 McLean	
DEI	TH .	DESCRIPTION	sample	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long	core axis. number					
0.0	6.0 1.83m	Casing				•		
6.0 1.83m	69.3 21.13m	Serpent quartzite, fine grained grey to dark grey to pinkish grey.						
69.3 21.13m	110.0 33.53m	Quartzite, altered salmon pink with grey carbonate stringers and oc patches similar in appearance to the footwall breccia.	casional .					
		90.0-90.5 - Carbonate Bx section, contains 10% coarse granular pyri	te. 9901	0.5	90.0 27.43m	90.5 27.59m	.01	
110.0 33.53m	126.0 38.41m	Chlorite breccia zone, salmon pink quartzite with chlorite seams ar patches.	od .					
		110.0-112.5 - Chlorite breccia, 10% chlorite in seams and patches, locally as a replacement. Some pyrite grains associated with the clocal grey vein quartz.	and 9902 chlorite.	2.5		112.5 34.29m	.005	
		112.5-114.5 - Chlorite breccia. 10% chlorite in narrow seams and a replacement. Local blebs of pyrite. Some white carbonate present.	s a 9903	2.0	112.5 34.29m	114.5 34.90m	nil	
		114.5-117.7 - Chlorite and carbonate breccia, mostly salmon pink qu with carb. rhombs and stringers. Some chlorite replacement. Minor	artzite 9904 pyrite.	3.2	114.5 34.90m	117.7 35.88m		
		117.7-120.0 - Chlorite-carbonate breccia. 10% chlorite, mostly as replacement. White carbonate stringers with some associated blebs	a 9905 of pyrite.	2.3	117.7 35.88m	120.0 36.58m	nil	
	-	120.0-123.0 - Chlorite breccia, 50% chlorite in seams and patches. well mineralized with pyrite in blebs and small cubes. Some grey viguretz also present.	Fairly 9906 ein	3.0	120.0 36.58m	123.0 37.49m	.005	
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Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1 Core size:

Dip Tests:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m)

Started: Oct. 2/80 .

Elevation: 318.9 m
Azimuth: S65°W Din: -45°

Completed: Oct. 5/80

0.50		DESCRIPTION	sample	width	from	to		ASSAYS
DEP 	to	NOTE: All angles are measured with respect to the long core axis.	number	wiath	l Pon		Au oz/ton	
		123.0-126.0 - Chlorite breccia, 60% chlorite as a replacement, and in seams and patches. Pyrite rare	9907	3.0 .91m	123.0 37.49m	126.0 38.41m	.17	
26.0 38.41m	136.5 41.61m	Chlorite zone, 50% to 80% chlorite. Rare pyrite grain, some grey vein quartz.						
		126.0-128.5 - Chlorite zone, 70% chlorite, rare grain of pyrite. Locally some grey vein quartz.	9908	2.5 0.8	126.0 38.41m	128.5 39.17m	.01	
		128.5-131.0 - Chlorite zone, 60% chlorite. The odd grain of pyrite. Occasional bleb of grey vein quartz.	9909	2.5 0.8	128.5 39.17m	131.0 39.92m	.002	
		131.0-134.0 - Chlorite breccia, 50% chlorite in red altered quartzite. Some grey vein quartz, sulphides absent.	9910	3.0 .91	131.0 39.92m	134.0 40.84m	nil	
:	• .	134.0-136.5 - Chlorite breccia, 50% chlorite in red altered quartzite. Some grey vein quartz, sulphides absent.	9911	2.5 0.8	134.0 40.84m	136.5 41.61m	nil	
36.5 41.61m	152.0 46.33m	Chlorite zone, 60% to 80% chlorite. Some grey vein quartz throughout, sparse pyrite. V.G. as noted.						
	-	136.5-139.8 - Chlorite zone, 80% chlorite with some irregular blebs and stringers of grey vein quartz. Occasional grain of py.	9912	3.3 1.01	136.5 41.61m	139.8 42.61m	.002	
		139.8-141.3 - Chlorite zone, 80% chlorite with some grey vein quartz. Occasional grain of pyrite. Several grains of V.G. at 140.8.	9913	1.5 0.5	139.8 42.61m	141.3 43.07m	.04	
		141.3-143.7 - Chlorite zone, 70% chlorite with some blebs of grey vein quartz. The odd grain of pyrite.	9914	2.4 0.7	141.3 43.07m	143.7 43.80m	.21	
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Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1 Core size:

Dip Tests:

Started: Oct. 2/80 Completed: Oct. 5/80 Logged by: P. McLean

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m Azimuth: S65°W Dip: -45°

	DRILL LO	G Drill Contractor - N. Morissette	Elevation: 318.9m Azimuth: S65°W Dip: _49	0	Logae	d by: P.	Oct. 5/80 McLean
DEP	TU	DESCRIPTION	sampl		from	to	ASSAYS
from	to	NOTE: All angles are measured with respect to	the long core axis. numbe	r			Au z/ton
		143.7-146.3 - Chlorite zone, 60% chlorite, blebs of grey voccasional grains of pyrite.	rein quartz, 9915	2.6 0.8	143.7 43.80m	146.3 44.59m	.005
		146.3-148.6 - Chlorite zone, 75% chlorite with the odd gra A little vein quartz. Grains of aspy at 146.5. A grain of 146.7 and very fine V.G. at 148.4.	of V.G. at	2.3 .70m	146.3 44.59m	148.6 45.29m	.05
		148.6-152.0 - Chlorite zone, 80% chlorite with several ble pyrite up to $\frac{1}{4}$ ". Several fine grains of V.G. at 149.2.	ebs and xtals of 9917		148.6 45.29m	152.0 46.33m	.08
152.0	154.5	Altered quartzite, minor chlorite as a replacement.					
46.33m	47.09m	152.0-154.5 - Quartzite, altered reddish with some local oreplacement.	chlorite 9918	2.5 0.8	152.0 46.33m	154.5 47.09m	
154.5	155.7	Chlorite breccia, 50% chlorite.					
47.09m	47.46m	154.5-155.7 - Chlorite breccia, 50% chlorite with some coacubes in altered red quartzite. Many grains of fine V.G. at 155.1.		1.2 .37m	154.5 47.09m	155.7 47.46m	.06
155.7 47.46m	159.0 48.46m	Quartzite, altered, reddish.					
47.40111	40.4011	` 155.7-159.0 - Quartzite, reddish, altered with some carbon and patches.	eate stringers 9920	3.3	155.7 47.46m	159.0 48.46m	
159.0 48.46m	162.9 49.65m	Chlorite breccia, 10% chlorite in red altered quartzite.					
40.40111	43.05111	159.0-162.9 - Chlorite breccia, 10% chlorite in altered re No sulphides.	ed quartzite. 9921	3.9 1.19m	159.0 48.46m	162.9 49.65m	.05



Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1. Core size:

Dip Tests:

Started: Oct. 2/80 . Completed: Oct. 5/80

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m

Logged	by:	Р.	McLean	i

	DRILL LO	G Drill Contractor - N. Morissette	Elevation: 318.9m Azimuth: S65°W Dip: -	-45 ⁰	Comple Logged	eted: (Oct. 5/8 McLean	,0
ne:	PTH	DESCRIPTION	samo		from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to	the long core axis. numb	ber			Au oz/ton	
162.9 49.65m	168.2 51.27m	Chlorite zone, 70% to 80% chlorite. Locally heavy fine ma mineralized with blebs and xtals of pyrite, V.G. as noted.			·	:		
		162.9-165.4 - Chlorite zone, 80% chlorite with heavy fine coarse pyrite in blebs. Many fine grains of V.G. at 164.7 at 164.9.			162.9 49.65m	165.4 50.42m	.60	
		165.4-168.2 - Chlorite zone, 80% chlorite with heavy fine fine chalcopyrite. Good pyrite in blebs. Fine V.G. at 1616.5 and 166.6.			165.4 50.42m	168.2 51.27m	.56	
168.2 51.27m	211.0 64.31m	Chlorite breccia, 10% to 30% chlorite in seams, patches ar replacement of the quartzite.	id as a					
	• •	168.2-172.0 - Chlorite breccia, 10% chlorite in seams and replacement. Sulphides rare.	as a 992		168.2 51.27m	172.0 52.43m	.01	
		172.0-174.0 - Chlorite breccia, 10% chlorite in crushed re Local fine py in seams and grains.	ed quartzite. 992	25 2.0 0.6	172.0 52.43m	174.0 53.04m		
		174.0-177.0 - Chlorite breccia, 5%-10% chlorite in seams.	Sulphides rare. 992	3.0	174.0 53.04m	177.0 53.95m		
		` 177.0-179.0 - Chlorite breccia, 15% chlorite in altered qu 5% pyrite and po.	uartzite. 992	27 2.0 0.6	177.0 53.95m	179.0 54.56m		
		179.0-181.9 - Chlorite breccia, 10% chlorite in seams and Sulphides are rare.	as a replacement. 992	28 2.9 0.9	179.0 54.56m	181.9 55.44m		
		181.9-183.9 - Chlorite breccia, 20% chlorite in seams, pat replacement. Local coarse blebs of py in chlorite.	cches, and as a 992	29 2.0	181.9 55.44m	183.9 56.05m	.04	
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Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1: Core size:

Dip Tests:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m Azimuth: S65°W Dip:-45°

Started: Oct. 2/80 Completed: Oct. 5/80 Logged by: P. McLean

	DRILL LO	Drill Contractor - N. Morissette	Azimuth: S65°W	Dip:-45 ⁰		Logge	by: P.	McLean
DEP	РТН	DESCRIPTION		sample	width	from	to	ASSAYS
from	to	NOTE: All angles are measured with respe	ct to the long core axis.	number				Au oz/ton
		183.9-187.0 - Chlorite breccia, 20% chlorite with di magnetite common, also a few grains of pyrite with t		9930	3.1 1.0	183.9 56.05m	187.0 57.00m	.005
		187.0-192.0 - Chlorite breccia, 25% chlorite in seam replacement. Occasional small grain of pyrite.	ns, patches, and as a	9931	5.0 1.53	187.0 57.00m	192.0 58.52m	.005
		192.0-195.0 - Chlorite breccia, 30% chlorite in pato The odd grain of pyrite.	thes and as a replacement.	9932	3.0 0.9	192.0 58.52m	195.0 59.44m	.04
		195.0-197.5 - Chlorite breccia, 40% chlorite with so The odd grain of pyrite.	ome grey vein quartz.	9933	2.0 0.6	195.0 59.44m	197.5 60.20m	
197.5 60.20m	199.1 60.69m	Chlorite zone, 80% chlorite, V.G. as noted.						
00.20111		197.5-199.1 - Chlorite zone, 80% chlorite with grey patches. Small blebs of pyrite throughout. Many sm at 198.3.	vein quartz in irregular all grains of V.G.	9934		197.5 60.20m	199.1 60.69m	.30
199.1	211.0	Chlorite breccia.					-	
60.69m	64.31m	199.1-201.5 - Chlorite breccia, 60% chlorite with fa chloritic sections.	ir pyrite in the	9935	2.4 0.7	199.1 60.69m	201.5 61.42m	nil
		` 201.5-204.1 - Chlorite breccia, 50% chlorite, mostly Minor pyrite.	as a replacement.	9936	2.6 0.8	201.5 61.42m		nil
		204.1-207.0 - Chlorite breccia, 40% chlorite mostly Fair % pyrite in small grains and seams.	as a replacement.	9937	2.9 0.9	204.1 62.21m	207.0 63.09m	.002
		207.0-209.6 - Chlorite breccia, 20% chlorite mostly Rare grain of py.	as a replacement.	9938		207.0 63.09m	209.6 63.89m	nil



Property: 772 D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1 Core size:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m Azimuth: S65°W Dip: -45°

Dip Tests: Started: Oct. 2/80 Completed: Oct. 5/80 Logged by: P. McLean

	DRILL LOG	Drill Contractor - N. Morissette Eleva	tion: 318.9m th: S65°W Dip: -45	50	Comple Logge	eted: Od d by:p.	ct. 5/80 McLean
DEP	Tu	DESCRIPTION	sampl	1 11/1070	from	to	ASSAYS
from	to	NOTE: All angles are measured with respect to the long	core axis. number	r			Au oz/ton
		206.9-211.0 - Chlorite breccia, 15% chlorite in seams and small pa Locally good pyrite in seams ir the more chloritic sections.	tches. 9939	1.4	206.9 63.89m		
211.0 64.31m	218.7 66.56m	Altered quartzite, reddish brown with patches of minor chlorite re	placement.				
04.31m	00.0011	211.0-216.0 - Quartzite, altered reddish brown occasional patch of chlorite replacement. Sulphides absent.	weak 9940	5.0 1.5	211.0 64.31m	216.0 65.83m	
		216.0-218.7 - Quartzite, altered reddish brown. A little chlorite narrow seams and as a replacement. Rare pyrite grains.	in 9941	2.7 0.8	216.0 65.83m	218.7 66.66m	
218.7	242.8	Chlorite breccia, 20% to 40% chlorite. Some sulphides present.					
66.66m	74.01m	218.7-222.0 - Chlorite breccia, 20% chlorite in seams and patches, a replacement. Locally a few grains of pyrite with the chlorite.	and as 9942	3.3	218.7 66.66m	222.0 67.67m	nil
		222.0-223.7 - Chlorite breccia, 20% chlorite mostly as a replaceme blebs in red quartzite. Sulphides absent.	nt in 9943	1.7	222.0 67.67m	223.7 68.19m	
		223.7-225.2 - Chlorite breccia, 25% chlorite in seams and patches a replacement. Some pyrite in grains and in narrow seams. 3 spec associated with coarse pyrrhotite at 224.0.	and as 9944 ks of V.G.	1.5	223.7 68.19m	225.2 68.64m	
		225.2-228.1 - Chlorite breccia, 20% chlorite in red quartzite, in and patches. Sulphides absent.	blebs 9945	2.9 0.9	225.2 68.64m		กำไ
		228.1-230.9 - Chlorite breccia, 40% chlorite in patches and seams. pyrrhotite and some pyrite throughout with the more chloritic sect		2.8 0.9	228.1 69.53m	230.9 70.38m	nil
		230.9-233.0 - Chlorite breccia, 40% chlorite with a few grains of with the chloritic sections.	py and po 9947	2.1		233.0 71.02m	nil



Property: 772, D.R.Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1. Core size:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m

Dip Tests:
Started: Oct. 2/80
Completed: Oct. 5/80 Oct. 2/80

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: S65°W DESCRIPTION	sample	width		to	McLean	ASSAYS
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	Midell	1100		Au oz/ton	
		223.0-236.8 - Chlorite breccia, 40% chlorite mostly as a replacement. Rare grains of py.	9948	3.8 1.2	233.0 71.02m	236.8 72.18m		
		236.8-238.7 - Chlorite breccia, 25% chlorite in reddish quartzite. Well mineralized with po and py in blebs and seams. A little grey vein quartz present.	9949	1.9 0.6	236.8 72.18m	238.7 72.76m		
		238.7-240.7 - Chlorite breccia, 20% chlorite in circular patches in red quartzite. The odd grain of pyrite.	9950	2.0 0.6		240.7 73.37m	.005	
		240.7-242.8 - Chlorite breccia, 20% chlorite in round patches and in seams. Locally fair py and po in seams and blebs.	9951	2.1 0.6	240.7 73.37m	242.8 74.01m	nil	
242.8 74.01m	249.3 75.99m	Quartzite, well altered reddish with narrow carbonate breccia sections. 250.0 - 1" patch of chlorite in carbonate breccia section. No sulphides.						
249.3 75.99m	257.0 78.33m	Carbonate breccia, patches, stringers and rhombs of grey carbonate in altered red quartzite.						
		257.0 - End of hole 78.33m						
	-							



Property: 772, D.R. Watt Property
Location: Scadding Twp, Ont.
Co-ordinates: 5054.4N, 9497.2E

HOLE: N-1 Core size:

Section: 0+50NW, 0+50NE Length: 257.0 (78.3m) Elevation: 318.9m

Dip Tests: Started: Oct. 2/80 Completed: Oct. 5/80

	DRILL LOG	Drill Contractor - N. Morissette	Azimuth: S65°W	"Dip: -45 ⁰		Logged	by: p.	McLea	in	
DEP.	тн	DESCRIPTION NOTE: All angles are measured with respect to the			width		to		ASSAYS	5
from	to	NOTE: All angles are measured with respect to the	long core axis.	number				Au oz/ton	Au gm/tonne	
·		Oue Seations					_			
		Ore Sections 1.		9907	3.0' 0.91m	123.0 37.49	: 126.0 38.41	0.17 .05	5.829 1.78	
	·	2.		9914	2.4' 0.73m	141.3 43.07	143.7		7.200	
		3.		9921-24	5.3' 1.62m	162.9 49.65	168.2 51.27	0.58	19.886 6.07	
		3a.			9.2' 2.81m	159.0 48.46	168.2 51.27	0.36 0.1	12.343 3.8	
		4.			1.6' 0.49m	197.5 60.20	199.1 60.69	0.30	10.286 3.1	
		<u>Ore Zone</u>			26.9 8.2m	141.3 43.07	168.2 51.27	0.158 .05	5.417 1.7	
			•							



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E HOLE: N-2 Core size:

Section: 0+50NW, 1+75NE Length: 401.5' (122.3m) Elevation: 318.1m Azimuth: S65°W Dip: -45°

Dip Tests: Started: Oct. 7/80

Completed: Oct. 9/80 Logged by: P. McLean

		- AZIMUTH: 365 W	U1D: -45		Logge	1 0y: P.	MCT6 9	n	
550	711	DESCRIPTION	sample	width	from	to		ASSA	YS
DEP.	to	NOTE: All angles are measured with respect to the long core axis.	number	w ruich:	1 (Oil)		Au oz/tor		
1100			1				3 = , 3 0		_
0.0	6.0 1.83m	Casing				:			
6.0 1.83m	217.8 66.39m	Serpent quartzite reddish brown to grey.							
1.03111	00.39111	22.0 (6.7m) - Bedded section at 45° to the core.							
-		$37.0 (11.3m)$ - Bedding at 45° to the core.							
		67.4-69.0 - Chlorite breccia, 10% chlorite in red altered quartzite down to the dyke & little py with the chlorite.	10101	2.4 0.51m	67.4 20.54m	69.0 21.03m	Nil		
		69.0 - 76.1 - (21.03 - 23.21) - Diabase dyke, fine grained dark grey. Top contact sharp at 60° to the core.							
		96.4 (29.4m) - Bedding at 65 ⁰ to the core.							
		98.5-99.0 (30-30.2m) - Brecciated section, carbonate and some coarse patches of chlorite, no sulphides.							
		$103.4-103.5$ (31.5-31.55m) - Diabase dyklet at 80° to the core.			-				
		103.5-109.7 (31.5-33.4m) - Greywacke bed, dark grey, fine grained massive looking with local bedding at 60° to the core.							
146.0 44.5m	148.3 45.2m	3" of carbonate breccia followed by a brecciated section with rounded fragments up to 1". Looks like pebbles in places. Seams and disseminated pyrite throughout.							
		146.0-148.3 - Brecciated section, minor chlorite and carbonate, dissem. py.	10143	2.3 0.30m	146.0 44.50m	148.3 45.20m			



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E

HOLE: N-3. Core size:

Section:

0+50NW, 1+75NE 401.5' (122.3m)

Dip Tests:

Length: 401.5'
Elevation: 318.1m

Started: Oct.7/80 Completed: Oct.9/80

		Drill Contractor - N. Morissette Azimuth: S65°W DESCRIPTION	sample				McLean	ASSAYS
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au oz/ton	
11 011	- 00							
177.8 54.2m	181.7 55.4m	Brecciated section, carbonated, sub-rounded fragments, locally coarse py in blebs. Last 1.5 ft. contains patches of chlorite which are mineralized with pyrite.			-	:		
		177.8-180.2 - Brecciated section, carbonatized with coarse patches and blebs of py.	10144	2.4 0.7	177.8 54.19m	180.2 54.93m		
		180.2-181.7 - Brecciated section, highly carbonatized. Seams and patches of chlorite up to 3/4" which are mineralized with pyrite.	10145	1.5 0.5	180.2 54.93m	181.7 55.38m	.002	
		187.3 (57.0m) - 3" Carbonatized section with coarse granular pyrite.						
213.7	217.8	Chloritic quartzite, grades into chlorite zone at 217.8. A little py.						
65.1m	66.4m	213.7-217.8 - Chloritic quartzite, 20% chlorite as a replacement. A little fine pyrite.	10146	4.1 1.3	213.7 65.14m	217.8 66.39m		
217.8 66.39m	247.0 75.29m	Chlorite zone, 60% to 80% chlorite with some grey vein quartz. Pyrite in sections throughout.						
		217.8-220.3 - Chlorite zone, 60% chlorite with some grey vein quartz. Pyrite common throughout in small blebs. Local heavy magnetite.	10147	2.5 0.8	217.8 66.39m	220.3 67.15m		
- u		` 220.3-222.3 - Chlorite zone, 50% chlorite with some grey vein quartz. Rare grains of pyrite.	10148	2.0 .61m	220.3 67.15m	222.3 67.76m		
-		222.3-224.3 - Chlorite zone, 60% chlorite. The odd grain of pyrite. Fair speck of V.G. at 222.6 in chlorite. Some dissem. magnetite.	10149	2.0 .61	222.3 67.76m	224.3 68.37m		
		224.3-226.1 - Chlorite zone, 60% chlorite, an occasional grain of pyrite.	10150	1.8 0.6	224.3 68.37m	226.1 68.92m		



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E

HOLE: N-2 Core size:

Section: 0+50NW, 1+75NE Length: 401.5' (122.3m) Elevation: 318.1m Azimuth: S65°W Dip: -45°

Dip Tests: Started:

Started: Oct. 7/80 Completed: Oct. 9/80 Logged by: P. McLean

		AZ IMULII: 365 W	U10: -43		Logge	ι υy. P	<u>ricle</u>	<u>an</u>	
DEP.	TU	DESCRIPTION	sample	width	from	to		ASSAYS	S
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/tom		
									+
,		226.1-227.7 - Chlorite zone, 65% chlorite with some irregular grey vein quartz. Occasional bleb of pyrite. Grain of V.G. at 226.3, speck at 227.5.	10151	1.6 0.5	226.1 68.92m	227.7 69.40m			
		227.7-231.0 - Chlorite zone, 50% chlorite with occasional grains of py and po throughout.	10152	3.3 1.0	227.7 69.40m	231.0 70.41m	0.005		
	·	231.0-233.0 - Chlorite zone, 50% chloirte, good py and po, includes a coarse py xtal 3/4" across.	10153	2.0	231.0 70.41m	233.0 71.02m			
		233.0-235.0 - Chlorite zone, 40% chlorite with the occasional bleb of pyrite.	10154	2.0	233.0 71.02m	235.0 71.63			
		235.0-237.5 - Chlorite zone, 60% chlorite, some grey vein quartz. Well mineralized with coarse pyrite in vuggy patches up to $1\frac{1}{2}$ ".	10155	2.5 0.8	235.0 71.63m	237.5 72.39m			
	••	237.5-240.7 - Chlorite zone, 50% chlorite, well mineralized with blebs and xtals of py and po up to $\frac{1}{2}$ ". Some grey vein quartz.	10156	3.2 1.0	237.5 72.39m	240.7 73.37m	.002		
		240.7-243.7 - Chlorite zone, 70% chlorite with irregular vein quartz. Local coarse pyrite in blebs up to 1".	10157	3.0 .91m	240.7 73.37m	243.7 74.28m			
		243.7-247.0 - Chlorite zone, 70% chlorite with grey vein quartz throughout. Well mineralized with blebs of pyrite in the quartz and in the chlorite.	10158	3.3 1.0	243.7 74.28m	247.0 75.29m		-	
247.0	249.0	Chloritic quartzite.							
75.29m	75.90m	247.0-249.0 - Ch ¹ oritic quartzite, grading to relatively unaltered quartzite.	10159	2.0	247.0 75.29m	249.0 75.90m			
249.0 75.90m	271.3 82.69m	Quartzite, pinkish grey							



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E

HOLE: N-2. Core size:

Section: 0+50NW, 1+75NE Length: 401.5' (122.3m) Elevation: 318.1m Azimuth: S65°W Dip: -45° Dip Tests: Started: Completed: Logged by: Oct. 7/80 -Oct. 9/80 P. McLean

	DRILL LOC	Drill Contractor - N. Morissette Elevation: Azimuth: S6	318.1m 5°W Dip: -45°		Comple Logged	ted: O	ct. 9/8 . McLea	0 n	
	-	DESCRIPTION	sample	width	from	to		ASSAY	S
DEP'	to	NOTE: All angles are measured with respect to the long core a	axis. number	Widen	110.11		Au oz/ton		
		249.0-255.0 - Quartzite, light pinkish grey non chloritic.	10160	6.0 1.8	249.0 75.90m				
		255.0-261.0 - Quartzite, light pinkish grey.	10161	6.0 1.8	255.0 77.73m	261.0 79.55m			
		263.0 (80.1m) - Bedding at 60° to the core.							
		261.0-266.5 - Quartzite, light pinkish grey some that altered over narrow sections.	10162	5.5 1.7	261.0 79.55m	266.5 81.23m			
266.5 81.2m	268.0 81.7m	Chlorite breccia, 20% chlorite in seams and patches.							
01. Zir:		266.5-268.5 - Chlorite breccia, 20% chlorite in seams and patches and as a replacement. Sulphides absent.	10163	2.0	266.5 81.23m	268.5 81.84m	.01		
·		268.5-271.3 - Quartzite, pinkish grey, becoming chloritic in the last foo	t. 10164	2.8 0.9	268.5 81.84m				
271.3 82.69m	290.9 88.67m	Chlorite zone, 60% to 80% chlorite mostly well mineralized with pyrite. A large amount of magnetite in this section, the most I have observed to 60%	date.			٠			
		271.3-274.2 - Chlorite zone, 70% chlorite with a little vein quartz. A fe small blebs of pyrite throughout. Local disseminated magnetite.	ew 10165	2.9 0.9	271.3 82.69m	274.2 83.58m	.03		
		274.2-276.4 - Chlorite zone and breccia, 25% chlorite. A few blebs of py and the odd grain of magnetite.	10166	2.2 0.7	274.2 83.58m	276.4 84.25m	.005		
		276.4-278.6 - Chlorite zone, 80% chlorite with 10% coarse magnetite. Some coarse pyrite and a few grains of chalco. Some grey vein quartz. Speck of V.G. at 278.3. Badly ground core at 277.3.	e 10167	2.2	276.4 84.25m	278.6 84.92m	.01		
		:							



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5070.7N, 9533.8E

HOLE: N-2-Core size:

Section: 0+50NW, 1+75NE Length: 401.5 (122.3m) Elevation: 318.1m Azimuth: S65 W Dip: -450

Dip Tests: Started:

Oct. 7/80 . Completed: Oct. 9/80 Logged by: P. McLean

		DESCRIPTION	sample	المالية فال		to		ASSA	YS
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	width	from		Au oz/to	1	
		278.6-280.3 - Chlorite breccia, 10% chlorite in narrow seams and patches. Sulphides absent.	10168	1.7 0.5	278.6 84.92m		Nil		
		280.3-282.1 - Chlorite zone, includes 1.2 ft. of white carbonate mixed with chlorite. Sample is heavily mineralized with 15% magnetite and 10% sulphides in coarse patches. Pyrite, some chalco and a little aspy.	10169	1.8 .55m	280.3 85.44m				
		282.1-283.3 - Chlorite zone, 20% magnetite with the odd grain of pyrite. Two grains of V.G. at 283.0.	10170	1.2 .37m	282.1 85.99m		0.13		
		283.3-286.4 - Chlorite breccia, 50% chlorite with the odd grain of pyrite. Some local magnetite.	10171	3.1 1.0	283.3 86.35m		0.02		
	٠.	286.4-268.6 - Chlorite zone, 80% chlorite, the odd coarse grain of pyrite throughout. Much fine magnetite in some sections.	10172	2.2 0.7	286.4 87.30m		0.13		
		288.6-290.9 - Chlorite zone, 80% chlorite with local coarse pyrite xtals up to 3/4". 10% magnetite throughout.	10173	2.3 0.7	288.6 87.97m		0.20		
290.9 88.67m	308.4 94.00m	Chlorite breccia, 10% to 20% chlorite with some pyrite mineralization.	•						
00.07.	34.00m	293.4-297.0 - Chlorite breccia, 10% chlorite in salmon pink quartzite. Occasional coarse grains of pyrite associated with the chlorite.	10175	3.6 1.1	293.4 89.43m	297.0 90.53m	.002		
		297.0-301.3 - Chlorite breccia, 10% chlorite in small patches in salmon red quartzite. A few grains and xtals of py throughout.	10176	4.1 1.3	297.0 90.53m	301.3 91.84m	.002		
	_	301.3-304.3 - Chlorite breccia, 10% chlorite in small patches. Locally good py in blebs in the more chloritic sections.	10177	3.0 0.9	301.3 91.84m	304.3 92.75m			
	_	304.3-306.3 - Chlorite breccia, 10% chlorite in small seams and patches, rare pyrite.	10178	2.0 0.6	304.3 92.75m	306.3 93.36m			



Property: 772, D.R. Hatt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E

HOLE: N-2 Core size:

Section: 0+50NW, 1+75NE Length: 401.5 (122.3m) Elevation: 318.1m Azimuth: S65°W Dip: _45°

Dip Tests: Started: Oct. 7/80 Completed: Oct. 9/80 Logged by: P. McLean Oct. 7/80

	DRILL LOG	Drill Contractor - N. Morissette Elev	ation: 318.1m uth: S65°W Dip: _	450			McLean		
DEP.	ru	DESCRIPTION	samp		from	to		ASSAYS	,
from	to	NOTE: All angles are measured with respect to the lon	g core axis. numb	er	11 0111		Au oz/ton		
		306.3-308.4 - Chlorite breccia, 20% chlorite in seams and patches. 7% coarse pyrite in seams and cubes.	1017	9 2.1 0.6	306.3 93.36m		.002		
308.4 94.00m	352.0 107.29m	Quartzite, altered brown to pink, locally mottled.	÷			•			
34.00m	107.23111	308.4-311.2 - Altered quartzite, occasional chlorite seams and pat Some coarse pyrite present.	ches. 1018	0 2.8 0.9	308.4 94.00m		.002		
352.0	368.0	Chlorite breccia and chlorite zones mineralized with pyrite and ma	gnetite.			,			
107.29m	112.17m	352.0-353.3 - Chlorite zone, 60% chlorite with local blebs of pyrivery heavy magnetite.	te and 1018	1 1.3 0.4	352.0 107.29m		.01		
	٠.	353.3-354.9 - Chlorite breccia, 10% chlorite mostly as a replaceme Sulphides absent.	nt. 1018	1.6	353.3 107.69m		.002		
		354.9-356.3 - Chlorite zone, 40% chlorite with some good blebs of Grain of V.G. at 355.2 and 2 grains of V.G. at 355.4.	pyrite. 1018	3 1.4 0.4	354.9 108.18m		0.22		
		356.3-358.5 - Chlorite zone, 70% chlorite well mineralized with bl pyrite. Locally heavy fine magnetite.	ebs of 1018	2.2 .67m	356.3 108.60m		0.22		
		358.5-361.5 - Chlorite breccia, 50% chlorite in patches. Locally some pyrite.	1018	3.0	358.5 109.27m		0.02		
		361.5-364.0 - Chlorite breccia, 50% chlorite in patches. Well min with blebs of pyrite.	eralized 1018	2.5	361.5 110.19m		0.01		
	-	364.0-366.0 - Chlorite zone, 80% chlorite, some vein quartz. 10% in blebs up to $\frac{1}{2}$ ". Some fine magnetite.	pyrite 1018	7 2.0 0.6	364.0 110.95m		0.02		
		366.0-368.0. Chlorite breccia, 30% chlorite in patches which are mineralized with blebs of pyrite.	1018	3 2.0	366.0	368.0	0.03		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.7N, 9533.8E

HOLE: N-2 . Core size:

Section: 0+50NW, 1+75NE Length: 401.5 (122.3m)

Dip Tests: Started:

Length: 401.5 (122.3m Elevation: 318.1m Azimuth: S65 W Dip: -45

Oct. 7/80 Completed: Oct. 9/80 Logged by: P. McLean

	DRILL LO	<u>G</u> Drill Contractor - N. Morissette	Azimuth: S65°W	Dip: -45 ⁰		Logged	ted: i by: P.	McLea	7/80 n
DEPT	ГН	DESCRIPTION NOTE: All angles are measured with respect to t		sample	width	from	to		ASSAYS
from	to	noic. Att angles are measured with respect to t	me tolig core axis.	·				Au oz/ton	Au gm/tonne
368.0 112.17m 390.0	401.4 122.35m 400.0	Quartzite, becoming light grey, relatively unaltered. Bedded section at 80 ⁰ to the core.				÷.	:		
118.9m	121.9m 401.4 122.35m	End of hole.							
		Ore Sections	·						
	• . `	1.		10148-9	4.0 1.22m	220.3 67.15m	224.3 68.37m	0.180 .05	6.172 1.9
		2.		10157-8	6.3 1.92m		75.29m	.03	1.1
		3.		10169-73	ľ	280.3 85.44m]]	•
	-	3b.			1	286.4 87.30m	88.67m	.05	1.7
		4.	•	10183-4	3.23m	280.3 85.44m	88.67m	.05	1.7
	•			10103-4		354.9 108.18m	358.5 109.27m	.07	2.3



Property: 772 D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

HOLE: N-3 Core size:

Section: 0+50NW, 1+75NE Length: 464.0' (141.4m)

Dip Tests: Started: Oct. 16/80 Completed: Oct. 19/80 Length: 464.0' Elevation: 318.1m

DEPT			•							
טבר	ru i	DESCRIPTION		sample	width	from	to		ASSAY	S
from	to	NOTE: All angles are measured with respect to the long c	ore axis.	number		. , 0		Au z/ton		
17 Oil 3										+
0.0	7.0 2.13m	Casing				·	:			
7.0 2.13m	45.5 13.87m	Quartzite, light to dark to pinkish grey. Broken blockey core to	40.0.							
45.5 13.87m	63.0 19.20m	Carbonate breccia, whitish to pink quartzite with stringers and pagrey carbonate. Locally some pyrite with the carbonate.	tches of							
63.0 19.20m	274.9 83.80m	Quartzite, light to dark to pinkish grey altered sections as noted	•							
81.1 24.7m	87.0 26.5m	Diabase dyke, fine grained dark grey. Badly broken up with many s Poor core recovery.	lips.			_				
101.0 30.8m		Bedding at 70° to the core.				·				
104.0 31.7m	107.0 32.6m	Bedding at 60° to the core.								
113.0 34.4m	114.5 34.9m	Carbonate breccia.								
131.6 40.1m	136.7 41.7m	Carbonate breccia, quartzite bleached white, contains white carbon stringers and patches.	ate :							



Property: 772 D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E HOLE: N-3 Core size:

Section:

0+50NW, 1+75NE 464.0' (141.4m)

Dip Tests: Started:

Length: 464.0' (141.4m)
Elevation: 318.1m
Azimuth: S65°W Dip: -60°

Oct. 16/80 Oct. 19/80 Completed: Oct. 19/ Logged by: P. McLean

		Drill Contractor - N. Morissette Azimuth: S65°W	Dip: -60°				. McLean	ASSAYS	
DEF from	TH to	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	, ,	width	from	to	Au oz/ton		T
136.7 41.7m	146.5 44.7m	Chlorite breccia, 10% chlorite along with carbonate. Fine seams and blebs of pyrite locally with the chlorite.				:			
		136.7-141.0 - Chlorite breccia, 10% chlorite in seams and small patches. Some py in narrow seams and blebs with the chlorite.	10189	4.3	136.7 41.67m	141.0 42.98m			
		141.0-143.5 - Chlorite breccia, 20% chlorite in seams and patches with some associated pyrite.	10190	2.5 0.8	141.0 42.98m	143.5 43.74m			
		143.5-146.5 - Chlorite breccia, 10% chlorite with blebs of pyrite in the chlorite.	10191	3.0 0.9	143.5 43.74m	146.5 44.65m			***************************************
145.6 44.4m	274.9 83.8m	Quartzite, light to dark grey with local whitish carbonatized sections.							
	•.	201.8 (61.5m) - ½" seam of chlorite, no sulphides.							
		207.7-209.0 - Heavily mineralized section not chloritic or carbonatized.	10192	1.3		209.0 63.70m	0.02		
		249.7-251.2 - Chlorite breccia, 10% chlorite. Some coarse pyrite in chlorite and in the quartzite. A few specks of chalco.	10193	1.5 0.5	249.7 75.11m	251.2 76.57m			
									-
								İ	j



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

Dip Tests: Started:

HOLE: N-3 Core size:

Section: 0+50NW, 1+75NE Length: 464.0' (141.4m) Elevation:318.1m

Started: Oct. 16/80. Completed: Oct. 19/80

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: S65°W	Dip: -60°		Logged	by: P.	_McLe	an	
DEPT	Н	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	Υ		SSAYS Swastlika
from	to	Note: The uniques are mounted to the service of	<i>:</i>						Au oz/to
274.9 83.80m	276.6 84.31m	Quartzite contains 10% chlorite with occasional grains of pyrite. 274.9-276.6 - Chloritic quartzite, 10% chlorite with some scattered grains of py.	10102	1.7 0.5	274.9 83.79m	: 276.6 84.31m		0.04	0.01
276.6 84.31m	286.5 87.33m	Chlorite breccia, 20% to 50% chlorite includes some very coarse pyrite in cubes and patches up to 4".							
		276.6-280.0 - Chlorite breccia, 20% chlorite in patches with 10% coarse pyrite in cubes and blebs.	10103	3.4 1.04m	276.6 84.31m	280.0 85.35m		0.21 .06	
		280.0-282.5 - Chlorite breccia, 25% chlorite in seams and patches. 10% pyrite in coarse cubes up to $\frac{1}{2}$ ", also in blebs. Grain of V.G. at 281.3.	10104	2.5 .76m	280.0 85.35m	282.5 86.11m	0.12	0.14	
	•.	282.5-285.0 - Chlorite breccia, 25% chlorite in seams and patches. 15% coarse pyrite in cubes and irregular blebs. Some grey vein quartz.	10105	2.5 .76	282.5 86.11m	285.0 86.87m			0.03
		285.0-286.5 - Chlorite breccia, 20% chlorite, 30% coarse pyrite in cubes and patches up to 4".	10106	1.5 .46m	285.0 86.87m	286.5 87.33m			
286.5 87.33m	299.9 91.41m	Quartzite, highly altered with 5% to 10% chlorite as a replacement and in narrow seams. Minor pyrite. Local chlorite breccia sections.							
		286.5-289.5 - Chloritic quartzite, 5-10% chlorite as a replacement and in narrow seams. A little fine pyrite.	10107	3.0 0.9	286.5 87.33m	289.5 88.24m		Tr	0.005
		289.5-293.0 - Chloritic quartzite, 7% chlorite in narrow seams and as a replacement. A few ½" pyrite cubes.	10108	3.5 1.1	289.5 88.24m	293.0 89.31m		Tr	0.005
		293.0-295.5 - Chloritic quartzite, 5% chlorite as a fine replacement. No sulphides.	10109	2.5 .76	293.0 89.31m	295.5 90.07m		Tr	Nil



Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

HOLE: N-3. Core size:

Section: 0+50NW, 1+75NE Length: 464.0' (141.4m) Elevation: 318.1m

Dip Tests: Started:

Oct. 16/80. Oct. 19/80 Completed:

		Drill Contractor - N. Morissette DESCRIPTION	Azimuth: S65°W [sample	_		by: p			SSAYS
DEP from	TH to	NOTE: All angles are measured with respect to the	e long core axis.	number	width	from	to			Swastik Au oz/t
17011	- 20							7.13	,	1 02,0
		295.5-297.5 - Chlorite breccia, 10% chlorite in seams and Some blebs of pyrite associated with the chlorite.	small patches.	10110	2.0 0.6	295.5 90.07m	297.5 90.58m		Tr	0.005
-	-	297.5-299.9 - Quartzite, weakly chloritic, also some carbo odd fine pyrite grain.	nate. The	10111	2.4	297.5 90.68m	299.9 91.41m		Tr	Nil
299.9 91.41m	313.7 95.62m	Chlorite breccia, well mineralized with coarse pyrite in c patches. V.G. as noted.	ubes and							
		299.9-302.5 - Chlorite breccia, 10% chlorite in seams. We with 10% py in blebs and coarse patches.	11 mineralized	10112	2.6 .79	299.9 91.41m	302.5 92.20m		Tr	0.005
		302.5-305.0 - Chlorite breccia, 5% chlorite in seams and a replacement. Minor py.	s a	10113	2.5	302.5 92.20m	305.0 92.97m		Tr	Nil
	•.	305.0-307.6 - Chlorite zone, 60% chlorite with 15% coarse and patches up to 3/4". Possible grain of V.G. at 306.0.	pyrite in cubes	10114	2.6 .79m	305.0 92.27m	307.6 93.76m			0.50
		307.6-309.4 - Quartzite, weakly chloritic with the odd gra	in of pyrite.	10115	1.8	307.6 93.76m	309.4 94.31m	1	Tr	0.005
		309.4-311.8 - Chlorite breccia, 25% chlorite, well mineral pyrite in cubes and patches up to 3/4".	ized with coarse	10116	2.4 .73m	309.4 94.31m	311.8 95.04m			0.09
		311.8-313.7 - Chlorite breccia, 10% chlorite in seams. 5% up to $\frac{1}{2}$ " with the chlorite. Also in blebs in the quartzit		10117	1.9 0.6	311.8 95.04m	313.7 95.€2m		Tr	0.002
313.7	324.0	Quartzite, 5% to 10% chlorite, mostly as a replacement. S	ulphides rare.							
95.62m	98.76m	313.7-317.0 - Quartzite, 5% to 10% chlorite as a replaceme grains of pyrite.	nt. A few	10113	3.3 1.0	313.7 95.62m	317.0 96.62m		Tr	0.005



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

HOLE: N-3 Core size:

Dip Tests:

Section: 0+50NW, 1+75NE Length: 464.0' (141.4m) Elevation: 318.1m Azimuth: S65°W Dip: -60° Started: Oct. 16/80 Completed: Oct. 19/80 Logged by: P. McLean

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 318.19 Azimuth: S65°W	n Dip: -60 ⁰			ted: (by: P.				
DEP.	тн	DESCRIPTION	sample	width	from	to		A	SSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number				X- Au oz	Ray Vton	Swast Au oz/	
		317.0-321.0 - Quartzite, 5% to 10% chlorite mostly as a replacement. Pyrite absent.	10119	4.0 1.2	317.0 96,62m	321.0 97.84m		Tr	Nil	
		321.0-324.0 - Quartzite with 10% chlorite as a replacement. Sulphides absent.	10120	3.0 .91	321.0 97.84m	324.0 98.76n		Tr	Nil	
324.0 98.76m	330.0 100.59m	Chlorite breccia, 50% chlorite with good pyrite mineralization throughout in xtals and grains up to $\frac{1}{4}$ ".								
·		324.0-327.0 - Chlorite breccia, 60% chlorite with 5% pyrite in cubes and blebs throughout.	10121	3.0 .91m	324.0 98.76m	327.0 99.67m			0.06	
		327.0-330.0 - Chlorite breccia, 70% chlorite, some pyrite and 10% magnetite.	10122	3.0 .91	327.0 99.67m	330.0 100.59m		0.04		
330.0 100.59m	332.6 101.38m	Chlorite zone, 80% chlorite with some pyrite throughout.								
100.001		330.0-332.6 - Chlorite zone, 80% chlorite well mineralized with 5% pyrite and local heavy magnetite. Fine V.G. at 330.7, 331.8, 331.9 and many grains at 332.3.	10123	2.6 .79m	330.0 100.59m		0.14	0.10	0.14	
332.6 101.38m	379.1 115.55m	Chlorite breccia, 50% to 60% chlorite with pyrite throughout most sections as noted.								
		332.6-335.8 - Chlorite breccia, 50% chlorite with pyrite in cubes and blebs.	10124	3.2 .98m	332.6 101.38m	335.8 102.35	0.06	0.05	0.07	
		335.8-337.6 - Chlorite breccia, 30% chlorite as a replacement and in grains. Locally good pyrite over narrow widths.	10125	1.8 0.6	335.8 102.35m	337.6	0.04	1	0.04	
		337.6-340.5 - Quartzite, 10% chlorite as a replacement. Sulphides rare.	10126	2.9 0.9	337.6 102.90m	340.5	Tr		0.005	



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

HOLE: N-3. Core size:

Section:

0+50NW, 1+75NE 464.0' (141.4m) 318.1m Length: 464.0' (141.4m Elevation: 318.1m Azimuth: S65°W Dip: -60°

Dip Tests: Started: Oct. 16/80 Completed: Oct. 19/80 Logged by: P. McLean

DRILL LOG Drill Contractor - N. Morissette

		DESCRIPTION	samole	width	from	to		Α	SSAYS	
from	PTH to	NOTE: All angles are measured with respect to the long core axis.	number	widen	Troili			Ray z/ton	Swast Au dz	- 1
		340.5-343.4 - Chlorite breccia, 50% chlorite. Locally well mineralized with fine and coarse pyrite.	10127	2.9 .88m		343.4 104.67m			0.17	
		343.7-345.7 - Chlorite breccia, 50% chlorite in patches, pyrite common in ½" cubes. Many fine grains of V.G. at 344.7 and 345.1.	10128	2.3 .70m	343.7 104.67m				0.19	
		345.7-348.6 - Chlorite breccia, 70% chlorite. Fine and coarse pyrite throughout. Grain of V.G. at 348.1.	10129	2.9 .88m	345.7 105.37m					
		348.6-350.9 - Chlorite breccia, 30% chlorite in seams and patches, local coarse py. Speck of V.G. on slip at 350.7.	10130	2.3 .70m	348.6 106.26m	350.9 106.96m				
		350.9-353.3 - Chlorite breccia, 40% chlorite. A little pyrite in the rore chloritic sections.	10131	2.4 .73m	350.9 106.96m	353.3 107.69m	0.10	0.10	0.03	
	••	353.3-355.4 - Chlorite breccia, 50% chlorite with some very coarse pyrite in blebs and cubes. Speck of V.G. at 353.5 and several grains at 354.8.	10132	2.1 .64m	353.3 107.69m					
		355.4-357.0 - Chlorite breccia, 60% chlorite with good pyrite throughout. Many grains of V.G. at 354.8.	10133	1.6 .49m	355.4 108.33m	357.0 108.82m		1.24		
		375.0-360.3 - Chlorite breccia, 20% chlorite in narrow seams. Rare sulphides.	10134	3.3 1.0	375.0 108.12m			Tr	0.005	
		360.3-363.8 - Chlorite breccia, 30% chlorite in seams and patches, rare pyrite.	10135	3.5 1.1	360.3 109.82m	363.8 110.89m		Tr	0.002	
		363.8-365.7 - Chlorite breccia, 30% chlorite in patches. A little pyrite in the more chloritic sections. Several grains of V.G. at 365.5.	10136	1.9 0.6	363.8 110.89m	365.7 111.47m				
		365.7-368.1 - Chlorite breccia, 20% chlorite mostly as a replacement. Rare pyrite.	10137	2.4 .73	365.7 3 111.47m	68.1	Tr	Tr	0.002	



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5070.5N, 9533.5E

HOLE: N-3. Core size:

0+50NW, 1+75NE 464.0' (141.4m) Section:

Length: 464.0'
Elevation: 318.1m

Dip Tests:

Started: Oct. 16/80 Completed: Oct. 19/80

		DESCRIPTION	Azimuth: S65°W	sample	ما ه له لادر		by: p			SSAYS
DEP.		NOTE: All angles are measured with respect to	the long core axis.	number	width	from	to	X-	Ray	Swastik Au ozyt
from	to							1.0 0.	7 0011	100
:		368.1-370.3 - Chlorite breccia, some py throughout. A of fine V.G. at 370.0.	great.many grains	10138	2.2 0.7	368.1 112.20m	370.3 112.87m		Tr	0.15
		370.3-372.7 - Chlorite breccia, some very coarse pyrite first part of the sample. 40% chlorite.	e up to ½" in	10139	2.0 .61m	370.3 112.87m	372.7 113.60m			
		372.3-374.8 - Chlorite breccia, 20% chlorite, rare pyri	te.	10140	2.5 0.7	372.3 113.60m			Tr	0.005
		374.8-376.6 - Chlorite breccia, 60% chlorite, well mine with blebs of pyrite.	eralized	10141	1.8 .55m	374.8 114.24m	376.6 114.79m			
		376.6-379.1 - Chlorite breccia, 10% chlorite in altered reddish quartzite.	i	10142	2.5 0.7	376.6 114.79m	379.1 115.55m		0.02	Nil
379.1 115.55m	449.0 136.86m	Quartzite, grey to pinkish grey, relatively unaltered.								
402.0 122.5m	408.0 124.4m	Carbonate breccia, white carbonate stringers in pinkish	altered quartzite.							
449.0 136.86m	464.0 141.43m	Carbonate breccia, salmon red, carb. rhombs and stringe	ers.	-						
		464.0 (141.43m) - End of hole.								
·										
	•									



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-3.
Co-ordinates: 5070.5N, 9533.5E Core size:

Section: 0+50NW, 1+75NE

Dip Tests:

Length: 464.0' (141.4m)
Elevation: 318.1m
Azimuth: S65°W Dip: -60

Started: Oct. 16/80 Completed: Oct. 19/80 Logged by: P. McLean

DRILL LO	G Drill Contractor - N. Morissette	Elevation: 318.1m Azimuth: S65°W Dip: -60	Cor Lo	npleted: O	ct. 19/80 . McLean
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to	the long core axis. number	width fr	1	ASSAYS
from to	NOTE. ATT angles are measured with respect to	the rong core axis. Hamber			Au Au gm/ oz/ton tonne
	Ore Sections				
	la.	10103-4	5.9 276 1.80 84	.6 282.5 .31 86.1	01866.378
	lb.	10103-6	9.9 3.0 276 84.	.6 286.5 36 87.38	0.134
	2.	101.14	2.6 305	.0 307.6	0.40 15.431
	3.	10123	2.6 330 0.79 100	.0 332.6 .59101.38	0.10 4.80
	4.	10127-33	16.5 340. 5.03 103.	5 357.0 79 108.82	0.312 10.698 .10 3.3
	5.	10139	2.0 370.		0.09 3.429
1			# # # # # # # # # # # # # # # # # # #		



DRILL LOG Drill Contractor - N. Morissette Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5085.7N, 9566.5E

HOLE: N-4. Core size:

Section: 0+50NW, 2+85NE Length: 601.0 (183.2m) Elevation: 312.3m Azimuth: S65°W Dip:-60°

Dip Tests:

Started: Oct. 20, 1980 Completed: Oct. 27, 1980 Logged by: P. McLean

	5.17.22	AZIMUTA: 505 W	U10:-0U		Louged	Dy: P.	rictear	<i>i</i>	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAY	S
from	to	NOTE: All angles are measured with respect to the long core axis.		:			Au		
0.0 0.0	6.0 1.84	Casing.							
6.0 1.84	27.7 8.44	Serpent quartzite, grey to pinkish grey.	-						
		10.3 - (3.1) - Bedding at 45° to the core.							
27.0 8.44	52.2 15.85	Chlorite-carbonate breccia, 10% chlorite in seams and small patches along with stringers and patches of carbonate, a few grains of pyrite associated with the carbonate.							
		27.7 - 31.7-(8.44-9.66) - Chlorite breccia, 10% chlorite in narrow seams and patches. Some blebs of pyrite with the chlorite.	10194	4.0 1.22	27.7 8.44	31.7 9.66	Nil		
		38.0 - 40.0 - (11.58 - 12.19) - Chlorite breccia, 7% chlorite in narrow seams with some fair pyrite in the chlorite.	10195	2.0 .61	38.0 11.58	40.0 12.19			
,		43.0 - 46.7-(13.11-14.23) - Chlorite breccia, 10% chlorite in seams and as a fine replacement of the quartzite.	10196	3.7 1.12	43.0 13.11	46.7 14.23	Nil		
		46.7 - 49.0-(14.23-14.94) - Chlorite breccia, 15% chlorite in seams and patches up to 1". Local good pyrite and po and some chalco with the chlorite.	10197	2.3 .71	46.7 14.23	49.0 14.94	Nil		
		49.0 - 51.2 - (14.94 - 15.65) - Chlorite-carbonate breccia, 5% chlorite in seams and as a replacement. Some narrow seams of pyrite.	10198	2.2 .71	49.0 14.94	51.2 15.65	Nil		
51.2 15.85	99.5 30.33	Quartzite, light to dark to pinkish grey blockey core.							
99.5 30.33	148.0 45.11	Altered section of quartzite, bleached whitish with some areas of carbonate breccia throughout. A little granular pyrite with the carbonate.						•	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5085.7N, 9566.5E

HOLE: N-4. Core size:

Dip Tests:

Section: 0+50NW, 2+85NE Length: 601.0 (183.2m)

Elevation: 312.3m
Azimuth: S65°W Dip: -60°

Started: Oct. 20, 1980. Completed: Oct. 27, 1980. Logged by: P. McLean

A N	DRILL LOG	Drill Contractor - N. Morissette	Elevation: 312.3m Azimuth: S65°W [Dip: _60°			ted: 0			
DEP	тн	DESCRIPTION	4h- 1	sample	width	from	to	 ASSA	YS.	-
from	to	NOTE: All angles are measured with respect t	the long core axis.	number (-
148.0 45.11	166.0 50.60	Quartzite, dark brownish grey due to presence of fine biot	ite.							
166.0 50.60	289.0 88.09	Quartzite, whitish to brownish grey locally mottled. Occa breccia sections.	sional narrow carbonate							
		208.2 - 216.1 - (63.50-65.91) - Diabase dyke, dark grey, f medium grained in the centre. Top contact sharp at 50° to	ine grained on contacts the core.	•						
		278.7 - 279.3 - (85.00-85.19) - Crushed and altered browning ranular pyrite.	sh quartzite with some						4 -	
289.0 88.09	307.5 93.73	Carbonate breccia, crushed and altered quartzite with stricarbonate. Some granular pyrite with the carbonate. Occarchlorite.	ngers and patches of sional seam of							
307.5 93.73	350.5 106.83	Quartzite, well altered, light brownish with some bleached	whitish sections.							,
350.5 106.83	364.5 111.10	Carbonate breccia, white carbonate stringers in pink alter	ed quartzite.							
		360.0 - 364.5 - (109.73-111.10) - Carbonate breccia, local pyrite associated with the carbonate.	coarse granular	10199	4.5 1.37	360.0 109.73	364.5 111.10			
364.5 111.10	436.0 132.89	Quartzite, light pinkish brown, altered in appearance with sections.	whitish bleached							
		387.5 - 394.0 - (118.19-120.17) - Carbonate breccia, bleach grey carbonate in stringers. Sulphides rare.	ned white section with					nd de die die Kana de Legan		
									1	!



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5085.7N, 9566.5E

HOLE: N-4 . Core size:

Section: 0+50NW, 2+85NE Length: 601.0 (183.2m) Elevation: 312.3m Azimuth: S65°W Dip: -6

Dip Tests:

Started: Oct. 20, 1980 . Completed: Oct. 27, 1980 Logged by: P. McLean

DRILL LOC			Dip: -60°		Comple Logged	ted: Oc	t. 27, <u>McLe</u> a	1980 n		
TH	DESCRIPTION		sample	width	from	to	· · · · · · · · · · · · · · · · · · ·	ASSA	YS	
to	NOTE: All angles are measured with respect to the long	g core axis.	number				Au			
	412.0 - 417.0 - (125.66-127.19) - Ground core.							-		
439.8 134.05	Carbonate breccia, 10% chlorite with a few grains of pyrite.	- 5				•				
	436.0 - 439.8 - (132.89-134.05) - Chlorite-carbonate breccia, 10% ca replacement and in small patches. A few grains of pyrite with the	chlorite as chlorite.	10200	3.8 1.16	436.0 132.89					
	439.8 - 444.0 - (134.05-135.33) - Lost core.									!
447.1 136.28	Chlorite breccia, 10% chlorite in small patches and as a replacement carbonate also present.	. Some	10201	3.1 .95	444.0 135.33	447.1 136.28	.002			
	447.1 - 454.8 - (136.28-138.62) - Lost core.									
458.3 139.69	Chlorite breccia, 10% chlorite in small patches and as a replacement carbonate throughout.	, some	10202	3.5 1.07	454.8 138.62					
	458.3 - 520.6 - (139.69-158.68) - Lost core.							:		
523.2 159.47	Chlorite breccia, 10% chlorite in small patches and as a replacement	-	10203	2.6 .79	520.6 158.68	523.2 159.47	.002			*
	Chlorite breccia over 2".							} *		
579.0 176.48	Quartzite, pinkish to grey with small carbonate rhombs replacing the	quartzite.							[- - - -	; ;
-	534.6 - 535.8 - (162.95-163.31) - Chlorite-carbonate breccia, 10% ch associated with the carbonate. The odd grain of pyrite.	lorite	10204	1.2	534.6 162.95					\$ 5 7
	TH to 439.8 134.05 447.1 136.28 458.3 139.69 523.2 159.47	DESCRIPTION DESCRIPTION NOTE: All angles are measured with respect to the lon to 412.0 - 417.0 - (125.66-127.19) - Ground core: Carbonate breccia, 10% chlorite with a few grains of pyrite. 439.8	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. to 412.0 - 417.0 - (125.66-127.19) - Ground core. Carbonate breccia, 10% chlorite with a few grains of pyrite. 436.0 - 439.8 - (132.89-134.05) - Chlorite-carbonate breccia, 10% chlorite as a replacement and in small patches. A few grains of pyrite with the chlorite. 439.8 - 444.0 - (134.05-135.33) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement. Some carbonate also present. 447.1 - 454.8 - (136.28-138.62) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement, some carbonate throughout. 458.3 - 520.6 - (139.69-158.68) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches and as a replacement. **Chlorite breccia, 10% chlorite in small patches a	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. DESCRIPTION NOTE: All angles are measured with respect to the long core axis. to 412.0 - 417.0 - (125.66-127.19) - Ground core. Carbonate breccia, 10% chlorite with a few grains of pyrite. 439.8 134.05 436.0 - 439.8 - (132.89-134.05) - Chlorite-carbonate breccia, 10% chlorite as a replacement and in small patches. A few grains of pyrite with the chlorite. 439.8 - 444.0 - (134.05-135.33) - Lost core. 447.1 136.28 Chlorite breccia, 10% chlorite in small patches and as a replacement. Some carbonate also present. 447.1 - 454.8 - (136.28-138.62) - Lost core. 458.3 139.69 Chlorite breccia, 10% chlorite in small patches and as a replacement, some carbonate throughout. 458.3 - 520.6 - (139.69-158.68) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement. 523.2 159.47 Chlorite breccia, 10% chlorite in small patches and as a replacement. 10203 Chlorite breccia over 2". 579.0 176.48	DESILE COS Drill Contractor - N. Morissette Azimuth: S65°M Dip: -60° TH DESCRIPTION NOTE: All angles are measured with respect to the long core axis. sample number width to 412.0 - 417.0 - (125.66-127.19) - Ground core. Carbonate breccia, 10% chlorite with a few grains of pyrite. 439.8 134.05 436.0 - 439.8 - (132.89-134.05) - Chlorite-carbonate breccia, 10% chlorite as a replacement and in small patches. A few grains of pyrite with the chlorite. 439.8 - 444.0 - (134.05-135.33) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement. Some carbonate also present. 447.1 136.28 Chlorite breccia, 10% chlorite in small patches and as a replacement, some carbonate throughout. 458.3 139.69 Chlorite breccia, 10% chlorite in small patches and as a replacement, some carbonate throughout. 10202 3.5 1.07 458.3 - 520.6 - (139.69-158.68) - Lost core. Chlorite breccia, 10% chlorite in small patches and as a replacement. 10203 2.6 1.79 Chlorite breccia over 2". 579.0 Quartzite, pinkish to grey with small carbonate rhombs replacing the quartzite. 534.6 - 535.8 - (162.95-163.31) - Chlorite-carbonate breccia, 10% chlorite	DESCRIPTION DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Sample number width from	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Sample number width from to	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Sample number Note Note	DESCRIPTION Description	DESCRIPTION DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Sample number Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are measured with respect to the long core axis. Note: All angles are located axis. Note: All angles are measured with respect to the long core axis. Note: All angles are located axis. Note: All angles axis. Note: All angles are located axis. Note: All angles are located axis. Note: All angles axis. Note: All angles axis. Note: All angles axis. Note: All angles axis. Note: All a



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5085.7N, 9566.5E

HOLE: N-4. Core size:

Dip Tests:

Section: 0+50NW, 2+85NE Length: 601.0 (183.2m) Elevation: 312.3m

Started: Oct. 20, 1980 Completed: Oct. 27, 1980

	DRILL LOG	Elevation: 31 Drill Contractor - N. Morissette Azimuth: S65°	W Dip: -60°		Logae	eted: Oc i by: P.	McLean		•
DEPT	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core ax	sample	width	from	to		ASSAYS	
from	to	NOTE. Att digites are measured with respect to the rong tore do	(13. Hamber						
		544.4 - (166.0) - Chlorite-carbonate breccia over 2". Sulphides absent. 548.2 - 552.0 - (167.2-168.4) - Chlorite-carbonate breccia, 20% chlorite replacing large carbonate rhombs. 5% granular pyrite throughout. 559.0 - 565.0 - (170.5-172.3) - Altered greywacke section.	10205	3.8 1.16	548.2 167.09	552.0 168.25			
579.0 176.48	601.0 183.19	Carbonate breccia, pinkish grey quartzite contains coarse carbonate rhombs to $\frac{1}{2}$ " also stringers and patches of carbonate. Local coarse pyrite associate with the carbonate.	up ited						
		601.0 - (183.19) - End of Hole.							



Property: 772,D.R. Watt Property Location: Scadding Twp, Ontario Co-ordinates: 5049.6N, 9561.8E

HOLE: N-5. Core size:

Dip Tests:

Section: 0+50SE

Length: 507.0 (154.5m)

Started: Oct. 28,1980 Completed: Nov. 5, 1980

Elevation: 311.8m Azimuth: S65 W Dip: -45° DRILL LOG Drill Contractor - N. Morissette

DEP	тн	DESCRIPTION	Azimuth: S65°w Dip: -4	width	from	to	McLean	ASSAYS
from	to	NOTE: All angles are measured with respect to th	e long core axis. number				Au	
11011			· · · · · · · · · · · · · · · · · · ·					
0.0	10.0 3.05m	Casing	·			•		
10.0 3.05	19.4 5.91	Quartzite, highlt altered, bleached white somewhat crushed in The odd narrow chlorite seam, occasional grain of pyrite. Bl at 10.2 feet.	appearance. eb or chalco					
19.4 5.91	64.7	Serpent quartzite, dark to light grey to pinkish grey, locall 30.0-31.0 Bedding at 70° to the core	y mottled.					
64.7 19.72 73.0 22.25	73.0 22.25 78.0 23.78	Diabase dyke, fine grained dark grey. Lower contact at 60° to 73.0-78.0 Chlorite breccia, altered reddish quartzite, with seams and the odd small patch of chlority associated pyrite	brecciated 10206	5.0 1.53	73.0 22.25	78.0 23.78	0.002	
78.0 23.78	93.6 28.53	Quartzite, altered brownish pink						
93.6 28.53	99.5	Carbonate breccia, bleached white quartzite with frequent car and patches with some granular py. Rare chlorite.	conate stringers					
99.5 30.33	147.3 44.90	Quartzite, light to dark brown to pinkish grey. Some short a 114.4-121.6 Altered brecciated bleached white section	ltered sections.					
.47.3 14.90	153.6 46.82	Chlorite breccia, 10% chlorite in seams and patches in altere Sulphides absent.	d white quartzite. 10207	3.0	147.3 44.90	150.3 45.81	1	



Property: 772, D.R. Watt Property Location: Scadding Twp, Ont. Co-ordinates: 5049.6N, 9561.8E

HOLE: N-5 Core size:

Dip Tests: Started: Oct. 28,1980 Completed: Nov. 5,1980

Section: 0+50SE Length: 507.0 (154.5m) Elevation: 311.8m Azimuth: S65 W Dip:

Logged by: P. McLean

DRILL LOG Drill Contractor - N. Morissette

DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core ax	sample xis. number	width	from	to		ASSAYS	
from	to	Note: Att angles are measured with respect to the long core as	X13. Humber				Au		
		147.3-150.3 Chlorite breccia, 10% chlorite in seams and patches. Sulphides absent.	10207	3.0	147.3 44.90	150.3 45.81	0.002		
		150.3-153.6 Chlorite breccia, 10% chlorite in seams and patches, sulphides absent.	10208	3.3	150.3 45.81	153.6 46.82	Nil		
153.6 46.82	189.5 57.76	Quartzite, grey to pinkish grey to brown							
189.5 57.76	212.5	Quartzite, crushed and altered section carbonatized sections with local patches of granular pyrite. A few narrow chlorite seams.							
		192.6-194.0 Quartzite, altered, carbonatized with some narrow chlorite seams with some associated granular pyrite	10209	1.4	192.6 58.71	194.0 59.13			
		205.6 4" carbonate stringer with 25% coarse granular pyrite.							
212.5 64.77	223.5 .68.12	Carbonate breccia, alternating sections of quartzite and carb. breccia. The odd small patch of chlorite within.	ne .						
223.5 68.12	230.8 70.35	Quartzite, altered, light grey to whitish							
230.8 70.35	256.9 78.30	Chlorite-carbonate breccia, 5% chlorite in seams and small patches with the carbonate stringers and patches							
		232.5-235.5 Chlorite-carbonate breccia, 5% chlorite in small patches and seams. The odd bleb of pyrite with chlorite	10210	3.0	232.5	235.5	1 1		
		238.2-239.7 Chlorite-carbonate breccia, 10% chlorite in seams and patches with local fair pyrite blebs with chlorite.	10211	1.5	238.2 72.60	239.7	0.002		



Property: 772,D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5049.6N, 9561.8E

HOLE: N-5 Core size:

Dip Tests:

Started: Oct. 28,1980 Completed: Nov. F,1980 Logged by: P. McLean

Section: 0+50SE Length: 507.0 (154.5m) Elevation: 311.8m Azimuth: S65 W Dip: -45° DRILL LOG Drill Contractor - N. Morissette

DEP	тн	NO	DESCRIPTION TE: All angles are measured with respect to the long core axis.	sample number	width	from	to	Au	ASSAYS	;
from	to	NU	ie: All angles are measured with respect to the long core axis.	Tramber						
		235.0	Lost water							
		239.7-244.0	Chlorite-carbonate breccia, 3% chlorite in narrow seams with local associated blebs of pyrite	10212	4.3	239.7 73.06	244.0 74.37	Nil		
		244.0-246.0	Chlorite-carbonate breccia, 5% chlorite with fair pyrite in the chloritic slips and also in the quartzite	10213	2.0	244.0 74.37	246.0 74.98	0.002		
		246.0-250.0	Quartzite, altered reddish brown, a few narrow chlorite seams and the odd grain of pyrite	10214	4.0		250.0 76.25	0.002		
	-	250.0–251.6	Quartzite, 5% chlorite in narrow seams with grains of pyrite	10215	1.6 0.5	250.0 76.25	251.6 76.69	0.002		
		251.6-253.1	Chlorite breccia, 10% chlorite in narrow seams which are well mineralized with blebs and cubes of py.	10216	1.5	1.	2 53.1	0.02		
		253.1-254.9	Chlorite breccia, 10% chlorite in narrow seams and as a replacement. Local pyrite with the chlorite.	10217	1.8	253.1 77.15	254.9 77.70	Nil		
		254 .9 –256 .7	Chlorite breccia, 25% chlorite with 10% vuggy pyrite. Some grey vein quartz. Good grain of V.G. at 255.3 and grain at 255.4 and also 255.8	10218	1.8	254.9 77.70	256.7 78.24	.27		
256.9 78.30	350.0 106.68	Quartzite, mos	tly grey with some pink to reddish brown sections.							
		256.7-258.4	Quartzite, grey, unaltered, includes 6" of coarse granular pyrite	10219	1.7 .52	256.7 78.24	258.4 78.76			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5049.6N, 9561.8E

HOLE: N-5 Core size:

Section: 0+50SE Length: 507.0 (154.5m) Elevation: 311.8m Azimuth: S65 W Dip: -45°

Dip Tests: Started: Oct. 28,1980

Completed: Nov. 5,1980 Logged by: P. McLean

DRILL LOG	Drill	Contractor	-	N.	Morissette	
			-			_

250	. 7.1		DESCRIPTION	sample	width	from	to		ASSA	7 S
DEP		NO	TE: All angles are measured with respect to the long core axis.	number	width	110111	10	Au		
! from	to									_
		273.5-275.4	Carbonate breccia, 5% granular py.	10220	1.9 .58	273.5 83.36	275.4 83.94	.005		
350.0	353.2	Quartzite, al	tered salmon pink, grades into chlorite breccia				İ			
353.2	357.0	Chlorite brec	cia							
		353.2-355.0	Chlorite breccia, salmon pink quartzite with 10% chlorite in small patches. A little pyrite with the chlorite	10221	1.8	353.2 107.60	355.0 108.21	.002		-
353.2 107.66	357.0 108.82	Chlorite brec	cia.							
		355.0-357.0	Chlorite breccia, 40% chlorite with 5% pyrite in blebs and cubes up to 1/4" with the chlorite	10222	2.0 .61	355.0 108.21	357.0 108.8			
	ļ 1	357.0	Ground and run over core for at least 1 ft.							
357.0 108.82	361.3 110.13	Quartzite weal	kly chloritized, sulphides are rare							
100.02	110.13	357.0-359.0	Altered quartzite, 5% chlorite as a replacement. Sulphides absent.	10223	2.0	357.0 108.82	359.0 109.4	Nil		
361.3 110.13	368.8 112.41	Chlorite breco	cia, 10% chlorite, locally well mineralized with pyrite in blebs							
		361.3-363.6	Chlorite breccia, 10% chlorite in seams and small patches up to 1". Local coarse pyrite in chlorite in cubes and blebs.	10224	2.3 .70	361.3 110.13	363.6 110.83		Average elimination and district special speci	
		363.6-364.8	Chlorite breccia, 10% chlorite in seams, patches and as a replacement. Some fair pyrite throughout. Grain of v.g. in chlorite at 364.1	10225	1.2	363.6 110.83	364.8 111.19	.13		



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp, Ontario

Co-ordinates: 5049.6N, 9561.8E

HOLE: N-5 Core size:

Dip Tests:

Section: 0+50SE

Length: 507.0 (154.5m) Elevation: 311.8m Azimuth: S65 W Dip: -45°

Started: Oct. 28,1980 Completed: Nov. 5,1980 Logged by: P. McLean

D. T. C.	· -		DESCRIPTION	sample	width	from	to	Au	AS	SAYS		
DEF		NO	TE: All angles are measured with respect to the long core axis.	number	WIGGI	110111	00					
from	to		·									_
		364.0	Ground core on block near v.g.								1	
		364.8-366.8	Chlorite breccia, 15% chlorite in patches and seams, well mineralized with 10% coarse pyrite in cubes up to 1/4" and in blebs.	10226	2.0	364.8 111.26	366.8 111.80	.11				
		366.8-368.8	Chlorite breccia, 5% chlorite in seams and small patches with the odd pyrite cube	10227	2.0	366.8 111.80	368.8 112.41	.01				
368.8 112.41	377.6 115.09	Quartzite, alt	tered salmon pink, some crushed sections containing narrow s. Sulphides absent.	-								
377.6 115.09	396.4 120.82	Quartzite, bro	wnish, less altered than the previous section									
		385.0-386.5	Chlorite-carbonate breccia, 10% chlorite in seams and as a replacement. 3% pyrite in blebs and cubes. Some carbonate rhombs present.	10228	1.5		386.5 117.81	.02				
		392.6-394.1	Carbonate-chlorite breccia, coarse carbonate rhombs and patches, also seams of chlorite which are mineralized with pyrite.	10229	1.5		394.1 120.12	.03				
396.4 120.82	418.0 127.41	Carbonate brec rhombs of carb rhombs.	cia, salmon pink quartzite with patches, stringers and large conate. Locally some chlorite partly replacing the carbonate									
		397.8-400.0	Carbonate breccia, 5% chlorite replacing carbonate rhombs, and in narrow seams, and as a replacement of the quartzite. A few scattered sulphides.	10230	3.2	397.8 121.25	400.0	.005				
										}	İ	•



Property: 772, D.R. Watt Property

Location: Scadding Two, Ont. Co-ordinates: 5049.6N, 7561.8E

HOLE: N-5 Core size:

Section: 0+50SE

Length: 507.0 (154.5m) Elevation: 311.8m

Dip Tests: Started: Oct. 28,1980 Completed: Nov. 5,1980

	DRILL LO	Drill Contractor - N. Morissette	Azimuth: S65 w Dip: -45	0	Logged	by: P.	McLear	1	
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to	sample	width	from	to		ASSAYS	
from	to								
418.0 127.41	455.0 138.69	Siliceous greywacke, dark grey with some narrow pinkish qua included. Quartzite beds contain patches and rhombs of car some chlorite as a weak replacement of the greywacke. Fine pyrite common. Some bedded sections at 60 to the core.	rhonate Iocally		·				
		443.0-448.0 Siliceous greywacke, weakly chloritized. Spyrite throughout.	3% disseminated 10231		443.0 135.03	448.0 136.55	Nil		
455.0 138.69	472.5 144.02	Carbonate breccia, quartzite light pinkish with patches and white carbonate. Minor chlorite around the rims of the car	rhombs of thombs.						
472.5 144.02	488.5 148.90	Greywacke, dark grey, well bedded sections at 60% to the cobeds of pinkish quartzite included. Greywacke is mineraliz pyrite throughout. Some sections faintly chloritic.	ore. Some narrow eed with fine						
	• .	480.7-484.1 Chlorite-carbonate breccia, fairly well min blebs of py.	eralized with 10232			484.1 147.56	Nil		
488.5 148.90	507.0 154.54	Carbonate breccia, pinkish quartzite with carbonate stringe rhombs.	ers and large			·			
		507.0 . End of hole 154.54							
-	·								



Property: 772, D. R. Watt Property Location: Scadding Twp, Ont. Co-ordinates: 5049.6N, 7561.8E

HOLE: N-5 Core size:

Section: 0+50SE

Length: 507.0 (154.5m)
Elevation: 313.8m

Dip Tests: Started: Oct. 28,1980 Completed: Nov. 5,1980

DRILL LOG Drill Contractor - N. Morissette Azimuth		Azimuth: S65 W	ition: 311.8m oth:S65 W Dip: -45°			Completed: Nov. 5,1980 Logged by: P. McLean			
DEPTH from to	DESCRIPTION NOTE: All angles are measured with respect to t			width	from	to	ASSAYS		
	NOTE: All angles are measured with respect to the lo	ne long core axis.					Assay oz/ton	Assay gms/tpnne	
	Ore Sections 1. 2.		10218	1.8 0.6 3.2 .98	į	256.7 78.29 366.8 111.87]	9.258 2.8 4.046 1.2	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5056.9N. 9541.0E

HOLE: N-6 Core size:

Dip Tests:

Started: Nov. 3/80

Completed: Nov. 12/80

Section: 0+00, 1+75NE

Length: 627.0' (191.1m)

Elevation: 315.5m

Azimuth: S65°W Dip: -70° Logged by: P. McLean

DRILL LOG Drill Contractor - N. Morissette **ASSAYS** samole DESCRIPTION width from to DEPTH number NOTE: All angles are measured with respect to the long core axis. Au bz/toh from to 0.0 5.0 Casing. 1.52m 0.0 5.0 145.6 Serpent quartzite, grey to pinkish grey to reddish brown with local 1.52m 44.38m brecciated and bleached sections. 10.0-15.0 - Brecciated section, bleached pinkish to white. Minor 3.0m-4.6m carbonate, the odd chlorite slip. 23.0-29.0 - Carbonate breccia section, white to pinkish with some 7.0m-8.8m carbonate stringers and patches. - Bedding at 85° to the core. 60.0 18.3m 63.2-71.5 - Diabase dyke, dark grey, fine grained top contact sharp 19.3-21.8m at 70° to the core. 80.0-94.0 - Brecciated, altered section, locally crushed in appearance, 24.4-28.7m sections of carb. breccia included. Bleached pinkish to white. A few blebs of granular pyrite. 91.5-92.5 - ½" quartz stringer parallel to core. 27.9-28.2m - Bedding at 70° to the core. 139.0 42.4m Chlorite breccia, 10% chlorite in small patches. 145.6 149.0 44.38m 45.42m 145.6-149.0 - Chlorite breccia, 10% chlorite in small patches and as a 10235 3.4 145.6 | 149.0 | 0.002 replacement. A little pyrite with the chlorite. 1.0m 44.38m 45.42m



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5056.9N, 9541.0E

HOLE: N-6 · Core size:

Section: 0+00, 1+75NE Length: 627.0' (191.1m) Elevation: 315.5 m Azimuth: S65°W Dip: -70°

Dip Tests: Started:

Nov. 3/80 Nov. 12/80 Completed: Nov. 12/

	DRILL LOG	Elevation: 315.5 Drill Contractor - N. Morissette Azimuth: S65°W		o		ted: 「 ! by: P.	lov. 12/8 McLean	U	
DEP	тн	DESCRIPTION	sample	width	from	to		ASSAYS	· · · · · · · · · · · · · · · · · · ·
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/ton		
149.0 45.42m	154.0 46.94m	Quartzite, altered brownish to pink, 5% chlorite as a replacement in narrow seams.				:	4		
154.0 46.94m	165.5 50.45m	Chlorite breccia, 10% to 20% chlorite in seams and in small patches, and as a replacement. 154.0-156.5 - Chlorite breccia, 10% chlorite in seams and small patches. Sulphides rare.	10236	2.5	154.0	156.5			
		156.5-160.2 - Chloritic quartzite, reddish brown with seams of chlorite, also some carbonate.	10237	0.8m 3.7 1.1m	46.94m 156.5 47.70m	160.2	0.002		
	- .	160.2-162.1 - Chlorite breccia, 20% chlorite in patches and small replacement grains. Rare pyrite.	10238	1.9 0.6m	160.2 48.83m	262.1 49.41n			
		162.1-163.1 - Chlorite breccia, 20% chlorite in patches and as a replacement. Two grains of V.G. in chlorite patch at 162.3. No sulphides noted.	10239	1.0 0.3m	162.1 49.41m	163.1 49.71n			
		163.1-164.1 - Quartzite, altered, slightly chloritic.	10240	1.1 0.33m	163.1 49.71m	164.2 50.05m			
		164.2-165.5 - Chlorite breccia, 15% chlorite in small patches and as a replacement. Rare pyrite on seams. Speck of V.G. at 165.2.	10241	1.3 .40m	164.2 50.05m	165.5 50.45m			
		165.5-167.5 - Chlorite breccia, 10% chlorite in small patches and replacement. Rare py.	10242	2.0 .61m	165.5 50.45m	167.5 51.05m	.10		
165.5 50.45m	239.7 73.06m	Quartzite, well altered pinkish grey. Frequent chlorite seams and local chlorite replacement. Appears to be weakly developed section of breccia zone.				·			
		167.5-171.0 - Chloritic quartzice, 5% chlorite in narrow seams and as a replacement. Sulphides rare.	10243	3.5 1.07m	167.5 51.05m	171.0 52.12m			



Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5056.9N, 9541.0E

HOLE: N-6 . Core size:

Dip Tests: Started:

Completed:

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Nov. 3/80 Nov. 12/80

Section: 0+00, 1+75NE Length: 627.0' (191.1m) Elevation: 315.5m

	·	Drill Contractor - N. Morissette Azimuth: S65°W DESCRIPTION	sample				McLean	ASSAYS	
DEP ⁻ from	TH to	NOTE: All angles are measured with respect to the long core axis.		width	from	to	Au oz/tom		
		180.4-183.5 - Chloritic quartzite, 5% chlorite in narrow seams and as a replacement. Local disseminated pyrite.	10244	3.1 0.94m	180.4 54.99m	183.5 55.93m			
		187.6-189.4 - Brecciated well mineralized section 15% granular pyrite with some chalco and a speck of arsenopyrite. Not chloritic.	10245	1.8 0.55m	187.6 57.18m	189.4 57.73m	0.005		
		192.0-197.0 - Chloritic quartzite, highly altered. Frequent narrow chlorite seams which are mineralized with pyrite.	10246	5.0 1.52m	192.0 58.52m	197.0 60.05m			
		197.0-202.0 - Chloritic quartzite, frequent narrow chlorite slips, mineralized throughout with pyrite which is associated with the slips.	10247	5.0 1.52m	197.0 60.05m	202.0 61.57m			-
		202.0-207.0 - Chloritic quartzite, frequent narrow chlorite slips which are mineralized with pyrite and some chalco. Sulphide heavily disseminated over short sections.	10248	5.0 1.52m	202.0 61.57m	207.0 63.09m			
210.0 64.0m	219.8 67.0m	Quartzite, bleached white. Some carbonate stringers, chlorite slips and sulphides rare in this section.							
		219.8-225.0 - Quartzite, altered with frequent narrow chlorite slips. Disseminated pyrite throughout.	10249	5.2 1.58m	219.8 67.00m	225.0 68.58m			
		225.0-230.0 → Altered quartzite, frequent narrow chlorite slips, disseminated pyrite throughout.	10250	5.0 1.52m	225.0 68.28m	230.0 70.11m			
		230.0-235.0 - Altered quartzite with frequent narrow chlorite slips. Disseminated pyrite throughout.	10251	5.0 1.52m	230.0 70.11m	235.0 71.63m			
		235.0-239.7 - Quartzite, less altered than the previous section, occasional chlorite seams, minor disseminated pyrite.	10252	4.7 1.43m	235.0 71.63m	239.7 73.06m	Nil		



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R.Watt Property

Scadding Twp., Ont. Location: Co-ordinates: 5056.9N, 9541.0E HOLE: N-6 Core size:

Dip Tests:

Section: 0+00, 1+75NE Length: 627.0' (191.1m) Elevation: 315.5m

Started: Nov. 3/80 Completed: Nov. 12/80

Azimuth: S65°W Dip: -70°

Logged by: P. McLean

	T 11	DESCRIPTION	sample	width	from	to		ASSAYS	
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	widen	I r Oili		Au oz/ton		
239.7 73.06m	257.0 78.33m	Chlorite breccia, 10% to 40% chlorite alternating with some unbrecciated sections. Chlorite in seams, patches and as a replacement. Some white carbonate with the chlorite throughout. Good pyrite and pyrrhotite with the chlorite.							
		239.7-240.9 - Chlorite breccia, 10% chlorite in seams and patches in crushed and altered whitish pink quartzite. 5% pyrite in blebs and seams, also a little chalco.	10253	1.2 0.37m	239.7 73.96m				
	-	240.9-242.2 - Chlorite breccia, 50% chlorite in seams and patches. 10% vuggy pyrite in patches up to ½" and in irregular seams. Small fracture with V.G. at 241.7.	10254	1.3 0.40m	240.9 73.43m		.08		
		242.2-244.3 - Quartzite, altered with 5% chlorite in seams and as a replacement. The odd grain of pyrite.	10255	2.1 0.64m	242.2 73.82m	244.3 74.46m			
		244.3-246.2 - Chlorite breccia, 30% chlorite in seams and patches. 10% pyrrhotite with some pyrite and a little chalco.	10256	1.9 0.58m	244.3 74.46m		.01		
		246.2-247.4 - Quartzite, grey pink, altered. A few chlorite slips and the odd grain of pyrrhotite.	10257	1.2 0.37m	246.2 75.04m	247.4 75.41m			
		247.4-248.9 - Chlorite breccia, 10% chlorite in altered quartzite, locally blebs and seams of pyrrhotite.	10258	1.5 0.46m	247.4 75.41m		.002		
		248.9-250.9 - Chlorite breccia, 30% chlorite well mineralized with 7% pyrite in blebs and seams. Fine speck of V.G. in pyrite at 249.8.	10259	2.0 0.61m	248.9 75.87m		.005		
. *		250.9-252.5 - Chlorite breccia, 5% chlorite in seams, a little associated pyrrhotite.	10260	1.6 0.49m	250.9 76.48m		.002		

DRILL LOG

Drill Contractor - N. Morissette

Property:

772, D.R. Watt Property

Location:

Location: Scadding Twp., Ont. Co-ordinates: 5056.9N, 9541.0E

HOLE: N-6 Core size:

Section:

Dip Tests:

Section: 0+00, 1+75NE Length: 627.0' (191.1m) Elevation: 315.5m Azimuth: S65°W Dip: -70°

Started: Nov. 3/80 Completed: Nov. 12/80 Logged by: P. McLean Started:

		DESCRIPTION	sample	width	from	to		ASSAYS
DEP from	to to	NOTE: All angles are measured with respect to the long core axis.	number	WIUCII	Tron		Au oz/ton	
		252.5-254.6 - Chlorite breccia, 25% chlorite in seams and patches, well mineralized with 10% pyrrhotite with some pyrite and a little chalcopyrite.	10261		252.5 76.96m	254.6 77.60m	Nil	
		254.6-257.0 - Chlorite-carbonate breccia, 5% chlorite in narrow seams, sulphides rare.	10262	2.4 0.73m	252.6 77.60m	257.0 78.34m	Nil	
257.0 78.33m	ے68.5 81.84m	Carbonate breccia, pink to brownish quartzite with stringers and patches of white carbonate over short sections.						
		260.0-261.2 - Carbonate breccia, 5% coarse granular pyrite with the carbonate.	10263		260.0 79.25m	261.2 79.62m		
268.5 81.84m	322.0 98.15m	Quartzite, pinkish grey, altered with frequent hairline chloritic slips. Sulphides rare.						
		300.0-303.4 - Chlorite breccia, 10% chlorite in narro, seams and small patches. Rare grains of pyrite.	10264	3.4 1.04m	300.0 91.44m	303.4 92.48m	0.002	
		314.5-316.5 - Chlorite breccia, 10% chlorite in seams and small patches. The odd grain of pyrite.	10265		314.5 95.86m	316.5 96.47m		
1 1		318.6-319.0 (97.11-97.23m) - Chlorite breccia, 20% chlorite, sulphides absent.						
322.0 98.15m	534.0 162.77m	Quartzite, light pinkish grey, gradually becoming less altered. Contains narrow bleached whitish sections with carbonate stringers and small patches.						
į.		· 420.8 (128.26) - 3" chloritic section with some pyrite.						
		$442.0-443.5$ (143.72-135.18m) - Bedding at 60° to the core.						
		444.0 (135.33m) - 6" chloritic section.						



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5056.9N, 9541.0E

HOLE: N-6. Core size:

Section: 0+00, 1+75NE

Length: 627.0' (191.1m) Dip Tests:

Elevation: 315.5 m

Started: Nov. 3/80 Completed: Nov. 12/80

DRILL LOG Drill Contractor - N. Morissette Azimuth: S65°W Dip:-70° Logged by: p. McLean ASSAYS DESCRIPTION samole width from to DEPTH number NOTE: All angles are measured with respect to the long core axis. Au oz/toh gm/tonnel from to 500.6-502.5 (152.58-153.16m) - Weakly chloritic section. 528.9-534.0 (161.21-162.76m) - Quartzite becoming somewhat crushed and altered. 545.0 Carbonate breccia, 20% carbonate in narrow stringers and small patches in 534.0 dark grey quartzite. Angular fragments of quartzite locally. 162.77m 166.12m Interbedded quartzite and greywacke, bedding at 60° to the core, some local 545.0 580.0 166.12m 176.79m sections of acrbonate breccia. Greywacke-argillite, dark grey, bedding at 60° to the core. Occasional 627.0 580.0 176.79m narrow pinkish quartzite beds. 191.11m 597.0-599.0 (181.97-182.58m) - Ground core. 619.0-621.0 (188.67-189.28m) - Ground core. 627.0 (191.11m) - End of hole. Ore Sections . 10241-2 164.2 167.5 0.167 5.726 3.3 50.05m | 51.05m | 1.00m .05 1.8

....TED

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4928.9N, 9507.7E

Dip Tests: Started: Nov. 14/80

HOLE: 11-7 -

Core size:

Section: 3+50SE, 1+00SW Length: 342.0 (104.2m)

Elevation: 308.3 m

Completed: Nov. 16/80 Logged by: P. McLean

DK. LUG Azimuth: S65°W Dip: -45° Drill Contractor - N. Morissette ASSAYS DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au from to Casing. 0.0 12.0 0.0 3.66m 90.0 Serpent quartzite, light to dark grey with some altered salmon red sections. 12.0 3.66m 27.43 12.0-13.0 - (3.66-5.49) - Salmon pink altered quartzite, some carbonate stringers. 50.0-90.0 - (15.24-27.43) - Core very blockey and broken up. 88.0-90.0 - (26.82-27.43) - Brick red quartzite with a few chlorite seams with Olivine diabase, top contact at 80° to the core. Fine grained at contact. 90.0 171.5 becoming much coarser, dark grey fresh and massive in appearance. 27.43m 52.27m 164.0-171.5 - (49.99-52.27) - Becoming fine grained to lower contact. 177.5 Quartzite, pinkish, occasional chlorite seam. 171.5 54.10m 52.27m Chlorite breccia, 10% chlorite in narrow seams and small patches. Chlorite is 221.5 177.5 usually mineralized with fine pyrite. 54.10m 67.51m 177.5-180.0 - Chlorite breccia, brick red quartzite with 10% chlorite in narrow 10266 2.5 177.5 180.0 seams with some associated pyrite. Poor core recovery. .77 54.10m 54.87m 180.0-183.5 - Chlorite breccia, 5% chlorite in seam and as a replacement. 10267 3.5 180.0 183.5 .002 Some disseminated pyrite throughout. 54.87m 55.93m 1.06 183.5-187.0 - Chlorite breccia, 10% chlorite in narrow seams and as a replace-10268 3.5 183.5 187.0 Nil ment and in small patches. 3% disseminated pyrite, in part associated with 55.93m 57.00m 1.07 the chlorite.



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 4928.9N, 9507.7E

Core

HOLE: N-7 . Core size:

Section: 3+50SE, 1+00SW Length: 342.0 (104.2m) Elevation: 308.3 m Azimuth: S65°W Dip: -45°

Dip Tests: Started: Nov. 14/80 Completed: Nov. 16/80 Logged by: p. McLean

DEPTH		DESCRIPTION	sample number	width	from	to	ASSAYS	
	to	NOTE: All angles are measured with respect to the long core axis.	number		·		Au	
		187.0-190.0 - Chlorite breccia, 10% chlorite in seams and small patches. 3% pyrite partly associated with the chlorite.	10269	3.0 .91		190.0 57.91m	.002	
		190.0-193.3 - Chlorite breccia, 15% chlorite with some carbonate also present. 3%-5% pyrite, mostly with the chlorite.	10270	3.3 1.01	190.0 57.91m	193.3 58.92m	Nil	
		193.3-196.0 - Chlorite breccia, 5% chlorite in narrow seams. Some associated py.	10271	2.7 .82	193.3 58.92m	196.0 59.74m	Nil	
		196.0-199.8 - Chlorite breccia, 10% chlorite in seams and small patches. Well mineralized with 5% pyrite with the chlorite.	10272	3.8 1.16		199.8 60.90m		
	-	199.8-203.0 - Chlorite breccia, 10% chlorite in seams, small patches, and as a replacement. 3% pyrite associated with the chlorite.	10273	3.2 .98	199.8 60.90m	203.0 61.88m	ทรา	-
		203.0-206.2 - Chlorite breccia, 5% chlorite with white carbonate stringers and patches. 2% disseminated pyrite throughout.	10274	3.2 .98		206.2 62.85m		
		206.2-208.9 - Chlorite breccia, 15% chlorite wiht carbonate. 5% pyrite in blebs up to 1/8" with the chlorite.	10275	2.7 .82	206.2 62.85m	208.9 63.67m	Nil	
		208.9-212.0 - Chlorite-carbonate breccia, 5% chlorite in stringers and small patches. Well mineralized with 5% disseminated pyrite, mostly with chlorite-carbonate.	10276	3.1 .95		212.0 64.62π		
		212.0-215.0 - Chlorite-carbonate breccia, 3% disseminated pyrite throughout.	10277	3.0 .91	21. ² .0 64.62n	215.0 65.53m	Nil	
		215.0-218.0 - Chlorite-carbonate breccia, 30% well mineralized with 5% pyrite in blebs and disseminated.	10278	3.0 .92		218.0 66.45m		!



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE:
Co-ordinates: 4928.9N, 9507.7E Core s

HOLE: N-7. Core size:

Section: 3+50SE, 1+00SW Length: 342.0 (104.2m)

Dip Tests: Started: Nov. 14/80 Completed: Nov. 16/80 Logged by: P. McLean

DRILL LOG	Drill Contractor - N. Morissette	Elevation: 308.3m	Comp
<u> </u>	Drill Contractor - N. Morissette	Azimuth: S65°W Dip: -45°	Logge

	רבט	T17	DESCRIPTION	sample	width	from	to		AS	SAYS	
	DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number				Αu			
			218.0-221.5 - Chlorite-carbonate breccia, 20% locally well mineralized with blebs of pyrite.	10279	3.5 1.06	218.0 66.45m	221.5 67.51m	Nil			
			221.5-224.0 - Quartzite, pinkish to dark grey, weakly chloritic, disseminated granular pyrite.	10280	2.5 .67	221.5 67.51m	224.0 68.28m	Nil			
	221.5 67.51m	241.0 73.46m	Interbedded quartzite and greywacke pinkish quartzite beds alternating with dark grey siliceous greywacke. Disseminated pyrite common in the greywacke beds. This section is weakly chloritized, mostly as a replacement, narrow sections of chlorite breccia.					•		***************************************	
			232.0-237.0 - Chloritic quartzite and greywacke, 5%-10% chlorite as a replacement and in narrow seams. Fine disseminated pyrite not associated with the chlorite.	10281	5.0 1.52		237.0 72.24n	ווא			
		• .	237.0-241.0 - Chloritic greywacke, 5% chlorite mostly as a replacement. Disseminated granular pyrite thoughout.	10282	4.0 1.22	237.0 72.24	241.0 73.46	Nil			1
	241.0 73.46m	257.3 78.43m	Chlorite breccia, 10% chlorite as a replacement and in seams and patches. Locally some pyrite with the chlorite.	_							
***			241.0-243.5 - Chlorite breccia, 10% chlorite in patches and as a replacement. Some blebs of pyrite with the chlorite.	10283	2.5 .76		243.5 74.22	Nil 1		1	
			`243.5-245.5 - Carbonate breccia, 30% carbonate with a little chlorite. Disseminated granular pyrite throughout.	10284	2.0 .61,	243.5 74.22m	245.5 74.83r				
			245.5-248.0 - Chlorite breccia, 10% chlorite in greywacke and quartzite beds. 3% pyrite in blebs in the chlorite.	10285	2.5 .76	245.5 74.83	248.0 75.59	Nil			
			248.0-251.0 - Chloritic greywacke, 5% chlorite in narrow seams and as a replacement. 3% disseminated pyrite throughout.	10286	3.0 .92	248.0 75.59	251.0 76.51			1 1	
										!	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4928.9N, 9507.7E

HOLE: N-7. Core size: '

Dip Tests:

Section: 3+50SE, 1+00SW Length: 342.0 (104.2m) Elevation: 308.3m Azimuth: S65°W Dip: -45°

Started: Nov. 14/80 Completed: Nov. 16/80

	DRILL LOC	Drill Contractor - N. Morissette	Azimuth: S65°W	n Dip: -45°		Logge	tea: No P.	ov. 16/ <u>McLear</u>	180 1	
DEP	ודט	DESCRIPTION		sample	width	from	to	•	ASSAYS	\$
from	to	NOTE: All angles are measured with respect to t	he long core axis.	number				Au		
		251.0-254.0 - Chloritic greywacke, 5% chlorite mostly as a repsection of chlorite breccia included. Disseminated pyrite.	lacement. Short	10287	3.0 .91		254.0 77.42n	.002		
		254.0-257.3 - Chlorite breccia, 15% chlorite with carbonate. seams of chlorite with a little associated pyrite.	Small patches and	10288	3.3	254.0 77.42	257.3 78.43	rii		
257.3 78.43m	293.9 89.58m	Greywacke and quartzite beds, weakly chloritic with the odd na chlorite breccia.	rrow section of							
		264.4-269.0 - (80.64-82.05) - Diabase dyke, dark grey, fine grasharp at 45 to the core.	ained. Top contact	·		<u> </u>				
		269.0-271.0 - (82.05-82.66) - Chlorite-carbonate braccia, sulpl	nides absent.							
293.9 89.58	297.2 90.59	Chlorite breccia, brick red quartzite bed 5% to 10% chlorite i patches, some associated pyrite.	n seams and small	10289	3.3 1.01	293.9 89.58	297.2 90.59			
		Economic - Chlorite breccia, 10% chlorite in seams and small replacement. Some pyrite with the quartzite.	patches and as a						1	
297.2 90.59	314.5 95.86	Quartzite, brick red, occasional narrow chlorite seams and sma	ill patches.	·						
-		.297.2-302.0 - Quartzite, altered brick red, 3-5% chlorite in n small patches. Minor pyrite.	arrow seams and	10290	4.8	297.2 90.59	302.0 92.05	.002	P	
		302.0-307.0 - Quartzite, brick red, altered. 3% chlorite in s narrow seams. Minor pyrite.	mall patches and	10291	5.0	302.0 92.05	307.0 93.57		•	,
314.5 95.86	342.0 104.24	Limestone, well bedded at 80 to the core. Alternating light somewhat chloritic beds. Epidote is common in some beds.	grey to greenish							
		342.0 - End of Hole. 104.24								}

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4957.1N, 9533.9E

HOLE: N-8 Core size:

Section: 3+00SE, 0+20NE Length: 475.0' (144.8m) Elevation: 312.0m

Dip Tests: Started: Nov. 17/80 Nov. 21/80 Completed:

		DRILL LOG	Drill Contractor - N. Morissette	Elevation: 312.0m Azimuth: S65°W Di	ip: -51 ⁰		Logged	by: P.	McLea			
			DESCRIPTION		sample	width	from	to		А	SSAYS	
-	DEP'	TH	NOTE: All angles are measured with respect to the	long core axis.	number	Wide!			Au oz/ta			
-	from	to							02/ 60	-		
	0.0 0.0	11.0 3.35m	Casing					:				
	11.0 3.35m	80.4 24.51m	Serpent quartzite. light to dark grey to pinkish grey. Local blockey core.	ly very	·							
•			18.0-20.0 (5.49-6.10m) - Ground core.	·								
-			33.0-39.0 (10.07-11.90m) - Ground core.	·								
			47.0-80.4 (14.34-24.52m) - Altered section, bleached whitish carbonate stringers and patches. Carbonate is pale green, romaraposite present. Occasional bleb of granular pyrite.		-							
: :			77.0-77.6 (23.49-23.67m) - Chlorite breccia, 10% chlorite in sulphides absent.	patches,			•					
7	80.4 24.51m	137.0 . 41.76m	Quartzite, light to dark grey, local altered and bleached sec with some whitish carbonate.	tions								
:			84.0 (25.62m) - Bedding at 75° to the core.									
s			\sim 121.5 (37.06m) - Bedding at 80° to the core.									
	137.0 41.76m	157.6 48.04m	Bleached, altered quartzite, white to pinkish with local stripatches of whitish carbonate, approaching a carbonate breccia									
	157.6 48.04m	200.4 61.08m	Quartzite, light to dark grey with some narrow altered section	ns.								
	200.4 61.08m	202.7 61.78m	Carbonate-chlorite breccia; pinkish carbonate with some narro seams, sulphides absent.	v chlorite								



772, D.R.Watt Property Property:

Location: Scadding Twp., Ont. Co-ordinates: 4957.1N, 9533.9E

HOLE: N-8 Core size:

Dip Tests: Started:

Section: 3+00SE, 0+20NE Length: 475.0' (144.8m) Elevation: 312.0 m

Nov. 17/80 Nov. 21/80 Completed:

· · · · · · · · · · · · · · · · · · ·		Drill Contractor - N. Morissette Azimuth: S65 W DESCRIPTION	Dip: -51°			by: p.	, riccean	ASSAY	S
DEP.	to	NOTE: All angles are measured with respect to the long core axis	1 • 1	width	from	to	Au oz/ton		T
from 202.7 61.78m	224.0 68.28m	Quartzite, altered with narrow chlorite seams. 206.0-211.0 - Quartzite with 5% chlorite in narrow seams and the odd patch. A few grains of pyrite with the chlorite.	10293		206.0 62.79m	211.0 64.31m	Nil		
224.0 68.22m	241.4 73.58m	216.5-218.6 - Quartzite, 5% chlorite in narrow seams and small patches. Some pyrite associated with the chlorite. Chlorite breccia, 10% chlorite in seams and small patches. Chlorite partly altered to serpentine due to diabase.	10294		216.5 66.00m				
	,	224.0-229.0 - Chlorite breccia, 10% chlorite and serpentine in small patches and seams. Rare grain of pyrite.	10295			229.0 69.80m			
	• -	229.0-234.0 - Chlorite breccia, $10%$ chlorite and serpentine in small patches and seams. The odd grain of py and po.	10296			234.0 71.32m			
•		234.0-236.0 - Chlorite breccia, 10% chlorite and serpentine in small patches Rare py.	. 10297		234.0 71.32m	236.0 71.93m			
241.4 73.58m	248.1 75.62m	236.0-237.8 - Chlorite breccia, 15% chlorite and serpentine, fairly well mineralized with seams and blebs of pyrite and some pyrrhotite. Quartzite, altered, with occasional narrow chlorite seams.	10298		236.0 71.93m	237.8 72.48m			
/ 3. JOH	75.02111	237.8-241.4 - Chlorite breccia, 10% chlorite and serpentine in patches and seams, 3% pyrite mostly in small blebs in the chlorite patches.	10299		237.8 72.48m	241.4 73.58m			
		241.4-245.0 - Quartzite, well altered, a few chlorite seams, well mineralize with 7% pyrite, disseminated and in seams.	d 10300		241.4 73.58m	245.0 74.68m			



Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4957.1N, 9533.9E

HOLE: N-8 Core size:

Section: 3+00SE, 0+20NE Length: 475.0' (144.8m) Elevation: 312.0 m Azimuth: S65°W Dip: -51°

Dip Tests: Started: Nov. 17/80

Completed: Nov. 21/80 Logged by: P. McLean

	DRILL LOG		S65 W Dip: -510		Logged	<u> </u>	McLean AS	SAYS
DEP	ТН	DESCRIPTION NOTE: All angles are measured with respect to the long cor	re axis. sample number	width	from	to	Au oz/ton	
from	to						02/ (01)	
		245.0-248.3 - Quartzite, well altered with some chlorite seams, a litt pyrite throughout.	le 10601	3.3 1.05m		248.3 75.73m		
248.1 75.62m	331.0 100.90m	Diabase, fine grained at contact, becoming medium coarse grained. Top at 45° to the core. Massive and uniform in appearance. Disseminated magnetite throughout.	contact .					
		327.0-331.0 (99.74-100.96m) - Diabase becoming fine grained to the con	tact.					
331.0 100.90m	331.5 101.04m	Ground core.	-					
331.0 100.90m	382.3 116.60m	Chlorite breccia, 10% to 20% chlorite in altered quartzite.			·			
100.9011	110.00	331.0-334.0 - Chlorite breccia, 7% chlorite in seams and small patches local py po. Some ground core.	, 10602		331.0 100.90m	334.0 101.80m		
		334.0-337.5 - Chlorite breccia, 10% chlorite partly altered to serpent Locally fair pyrite and po with the chlorite.	ine. 10603		334.0 101.80m	337.5 102.87n		
		337.5-340.8 - Chlorite breccia, 15% chlorite and serpentine with 5% fi pyrrhotite mostly with the chlorite which is in seams and patches.	ne 10604		337.5 102.87m			İ
		340.8-342.8 - Chlorite breccia, 5% chlorite and serpentine in seams an small patches. Minor pyrrhotite.	10605		340.8 103.88m			
		344.0-345.6 (104.92-105.40m) - Ground core.						
		342.8-346.6 - Chlorite breccia, 15% chlorite and serpentine in seams a small patches, 5% fine pyrrhotite with the chlorite. Note: 1.6 ft. gr			342.8 104.49m	346.6 105.65		



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4957.1N, 9533.9E

HOLE: N-8. Core size:

Section: 3+00SE, 0+20NE Length: 475.0' (144.8m) Elevation: 312.0 m

Dip Tests: Started: Completed: Nov. 17/80 Nov. 21/80

	DRILL LOG	Drill Contractor - N. Morissette	Azimuth: S65 W Dip: -5	10	Logged	by: p	McLean_	
OFDT.		DESCRIPTION	sampl	e width	from	to	Α	SSAYS
DEPT		NOTE: All angles are measured with respect to	the long core axis. numbe	r			Au oz/ton	
from		346.6-349.0 - Chlorite breccia, 20% chlorite in well brec patches. 7% pyrite and pyrrhotite in small blebs with th 349.0-351.1 - Chlorite breccia, 20% chlorite with 7% pyri in blebs with the chlorite. A little vein quartz. 351.1-354.6 - Chlorite breccia, 5% chlorite in seams and A few blebs and grains of po with chlorite. 354.6-358.5 - Chlorite breccia, 5% chlorite in seams and A few blebs and grains of po with chlorite. 358.5-362.0 - Chlorite breccia, 10% chlorite and carbonat patches which are mineralized with grains of po.	e chlorite. te and pyrrhotite 10600 as a replacement. 10600 as a replacement. 10610	.73m 8 2.1 .64m 9 3.5 1.01m 0 3.9 1.24m	346.6 105.65m 349.0 106.38m 351.1 107.02m 354.6 108.03m 358.5 109.27m	349.0 106.38r 351.1 107.02r 354.6 108.03r 358.5 109.27r 362.0	0.02 1.01 0.01 0.002 Nil	
369.0 112.55m	372.0 113.46m	362.0-365.5 - Chlorite breccia, 10% chlorite in patches w carb. Some disseminated pyrite with the chlorite. 365.5-369.0 - Chlorite breccia, 7% chlorite and carbonate seams. Some pyrite. Quartzite, pinkish with some narrow greywacke beds includ. 372.0-375.8 - Chlorite breccia, 10% chlorite mostly as a	in patches and 1061	3 3.5 1.07m	362.0 110.34m 365.5 111.41m	111.41r 369.0 112.47r	Ni 7	
		some small chlorite carbonate patches. A little pyrite w chlorite throughout. 375.8-378.8 - Chlorite-carbonate breccia, patches of chlo with local pyrite grains. 378.8-382.3 - Carbonate breccia minor associated chlorite quartzite. Minor pyrite.	rite and carbonate 1061	1.16m 5 3.0 .91m 6 3.5	375.8 114.55m 378.8	378.8 115.46r	Nil	



Property: 772, D.R.Watt Property Location: Scadding Twp, Ont. Co-ordinates: 4957.1N, 9533.9E

HOLE: N-8. Core size:

Dip Tests:

Started: Nov. 17/80 Completed: Nov. 21/80 Logged by: P. McLean

Section: 3+00SE, 0+20NE Length: 475.0' (144.8m) Elevation: 312.0 m Azimuth: S65°W Dip: -51°

	DRILL LOC		Azimuth: S65°W C	m Dip: -51 ⁰		Logged	by: P.	v. 21/8 McLear	.U	!
DEP1	ΓU	DESCRIPTION		sample	width	from	to		ASSAYS	5
from	to	NOTE: All angles are measured with respect to the	long core axis.	number		, , , ,		Au oz/ton		
382.3 116.53m	389.2 118.63m	Interbedded quartzite and greywacke, some bedded sections at to the core.	70 ⁰							
389.2 118.63m	398.C 121.31m	Chlorite breccia, 10% chlorite mostly as a replacement, also seams and patches, local pyrite.	in narrow				•			
· · · ·	-	389.2-392.7 - Chlorite breccia, 15% chlorite mostly as a replement patches also present. A little pyrite with the chlorit	acement, some	10617	3.5 1.07m	389.2 118.63m	392.7 119.70			
		392.7-398.0 - Chlorite breccia and replacement, 10% to 15% chas a replacement. Some narrow chlorite seams are mineralized	Norite mostly with pyrite.	10618	5.3 1.61m	392.7 119.70m	398.0 121.31			
398.0 121.31m	433.0 131.98m	Argillite with occasional narrow quartzite beds. Well chlori throughout, minor sulphides.	tized							
		398.0-403.0 - Chloritic argillite and altered quartzite. 10% replacement and in narrow seams. Minor pyrite.	chlorite as a	10169	5.0 1.53m	398.0 121.31m	403.0 122.84	Nil		
433.0 131.98m	443.7 135.24m	Quartzite, pale salmon pink with some narrow carbonate string rhombs. Minor chlorite seams.	ers and							
		443.0-443.7 - (135.12-135.24) - Breccia zone at contact, many could be a regolith.	small fragments,							
443.7 135.24m	475.0 144.73m	Limestone, well bedded light grey to greenish limestone. Som chloritic beds. Epidote common in some beds.	e narrow							
449.5 137.10m	451.8 137.80m	1" pink calcite stringer parallel to the core.							# # # *	
	475.0 144.78m	End of hole.		-	•					



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 Core size:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m) Elevation: 313.3 m Azimuth: S65°W Din: -45°

Dip Tests:

Started: Nov. 22/80 Completed: Nov. 27/80 Logged by: K. Larsen

·	DRILL LO	OG Drill Contractor - N. Morissette Elevation: 313.31 Azimuth: S65°W	m Dip:-45°				/. 27/80 Larsen		
ņei	PTH	DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axi:.	number		,		Au oz/ton		
0.0	8.0	Overburden/Casing.	-						
8.0 2.4	163.0 49.7	Serpent quartzite. Weakly to strongly brecciated quartzite. Patches of alteration, pink and grey with much only slightly altered subgreywacke, frequently well bedded, 60° to core. Rare isolated chlorite stringer, and small blebs of granular pyrite. 5 to 10% carbonate stringers.		-		•			
1 2 1		38.0-53.0 (11.59 - 16.17) - prominant pink alteration.							
		112.0-114.0 (34.16 - 34.77) As above.							Ť
		120.0-163.0 (36.6 - 49.7) - Well brecciated quartzite with much spotty pink alteration. Some sections very strongly brecciated with angular fragment of bright pink quartzite in a carbonate matrix.							
163.0 49.7	172.5 52.4	Argillaceous metagreywacke. Dark brownish, f.g. Occ. weakly bedded. Numerous minute specs of carbonate and very finely diss. pyrite.			•				
172.5 52.40	191.3 58.20	Chlorite breccia zone. Poorly defined. Mostly scattered lumps, bands and fracture fillings with patches of non-chloritic, only slightly altered brownish subgreywacke. Distinct pink alteration in many spots. Prominent carbonate in chlorite rich spots. Economics.							
		172.5-176.0 - First few inches argillaceous, dark brown, then pink quartzite with rare streaks of chlorite. A little very f.g. diss. py.	10575	3.5 1.07	172.5 52.61	176.0 53.68	Nil		
·		176.0-179.0 - Chlorite breccia. 10% chlorite as streaks, fracture fillings and small patches. Rare flecks of py, po.	10576	3.0 .92	176.0	179.0 54.60	Nil		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 -Core size:

Dip Tests:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m) Elevation: 313.3m Azimuth: S65 W Dip: -45

Started: Nov. 22/80 Completed: Nov. 27/80 Logged by: K. Larsen

	DRILL LO	G Drill Contractor - N. Morissette Elevation: 313.3	n Dip: -45°				v. 27/80 Larsen	·	
		DESCRIPTION	sample	width	from	to		ASSAYS	
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	***************************************	110,		Au oz/ton		
		179.0-182.0 - Chlorite breccia. 25% chlorite, mostly small patches in pink quartzite. Odd small cubes of py.	10577	3.0 .91	179.0 54.60	182.0 55.5]	0.002		1
		182.0-185.0 - Chlorite breccia. A couple of 3 to 6" wide chlorite bands, remainder pink quartzite with scattered streaks of chlorite. Rare flecks of py, po.	10578	3.0 .91	182.0 55.51	185.0 56.43	0.002		
		185.0-188.0 - Quartzite, grey brown to spotty brown, weakly brecciated. Essentially barren.	10579	3.0 .91	185.0 56.43	188.0 57.34	Nil		
		188.0-191.3 - Quartzite, dark brown to dark grey with a few patches of grey to pink alteration. 5% chlorite in patches. A few small cubes of py.	10580	3.3 1.01		191.3 58.35			
191.3 58.35	236.7	Quartzite, mostly dark grey with bands and patches of pale grey to pinkish alteration. A few spots of well brecciated material, carbonate cemented. Remainder poorly brecciated to only lightly fractured. Rare bits of chlorite.							-
		222.5-236.7 - (67.86 - 72.19) - Strong pink alteration with patches of well brecciated material. A little chlorite locally in this section.				-			
		Economics - (Trial Samples)							
		205.0-207.1 - Quartzite, dark grey with some bleaching in bands. Odd grains and small cubes of py.	10581	2.1	205.0 62.52	207.1 63.17	Nil		
		207.1-209.0 - Quartzite, quite well brecciated, carbonate cemented. A few streaks of chlorite. Odd grains of py.	10582	1.9 .58		209.0 63.75			
		223.5-225.5 - Quartzite, altered, pink, brecciated, with 3 to 5% chlorite cement. Rare grains py.	10583	2.0		225.5 68.78			
		225.5-228.0 - Quartzite, pink, fairly well brecciated. Small spots and streaks of chlorite, total less than 5%. Odd grains of py.	10584	2.5		228.0			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 · Core size:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m) Elevation: 313.3 m

Dip Tests: Started: Nov. 22/80 Completed: Nov. 27/80

		G Drill Contractor - N. Morissette Azimuth: S65°W_			Logge	d by: K.	Larsen		
ne:	PTH	DESCRIPTION	sample	width	from	to		ASSAY	S
from	to	NOTE: All angles are measured with respect to the long core axis.	number	•			Au oz/ton		
		228.0-230.2 - Chlorite bx. 5 to 10% chlorite as small patches in pink brecciated quartzite. Scattered grains py, po.	10585	2.2 .67	228.0 69.54	230.2			
		230.2-232.9 - Argillaceous subgreywacke, dark grey to dark brown, bedded, with some bleached, light grey bands. Weakly diss. minute cubes of py.	10586	2.7 .82	230.2	232.9 71.03			
		232.9-236.7 - Quartzite, pink, brecciated with odds and ends of chlorite, less than 5%. A few scattered grains of py, po.	10587	3.8 1.16	232.9	236.7 72.19			
36.7 7 2.19	317.7 96.90	Olivine Diabase, med. grained, with f.g. chilled margins. Much very f.g. diss. magnetite, pyrrhotite. Contact with upper unit sharp - 65° to core.							
17.7 96.90	406.5 123.98	Argillaceous greywacke with several pink quartzite breccia and chloritic zones.							
	•	317.7-320.0 (96.90 - 97.50) - greywacke, becoming increasingly bleached and altered. Strong chlorite slips, minor gouge, much broken core @ 320.5, possible fault 30° to core.							
		320.0-338.0 (97.50 - 103.09) - Brecciated pink to brick red quartzite. Weakly brecciated with small spots and streaks of chlorite.							
		338.0-368.0 (103.09 - 112.24) - Bedded argillaceous greywacke. Fairly much bleached in bands along bedding planes and in irreg. patches. Very weakly brecciated in local spots, accompanied by pinkish alteration and chlorite filled fractures plus carbonate. Chlorite invariable post carbonate in age.							
		368.0-385.0 (112.24 - 117.73) - Mainly pinkish altered brecciated quartzite with 5% carbonate filled fractures and rare chlorite band.							1
		385.0 - 406.5 (117.73 - 123.98) - Chloritized zone composed mainly of weakly chloritized argillaceous greywacke, very poorly brecciated with local patchy exceptions.							; ; ;



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9. Core size:

Dip Tests:

Started: Nov. 22/80

Completed: Nov. 27/80

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m)

Elevation: 313.3 m

Logged by: K. Larsen DRILL LOG Azimuth: S65 W Dip: -45° Drill Contractor - N. Morissette **ASSAYS** samole DESCRIPTION width from to DEPTH number NOTE: All angles are measured with respect to the long core axis. Αu oz/tdn from to Economics 321.0 Nil 317.7-321.0 - Argillaceous greywacke. Moderately brecciated and bleached first 10588 3.3 317.7 96.90 97.90 1.0 1.5 feet, then dark grey. Scarce small grains of py. 324.0 Nil 321.0 321.0-324.0 - Argillaceous wacke, becoming bleached, hard. Scattered grains py. 10589 3.0 98.82 .92 97.90 326.0 Nil 324.0-326.0 - Quartzite, pink to brick red, brecciated with angular lumps of 10590 2.0 324.0 98.82 99.43 .63 chlorite. A few grains and streaks of py. 328.0 0.002 326.0 326.0-328.0 - Bleached bedded argillaceous wacke, hard, pink in last 3 inches. 10591 2.0 99.43 100.04 .61 Rare small grains py. 328.0-331.5 - Pink to brick red quartzite. Well brecciated with odd streaks 328.C 331.5 0.002 10592 3.5 and small lumps of chlorite. Some irregular thin carbonate cemented fractures. 100.04 1.07 101.11 ٠. Very scarce pyrite. 331.5-334.0 - Pink to brick red quartzite. Much less brecciated than above. 10593 334.0 Nil 2.5 331.5 A few carbonated seams and chloritized fractures carrying a little pyrite. 101.11 101.87 .76 334.0-338.0 - Pink to brick red quartzite, gradually fading into grey. Very 10594 334.0 338.0 Nil 4.0 well brecciated with 5% chlorite seams. Strong pre-ore fault @ 335.0 with 1.22 101.87 103.09 angular quartzite fragments in a carbonate matrix. Scattered grains of pyrite in chlorite seams. .338.0-343.0 - Argillaceous wacke, fairly well bleached, altered with a few 10595 5.0 338.0 343.0 Nil small pink spots where brecciated. Appear barren. 1.53 103.09 104.62 343.0-348.0 - Interbedded argillite, siltstone and argillaceous wacke. 10596 348.0 Nil 5.0 343.0 Non-brecciated, massive to weakly fractured. A few carbonate streaks and seams. 1.52 104.62 106.14 Essentially barren.



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 . Core size:

Dip Tests:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m) Elevation: 313.3m

Started: Nov. 22/80 Completed: Nov. 27/80

	DRILL LOG	AZIMUCII. 303 W			209920	by:K.	Lai Seii	ASS.4YS	<u> </u>
DEPTH		DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	Au ·	7,55	<u>_</u>
from t	to -			·			oz./ton		1
		348.0-353.0 - As above, becoming weakly chloritic where slightly brecciated. A little more bleached and altered Scarce grains of pyrite.	10597	5.0 1.53	348.0 106.14	353.0 107.67			
		353.0-356.0 - Interbedded argillite and siltstone, becoming slightly more brecciated. 5% chlorite in bands and as fracture fillings. Rare flecks of py, po.	10598	3.0	353.0 107.67	356.0 108.58			
		356.0-361.0 - As above, less brecciated except 359 to 360. Some vague chlorite banding. Scarce grains and streaks of py.	10599	5.0 1.53	356.0 108.58	361.0 110.1:			1
	-	361.0-365.0 - Interbedded argillite and siltstone, massive to locally weakly brecciated, with chlorite streaks and fracture fillings where brecciated. Scattered grains of py.	10600	4.0	361.6	365.0 111.32			
	••	365.0-369.0 - As above but better brecciated with much bleaching in bands. Essentially barren.	10801	4.0 1.23		369.0 112.55			
		369.0-373.0 - Quartzite, pink alteration, well brecciated with a little carbonate, mostly small thombs. A few blebs of granular pyrite.	10802	4.0	369.0 112.55				
		373.0-377.0 - As above, less pyrite.	10803	4.0 1.22	373.0 113.77	377.0 114.99	Nil		
		377.0-380.8 - Weakly brecciated argillite and siltstone, bleached in bands. f.g. weakly diss. pyrite.	10804	3.8	377.0 114.99	380.8 116.14			
		380.8-384.2 - Argillaceous wacke, 10% chlorite as vague bands and weak replacement in poorly brecciated material. Only scattered small grains of pyrite.	10805	3.4	380.8 116.14	384.2 117.18			
	-	384.2-387.0 - As above, better brecciated, but poorly mineralized.	10806	2.8	384.2 117.18	387.0 118.03			1



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 . Core size:

Dip Tests:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m)

Started: Nov. 22/80 Completed: Nov. 27/80 Logged by: K. Larsen

Elevation: 313.3 m

	DRILL LOG	7 Vol. 1, 250, 000			Logget	by: K	Lais		SAYS
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from		Au		
from	to						oz./t	on	
		387.0-391.0 - Argillite, some interbedded siltstone, locally bleached in bands. Rare f.g. py. No chlorite.	10807	4.0	387.0 118.03	391.0 119.26			
		391.0-394.0 - Argillite, bleached in bands. Odd narrow band of chlorite, less than 5% total. Very f.g. diss. py, less than ½%.	10808	3.0 .91	391.0 119.26	394.0 120.17			
		394.0-397.0 - Argillite, moderately brecciated, weakly chloritized. Much interbedded greywacke. A little f.g. diss. py.	10809	3.0 .92	394.0 120.17	397.0 121.09			·
		397.0-401.0 - Becoming hard, quartzitic, fairly well brecciated. 3% to 5% chlorite as fracture fillings. A little f.g. diss. py.	10810	4.0 1.22	397.0 121.09	401.0			
		401.0-406.5 (122.31 - 123.98) - Dark grey, banded, bleached argillite and grey-wacke. Barren. No sample taken.							
106.5 123.98	421 ⁻ .9 128.68	Quartzite, pink brecciated in patches. 3% chlorite as fracture fillings and streaks. No sulphides observed.							
121.9 128.68	461.3 140.70	Limestone. Contact with upper unit weakly brecciated but well defined 70° to core. Well bedded 75° to 80° to core. Becoming well chloritized from 424.5 feet, generally as replacement along bedding planes but very locally as fracture filling where weakly brecciated. Possibly some amphible present. Rare small cube of pyrite. 2" fault zone at 330.2, with soft gouge, 50° to core.							
		451.5-456.0 (137.70 - 139.08) - Diabase dyke.		• • • • • • • • • • • • • • • • • • •					
		Trial Samples							
		456.0-458.0 - Limestone, 30% chlorite replacement in massive to weakly fractured well bedded limestone. A few small clusters of py near contact with diabase dyke at 456.0'.	10816	2.0	456.0 139.08	458.0 139.69			



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E

HOLE: N-9 · Core size:

Section: 2+50 SE, 182 NW

Dip Tests: Started: Nov. 22/80

Length: 532.0' (162.1 m) Elevation: 313.3m Azimuth: S65° W Dip: -45°

Completed: Nov. 27/80

	DRILL LOG		1		Logge	by: K.		ASSAYS	
DEP from	TH to	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from		Au oz/ton		
110:11		458.0-460.0 - Limestone, 20% chlorite replacement, well bedded 70°- 80° to core. Poss. some amphibole present. No sulphides noted.	10817	2.0		450.0 140.30			
		460.0-461.3 - Limestone, 20% chlorite replacement, poss. Some amphibole present. A few grains of py in last 6 inches.	10818	1.3 .40		461.3 140.70			•
461.3 140.70	471.9 143.93	Quartzite, pink, altered, brecciated and chloritized, mostly as odd rounded spots composed of concentric layers of chlorite, but also some chlorite bands. Gradually becoming less brecciated and chloritized. Contact with limestone above sharp, 70° to core.							-
		Economics.							i ,
		461.3-462.7 - Quartzite, pink, altered, brecciated with about 10% chlorite as odd rounded spots and irregular bands. Scattered small cubes of py.	10811	1.4		462.7 141.12			
		462.7-463.6 - Chlorite breccia. 20% chlorite in patches, spots and fracture fillings. 3% pyrite, mostly cubes and granular blebs.	10812	0.9		463.6 141.40			
		463.6-466.0 - Quartzite, pink, altered, poorly brecciated with odd spot of chlorite. A few grains of py.	10813	2.4		466.0 142.19			
		466.0-469.0 - Quartzite, pink, altered with scattered rounded spots of chlorite `and a single well mineralized 3/4" band at 466.8'.	10814	3.0		469.0 143.05			•
		469.0-471.9 - Quartzite, pink in patches, some chlorite replacement at beginning and end of sample, but essentially barren.	10815	2.9		471.9 143.93			
471.9 143.93	532.0 162.26	Limestone, f.g., well bedded, 70° to core, chloritic to 490.0', becoming banded chloritic in scattered patches from 476'. ½" diabase dykelet 60° to core at 488.0'. Some epidote rich thin beds 489.0 to 501.0. Numerous dark grey, slightly distorted beds.							:

DRILL LOG

NORTHGATE EXPLORATION LIMITED

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property
Ont. HOLE: N-9. Location: Scadding Twp., Ont. Co-ordinates: 4966.8N, 9522.3E Core size:

Section: 2+50 SE, 182 NW Length: 532.0' (162.1 m) Elevation: 313.3m Azimuth: S65°W Dip: -45°

Dip Tests:

Started: Nov. 22/80 Completed: Nov.27/80 Logged by: K. Larsen

		nr	SCRIPTION		AZIMULA: 305 W	sample				Larser	ASSAYS	
DEPTH from to	$\overline{}$	NOTE: All angle	S C R I P T I O N s are measured with m	respect to th	e long core axis.	sample number	width	from	to	Au oz/to	n	
532. 162.) Hole ter	32.0 - (152.81-162.2 rminated.	f) - occ. displaying	small si. ch	evron folds.				:			
		•									to the second se	
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		•	•	·								
					· .							•
					·						• • • •	: !

OM21-7E17- C-80

Property: 772, D.R.Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10 Core size:

Section: 0+00, 1+75NE Length: 418.0' (127.4m) Elevation: 315.5

Dip Tests: Started: Completed:

Dec. 1/80

Nov. 27/80.

	DRILL LOG	Azimuth:	<u>Dip: · -45⁰</u>		Logged	by:	Moriss	ette	
DEPTI	٠	DESCRIPTION	sample	width	from	to		ASSA	YS
	to	NOTE: All angles are measured with respect to the long core axis.	number		110/11		Au oz/ton		
0.0	6.0 1.83m	Casing	·						
6.0 1.83m	152.0 46.33m	Serpent quartzite, light to dark to pinkish grey. Locally brecciated and altered.			•	•			
		18.0-275. (5.49-8.39m) - Altered brecciated section, angular quartzite fragments up to 1". Rare chlorite seams.							
		40.5-46.8 (12.35-14.27m) - Diabase dyke, dark grey, fine grained. Top contact at 60° to the core.						•	
		67.0-68.0 (24.44-20.74m) - Ground core							
		125.8 (38.37m) - $\frac{1}{2}$ " quartz stringer with chlorite at 60° to the core.							
152.0 47.46m	166.0 48.00m	Quartzite, well altered and weakly chloritic with small replacement patches and narrow seams. Looks like a poorly developed chlorite breccia.							
		155.6-157.4 - Chlorite breccia, 10% chlorite in patches and narrow seams, some vein quartz. A few local grains of pyrite.	10620		155.6 47.43m	157.4 47.98m			
166.0	187.4	Chlorite breccia, 5% to 10% chlorite in seams and small patches.	·						
50.60m	57.12m	166.0-167.9 - Chlorite breccia, 5% to 10% chlorite in narrow seams. Locally good pyrite with the chlorite seams.	10621	1.9 0.30	166.0 50.60m	167.9 50.90m			
		167.9-169.2 - Chlorite breccia, 10% chlorite in seams and patches. Local coarse py in blebs up to ¼". Many small grains of V.G. at 168.6 in quartzite.	10622	1.3 .67m	167.9 50.90m	169.2 51.57π		.63	
	•	169.2-171.7 - Chlorite breccia, 10% chlorite mostly in narrow seams. Minor pyrite.	10623	2.5 .76m	169.2 51.57m	171.7 52.33m			

DRILL LOG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10 Core size:

Section: Length: Elevation: Azimuth:

0+00, 1+75NE 418.0' (127.4m) 315.5 Dip: -45⁰

Nov. 27/80

Dip Tests:
Started: Nov. 27/80.
Completed: Dec. 1/80
Logged by: Morissette

		AZIMUTh:	U1p: -45°		Logge	י עס נ	<u>Morissette</u>		_
DEP	TU.	DESCRIPTION	sample	width	from	to		SSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/ton		
		171.7-173.1 - Chlorite breccia, 10% chlorite with 30% grey vein quartz. Some pyrite with the chlorite.	10624	1.4 .43m	171.7 52.33m	173.1 52.76m			
		173.1-176.0 - Chlorite breccia, 5% to 10% chlorite and carbonate in narrow seams. Blebs of pyrite with the chlorite.	10625	2.9 .89m	173.1 52.76m	176.0 53.65m			
		176.0-178.4 - Chlorite breccia, 10% chlorite and carbonate in altered quartzite. Blebs of pyrite up to ½" fairly common with chlorite seams.	10626	2.4 .73m	176.0 53.65m	178.4 54.38m			
		178.4-181.8 - Quartzite, pinkish with 3% chlorite in small patches and seams. Some carbonate also present. Sulphides rare.	10627	3.4 1.03m	178.4 54.38m	181.8 55.41m			
	·	181.8-183.8 - Carbonate breccia, minor chlorite. Coarse granular pyrite in patches usually with the carbonate.	10628	2.0 .61m	181.8 55.41m	183.8 56.02m			
	•	185.5-187.4 - Altered mineralized section. Weakly chloritic. 10% pyrite in seams and patches.	10629		185.5 56.54m	187.4 57.12m	0.002		
187.4 57.12m	201.2 61.33m	Carbonate breccia, pinkish quartzite with patches, stringers and some rhombs.							
		190.7-191.7 - Carbonate bx, coarse granular py with carbonate stringers. A little Aspy.	10630	1.0	190.7 58.13m	191.7 58.43m	.03		! !
201.2 51.33m	215.2 65.59m	Chlorite-carbonate breccia, 5% to 10% chlorite in seams and small patches, and as a replacement of the quartzite and of the carbonate.							
		203.9-206.2 - Chlorite-carbonate breccia, 10% chlorite as a replacement of quartzite, and also replacing carbonate rhombs and patches.	10631	2.3 .70m	203.9 62.15m	206.2 62.85m			
		206.2-207.6 - Chlorite-carbonate breccia with 25% chlorite. 10% coarse pyrite with the chlorite in cubes and blebs, some chalco also present, a little vein q	10632	1.4 .43m	206.2 68.85m	207.6 63.28m	.02		



DRILL LOG

Property: 772. D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5056,4N, 9540.0E

HOLE: N-10 Core size:

Section:

Length:

0+00, 1+75NE

418.0' (127.4m)

.59m

80.13m 80.62m

F.01

Dip Tests: Nov. 27/80 Started: Completed: Dec. 1/80

Elevation: 315.5

Logged by: Morissette

Dip: -450 Azimuth: **ASSAYS** DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Αu oz/ton from to 211.9-215.2 - Chlorite-carbonate breccia, 10% chlorite in seams and small 10633 3.3 211.9 215.2 Nil patches. Good grains of pyrite with chlorite. 1.00m |64.59m |65.59m 240.0 Quartzite, light to pinkish grey, relatively unaltered. 215.2 65.59m 73.15m 262.9 240.0 Chlorite breccia, 10 to 20% chlorite in seams, patches, and as a replacement 73.15m 80.13m of pinkish quartzite. Some associated carbonate. 240.0-245.0 - Chlorite breccia, 10% chlorite as a replacement and in 5.0 240.0 10634 245.0 patches, minor py. 1.53m | 73.15m 74.68m 245.0-248.6 - Chlorite breccia, 15% chlorite with considerable white 10635 3.6 245.0 248.6 carbonate. Sulphides rare. 1.09m 74.68m 75.77m 248.6-250.5 - Chlorite breccia, 20% chlorite in patches and seams. 3% coarse 248.6 10636 1.9 250.5 0.002 pyrite in cubes and blebs with the chlorite. .58m 75.77m 76.35m 250.5-252.9 - Chlorite breccia, 20% chlorite mostly as a replacement. Cubes 10637 2.4 250.5 252.9 Nil and grains of pyrite throughout. 76.35m 77.08m .73m 252.9-257.5 - Chlorite breccia, 15% chlorite in replacement patches and in 4.6 10638 252.9 257.5 Nil seams. Minor pyrite. 1.41m 77.08m 78.49m 257.5-259.0 - Chlorite breccia, 10% chlorite in patches local coarse py with 10639 257.5 259.0 1.5 Nil chlorite. .45m 78.49m 78.94m 259.0-262.9 - Chlorite breccia, 5% chlorite in small patches and as a 259.0 10640 3.9 262.9 replacement. Pyrite rare. 1.19m 78.94m 80.13m 262.9-269.0 - Carbonate breccia, some sections are well mineralized with 10641 262.9 264.5 1.6 .02 granular pyrite.



DRILL LOG

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10 Core size:

Section: 0+00, 1+75NE Length: 418.0' (127.4m) Elevation: 315.5 Azimuth: Dip: -45°

Dip Tests: Started: Nov. 27/80 Completed: Dec. 1/80 Logged by: Morissette

		AZIMUTN:	יקוט: ביי		_ Loggeo	by; No	1336	LE	
250		DESCRIPTION	sample	width	from	to		ASSA	YS.
DEPT	н .	NOTE: All angles are measured with respect to the long core axis.	number	Widen	1 POIII		Au		
from	to						z/ton		
		265.9-269.0 - Carbonate breccia, well mineralized with 10% granular pyrite associated with the carbonate.	10642		265.9 81.05m	269.0 81.99դ			
269.0 81.99m	272.7 83.12m	Quartzite, grey, unaltered, faintly chloritic.							
272.7 83.12m	277.3 84.52m	Chlorite breccia, 15% chlorite in seams and patches, sulphides as noted.							
269.0 81.99m	272.7 83.12m	Quartzite, grey, unaltered, faintly chloritic.				·			
272.7 83.12m	277.3 84.52m	Chlorite breccia, 15% chlorite in seams and patches, sulphides as noted.							
		272.7-274.8 - chlorite breccia, 20% chlorite in seams and patches. Some coarse py with the chlorite in cubes up to ½".	10643			274.8 83.76m	.02	.01	
		274.8-277.3 - Chlorite breccia, 7% chlorite and some carbonate in patches and narrow seams, pyrite rare.	10644			277.3 84.52	.01		
277.3 84.52m	287.6 87.66m	Carbonate breccia, pinkish quartzite with patches and stringers of whitish carbonate.							
		283.5-287.6 - Chlorite increasing, replacing the quartzite and the carbonate. Chlorite-carbonate breccia, 5% chlorite, sulphides absent.	10645		283.5 86.41m	287.6 87.66m			
287.6 87.66m	350.8 106.93m	Chlorite breccia, 25% to 40% chlorite with coarse pyrite and V.G. as noted. Chlorite zones noted within this zone.	-						
		287.6-289.8 - Chlorite breccia, 40% chlorite with 10% coarse pyrite in cubes up to ½". Several grains of V.G. at 287.7 and speck of V,G. at 288.4 and 288.5	10646		287.6 87.66m	289.8 88.33m		29	



305.5, 305.8, 305.9, 306.0, 306.1, 306.6.

DRILL LOG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10. Core size:

Section:

0+00, 1+75NE 418.0' (127.4m)

Length: 418.0' (127.4m Elevation: 315.5 Azimuth: Dip: -45°

Dip Tests:

Started: Nov. 27/80 Completed: Dec. 1/80 Logged by: Morissette

		DESCRIPTION	sample		£			ASSAYS
DEPT		NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au oz/ton	
from	to						,	
		289.8-291.4 - Chlorite breccia, 50% chlorice with pyrite cubes up to 4" throughout. Speck of V.G. at 290.9 and 291.2.	10647		289.8 88.3m	291.4 88.82m		6.04
291.4 88.88m	293.2 89.43m	Chlorite zone, 65% chlorite well mineralized with pyrite, much V.G. throughout.						
		291.4-293.2 - Chlorite zone, 65% chlorite, some grey vein quartz. 15% pyrite in cubes and blebs up to ½". V.G. noted at 292.0, 292.3, 292.6 292.7, 292.8 and many grains at 293.0.	10648		291.4 88.82m	293.2 89.37m		< 13
		293.2-295.8 - Chlorite breccia, 15% chlorite in altered pink quartzite. A few grains of pyrite with the chlorite.	10649		293.2 89.37m	295.8 90.16m	.02	ć.01
295.8 90.16m	309.5 94.34m	Chlorite zone, 50% to 70% chlorite, some local vein quartz, good pyrite throughout, V.G. as noted.						
		295.8-297.5 - Chlorite zone, 65% chlorite with some grey vein quartz. 5% pyrite in blebs with the chlorite. Fine grains of V.G. at 296.3.	10650		295.8 90.16m	297.5 90.68m	0.14	÷.64
		297.5-300.5 - Chlorite zone, 50% chlorite with local heavy fine magnetite. Small blebs of pyrite throughout. Fine V.G. noted at 299.0, 299.3, 300.1, 300.3 and 300.4.	10651		297.5 90.68m	300.5 91.59n	0.08	←. 02
		300.5-302.5 - Chlorite zone, 60% chlorite, local grey vein quartz, small blebs of py throughout. Several grains of V.G. at 301.8.	10652		300.5 91.59m	302.5 92.20m		2.05
		302.5-304.5 - Chlorite zone, 70% chlorite, 5% py in blebs throughout. Approximately 50 small grains of V.G. at 303.9.	10653		302.5 92.20m	304.5 92.81m	'}	1 1
	•	304.5-307.0 - Chlorite zone, 70% chlorite with very good patches of vuggy pyrite. An unusual amount of fine V.G. in multiple grains, fine to medium coarse. V.G. noted as follows: 304.8, 304.9, 305.0, 305.1, 305.3, 305.4,305.5	10654	2.5	304.5 92.81m	1	5.54	ay Swast ka 5.69 5.84

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10 Core size:

Section: 0+00, 1+75NE Length: 418.0' (127.4m) Elevation: 315.5

Nov. 27/80

Dip Tests: Started: Nov. 27/80 Completed: Dec. 1/80

	DRILL LOG	Azimuth:	Dip: -45 ⁰	·	Logge	i by: Mo	orisse	tte	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	A. .	ASSAYS	
from	to		·				Au pz/ton		
	·	307.0-309.5 - Chlorite zone, 15% pyrite, 60% chlorite, some chalco with the py. Speck of V.G. at 308.5 and 50-60 small grains at 308.9.	10655		307.0 93.58m	309.5. 94.34m		c .56	
309.5 94.34m	322.7 98.36m	Chlorite breccia, 25% to 30% chlorite in patches and as a replacement. Local pyrite in the more chloritic sections.			! 				
		309.5-322.7 - Chlorite breccia, 30% chlorite in patches and as a replacement. Local pyrite in the more chloritic sections.	10656			311.8 95.04m	.05	02م	
		311.8-314.0 - Chlorite breccia, 50% chlorite with small blebs of pyrite throughout. Local fine magnetite. Two grains of V.G. at 312.9.	10657			314.0 95.71m	0.14	.64	i I
		314.0-315.5 - Chlorite zone, 70% chlorite with 15% pyrite in patches. Considerable fine magnetite also present.	10658			315.5 96.16m	0.34	.10	
	·	313.5-318.5 - Chlorite breccia, 30% chlorite, local pyrite in small blebs.	10659			318.5 97.08m	.02	.01	
	-	318.5-321.2 - Chlorite breccia, 25% chlorite with a few blebs of pyrite in the more chloritic sections.	10660			321.2 97.90m	.002		ſ
	-	321.2-322.7 - Chlorite breccia, 25% chlorite with a few blebs of pyrite in the more chloritic sections.	10661			322.7 98.36m	.03	.01	
322.7	329.0	Chlorite zone, 50% to 70% chlorite V.G. as noted.							! į
98.36m	100.28m	322.7-324.7 - Chlorite zone, 50% chlorite fairly well mineralized with blebs of py. Fine V.G. at 322.8 and 323.4.	10662		322.7 98.36m	324.7 98.76m	.07	ر ₂ در	
		324.7-327.0 - Chlorite zone, 60% chlorite with local coarse pyrite in blebs, also a little fine magnetite. 2 grains of V.G. at 325.4 also a grain of aspy.	10663	ı	324.7 98.76m	327.0 99.68m	. 16m	.05	



DRILL LOG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5056.4N, 9540.0E

HOLE: N-10 Core size:

Nov. 27/80

section: 0+00, 1+75NE Length: 418.0' (127.4m) Elevation: 315.5 Azimuth: Dip Tests: Started: Nov. 27/80 Completed: Dec. 1/80 Logged by: Morissette

DEPTH		DESCRIPTION		width	from	to	ASSAYS			
		NOTE: All angles are measured with respect to the long core axis.	number	Widen	. On		Au			
from 329.0 100.35m	350.8 106.99m	327.0-329.0 - Chlorite zone, 60% chlorite well mineralized with blebs of pyrite Local fine magnetite specks V.G. at 327.4 Chlorite breccia, 10% to 20% chlorite in patches and as a replacement. Local pyrite in the more chloritic sections.	.10664	2.0 .60m		329.0. 100.28π		.64		
100.3311	100.75111	329.0-330.5 - Chlorite breccia, 10% chlorite usually in round patches, sulphides rare.	106 <u>6</u> 5	1.5 .46m	329.0 100.28m	330.5 100.74n	.02	.01		
		330.5-331.4 - Chlorite breccia, 50% chlorite, includes a 1" bleb of pyrite. Several fine specks of V.G. at 330.8.	10666	0.9 .27m	330.5 100.74m		.52	16		
	٠.	331.4-335.0 - Chlorite breccia, 15% chlorite mostly as a replacement in circular blebs and small patches. The odd grain of pyrite with the chlorite.	10667	3.6 1.10m	331.4 101.01m		.01			
		335.0-338.5 - Chlorite breccia, 10% chlorite mostly as a replacement, the odd grain of py.	10668	3.5 1.07m	335.0 102.11m		.005			
		338.5-342.0 - Chlorite breccia, 10% chlorite in salmon red quartzite, mostly as a replacement. Sulphides absent.	10669	3.5 1.07m	338.5 103.18m		.005			•
- Carallel State of the Carallel State of th		342.0-345.0 - Chlorite breccia, 10% chlorite in salmon red quartzite. The odd grain of pyrite with the more chloritic sections.	10670	3.0 .92m	342.0 104.24m		.02	.01		
	-	345.0-349.0 - Chlorite breccia, 10% chlorite in salmon red quartzite in small patches and circular replacement blebs. A few grains of pyrite in the more chloritic sections. Some vein quartz.	10671	4.0 1.22m	345.0 105.16m		.005			:
		349.0-350.8 - Chlorite breccia, 20% chlorite in altered quartzite, mostly as a repla ement. Sulphides absent.	10672	1.8 .55m	349.0 106.38m	350.8 106.93r	Nil			



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5056.4N. 9540.0E

HOLE: N-10 Core size:

Section:

Azimuth:

0+00, 1+75NE

Dip: -45⁰

Dip Tests:

Length: 418.0' (127.4m) Elevation: 315.5

Started: Completed:

Nov. 27/80. Dec. 1/80 Logged by: Morissette

DRILL LOG

ASSAYS samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au oz/tdn from to 359.3 350.8 Quartzite, altered pinkish to brown with occasional small patch of chlorite. 106.93m 109.52m 359.3 364.2 Chlorite breccia, 30% chlorite in patches and as a replacement. 109.52m 111.01m 359.3-360.9 - Chlorite breccia, 30% chlorite which is well mineralized with 10673 359.3 | 360.9 | 0.48 1.6 coarse patches of pyrite up to ½", also a little chalco. Disseminated .48m | 109.52m | 110.00m .15 magnetite throughout. 360.9-362.2 - Chlorite breccia, 30% chlorite, mostly as a replacement. Fine 10674 1.3 360.9 362.2 .03 disseminated magnetite throughout with the odd bleb of pyrite. Several 110.00m 110.40m 0.40 .01. grains of V.G. at 361.9 and a grain at 362.1. 362.2-364.2 - Chlorite breccia, 25% chlorite with heavy disseminated 10675 362.2 364.2m .02 2.0 magnetite, a few grains of pyrite. .61m |110.40m |111.01m .cl 364.2 418.0 Quartzite, pinkish grey to brown. 111.01 127.41 367.0-367.8 - Chlorite breccia, 35% chlorite, some grey vein quartz and a 10676 367.0 367.8 0.8 few grains and small cubes of pyrite. .25m | 111.86m | 112.11m .Gl 391.0-418.0 - Quartzite contains carbonate rhombs over narrow widths. 418.0 End of hole. 127.41m



Property: 772, D.R.Watt Property
Location: Scadding Twp., Ont. HOLE: N-10
Co-ordinates: 5056,4N, 9540.0E Core size:

Section: 0+00, 1+75NE Length: 418.0 (127.4m) Elevation: 315.5

Dip Tests: Started: Nov. 27/80 Completed: Dec. 1/80 Logged by: Morissette

	DRILL LOC		Dip: -45 ⁰		£		ASSAYS
DEPTH		DESCRIPTION NOTE: All angles are measured with respect to the long core axis.		width	from	to	Au Au oz/tor oz/ft
from	to						
	•	Ore Sections	10646	2.2	287.6	289.8	0.950 2.090
			10647	1.6	289.8	291.4	0.130 .208
	·		10648	1.8	291.4	293.2	0.430 .774
			10649	2.6	293.2	295.8	0.020 .052
			10650	1.7	295.8	297.5	0.1400.238
			10651	3.0	297.5	300.5	0.0800.240
			10652	2.5	300.5	302.5	0.1500.375
			10653	2.0	302.5	304.5	0.690 1.380
			10654	2.5	304.5	307.0	5.69 14.225
			10655	2.5	307.0	309.5	1.82 4.550
	•,		10656	2.3	309.5	311.8	0.050 .115
	-		10657	2.2	311.8	314.0	0.140 .308
:			1,0658	1.5	314.0	315.5	0.340 .510
	1		10659	3.0	β15.5	318.5	0.020 .060
			10660	2.7	318.5	321.2	p.002 .005
	•		10661	1.5	321.2	322.7	0.030 .045
			10662	2.0	322.7	324.7	0.070 .140
			10663	2.3	324.7	327.0	0.160 .368
_			10664	2.0	327.0	329.0	0.120 .240
			10665	1.5	β 29. 0	330.5	0.020 .030
			10666	0.9	330.5	331.4	0.520 .468
	-		10666	0.9	330.5	331.4	0.520 .468



DRILL LOG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Dip Tests: Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

_		AZIMUTN:	ייסוט: בעוט: בעוט		Logged	by: m	11 13366	
DEP.	TH	DESCRIPTION	sample number	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	rumber				Au oz/ton	
0.0	8.0 2.44m	Casing				:		
8.0 2.44m	13.0 3.97m	Carbonate breccia, salmon pink quartzite with stringers and patches of white carbonate, local coarse pyrite.				·		
		11.0-12.5 - Carbonate breccia, some coarse pyrite with a little chalco, and a grain of aspy.	10677	1.5 0.5m	11.0 3.3m	12.5 3.8m	0.002	
13.0 3.97m	33.9 10.34m	Serpent quartzite, grey to pinkish grey to salmon pink.						
33.9 10.34m	63.0 12.10m	Chlorite breccia, 10% chlorite in seams patches and as a replacement.						
10.3411		33.9-35.1 - Chlorite breccia, 10% chlorite in patches. Includes a quartz-carbonate stringer with coarse pyrite cubes up to 3/8".	10678	1.2 0.4m	33.9 10.3m	35.1 10.7m	•	.03
		35.1-36.6 - Chlorite breccia, 15% chlorite in patches and as a replacement. Coarse pyrite cubes and grains with the chlorite. Many grains of V.G. in quartzite at 36.0, also 2 grains at 36.4.	10679	1.5 0.5m	35.1 10.7m	36.6 11.2m		.06
		36.6-40.0 - Chlorite breccia, 10% chlorite, mostly as a replacement and in patches, and in narrow seams. Sulphides absent.	10680	3.4 1.0m	36.6 11.2m	40.0 12.2m	0.002	
		40.0-43.0 - Chlorite breccia, 10% chlorite as a replacement. A little py with chlorite throughout.	10681	3.0 0.9m	40.0 12.2m	43.0 13.1m		
		43.0-45.4 - Chlorite breccia, 15% chlorite in patches and as a replacement. A few grains of pyrite.	10682	2.4 0.7m	43.0 13.1m	45.4 13.8m	0.002	
	-	45.4-48.6 - Chlorite breccia, 30% chlorite with 15% white calcite. Local good pyrite with the chlorite and calcite.	10683	3.2 1.0m	45.4 13.8m	i	0.005	

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

Section: Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90°

Dip Tests: Started:

Dec. 2/80 Dec. 5/80
Morissette

Complete::

	DRILL LOG	Elevation: 320.2 Azimuth:	Dip: -90°		Logged	by:	Dec. 5/80 Morissette	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long tore axis.	: Humber				Au oz/ton	
52.8 16.10m	58.0 17.69m	48.6-51.8 - Chlorite breccia, 5% chlorite as a replacement, the odd grain of pyrite. Quartzite with 5% chlorite as a replacement.	10684	3.2 1.0m	48.6 14.8m	51.8 15.8m		
10.10	17.09111	51.8-52.8 - Chlorite breccia, 10% chlorite with a little white carbonate. Some pyrite with the chlorite. Possible speck of V.G. at 50.0.	10685	1.0 0.3m	51.8 15.8m	52.8 16.1m	Nil	
		53.8-55.0 (16.41-16.78m) - Ground core.				}		
		52.8-58.0 - Quartzite, weakly chloritic with 5% chlorite throughout as a replacement. Includes 1.2 ft. of ground core. Sulphides absent.	10686	7.2 1.6m	52.8 16.1m	58.0 17.7π		
	· ••	$58.0\mbox{-}63.0$ - Chlorite breccia, 7% chlorite as a replacement and in narrow seams. Rare grains of pyrite.	10687	5.0 1.2m	58.0 17.7m	63.0 19.2m		
63.0 19.21m	70.8 21.59m	Quartzite, dark grey, local weakly chloritic sections.						
70.8 21.59m	98.8 30.13m	Chlorite breccia, 10% chlorite in patches and seams.						
21.05111	30.134	70.8-72.6 - Chlorite breccia, 10% chlorite in seams and patches in well altered red quartzite. Sulphides absent.	10688	1.8 0.5m	70.8 21.6m	72.6 22.1m	0.002	
		72.6-73.8 - Chlorite breccia, 30% chlorite with grains of pyrite throughout.	10689	1.2 0.4m	72.6 22.1m	73.8 22.5m		.01
		73.8-75.1 - Chlorite breccia, 20% chlorite with a few grains of pyrite. 10 grains of V.G. at 74.7 and approximately 30 grains at 74.0, several at 75.1.	10690	1.3 0.4m	73.8 22.5m	75.1 22.9m	0.34	,10
		75.1-78.5 - Chlorite breccia, 20% chlorite in replacement patches. Sulphides absent.	10691	3.4	75.1 22.9m	78.5	0.002	

Dec. 2/80

NORTHGATE EXPLORATION LIMITED

DRILL 1 OG

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Completed: Dec. 5/80 Logged by: Morissette <u>Dip:</u> -90°

Dip Tests: Started:

		DESCRIPTION	sample		£			ASSAYS
DEP from	TH to	NOTE: All angles are measured with respect to the long core axis. number	width	from	to	Au oz/ton		
		78.5-80.7 - Chlorite breccia, 20% chlorite in patches and as a replacement. Small pyrite xtals fairly common in the chlorite and in the altered quartzite.	10692	2.2 0.7m	78.5 23.9m	80.7 24.6m	.005	
		80.7-83.3 - Chlorite breccia, 40% chlorite in patches and seams, sulphides rare	10693	2.5 0.8m	80.7 24.6m	83.3 25.4m	.002	
		83.3-86.0 - Chlorite breccia, 50% chlorite in seams and patches. Sulphides absent.	10694	2.7 0.8m	83.3 25.4m	86.0 26.2m	Nil	
		86.0-89.0 - Chlorite breccia, 15% chlorite in seams and round patches and as a replacement. Sulphides absent.	10695	3.0 0.8m	86.0 26.2m	89.0 27.0m	.002	
		89.0-92.3 - Chlorite breccia, 15% chlorite in seams, patches and as a replacement. Sulphides absent.	10696	3.3 1.1m	89.0 27.0m	92.3 28.1m	Nil	
	•-	92.3-94.7 - Chlorite breccia, 60% chlorite with a few disseminated grains and blebs of pyrite throughout.	10697	2.4 0.8m	92.3 28.1m	94.7 21.9m	.03	.01
	: 1 1	94.7-98.8 - Chlorite breccia, 20% chlorite mostly as a replacement. The odd grain of pyrite disseminated throughout.	10698	4.1 1.2m	94.7 28.9m	98.8 30.1m	Nil	
98.8 30.13m	119.8 36.54m	Quartzite, grey to pinkish grey, relatively unaltered.						
	5	106.5-107.2 - Chlorite breccia, 10% chlorite in circular patches. Grain of pyrite.						
119.8 36.	147.7 45.05m	Chlorite breccia, 20% to 50% chlorite in patches, seams and as a replacement.						
	-	119.8-122.3 - Chlorite breccia, 25% chlorite in seams, patches and as a replacement. Locally a few grains of pyrite.	10699	2.5 0.7m	119.8 36.5m	122.3 37.2m	.002	



DRILL LOG

NORTHGATE EXPLORATION LIMITED

Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11. Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90°

Dip Tests: Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

7/126 600		Azimuth:	90° -90°		Logge	יו : עט נ	Morissette		
DEPTH		DESCRIPTION	sample	width	from	to		ASSAYS	
from_	to	NOTE: All angles are measured with respect to the long core axis.	number	WILCH			Au oz/ton		
		122.3-124.8 - Chlorite zone, 60% chlorite which is well mineralized with 2% pyrite in blebs, includes a 1" xtal Disseminated magnetite throughout, some irregular vein quartz.	10700	2.5 0.8m	122.3 37.2m	124.8 38.0m		.02	
		124.8-125.8 - Chlorite breccia, 10% chlorite mostly as a replacement. Pyrite absent.	11001	1.0 -0.3m	124.8 38.0m	125.8 38.3m			
		126.0 (38.43m) - Ground core, possibly 6".							
		125.8-128.0 - Chlorite zone, 60% chlorite with disseminated magnetite throughout. Blebs of pyrite including a 2" cube. Specks of V.G. at 126.9 and 127.6. Note: Ground core on block at 126.0.	11002	2.2 0.7m	125.8 38.3m	128.0 39.0m		.0-1	
		128.0-129.4 - Chlorite breccia, 15% chlorite mostly as a replacement. Rare sulphides.	11003	1.4 0.4m	128.0 39.0m	129.4 39.4m			
		129.4-132.6 - Chlorite breccia, 60% chlorite with small blebs of pyrite throughout.	11004	3.2 1.0m	129.4 39.4m	132.6 40.4m		.02	
		132.6-134.8 - Chlorite breccia, 15% chlorite mostly as a replacement. Blebs and small cubes of pyrite in the chlorite, also in altered reddish quartzite.	11005	2.2 0.7m	132.6 40.4m	134.8 41.4m		.06	
		134.8-136.8 - Chlorite breccia, 50% chlorite, 3% pyrite in cubes and blebs throughout. Several grains of V.G. at 135.0, grain at 135.5, small patches of V.G. on chlorite slip 135.7 to 135.9. Good grain of V.G. within a pyrite cube at 136.4.	11006	2.0 0.6m	134.8 41.1m	136.8 41.7m		.75	
		136.8-139.8 - Chlorite breccia, 20% chlorite in patches and seams. Sulphides absent.	11007	3.0 0.9m	136.8 41.7m	139.8 42.6m			
	-	139.8-141.8 - Chlorite breccia, 50% chlorite well mineralized with 5% pyrite in blebs and cubes.	11008	2.0 0.6m	139.8 42.6m	141.8	.03	,et	

Property: 772. D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 . Core size:

0+50SE, 0+80SW Section: Length: 286.0' (87.2m)

Dip Tests:

Started: Dec. 2/80 Completed: Dec. 5/80

Elevation: 320.2 DRILL LOG Azimuth: Dip: -900 Logged by: Morissette **ASSAYS** DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au bz/ton from to 144.1 .02 141.8-144.1 - Chlorite breccia, 30% chlorite in patches and as a replacement. 11009 2.3 141.8 0.7m 43.2m 43.9m .01 Rare cube of pyrite. 144.1-146.3 - Chlorite breccia, 50% chlorite as a replacement. Small blebs of 2.2 144.1 146.3 .01 11010 pyrite and a little chalcopyrite throughout. 0.7m 43.9m 44.6m 146.3-147.7 - Chlorite breccia, 10% chlorite mostly as a replacement of altered 147.7 11011 1.4 146.3 .01 quartzite. The odd small grain of pyrite. 0.4m44.6m 45.0m 152.0 Quartzite, pinkish grey, minor chlorite replacement over narrow widths. 147.7 46.3m 45.0m 147.7-152.0 - Quartzite, pinkish grey weakly chloritized in some sections. 11012 4.3 147.7 152.0 Nil A few local grains of pyrite. 1.3m 45.0m 46.0m 155.2 Chlorite breccia, weakly chloritic as a replacement and in narrow seams. 152.0 47.3m 46.3m 152.0 155.2 Nil 152.0-155.2 - Chlorite breccia, 7% chlorite mostly as a replacement, also 11013 3.2 in narrow seam. Some fine disseminated pyrite throughout. 1.0m 46.3m 47.3m 160.2 Quartzite, pinkish grey, very weakly chloritized. No appreciable sulphide. 155.2 47.3m 48.9m 172.0 Quartzite, well altered, somewhat crushed in appearance. 5% chlorite in 160.2 narrow seams and as a replacement. Local fine disseminated sulphides. 48.9m 52.4m 160.2-164.0 - Quartzite, crushed and altered with frequent chlorite seams. 11014 3.8 160.2 164.0 Nil Some fine disseminated pyrite with a little local chalco. 1.2m 48.8m 50.0m 164.0-169.0 - Quartrite, altered with local fine chlorite seams. The odd 11015 5.0 164.0 169.0 Nil narrow section of weak chlorite replacement. Local fine pyrite. 1.5m 50.0m 51.5m 169.0-172.0 - Quartzite grading to chlorite breccia, 7% chlorite as a 169.0 172.0 Nil 11016 3.0 replacement and in narrow seams. Sulphides absent. 0.9m51.5m 52 Am



Property:

Property: 772, D.R.Watt Property
Location: Scadding Twp., Ont. HCLE
Co-ordinates: 5012.1N, 9476.8E Core

HCLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Dip Tests: Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

00711 100		•
DRILL LOG	 •	•

DEPTH		DESCRIPTION	sample		from	•		ASSA	YS
DEP	to	NOTE: All angles are measured with respect to the long core axis.	number	width	Trom	to	Au oz/to	n	
172.0 52.4m	195.0 59.4m	Chlorite breccia, 20% to 50% chlorite in seams, patches and as a replacement of altered red quartzite.							
		172.0-173.8 - Chlorite breccia, 25% chlorite which is well mineralized with blebs and small cubes of pyrite.	11017	1.8 0.6m	172.0 52.4m	173.8 53.0m	.01		
		173.8-177.3 - Chlorite breccia, 20% chlorite mostly as a replacement with the odd small patch of chlorite. Occasional small grains of pyrite.	11018	3.5 1.0m	173.8 53.0m	177.3 54.0m	Nil		
		177.3-180.8 - Chlorite breccia, 20% chlorite mostly as a replacement with the odd small patch of chlorite. Local grains of py.	11019	3.5 1.1m	117.3 54.0m	180.8 55.1m	.002	-	
<u> </u>		180.8-182.6 - Chlorite breccia, 30% chlorite in patches. Blebs of pyrite throughout. Several fine grains of V.G. at 181.5 also at 181.7 and at 182.4.	11020	1.8 0.6m	180.8 55.1m	182.6 55.2m	.85	.26	
	· ••	182.6-184.1 - Chlorite breccia, 60% chlorite with fine blebs of pyrite throughout. Good grains of V.G. at 183.9 and 184.0.	11021	1.5 0.4m	182.6 55.7m	184.1 56.1m	-48	.15	
		184.1-187.1 - Chlorite breccia, 20% chlorite in seams and patches, and as a replacement. Rare grains of pyrite.	11022	3.0 0.9m	184.1 56.1m	187.1 57.0m	.01		
		187.1-189.6 - Chlorite breccia, 30% chlorite as a replacement and in patches. Fine disseminated pyrite.	11023	2.5 0.8m	187.1 57.0m	189.6 57.8m	.005		
		189.6-191.6 - Chlorite breccia, 50% chlorite. Coarse pyrite in blebs up to 3" in the more chloritic sections, with some associated chalcopyrite. Grain of V.G. at 189.9, good grains at 190.7 and 190.8, also at 191.2.	11024	2.0 0.6m	189.6 57.8m	191.6 58.4m	1.20	.37	
		191.6-195.0 - Chlorite breccia, 20% chlorite with local blebs of pyrite in the more chloritic sections.	11025	3.4 1.1m	191.6 58.3m	195.0 59.4m	.07	.02	•
			·						



DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp. Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2

Dip: -90° Azimuth:

Dip Tests: Started: Dec. 2/80

Completed: Dec. 5/80 Logged by: Morissette

ner.		DESCRIPTION	sample	width	from	to		ASSAYS	
DE: from	to	NOTE: All angles are measured with respect to the long core axis.	number	width	·		Au oz/ton		
195.0 59.4m	217.7 66.4m	Chlorite zone, 50% to 70% chlorite well mineralized with blebs of pyrite.							
59.40	00.4111	195.0-196.5 - Chlorite zone, 70% chlorite with 10% pyrite in coarse blebs. Some vein quartz. Speck of V.G. at 195.7.	11026	1.5 0.5m	195.0 59.4m	196.5 59.9m	.20	.04	;
		196.5-197.7 - Chlorite zone, 20% chlorite in altered red quartzite, sulphides rare.	11027	1.2 0.4m	196.5 59.9m	197.7 60.3m	.01		
	-	197.7-199.7 - Chlorite zone, 70% chlorite with coarse blebs of pyrite with a little chalco. Grains of V.G. at 198.3 and also at 199.0.	11028	2.0 0. 6 m	197.7 60.3m	199.7 60.9m	.23	.07	***************************************
		199.7-201.7 - Chlorite zone, 70% chlorite, some irregular grey vein quartz. Blebs of pyrrhotite and pyrite throughout. Very fine V.G. at 199.9, 200.7 and 200.8.	11029	2.0 0.6m	199.7 60.9m	201.7 61.5m	.15	.05	
		201.7-203.7 - Chlorite zone, 70% chlorite, some grey vein quartz. Sparsely mineralized with small blebs of pyrite.	11030	2.0 0.6m	201.7 61.5m	203.7 62.1m	.03	.01	
		203.7-205.5 - Chlorite zone, 70% chlorite with small blebs of pyrite throughout Irregular grey vein quartz, some of which is also mineralized. Very fine specks of V.G. at 204.5.	. 11031	1.8 0.5m	203.7 62.1m	205.5 62.6m	.005		:
		205.5-208.0 - Chlorite zone, 60% chlorite with coarse blebs of pyrite in the more chloritic sections. 10% magnetite in fairly coarse grains, local grey vein quartz.	11032	2.5 0.8m	205.5 62.6m	208.0 63.4m	.01		,
		208.0-210.0 - Chlorite zone, 60% chlorite, 10% grey vein quartz and 15% magnetite in coarse patches. Blebs of pyrite with a little associated chalco up to 3/4". Speck of V.G. in magnetite at 208.6.	11033	2.0 0.6m	208.0 63.4m	210.0 64.0m	.31	٠٥٠	
		210.0-212.5 - Chlorite zone, 60% chlorite, 10% vein quartz and 15% magnetite in coarse patches. Fine speck of V.G. at 212.1.	11034	2.5 0.8m	•	212.5 64.8m	.05	.02	



Property: 772, D.R.Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

	DRILL LOG	Length: 286.0	0+80SW (87.2m)		Dip Te Starte Comple Logged	ed: Deted: D	ec. 2/80 ec. 5/80 orissett	•
DEPT	гн	DESCRIPTION	sample	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/ton	
		212.5-215.0 - Chlorite zone, 70% chlorite with 15% pyrite in coarse patches and blebs with a little associated chalco. Irregular grey vein quartz.	11035	2.5 0.7m	212.5 64.8m	215.0 65.5m	.15	.05
		215.0-217.7 - Chlorite zone, 70% chlorite, 5% pyrite in $\frac{1}{4}$ " xtals and blebs. Several grains of V.G. at 217.2.	11036	2.7 0.9m	215.0 65.5m	217.7 66.4m	.10	.03
217.7 66.4m	225.9 68.9m	Chlorite breccia, 10% to 15% chlorite in seams and replacement patches. A little pyrite with the chlorite.						
		217.7-220.4 - Chlorite breccia, 20% chlorite in altered red quartzite. 5% pyrite in blebs and cubes.	11037	2.7 0.8m	217.7 66.4m	220.4 67.2m	.04	.01
		220.4-223.0 - Chlorite breccia, $10%$ chlorite in seams and circular patches. A few grains of pyrite with the chlorite.	11038	2.6 0.8m	220.4 67.2m	223.0 68.0m	.005	
	•.	223.0-225.9 - Chlorite breccia, 10% chlorite in seams and patches, a little pyrite with the chlorite. Quartzite altered brick red.	11039	2.9 0.9m	223.0 68.0m	225.9 68.9m	.005	
225.9 68.9m	247.5 75.4m	Quartzite, grey to light pinkish grey relatively unaltered.						
247.5 75.4m	259.0 78.9m	Chlorite breccia, highly altered quartzite bleached whitish with 5% to 10% chlorite as a replacement. A few large carbonate rhombs within this section. Sulphides are absent.						
259.0 78.9m	286.0 87.2m	Carbonate breccia, large rhombs of carbonate with stringers and patches replacing the quartzite. Locally a little chlorite in narrow seams and as replacement.						
	286.0	End of hole.						



DRILL LOG

NORTHGATE EXPLORATION LIMITED

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11. Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Din: _one

Dip Tests:

Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

DIVICE EC	Azimuth:	Dip: -90°		Logged	Lby: Mo	risset	:te	_
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAY	5
from to	Horz. Arr angles are measured with respect to the rong tore dxis.	·				Au A	u oz/ n ft.	
from to	Ore Sections 1. 2.	10678 10679 10689 10690	1.2 0.4 1.5 0.5 2.7 1.2 0.4 1.3 0.4 2.5	33.9 10.3 35.1 10.7 33.9 72.6 22.1 73.8 22.5 72.6	36.6 11.2 36.6 73.8 22.5 75.1 22.9	0.100 0.210 0.161	.120 .315 .435 0.048	.0
	3.	11002	0.8 2.2 0.7 1.4 0.4	22.1 125.8 38.3 128.0 39.0	22.9	0.240 Nil		
		11004	3.2 1.0 2.2 0.7	129.4 39.4 132.6 40.4	40.4	0.190		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11.

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Dip Tests: Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

DRILL LO	Azimuth: D	ip: -90°		Logged	by: Mo	y: Morissette			
DEPTH	DESCRIPTION	sample number	width	from	to		ASSAYS		
from to	NOTE: All angles are measured with respect to the long core axis.	Humber		.		Au /	lu oz/ n ft.		
170111	Ore Sections - Cont'd	11006	2.0	134.8	136.8 41.7	2.470	4.940		
	3a.		11.0	125.8	136.8	D.558	6.142		
			14.5	122.3	136.8	0.438	,		
		11020	1.8 0.6	180.8 55.1	182.6 55.2	0.850	1.530		
		11021	1.5 0.4	182.6 55.7	184.1 56.1	0.480	0.720		
	4.		3.3	180.8	184.1 56.1	0.682	2.251		
•		11022	3.0	184.1 56.1	187.1 57.0	0.010	0.030		
		11023	2.5	187.1 57.0	189.6 57.8	0.005	0.013		
		11024	2.0	189.6 57.8	191.6 58.4	1.200	2.400		
		11025	3.4	191.6 58.3	195.0 59.4	0.070	0.238		
		11026	1.5	195.0 59.4	196.5 59.9	0.200	0.300		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

HOLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -90

Dip Tests:

Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Maniscotto

			Elevation: 320.2 Azimuth:	sample				ec. 5/80 prissette ASSAYS
DEPTH to	DESCRIPTION NOTE: All angles are measured with respect to the lo		o the long core axis.	number	width	from	to	Au Au oz/ oz/ton ft.
Trom to	Ore Sections - Cont'd							027 tdii 1 ti.
	4a.		•		6.9	189.6 57.8	196.5 · 59.9	0.426 2.938
				11027	1.2 0.4	196.5 59.9	197.7 60.3	0.010 0.012
				11028	2.0 0.6	197.7 60.3	199.7 60.9	0.230 0.460
				11029	2.0 0.6	199.7 60.9	201.7	0.160 0.320
				11030	2.0 0.6	201.7	203.7	0.030 0.060
				11031	1.8 0.5	203.7 62.1	205.5 62.6	0.005 0.009
				11032	2.5 0.8	205.5 62.6	208.0 63.4	0.010 0.025
				11033	2.0 0.6	208.0 63.4	210.0 64.0	0.310 0.620
			·	11034	2.5 0.8	210.0 64.0	212.5 64.8	0.050 0.125
				11035	2.5 0.7	212.5 64.8	215.0 65.5	0.150 0.375



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5012.1N, 9476.8E

Dip: -90

HOLE: N-11 Core size:

Section: 0+50SE, 0+80SW Length: 286.0' (87.2m) Elevation: 320.2 Azimuth: Dip: -9

Dip Tests:

Started: Dec. 2/80 Completed: Dec. 5/80 Logged by: Morissette

DRILL LOG

	DESCRIPTION	sample	ما خام کی د	width from to		ASSAYS
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	number	wiath	Tron		Au Au oz/ oz/ton ft
from to					 	oz/ton ft
	<u>Ore Sections</u> - Cont'd					
		11036	2.7 0.9	215.0 65.5	217.7	0.100 0.270
· ·	46.		4.0	197.7 60.3	1	0.195 0.780
	4c.		7.0	208.0	ì	0.160 1.120
	4d.		36.9	180.8	ł	0.203 7.508

DRILL LOG

21st-Oct 6.1981 4 Drill Contractor - N. Morisseffe Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5088N, 9612.4E

Core size:

HOLE: N-12

Section: 0 + 00 Length: 615 (187.5m) Elevation: 315.5m Azimuth: S65°W Dip: -45°

Dip Tests:

	511.22 200	Diffi Contractor - N. Mortssette	Azimuth: Sos W	U1D: -45		Logge	Dy: K	Lars	en	_	
DEP.	тн	DESCRIPTION NOTE: All angles are measured with respect to 1	the long core axis.	sample number	width	from	to		A:	SSAYS	T-
from	to	Nove. With uniques are measured with respect to		·							
0.0	10.0 3.05	Casing through overburden.	,								
10.0 3.05	112.5	Serpent Quartzite, fairly well brecciated, grey to bleached patches, very rarely isolated patches of faint pink alterationatch of dark grey less bleached and altered material.	near white in on. Occasional			-					
-		37.0 - 69.0 - (11.28 - 21.03) - Medium grey quartzite, only and altered and very little carbonate. Some remnant bedding									
		69.0-80.5-(21.03-24.54) - Highly bleached and altered, but local faintly pinkish patches. A 1" blob of chlorite at small grain or bleb of pyrite.									
-	-	80.5 - 112.5 - (24.54 - 34.29) - Quartzite, grey with patchy brecciated with occasional carbonate stringer. Rare streaks occasional fleck of py.									
112.5 34.29	161.4 49.19	Olivine Diabase, f.g. chilled borders, m.g. center. Very majoints. Strongly magnetic. Upper contact ground. Lower core.	ssive with few ntact sharp 37° to								
161.4 49.19	321.0 97.84	Quartzite, grey, occasional carbonate stringers, much bleach altered grey bedded patches.	ing but some less	·							
		180.0 - 195.0 - (54.86 - 59.44) - Quartzite, strongly bleache with much bluish-grey carbonate.	ed, well brecciated								
		195.0 - 232.8 - (59.44 - 70.96) - Quartzite, dark grey, very and bleaching. Some f.g. weakly disseminated py locally. No no carbonate.	little alteration		-						
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Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5088N, 9612.4E

HOLE: N-12. Core size:

Section: 0 + 00 Length: 615 (187.5m) Elevation: 315.5m Azimuth: S65°W Dip: -45°

Dip Tests:

DEPTH		DESCRIPTION	sample	e width from to		ASSAYS	ASSAYS		
DEP from	TH to	NOTE: All angles are measured with respect to the long core axis.	number	width	1 POIII	.0			
ri on		232.8 - 233.6 - (70.96 - 71.20) - A few bands and blebs of chlorite. About 1% disseminated pyrite.	10889	0.8 0.24	232.8	233.6 71.20			
		233.6 - 257.0 - (71.20 - 78.33) - Quartzite, dark grey, relatively unaltered, non-brecciated with no carbonate.							
		257.0 - 321.0 - (78.33 - 97.84) - Quartzite, much bleaching and well brecciated with some patches unaltered. A few streaks and blebs of chlorite at 276.0' (84.2). Core fairly broken and blocky.							
321.0 97.84	332.0 101.19	Olivine Diabase, m.g. to f.g. with chilled margins. Lower contact area fractured and weakly brecciated with contact irregular, about 45° to core. Upper contact sharp, 40° to core. Strongly magnetic.							
332.0 101.19	380.3 115.92	Quartzite, moderately well brecciated and strongly bleached pale grey, occasional faintly pink. Some patches and zones of brown, less altered quartzit Some zones of chlorite filled hairline fractures imparting a web-like pattern. Very scarce sulphides.	e.			,			
		Economics - Trial Samples) 	! !
		332.0 - 337.0 - (101.19 - 102.72) - Quartzite, well brecciated with numerous hairline fractures, many mineralized with chlorite. Total chlorite content less than 5%. Occasional scattered grains of pyrite.	10890	5.0 1.53	332.0	337.0 102.72			
		337.0 - 339.5 - (102.72 - 103.48) - As above, but less chlorite.	10891	2.5 .76	337.0 102.72	339.5 103.48			*****
		339.5 - 341.7 - (103.48 - 104.15) - Quartzite, light to medium brown, very little altered and only slightly fractured. Barren.	10892	2.2 .67	339.5 103.48	341.7 104.15			
		341.7 - 344.6 - (104.15 - 105.03) - Quartzite, strongly bleached, slightly brecciated with scattered streaks of chlorite. Rare flecks py.	10893	2.9	341.7	344.6 105.03			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5088N, 9612.4E

HOLE: N-12. Core size:

Dip Tests:

Section: 0 + 00 Length: 615 (187.5m) Elevation: 315.5m Azimuth: S65°W Dip:-45°

	DRILL LO	G Drill Contractor - N. Morissette Elevation: 315.5m Azimuth: S65°W	Dip:-45°		Comple Logged	eted: Ja d_by: K.	n. 9, Lars	1981 en		
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width		to			SAYS	
from	to									
		344.6 - 379.0 - (105.03 - 115.52) - Quartzite, mostly brownish, weakly brecciated with scattered small patches of pale grey bleached carbonate rich quartzite. Only very rare flecks of pyrite noted. No samples taken.				-				
		379.0 - 380.3 - (115.52 - 115.92) - Quartzite, strongly bleached with some minor chlorite filled hairline fractures.	10894	1.3 .40	379.0 115.52					# # # # # # #
380.3 115.92	383.3 117.13	Chlorite breccia. Strongly brecciated quartzite with 25% chlorite to 331.5 (101.1), then weakly brecciated quartzite, bleached pale grey with scattered streaks of chlorite.								
		<u>Economics</u>								
		380.3 - 381.5 - (115.92 - 116.28) - Chlorite breccia. Zone of intense crushing, largely healed with chlorite, about 25% total. 1% pyrite as blebs and scattered grains.	10895	1.2	380.3	381.5 116.28				
		381.5 - 384.3 - (116.28 - 117.13) - Strongly bleached and weakly brecciated quartzite with scattered streaks of chlorite. Less than 5% total. Rare flecks of py.	10896	2.8	381.5 116.28	384.3 117.13				
384.3 117.13	507.5 154.69	Quartzite, buff to brown with pale grey patches of bleaching. Strongly brecciated locally, generally accompanied by bleaching and carbonate cement, rarely a few streaks of chlorite. Spotty zones of weak pyrite throughout.								•
		<u>Economics</u>							1	:
		384.3 - 388.0 - (117.13 - 118.26) - Quartzite, brownish, weakly brecciated. Odd pyritic hairline fracture and rare py, po flecks.	10897	3.7 1.13	384.3 117.13	388.0 118.26				
		388.0 - 393.0 - (118.26 - 119.79) - Quartzite, brownish with small zones well brecciated and slightly bleached. Odd grains of py.	10898	5.0 1.53	388.0 118.26	393.0 119.79				•



DRILL LOG Drill Contractor - N. Morissette Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5088N, 9612.4E

Dip Tests:

HOLE: N-12

Core size:

Section: 0 + 00Length: 615 (187.5m)

Elevation:315.5m

Started: Dec. 9, 1980 Completed: Jan. 9, 1981

Azimuth: S65°W Dip: -45° Logged by: K. Larsen **ASSAYS** DESCRIPTION sample width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number from to 393.0 - 398.0 - (119.79 - 121.31) - Quartzite, bleached pale grey with some 10899 5.0 393.0 398.0 brownish less altered spots. Rare streak of chlorite and odd flecks of pyrite. 1.52 119.79 121.31 398.0 - 403.0 - (121.31 - 122.83) - Quartzite, weakly brecciated, brownish. 10900 5.0 398.0 403.0 Poorly mineralized with only odd grain of pyrite. 1.52 121.31 122.83 403.0 - 407.0 - (122.83 - 124.05) - Quartzite, brownish, weakly fractured, very 10701 4.0 403.0 407.0 little bleaching. Essentially barren. 122.83 124.05 1.22 407.0 - 412.0 - (124.05 - 125.58) - Quartzite, well bleached and brecciated. 10702 5.0 407.0 412.0 A little vein quartz at 409.0 (0.1). Scattered grains and odd bleb of py. 1.53 124.05 125.58 412.0 - 447.0 - (125.58 - 136.25) - Quartzite, brownish, locally brecciated with minor bleaching and alteration. Entire section essentially barren. No samples taken. 447.0 - 449.0 - (136.25 - 136.86) - Quartzite, light brown, brecciated, slightly 447.0 | 449.0 2.0 bleached, rare fleck of py. 0.6 136.25 136.86 449.0 - 453.0 - (136.86 - 138.07) - Quartzite, brownish to spotty bleached 10704 449.0 453.0 4.0 greyish. Well brecciated with odd grains of py. 1.21 136.86 138.07 453.0 - 456.0 - (138.07 - 138.99) - Quartzite, more bleached and altered than 3.0 10705 453.0 456.0 · above. Fairly well brecciated. A little carbonate. Rare flecks of py. .92 138.07 138.99 456.0 - 460.0 - (138.99 - 140.21) - Quartzite, well bleached and altered, fairly 10706 4.0 456.0 460.0 well brecciated with a little carbonate cement. Odd grains of py. 1.22 138.99 140.21 460.0 - 463.0 - (140.21 - 141.12) - As above. A little more py as scattered 10707 3.0 460.0 | 463.0 small blebs and hairline fracture fillings. .91 140.21 141.12 463.0 - 466.0 - (141.12 - 142.04) - Quartzite, bleached and brecciated in small 10708 3.0 463.0 466.0 patches with odd grains and streaks of py. .91 143.12 1142.04



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5088N, 9612.4E

HOLE: N-12 . Core size:

Section: 0 + 00

Length: 615 (187.5m)

Dip Tests:

Elevation: 315.5m Azimuth: S65°W

Started: Dec. 9, 1980 Completed: Dec. 9, 1981

Drill Contractor - N. Morissette DRILL LOG Dip: -45⁶ Logged by: K. Larsen **ASSAYS** DESCRIPTION sample width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number from to 466.0 - 469.0 - (142.04 - 142.95) - Quartzite, less altered, bleached and 10709 466.0 3.0 469.0 brecciated than above. A few blebs of py. 142.04 142.95 .91 469.0 - 471.0 - (142.95 - 143.56) - Quartzite, brownish, becoming bleached and 10710 2.0 469.0 471.0 altered last 3". Scattered grains of py, and local small clusters of dissemi-142.95 | 143.56 .61 nated f.q. py. 471.0 - 474.5 - (143.56 - 144.63) - Quartzite, becoming very bleached. Rare 10711 3.5 471.0 474.5 small grain of py. 143.56 144.63 1.07 474.5 - 507.5 - (144.63 - 154.69) - Quartzite, locally slightly brecciated, buff to brown with spotty bleaching. Rare grains of py and magnetite. No samples taken. 507.5 Ch. orite breccia. Weakly developed, about 10% locally 20% chlorite in bleached 515.8 154.69 157.22 white to pinkish well brecciated quartzite. Economics 507.5 - 510.0 - (154.69 - 155.45) - Quartzite, well brecciated with 5% chlorite. 10712 2.5 507.5 510.0 Strongly bleached and altered. Essentially barren. .76 154.69 155.45 510.0 - 513.0 - (155.45 - 156.36) - Chlorite breccia. First foot only odd 10713 3.0 510.0 513.0 chlorite streaks, remainder 15% chlorite in well brecciated, bleached pinkish 155.45 | 156.36 .91 quartzite. Occasional small grain of pyrite. 513.0 - 515.8 - (156.36 - 157.22) - Chlorite breccia. 20% chlorite in well 10714 2.8 515.8 513.0 brecciated pink quartzite. Rare grains py. .86 156.36 157.22 515.8 Quartzite, bleached, altered with some pinkish alteration in patches and 543.0 occasional bedded, relatively unaltered zones. Bedding 60° to core at 524.0 157.22 165.51 (159.8). Locally well brecciated, at times with a few small spots of chlorite. Entire section barren.

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5088N, 9612.4E

HOLE: N-12. Core size:

Section: 0 + 00 Length: 615 (187.5m) Elevation: 315.5m Azimuth: S65°W Din

Dip Tests:

	DRILL LO	G Drill Contractor - N. Morissette Elevation: Azimuth: S	: 315.5m : 315.5m	: -45°.			ted: Jan. ! by: K. l			
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core	· •	ample umber	width	from	to _	T	ASSAY	S
from	to									
543.0 165.51	552.2 168.31	Quartzite, well brecciated and altered pinkish to light grey. A few smal patches of 3 to 5% chlorite as streaks and irregular blebs.	11				•	-		
		Economics								
		543.0 - 545.5 - (165.51 - 166.27) - Quartzite, 3 to 5% chlorite in well brecciated altered pink quartzite. Rare grains of py.	10	715	2.5	543.0 165.51	545.5 166.27			
***		545.5 - 549.0 - (166.27 - 167.34) - Quartzite, altered, pink to grey, well brecciated and fractured. Essentially barren.	11 10			545.5 166.27	549.0 167.34			
		549.0 - 552.2 - (167.34 - 168.31) - Quartzite, pink, well brecciated, 2 t chlorite as fracture fillings. Rare grains of py.	to 4% 10	717		549.0 167.34	55? : 168.3:			
552.2 168.31	581.4 177.21	Chlorite breccia. 5 to 60% chlorite in altered pink to red quartzite. O a weak chloritic breccia zone, with highly variable chlorite content.	Overall							
		Economics								
		552.2 - 554.5 - (168.31 - 169.01) - Chlorite breccia. 30% chlorite in we brecciated pink to grey quartzite. 1% yo 2% pyrite as small irregular bl	ell 10	718	2.3	552.2 168.31	554.5 169.01			
		554.5 - 556.3 - (169.01 - 169.56) - Chlorite breccia. 30% chlorite in pi brecciated quartzite. ⅓ to 1% pyrite as irregular blebs and small cubes mm.	nk 10 to 3	719		554.5 169.01	556.3 169.56			
		556.3 - 558.5 - (169.56 - 170.23) - Chlorite zone. 60% chlorite. Rare s cubes of py.	small 10	720		556.3 169.56	558.5 170.23			
1		558.5 - 562.0 - (170.23 - 171.29) - Chlorite breccia. 35% chlorite in pi brecciated quartzite. Scattered small grains of pyrite, less than 1% tot	nk 10			558.5 170.23	562.0 171.29		# \$ 1 1 1	
•	;	·	1	}		1	:		1	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5088N, 9612.4E

HOLE: N-12. Core size:

Section: 0 + 00 Length: 615 (187.5m) Elevation: 315.5m Azimuth: S65°W Dip: -45°

Dip Tests:

·	DRILL LO	<u>G</u> Drill Contractor - N. Morissette Elevation: 315.5m Azimuth: S65°W	n Dip: _45°		Logged	ted: Jan. 9 1_by: K. Lar:	, 1981 sen
DEP	TH	DESCRIPTION	sample	width	from	to	ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number				
		562.0 - 565.0 - (171.29 - 172.21) - Chlorite breccia, 15% chlorite in first 1.5 feet (0.5), then grading into pink quartzite. Rare grain of py.	10722	3.0 .92	562.0 171.29	565.0 172.21	
		565.0 - 568.0 - (172.21 - 173.13) - Chlorite breccia. 10% chlorite first two feet, then 5% in remainder. Quartzite is highly altered pink to orange. Odd grains of py.	10723	3.0 .92	565.0 172.21	568.0 173.13	
		568.0 - 571.5 - (173.13 - 174.19) - Chlorite breccia. 30% chlorite in pink to orange brecciated quartzite. About 1% pyrite as scattered blebs and lumps to ½ inch. A little vein quartz at 570.0 (173.8).	10724	3.5 1.06	568.0 173.13	571.5 174.19	
		571.5 - 574.5 - (174.19 - 175.11) - Chlorite breccia. 40% chlorite. Rare grains of pyrite. A little bluish matrix quartz.	10725	3.0	571.5 174.19		
	-	574.5 - 577.0 - (175.11 - 175.87) - Chlorite breccia. 5% chlorite in pink to orange brecciated quartzite. Essentially barren.	10726	2.5 .76	574.5 175.11	577.0 175.87	
-		577.0 - 580.0 - (175.87 - 176.78) - Chlorite breccia. 25% chlorite in pink to orange brecciated quartzite. Several lumps of py and scattered grains totalling about 1%.	10727	3.0 .91	577.0 175.87	580.0 176.78	
		580.0 - 581.4 - (176.78 - 177.21) - Chlorite breccia. 20% chlorite in pink to grey quartzite. Appear barren.	10728	1.4		581.4 177.21	
581.4 177.21	611.8 186.48	Quartzite, slightly to moderately altered with frequent pink spots and small zones. Much bedded brownish relatively unaltered quartzite, bedding 70° to core. Rare isolated spot or streak of chlorite. No sulphides observed.					
611.8 186.48	614.6 187.33	Quartzite, becoming interbedded with argillite. Last foot finely interbedded 50% argillite 50% quartzite, dark brown and buff coloured. Bedding 65° to core.				-	
-		614.6 (187.33) - Hole Terminated.					



Property: 772, D.R. Watt Property Location: Scadding Two., Ont. Co-ordinates:5088N, 9612.4E

HOLE: N-12. Core size:

Section: 0 + 00 Length:615 (187.5m) Elevation: 315.5m

Dip Tests: Started: Dec. 9, 1980 Completed: Jan. 9, 1981

	DRILL LOG		ontractor ·					AL IIIU	th: S65°W	Dip: -45°		1	d by: K.	241 3611	
DEP	TH			DES	CRIP.	TION		. 46. 7000		sample number	width	from	to		ASSAYS
from	to		NOIE:	All angles	s are measu	ured with	·	the rong	core axis.	number				Au oz/tor	oz/f
		Ore Section	òns.			••						 			
		1.								10724	3.5 1.07	568.0 173.2	571.5 174.3	.32	1.12
						·				10725	3.0 .92	571.5 174.3	574.5 175.2	.04	.120
		•	•								2.5 .76	574.5 175.2	577.0 175.9	.01	.02
		2.								-	3.0 .92	577.0 175.9	580.0 176.9	.13	. 390
	-	2a.					-				12.0 3.7	568.0 173.2	580.0 176.9	.138	1.65
							.•								
	_														
		•		•											
		-													1
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DRILL LOG Drill Contractor - N. Morissette Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4994N, 9836E

HOLE: N-13 · Core size:

Section: 98 + 36E Length: 55.0 (16.76m) Elevation:300.3m Azimuth: 0° Dip:0°

Dip Tests:

Started: Dec. 15, 1980 Completed: Dec. 16, 1980 Logged by: P. McLean

		AZ INIULII O	טועוט.		Logged	1 Uy . P. P	clean
DEP:	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	ASSAYS
from	to		·				
0.0 0.0	5.0 1.52	Casing.	-				
5.u 1.52	8.0 2.44	Casing Core. Chlorite breccia, 25% chlorite in bleached white quartzite in patches, seams and as a replacement. Rusty weathered with carbonate grains rusty brown. 1% pyrite in grains and blebs.			•	,	
		5.0 - 8.0 - (1.52 - 2.44) - Casing core. Chlorite breccia, 25% chlorite in bleached whitish quartzite in patches seams, and as a replacement. 10% carbonate, weathered rusty brown. 1% pyrite in grains and blebs, mostly with the more chloritic sections.	11040	3.0 0.9	5.0 1.52	8.0 2.44	
8.0 2.44	14.5	Chlorite zone, 60% chlorite with 3% to 10% pyrite in blebs and grains. Local aspy. Minor chalco with the pyrite.					
		8.0 - 10.0 - (2.44 - 3.05) - Chlorite zone, 60% chlorite, 10% pyrite in vuggy patches with a little associated chalco. Specks of V.G. on sawn surface at 8.9 (2.7) and 9.5 (2.9). Small grain at 9.6 (2.9) on 2nd half of core.	11041	2.0 0.6	8.0 2.44	10.0 3.05	
		10.0 - 12.0 - $(3.05 - 3.66)$ - Chlorite zone, 70% chlorite with 10% pyrite in blebs up to $\frac{1}{2}$ ". A little grey vein quartz. Local grains of aspy and a little chalco. Speck of V.G. 2nd half at 10.1 (3.1), several grains of V.G. in pyrite bleb on sawn surface at 11.3 (3.5).	11042	2.0 0.6	10.0 3.05	12.0 3.66	
		12.0 - 14.5 - (3.66 - 4.42) - Chlorite zone, 60% chlorite with 3% pyrite in small blebs and grains.	11043	2.5 0.8	12.0 3.66	14.5 4.42	
14.5	25.0 7.62	Chlorite breccia, 10% to 30% chlorite as a replacement, and in seams and patches.					
		14.5 - 16.7 - (4.42 - 5.09) - Chlorite breccia, 30% chlorite in seams and as a replacement. A few grains and small blebs of pyrite.	11044	2.2 0.7	14.5 4.42	16.7 5.09	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4994N, 9836E

HOLE: N-13 Core size:

Section: 98 + 36E

Length: 55.0 (16.76m)
Elevation: 300.3m
Azimuth: 0° Dip: 0°

Dip Tests:

Started: Dec. 15, 1980 Completed: Dec. 16, 1980 Logged by: P. McLean

	DRILL LO	Drill Contractor - N. Morissette	Elevation: 300.3m Azimuth: 0° Dip	p: 0°		Comple Logged	ted: Dec by: P.	. 16, <u>McLear</u>	1980 າ	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the		sample number	width	from	to		ASSAY	'S
from	to									
		16.7 - 18.0 - (5.09 - 5.49) - Chlorite breccia, $15%$ chlorite ment in small round aggregates. Sulphides absent.	ostly as a replace-	11045	2.3	16.7 5.09	18.0 5.49			
		18.0 - 20.0 - (5.49 - 6.10) - Chlorite breccia, 20% chlorite a in round aggregates. Sulphides absent.	s a replacement	11046	2.0	18.0 5.49	20.0 6.10			
		20.0 - 22.0 - (6.10 - 6.71) - Chlorite breccia, 25% chlorite i a replacement. Some irregular vein quartz. A few grains of pmore chloritic sections.	n patches and as yrite in the	11047	2.0	20.0 6.10	22.0 6.71	deregospre augmente ac de		
		22.0 - 25.0 - (6.71 - 7.62) - Chlorite breccia, 20% chlorite a and in small patches. A few grains and narrow seams and blebs more chloritic sections.		11048	3.0	22.0 6.71	25.0 7.62			
25.0 7.62	31.0 ·9.45	Chlorite zone, 50% to 70% chlorite with 3% to 10% sulphides.	V.G. as noted.			·				
		25.0 - 27.0 - (7.62 - 8.23) - Chlorite zone, 50% chlorite with grains and small blebs. Speck of V.G. at 25.8 (7.9) on sawn s 2 small grains on outside of core at 25.9 feet (7.9).	3% pyrite in urface and also	11049	2.0	25.0 7.62	27.0 8.23			
	,	27.0 - 29.0 - (8.23 - 8.84) - Chlorite zone, 70% chlorite with grey vein quartz. 7% sulphides, pyrite and po in blebs and gr V.G. at 28.4 (8.7) outside of the core.		11050	2.0	27.0 8.23	29.0 8.84			***************************************
		29.0 - 31.0 - (8.84 - 9.45) - Chlorite zone, 60% chlorite with vein quartz throughout. 10% sulphides, mostly pyrrhotite, som and blebs.		1	2.0	29.0 8.84	31.0 9.45			
31.0 9.45	36.5 11.13	Chlorite breccia, 25% to 30% chlorite very well mineralized wi coarse blebs and seams.	th 20% pyrite in							
					!					1



DRILL LOG Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4994N, 9836E

Core size:

Section: 98 + 36E

Length: 55.0 (16.76m)
Elevation: 300.3m
Azimuth: 0° Dip: 0°

Dip Tests:

HOLE: N-13

Started: Dec. 15, 1980 Completed: Dec. 16, 1980 Logged by: P. McLean

	DIVILLE CON	Azimuth: 0°	01p: 0		Logged	by:P.	rictean		
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAYS	1
from	to								
		31.0 - 33.0 - (9.45-10.06) - Chlorite breccia, 30% chlorite with 15% pyrite and a little po in coarse blebs and small grains. Small vugs present locally.	11052	2.0	31.0 9.45	33.0 10.06			
		33.0 - 35.0 - (10.06-10.67) - Chlorite breccia, 25% chlorite with 20% pyrite in coarse blebs and seams. Minor chalco. Small vugs throughout.	11053	2.0 0.6	33.0 10.06	35.0 10.67			
,		35.0 - 36.5 - (10.67-11.13) - Chlorite breccia, 25% chlorite with 25% pyrite in coarse blebs and seams. A little po also present. Some small vugs.	11054	1.5 0.5	35.0 10.67	36.5 11.13			
36.5 11.13	43.4 13.23	Chlorite breccia, 20% chlorite with 7% to 10% sulphides, mostly pyrrhotite in blebs.							
		36.5 - 39.0 - (11.13-11.89) - Chlorite breccia, $25%$ chlorite with $7%$ sulphides, both pyrrhotite and vuggy pyrite.	11055	2.5 0.8	36.5 11.13	39.0 11.89			
		39.0 - 41.0 - (11.89-12.50) - Chlorite breccia, 20% chlorite with 10% pyrrhotite in blebs, also a little chalco and some pyrite.	11056	2.0 0.6	39.0 11.89	41.0 12.50			
		41.0 - 43.4 - (12.50-13.23) - Chlorite breccia, 20% chlorite with 7% pyrrhotite in grains and blebs. Minor chalcopyrite.	11057	2.4 0.7	41.0 12.50	43.4 13.23			-
43.4 13.23	53.0 16.15	Chlorite breccia, 10% chlorite as a replacement. Some carbonate grains throughout. A few grains of pyrite and pyrrhotite.							
		43.4 - 46.0 - (13.23-14.02) - Chlorite breccia, 10% chlorite as a replacement of pinkish quartzite. The odd grain of po.	11058	2.6 0.8	43.4 13.23	46.0 14.02		1	
	-							1	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4994N, 9836E

HOLE: N-13. Core size:

Section: 98 + 36E Length: 55.0 (16.76m) Elevation: 300.3m

Dip Tests: Started: Dec. 15, 1980 Completed: Dec. 16, 1980 Logged by: P. McLean

DRILL LOG Drill Contractor - N. Morissette

	DRILL LUG	Drill Contractor - N. Morissette Azimuth: 0°	Dip:0°		Logged	by: P.	McLea	an	
DEP.	ТН	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAYS	5
from	to	note. The angles are most of the second of t							
		46.0 - 48.5 - (14.02 - 14.78) - Chlorite breccia, 10% chlorite as a replacement of pinkish quartzite. The odd grain of po and py throughout.	11059	2.5 0.8	46.0 14.02	48.5 14.78			
		48.5 - 51.0 - (14.78 - 15.54) - Chlorite breccia, 10% chlorite as.a replacement. Rare grains of po and py locally.	11060	2.5 0.8	48.5 14.78	51.0 15.54			
		51.0 - 53.0 - (15.54 - 16.15) - Chlorite breccia, 10% chlorite in seams and as a replacement. 2% pyrite and pyrrhotite, includes a coarse 1" aggregate of pyrite grains.	11061	2.0 0.6	51.0 15.54	53.0 16.15			
53.0 16.15	55.0 16.76	Quartzite, dark reddish with 5% chlorite as a fine grained replacement. Grains of whitish carbonate throughout.			-				
		53.0 - 55.0 - (16.15 - 16.76) - Quartzite, 5% chlorite as a fine grained replacement. Small grains of whitish carbonate throughout.	11062	2.0 0.6	53.0 16.15	55.0 16.76			
		55.0 (16.76) - End of Hole.							
							•		1
				1					1



Property: 772, D.R. Watt Property Location: Scadding Typ., Ont. Co-ordinates: 4994N, 9836E

HOLE: N-13. Core size:

Section: 98 + 36E

Length: 55.0 (16.76m) Elevation: 300.3m

Dip Tests: Started: Dec. 15, 1980 Completed: Dec. 16, 1980

0.00	·				DESCRIPTION		sample number	width	from	to		ASSAYS
DEP from	to		NOTE:	. All	DESCRIPTION angles are measured with respect to t	he long core axis.	number	Witti	i i Otti		Au oz./ton	
		ure 5	ections		• • • • • • • • • • • • • • • • • • •		11040	3.0 0.9	5.0 1.5	8.0	.059	
							11041	2.0 0.6	8.0 2.4	10.0	.560	
					•		11042	2.0 0.6	10.0 3.1	12.0	.253	
		,	1.	٠	· · · · · · · · · · · · · · · · · · ·			7.0 2.1	5.0 1.5	12.0	.258	
	·		la.					4.0 1.2	8.0	12.0	.407	
	-											
		•										Transporting or such season.
		•	·			•						
1	-											



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4995N, 9828.3E

HOLE: N-14. Core size:

Section: 98 + 28.5E Length: 54.0 (16.46m) Elevation: 300.7 m Azimuth: 0° Dip: 0°

Dip Tests: Started: Dec. 16, 1980 Completed: Dec. 17, 1980 Logged by: P. McLean

	DRILL LOC	Drill Contractor - N. Morissette Elevation: 300. Azimuth: 0°	./m Dip: 0°			by: P. I	. 17, 198 McLean	.0 	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axi	sample s. number	width	from	to _	A	SSAYS	
from	to	NOIE: All angles are measured with respect to the long core axi	3. Humber						
0.0	6.0 1.83	Casing.				•			#
6.0 1.83	7.0 2.13	Casing core, chlorite breccia, 10% chlorite mostly as a replacement, sulphides are rare.	s ·						
7.0 2.13	37.2 11.34	Chlorite breccia, 15% to 40% chlorite mineralized throughout with blebs and grains of pyrite, varies from 1% to 25% sulphides. Locally very fine V.G. noted.							
		7.0 - 10.0 - (2.13 - 3.05) - Chlorite breccia, 15% chlorite as a replacement and in patches. A few grains of pyrite in the more chloritic sections. 70% recovery.	11063	3.0	7.0 2.13	10.0	-		
:		10.0 - 12.0 - (3.05 - 3.66) - Chlorite breccia, 50% chlorite in patches and as a replacement. 10% pyrite in blebs and grains. A few grains of aspy noted. 70% recovery.	11064	2.0 0.6	10.0 3.05	12.0 3.66	#		
		12.0 - 14.0 - (3.66 - 4.27) - Chlorite breccia, 30% chlorite in patches and as a replacement. 2% pyrite in small blebs and grains in the more chloritic sections.	11065	2.0 0.6	12.0 3.66	14.0 4.27			: : : : : : : : : : : : : : : : : : : :
		14.0 - 16.0 - (4.27 - 4.88) - Chlorite breccia, 30% chlorite in patches and as replacement. Local blebs and grains of pyrite, mostly in the more chloritic sections. Grain of V.G. on sawn surface 15.2 (4.6)in pyrite bleb.	11066	2.0	14.0 4.27	16.0 4.88			
		16.0 - 18.0 - (4.88 - 5.49) - Chlorite breccia, 40% chlorite with 20% pyrite i large blebs. Small vugs throughout. Specks of V.G. in vug at 16.8 (5.1) 2nd side, speck at 17.5 (5.3) and grain at 17.6 (5.4) on 2nd side of sawn surface.		2.0	16.0 4.88	18.0 5.49			•
		18.0 - 19.2 - (5.49 - 5.85) - Chlorite breccia, 30% chlorite in patches and as a replacement. 10% pyrite in large blebs, grains, and seams. Small specks of V.G. on sawn surface at 18.4 (5.6).	11068	1.2	18.0 5.49	19.2	e care care care care care care care car		;



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4995N, 9828.3E

HOLE: N-14 Core size:

Section: 98 + 28.5E Length: 54.0 (16.46m)

Elevation: 300.7 m
Azimuth: 0° Dip: 0°

Dip Tests:

Started: Dec. 16, 1980 Completed: Dec. 17, 1980 Logged by: P. McLean

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 300.7 Azimuth: 0°	m Dip: 0°			by: P. Mc	
		DESCRIPTION	sample	width	from	+0	ASSAYS
DE	PTH	NOTE: All angles are measured with respect to the long core axis.	number	Width	i roili	to	
from	to		<u> </u>				
		19.2 - 22.0 - (5.85 - 6.70) - Ground core.			-		
		22.0 - 24.0 - (6.70 - 7.32) - Chlorite zone, 60% chlorite, 5% sulphides, mostly pyrrhotite in small blebs, also some chalco and a little pyrite. Poor recovery 50% ground core.		2.0 0.6	22.0 6.70	24.0 7.32	
		24.0 - 26.0 - (7.32 - 7.92) - Chlorite breccia, 30% chlorite as a replacement and in patches. 5% sulphides as coarse pyrite blebs, also some pyrrhotite. Rusty weathered core with frequent small vugs.	11070	2.0 0.6	24.0 7.32	26.0 7.92	
		26.0 - 28.0 - (7.92 - 8.53) - Chlorite breccia, 25% chlorite as a replacement and in patches. 15% pyrite in seams and large blebs, minor chalco. Small vugs throughout.	11071	2.0 0.6	26.° 7.92	28.0 8.53	
		28.0 - 30.0 - (8.53 - 9.14) - Chlorite breccia, 20% chlorite as a replacement and in patches. Locally well mineralized with blebs of pyrite, 5%. Vugs in the best mineralized sections. Specks of fine V.G. at 28.9 (8.8) in vug on sawn surface.	11072	2.0 0.6	28.0 - 8.53		
		30.0 - 32.0 - (9.14 - 9.75) - Chlorite breccia, 20% chlorite with 15% pyrite in large blebs and seams. Small vugs throughout. Rusty sections.	11073	2.0 0.6	30.0 9.14	32.0 9.75	
		32.0 - 34.0 - (9.75 - 10.36) - Chlorite breccia, 20% chlorite in whitish quartzite. 7% sulphides, pyrite and pyrrhotite and minor chalco. Small vugs throughout.	11074	2.0 0.6	32.0 9.75	34.0 10.36	
		$34.0-36.0-(10.36-10.97)$ - Chlorite breccia, 25% chlorite with 20% sulphides, mostly large blebs of pyrite up to $\frac{1}{2}$ " with minor associated chalco. Specks of V.G. with pyrite at 34.6 (10.6) on sawn surface. Some small vugs throughout.	11075	2.0 0.6	34.0 10.36	36.0 10.97	
		36.0 - 37.2 - (10.97 - 11.34) - Chlorite breccia, 25% chlorite with 25% pyrite in very coarse blebs and seams up to 2". Minor chalco. A few small vugs through	11076 hout.	1.2 0.4	36.0 10.97	37.2 11.34	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4995N, 9828.3E

HOLE: N-14 Core size:

Section: 98 + 28.5E Length: 54.0 (16.46m) Elevation: 300.7m Azimuth: 0° Dip: 0°

Dip Tests: Started: Dec. 16, 1980 Completed: Dec. 17, 1980 Logged by: P. McLean

20111100				-
DRILL LOG	Drill	Contractor -	N.	Morissette

DEP	TH	DESCRIPTION	sample number	width	from	to		ASSAYS	,
from	to	NOTE: All angles are measured with respect to the long core axis.	number.						
37.2 11.34	41.2 12.56	Chlorite zone, 65% - 70% with 7% sulphides. Coarse pyrite blebs and smaller blebs of pyrrhotite. Some grey quartz.				•			
		37.2 - 39.1 - (11.34 - 11.92) - Chlorite zone, 70% chlorite with 7% pyrite and pyrrhotite in blebs and grains. Some vuggy pyrite blebs up to 3/4".	11077	1.9 0.6	37.2 11.34	39.1 11.92			
		39.1 - 41.2 - (11.92 - 12.56) - Chlorite zone, 65% chlorite with some grey xtalline quartz. 5% pyrite and pyrrhotite in coarse blebs.	11078	2.1 0.6	39.1 11.92	41.2 12.56		Approximate the second	
		. 41.2 - (12.6) - 2" rusty seam.					-		
41.2 12.56	54.0 16.46	Chlorite breccia, 10% to 30% chlorite. Sulphides rare to absent.							
		41.2 - 43.4 - (12.56 - 13.23) - Chlorite breccia, 30% chlorite mostly as a replacement. Rare grain of py.	11079	2.2 0.7	41.2 12.56	43.4 13.23			
43.4 13.2	54.0 16.5	Rusty seams, core weathered in appearance.							
		43.4 - 45.5 - (13.23 - 13.87) - Chlorite breccia, 40% chlorite mostly as a replacement. The odd grain of pyrite and some white carbonate in this section.	11080	2.1	43.4 13.23	45.5 13.87			
		· 45.5 - 48.0 - (13.87 - 14.63) - Chlorite breccia, 15% chlorite as a replacement. The odd grain of pyrite. Rusty core due to seams.	11081	2.5 0.8	45.5 13.87	48.0 14.63		:	
48.0 14.63	54.0 16.46	Rusty seam almost parallel to the core.		-					
		48.0 - 51.0 - (14.63 - 15.54) - Chlorite breccia, 10% chlorite as a replacement. Sulphides absent. Rusty seam almost parallel to the core.	11082	3.0 0.9	48.0 14.63	51.0 15.54			
						:	<u> </u>	· 	



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9828.3E

HOLE: N-14 . Core size:

Section: 98 + 28.5E

Dip Tests:

Length: 54.0 (16.46m) Elevation: 300.7 m

Started: Dec. 16, 1980 Completed: Dec. 17, 1980

			zimuth: 0°	Dip: 0°		209400	i by: p		ASSAYS
DE	PTH	DESCRIPTION NOTE: All angles are measured with respect to the	long core axis.	sample number	width	from	to		
from	to								
		51.0 - 54.0 - (15.54 - 16.46) - Chlorite breccia, 10% chlorite mo ment. Rusty core.	stly as a replac	ce- 11083	3.0 0.9	51.0 15.54	54.0 16.46		
		54.0 - (16.46) - End of Hole.	•			-			
		Hole could not be deepened as it went off line along rusty seam.							
		•							
	-								
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Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9828.3E

HOLE: N-14 Core size:

Dip Tests:

Section: 98 + 28.5E Length: 54.0 (16.46m)

Elevation: 300.7m Azimuth: 0°

Started: Dec. 16, 1980

Completed: Dec. 17, 1980 Logged by: P. McLean DRILL LOG Drill Contractor - N. Morissette Dip: 0° **ASSAYS** DESCRIPTION sample width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au from oz/ton Ore Sections 1. 11064 12.0 .586 3.7 .2 2.0 10.0 0.6 3.1



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15 . Core size:

Section: 98 + 21E

Length: 82.0 (24.99m)
Elevation: 301.4m
Azimuth: 0 Dip: 0

Dip Tests: Started: Jan. 7, 1981 Completed: Jan. 9, 1981 Logged by: P. McLean

	DRILL LO	Drill Contractor - N. Morissette Elevation: 301.4m	Dip: 0°		Comple Logged	ted: Jar I by: P.	1. 9, 19 McLear	981 1	
D	EPTH	DESCRIPTION	sample number	width	from	to		ASSAY	'S
from		NOTE: All angles are measured with respect to the long core axis.	number	•			Au oz./to	n	
0.0 0.0	6.5 1.98	Casing.				•			
6.5 1.98	15.0 4.57	Chlorite breccia. 20% to 30% chlorite in seams, patches, and as a replacement. 5% to 10% pyrite in irregular blebs and seams. Small vugs common.							
		6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 20% chlorite, mostly as a replace ment, also in patches. 10% pyrite in coarse blebs and seams.	11084	2.0 .61	6.5 1.98	8.5 2.59	Tr		
		8.5 - 10.9 - (2.59 - 3.32) - Chlorite breccia, 20% chlorite in patches and as a replacement. 10% yy coarse bleb; and seams, locally a few grains of chalco. Small vugs throughout.	11085	2.4	8.5 2.59	10.9 3.32	.002		
		10.9 - 13.0 - (3.32 - 3.96) - Chlorite breccia, 20% chlorite in patches and as a replacement. 7% sulphides, py and po in blebs. Also a little fine chalco.	17086	2.1 .64	10.9 3.32	13.0 3.96	.002		
		13.0 - 15.0 - (3.96 - 4.57) - Chlorite breccia, 20% chlorite in patches and as a replacement. 7% sulphides, mostly po and py in blebs. Minor fine chalco. Small vugs present.	11087	2.0 .61	13.0 3.96	15.0 4.57	.011		
15.0 4.57	38.0 11.58	Chlorite zone, 60% to 80% chlorite, well mineralized with coarse blebs of pyrite throughout. Frequent vuggy sections. V.G. as noted.							
		15.0 - 17.0 - (4.57 - 5.18) - Chlorite zone, 60% chlorite with 20% pyrite in coarse blebs up to 3/4". Fine grains of V.G. both sides of surface at 15.3 (4.7), several coarse grains both surfaces at 15.5 (4.7), fine speck of V.G. at 16.6 (5.1), 2nd half. Local large vugs with quartz xtals.	11088	2.0	15.0 4.57	17.0 5.18			
		17.0 - 19.0 - (5.18 - 5.79) - Chlorite zone, 60% chlorite with 15% pyrite in coarse blebs, minor po. Locally some irregular grey vein quartz also well mineralized with pyrite. Some small vugs, fine speck of V.G. 2nd half surface at 17.6 (5.4).	11089	2.0 .61	17.0 5.18	19.0 5.79	.096		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4995N, 9821E

Core size:
Dip Tests:

HOLE: N-15.

Section: 98 + 21E Length: 82.0 (24.99m)

Started: Jan. 7, 1981

Elevation: 301.4m

Completed: Jan. 9, 1981 Logged by: P. McLean

Dip:0° Azimuth: 0° DRILL LOG Drill Contractor - N. Morissette ASSAYS samole DESCRIPTION width to from NOTE: All angles are measured with respect to the long core axis. number DEPTH oz./ton from to 19.0 - 21.5 - (5.79 - 6.55) - Chlorite zone, 60% chlorite, 10% sulphides, 11090 21.5 .052 2.5 19.0 equal amounts of py and po in blebs up to 3". Grains of V.G. at 20.5 (6.3) and 5.79 6.55 .76 21.2 (6.5) on 2nd half surface. Also at 21.3 (6.5) on 1st half surface. 21.5 - 23.5 - (6.55 - 7.16) - Chlorite zone, 70% chlorite with 20% coarse 23.5 .230 11091 2.0 21.5 pyrite in coarse blebs and seams up to 11". Very vuggy. Coarse grain of V.G. 6.55 7.16 .61 at 22.0 (6.7) and many coarse grains at 22.4 (6.8), some on 1st side of sawn surface, most on 2nd side, also on outside of 2nd side. 23.5 - 25.0 - (7.16 - 7.92) - Chlorite zone, 60% chlorite with 20% sulphides, 11092 2.5 23.5 26.0 .798 7.16 7.92 mostly py some po in coarse bloos. Coarse V.G. grains at 23.7 (7.2) outside .76 2nd half, also fine grains 2nd surface. Coarse grains on 1st half outside and on 1st surface at 25.7 (7.8). .202 26.0 - 28.0 - (7.92 - 8.53) - Chlorite zone, 70% chlorite with 10% sulphides, 11093 2.0 26.0 28.0 both py and po. Several large vugs. Fine speck of V.G. at 26.5 (8.1) 1st half 7.92 8.53 .61 surface, also several grains on 2nd surface at 27.6 (8.4). 28.0 - 30.0 - (8.53 - 9.14) - Chlorite breccia, 70% chlorite, 15% sulphides, 11094 1.038 2.0 28.0 30.0 mostly po in blebs up to ½", also some coarse py. Occasional vugs. Locally 8.53 9.14 .61 some irregular vein quartz. Grains of V.G. at 28.3 (8.5) on both sides of sawn surface, several grains at 28.5 (8.7) on 2nd surface. Coarse grains V.G. at 29.1 (8.9) outside 1st half. Grain V.G. at 29.6 (9.0) on 1st surface and coarse smear at 29.8 (9.1) also on 1st surface. Grain of V.G. at 29.9 (9.1) on 1st surface. . 30.0 - 32.0 (9.14 - 9.75) - Chlorite zone, 70% chlorite with 12% sulphides, 11095 30.0 32.0 .801 2.0 mostly po in coarse blebs up to 12". Some irregular vein quartz also mineral-9.14 9.75 .61 ized. Specks of V.G. at 30.2 (9.2) 1st surface. Coarse grain at 30.6 (9.3) both surfaces. V.G. at 31.6 (9.6) and 31.7 (9.7) on 2nd surface. Several coarse grains outside 1st side at 31.8 (9.7). Coarse grain V.G. outside 2nd side at 38.9 (11.9).



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15. Core size:

Section: 98 + 21E Length: 82.0 (24.99m)
Elevation: 301.4m
Azimuth: 0° Dip: 0° Dip Tests: Started: Jan. 7, 1981

Completed: Jan. 9, 1981 Logged by: P. McLean

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: 0°	Dip: 0°		Logged	by: P.	McLean		
<u> </u>		DESCRIPTION	sample	المال في	from	to		ASSAYS	;
DEPT	ТН	NOTE: All angles are measured with respect to the long core axis.	1	width	Trom	LO	Au oz./to	n	
from	to								
		32.0 - 34.0 - (9.75 - 10.36) - Chlorite zone, 70% chlorite with 20% po in large blebs and seams. Local grey vein quartz. Grain of V.G. outside 1st half at 32.4 ((9.9), fine grains on 1st surface at 32.5 (9.9). Fine grains outside 1st surface at 32.6 (9.9). Also several coarse grains outside 2nd half at 32.4 (9.9). 32.6 (9.9) to 33.2 (10.1) coarse po, 40% in this section with some chalco. Many grains of V.G. in the pyrrhotite thoughout this section, on both sides of the core outside, also on the sawn surfaces.	11096	2.0 .61	32.0 9.75	34.0 10.36	1.33		
		34.0 - 36.0 - (10.36 - 10.97) - Chlorite zone, 65% chlorite with some grey vein quartz. 20% sulphides mostly po, also some vuggy pyrite, in blebs and seams. Coarse grain of V.G. 2nd surface at 33.0 (10.1), fine grains and a fine seam outside 2nd side at 33.4 (10.2). Fine grains 1st half outside at 33.1 (10.1). Coarse grain V.G. 1st surface at 33.4 (10.2), several grains outside 1st half at 35.9 (10.9).	11097	2.0	34.0 10.36	36.0 10.57	.12		
,	•	36.0 - 38.0 - (10.97 - 11.58) - Chlorite zone, 60% chlorite, 10% grey vein quartz in irregular stringers. 12% pyrite in blebs up to ½". Many fine grains of V.G. 1st surface at 37.5 (11.4).	11098	2.0	36.0 10.97	38.0 11.58	.278		
38.0 11.58	52.8 16.09	Chlorite breccia, 20% to 30% chlorite in altered whitish quartzite, sulphides vary from sparse to 10%.	·						
		38.0 - 40.0 - (11.58 -12.19) - Chlorite breccia, 25% chlorite as a replacement and in seams, 5% sulphides, mostly py, some pc. Coarse grain of V.G. in po at 38.9 (11.9) 1st half outside.	11099	2.0	38.0 11.58	40.0 12.19	.056		
		40.0 - 43.3 - (12.19 - 13.20) - Chlorite breccia, 25% chlorite in patches and a replacement. 10% sulphides, mostly po in small blebs, also some pyrite.	11100	3.3	40.0 12.19	43.3 13.20	.003		
		43.3 - 46.0 - (13.20 - 14.02) - Chlorite breccia, 10% chlorite in well brecciate quartzite, in seams and as a replacement. Sulphides rare.	11101	2.7	43.3	46.0 14.02	Tr		
i ·							1	1	



Property: 772, D.R. Watt Property Location: Scadding Township, Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15. Core size:

Section: 98 + 21E Length: 82.0 (24.99m) Elevation: 301.4m Azimuth: 0° Dip: 0°

Dip Tests:

Started: Jan. 7, 1981 Completed: Jan. 9, 1981 Logged by: P. McLean

	DRILL LO	Drill Contractor - N. Morissette Elevation: 301.4m Azimuth: 0°	Dip: 0°				n. 9, 1981 <u>McLean</u>	
DEP	TU	DESCRIPTION	sample	width	from	to	ASSAY	S
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz./ton	
		46.0 - 47.3 - (14.02 - 14.42) - Chlorite breccia, 30% chlorite in patches and as a replacement. 10% sulphides in small blebs. Py and po.	11102	1.3	46.0 14.02	47.3 14.42	.002	
		47.3 - 48.4 - (14.42 - 14.75) - Chlorite breccia, 15% chlorite as a replacement, a few grains of py and pyrrhotite.	11103	1.1	47.3 14.42	48.4 14.75	Tr	
		48.4 - 50.4 - (14.75 - 15.36) - Chlorite zone, 50% chlorite with 7% sulphides, fine py and po. Speck of V.G. 1st half outside at 49.2 (15.0), several grains 2nd surface at 50.0 (15.3). Some disseminated magnetite.	11104	2.0 .61	48.4 14.75	50.4 15.36	.306	
		50.4 - 52.8 - (15.36 - 16.09) - Chlorite breccia, 35% chlorite as a replacement, and in seams. Locally some aspy. Disseminated magnetite, minor sulphides.	11105	2.4 .73	50.4 15.36	52.8 16.09	.03	-
52.8 16.09	65.7 20.02	Chlorite zone, 60% to 70% chlorite with 5% to 10% sulphides.						
		52.8 - 54.7 - (16.09 - 16.67) - Chlorite zone, 60% chlorite with 10% sulphides, pyrite and pyrrhotite, disseminated magnetite also present. Grain of V.G. at 53.6 (16.4) on 2nd surface and grain at 54.5 (16.6) on 1st surface.	11106	1.9 .58	52.8 16.09	54.7 16.67	.177	
		54.7 - 56.7 - (16.67 - 17.28) - Chlorite zone, 60% chlorite with 10% py and po in blebs, locally disseminated magnetite. Speck of V.G. at 55.4 (16.9) and 55.5 (16.9) on 2nd surface, grains of V.G. at 54.5 (16.6) on 1st surface.	11107	2.0	54.7 16.67	56.7 17.28	.139	
		56.7 - 59.4 - (17.28 - 18.11) - Chlorite zone, $60%$ chlorite with $7%$ py and po, disseminated magnetite throughout.	11108	2.7	56.7 17.28	59.4 18.11	.172	
		59.4 - 62.2 - (18.11 - 18.96) - Chlorite zone, 70% chlorite with 3% disseminated pyrite in 1st half of the sample. Frequent grains of aspy in the last 3". 5% disseminated magnetite.	11109	2.8 .85	59.4 18.11	62.2 18.96	.056	
		62.2 - 64.0 - (18.96 - 19.50) - Chlorite zone, 70% chlorite with 5% sulphides, py and po in blebs. 5% disseminated magnetite. Several coarse grains of V.G.	11110	1.8 .54	62.2 18.96	64.0 19.50	.050	•



DRILL LOG Drill Contractor - N. Morissette Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4995N, 9821E

HOLE: N-15 Core size:

Dip Tests:

Section: 98 + 21E

Length: 82.0 (24.99m)
Elevation:301.4m
Azimuth: 0 Dip: 0

Started: Jan. 7, 1981 Completed: Jan. 9, 1981 Logged by: P. McLean

		DESCRIPTION	sample	width	fuom	• •		ASSAYS
DEP from	to	NOTE: All angles are measured with respect to the		wiath	from	to	Au oz./ton	
		at 63.4 (19.3) with bleb of pyrite 1st side outside.						
		64.0 - 65.7 - (19.50 - 20.01) - Chlorite zone, 60% chlorite we be and point blebs. 10% magnetite, disseminated and in coars quartz. Specks of V.G. 2nd side outside at 64.2 (19.6). A fof aspy noted.	e blebs local vein	1.7	64.0 19.50	65.7 20.01	.052	
65.7 20.02	70.3 21.43	Chlorite breccia, 20% to 50% chlorite with some sulphides.			-			
T		65.7-68.0-(20.01-20.73) - Chlorite breccia, $20%$ to $50%$ sulphides, py and po with minor disseminated magnetite. Specoutside at 67.8 (20.7).	chlorith 3% 11112 k of V.s. 1st half	2.3	65.7 20.01	68.0 20.73	.018	
		68.0 - 70.3 - (20.72 - 21.43) - Chlorite breccia, 30% chlorit py and po throughout.	e with 3% sulphides, 11113	2.3	68.0 20.72	70.3 21.43		
70.3 21.43	73.7 22.46	Chlorite breccia, 20% chlorite in seams patches, and as a reppink quartzite.	lacement of salmon					
		70.3 - 73.7 - (21.43 - 22.46) - Chlorite breccia, 20% chlorit and as a replacement. Sulphides absent.	e in seams, patches 11114	3.4 1.03	70.3 21.43	73.7 22.46	Tr	
73.7	82.0 24.99	` Quartzite, salmon pink, altered with carbonated stringers and	small patches.					
22.46	24.99	82.0 (24.99) - End of Hole.						
1 1 1								
					-			



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15 Core size:

Section: 98 + 21E Length: 82.0 (24.99m) Elevation: 301.4m Azimuth: 0° Dip:

Dip:0°

Dip Tests: Started: Jan. 7, 1981 Completed: Jan. 9, 1981 Logged by: P. McLean

			•	DESCRIPTION samp NOTE: All angles are measured with respect to the long core axis. number		sample number	width	from	to		ASSAYS			
DEPTH from t	to		NOTE: All	angles a	are measure	ed with resp	ect to the	e long core	axis. number	WIGCH	71 0111	10	Au oz/ton	
		Ore Secti	ons											
					· ·				11088	2.0 0.6	15.0 4.6	17.0° 5.2	. 365	
			· · · · · · · · · · · · · · · · · · ·					·	11089	2.0 0.6	17.0 5.2	19.0 5.8	.095	
			•	··· .	· · · .	•			11090	2.5 0.8	19.0	21.5	.05	
	:		•						11091	2.0 0.6	21.5	23.5 7.2	.23	
	•								11092	2.0 0.6	23.5	26.0 7.9	.798	
									11093	2.0 0.6	26.0 7.9	28.0	.20	
	•								11094	2.0 0.6	28.0	30.0	1.04	
			•						11095	2.0 0.6	30.0	32.0 9.8	.801	
						• •	. •		11096	2.0 0.6	32.0 9.8	34.0 10.4	1.33	
						•			11097	2.0 0.6	34.0 10.4	36.0 10.9	.12	



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15. Core size:

Section: 98 + 21E Length: 82.0 (24.99m) Elevation: 301.4m Azimuth: 0° Dip: 0°

Dip Tests: Started: Jan. /, 1981 Completed: Jan. 9, 1981 Logged by: P. McLean

DEPTH		DESCRIPTION NOTE: All angles are measured with respect to the long co			• .	sample	sample	sample	sample	width	from	to	ASSA
UER from	to		NOTE: All angl	les are measured with respect	to the long core axis.	number	Widen	110111		Au oz/ton			
		Ore Secti	ons - (Cont'd)										
			•		•	11098	2.0 0.6	36.0 10.9	38.0 11.6	.278			
		1.		•			23.0 7.0	15.0 4.6	38.0 11.6	.462			
		•				11099	2.0 0.6	38.0 11.6	40.0	.056			
						11100	3.3 1.0	40.0 12.2	43.3	.003			
	-		•			11101	2.7	43.3	46.0 14.0	Tr			
;						11102	1.3 0.4	46.0 14.0	47.3 14.4	.002			
	·					11103	1.1	47.3 14.4	48.4 14.8	Tr			
		•	. •				10.4	38.0 11.6	48.4 14.8	.012			
		•				11104	2.0 0 5	48.4 14.8	50.4 15.4	.306			
						11105	2.4 0.7	50.4 15.4	52.8 16.1	.03			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4995N, 9821E

HOLE: N-15 Core size:

Section: 98 + 21E Length: 82.0 (24.99m)

Elevation: 301.4m

Dip Tests: Started: Jan. 7, 1981 Completed: Jan. 9, 1981 Locged by: P. McLean

	DRILL LO	G Drill Contractor - N. Morissette	Elevation: 301.4m	D1p: 0°		Logge	d by: P.	n. 9, 198 McLean	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to t	he long core axis.	sample number	width	from	to	Au	ASSAYS
from	to	More: 7111 angres are massares misin respect to						oz/ton	
		Ore Sections - (Cont'd)							
				11006	1.9 0.6	52.8 16.1	54.7 16.7	.177	
				11007	2.0 0.6		56.7 17.3	.139	
				11108	2.7 0.3	56.7 17.3	59.4 18.1	.172	
		2.			11.0	48.4 14.8	59.4 18.1	.160	
	-	3.		-	44.4 13.5	15.0 4.6	59.4 18.1	.291	
	·								
	_								
	-								:



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4992N, 9806E

HOLE: N-16. Core size:

Section: 98 + 06E Length: 58.0 (17.67m)

Elevation: 300.3 m
Azimuth: 0° Dip: -10°

Dip Tests: Started: Jan. 11, 1987.

Completed: Jan. 13, 1981 Logged by: P. McLean

·	DRILL LO	G Drill Contractor - N. Morissette Elevation: 300.3 Azimuth: 0°	3 m 	·		eted: Ja i by: P.			
DEP	TH	DESCRIPTION	sample number	width	from	to		ASSAY	5
from	to	NOTE: All angles are measured with respect to the long core axis	· Itumber				Au na/to	n	
0.0 0.0	15.0 4.57	Casing.				٠			
		0.0 - 3.0 - (0.091) - Quartzite, salmon pink with occasional grains of chlorite. Apparently a boulder.							
		3.0 - 15.5 - (.91 - 4.72) - Gravel and boulders, hole was reported to have ru out of rock.	n .						
15.0 4.57	21.7 6.61	Chlorite breccia, 15% to 20% chlorite as a replacement and in seams in alteredred reddish quartzite. Sulphides absent.	t						
		15.5 - 17.0 - (4.72 - 5.18) - Chlorite breccia, 15% chlorite as a replacement and in seams. Sulphides absent.	11115	1.5	15.5 4.72	17.0 5.18			
		17.0 - 19.5 - (5.18 - 5.94) - Lost core.							
		19.5 - 21.7 - (5.94 - 6.61) - Chlorite breccia, 20% chlorite, as a replacement and in small patches. Sulphides rare. Speck of V.G. outside 2nd half.	11116	2.2	19.5 5.94	21.7 6.61	.002		
21.7 6.61	30.6 9.33	Chlorite breccia, 25% chlorite in patches and seams, local coarse sulphides.							
		21.7 - 23.7 - (6.61 - 7.22) - Chlorite breccia, 25% chlorite in patches and as a replacement. Pyrite blebs increasing to the end of the sample in more chloritic sections. 5% pyrite.	11117	2.0	21.7 6.61	23.7	.018		
	·	23.7 - 25.2 - (7.22 - 7.68) - Chlorite breccia, 25% chlorite in patches and as a replacement. Well mineralized with 20% pyrite in coarse blebs, also a littichalco. Vuggy section. Speck of V.G. in vug outside 2nd half at 24.0 (7.3), also V.G. at 24.0 (7.3) and 24.5 (7.5) 1st half surface. Two grains of V.G. outside 1st half at 23.9 (7.3), and two grains in vugs at 24.3 (7.4). Minute grains on both surfaces at 24.6 (7.5).	e	1.5	23.7 7.22	25.2 7.68			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9806E

HOLE: N-16. Core size:

Section: 98 + 06E

Length: 58.0 (17.67m)
Elevation: 300.3m
Azimuth: 0° Dip: -10°

Dio Tests: Started: Jan. 11, 1981 Completed: Jan. 13, 1981 Logged by: P. McLean

DRILL LOG	Drill	Contractor	-	N.	Morissette
					

DEPTH		DESCRIPTION NOTE: All angles are measured with respect to the long core axis		width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number	WIGGI	TOM		Au oz/tor	1	
		25.2 - 28.2 - (7.68 - 8.60) - Chlorite breccia, 25% chlorite, mostly as a replace ment. Sulphides absent.	- 11119	3.0 .92	25.2 7.68	28.2 8.60			***
		28.2 - 30.6 - (8.60 - 9.33) - Chlorite breccia, 25% chlorite in patches and as a replacement. 3% to 5% sulphides, mostly pyrite in blebs, seams and grains, also a few grains of aspy. Speck of V.G. on 2nd surface at 28.3 (8.6).	11120	2.4	28.2 8.60	30.6 9.33			
30.6 9.33	35.3 10.76	Chlorite zone, 60% chlorite with very heavy aspy to 32.8 (10.0), then minor sulphides.							
		30.6 - 33.0 - (9.33 - 10.06) - Chlorite zone, 60% chlorite with 10% arsenopyrite in grains and coarse aggregates with prismatic xtals up to 1" in length. 32.2 (9.8) to 32.7 (9.9) is 60% aspy. Minor associated pyrite.	11121	2.4 .73	30.6 9.33	33.0 10.06			
		33.0 - 35.3 - (10.06 - 10.76) - Chlorite zone, 60% chlorite with some quartzite breccia fragments. A few local grains of pyrite.	11122	2.3 .70	33.0 10.06	35.3 10.76			
35.3 10.76	44.3 13.50	Chlorite breccia, 25% to 50% chlorite with 2% to 5% disseminated sulphides.							
		35.3 - 38.0 - (10.76 - 11.58) - Chlorite breccia, 40% chlorite with 1% to 2% pyrite in small blebs and seams. Good grain of V.G. outside 2nd half at 36.8 (11.2).	11123	2.7	35.3 10.76	38.0 11.58			
		38.0 - 40.0 - (11.58 - 12.19) - Chlorite breccia, 50% chlorite with 2% disseminated pyrite. A little grey vein quartz.	11124	2.0 .61	38.0 11.58	40.0 12.19			1
		40.0 - 42.3 - (12.19 - 12.89) - Chlorite breccia, 40% chlorite with 5% sulphides, coarse blebs of pyrite and po, also some fine sulphides. Large vugs locally.	11125	2.3 .70	40.0 12.19	42.3 12.89			
	•	42.3 - 44.3 - (12.89 - 13.50) - Chlorite breccia, 25% chlorite with 5% sulphides, mostly po in coarse bleb in the more chloritic sections, some chalco also present Good grain of V.G. at 44.0 (13.4) on 1st surface.	11126	2.0 .61	42.3 12.89	44.3 13.50	.022		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9806E

HOLE: N-16 Core size:

Section: 98 + 06E

Length: 58.0 (17.67m)
Elevation: 300.3 m
Azimuth: 00 Din:

Dip Tests:

Started: Jan. 11, 1981 Completed: Jan. 13, 1981 Logged by: P. McLoan

	DRILL LO		ation: 300.3 _r uth: 0°	n Dip: -10°		Comple Logged	ted:Jar by:p	. 13, McLean	1981	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the lon	a core axis	sample number	width	from	to	A	ASSAYS	
from	to	MOTE. Att digres are measured with respect to the for	y core axis.	·				Au oz/tor	1	
44.3 13.50	51.0 15.54	Chlorite zone, 60% chlorite with local coarse sulphides.								
		44.3 - 45.9 - (13.50 - 13.99) - Chlorite zone, 60% chlorite with 7% mostly po in blebs and grains. Good grain of V.G. at 44.4 (13.5) on half, also good grain outside 2nd half at 45.0 (13.7).	sulphides, utside lst	11127	1.6 .49	44.3 13.50	45.9 13.99	.025		
		45.9 - 48.0 - (13.99 - 14.63) - Chlorite zone, 60% chlorite with 20% mainly arsenopyrite in coarse seams and xtals. Aspy is often interpy and/or po.	% sulphides, grown with	11128	2.1	45.9 13.99	48.0 14.63	.154		
		48.0 - 50.0 - (14.63 - 15.24) - Chlorite zone, 70% chlorite with 10% mostly po in small blebs and seams, also some py and a little chalco grain of aspy. Several fine grains of V.G. on 1st surface at 48.3 grain outside 1st half at 48.8 (14.9) and 48.9 (14.9).	and the odd	11129	2.0 .61	48.0 14.63	50.0 15.24	.072		
		50.0 - 51.6 - (15.24 - 15.73) - Chlorite zone, 70% chlorite with 7% mostly blebs of pyrite: Grain of V.G. at 50.8 (15.5) outside 1st had 4" is chlorite breccia.	sulphides, alf. Last	11130	1.6 .49	50.0 15.24	51.6 15.73	.029		
51.0 15.54	58.0 17.68	Chlorite breccia, 10% to 25% chlorite mostly as a replacement, and i seams.	in narrow							
		51.6 - 53.7 - (15.73 - 16.37) - Chlorite breccia, 25% chlorite in pa a replacement. A little disseminated pyrite in 1st 6".	atches and as	11131	2.1 .64	51.6 15.73	53.7 16.37	.002		
		53.7 - 56.4 - (16.37 - 17.19) - Chlorite breccia, 10% chlorite as a sulphides absent except for a 1" coarse patch of py with aspy with and chlorite.	replacement, carbonate	11132	2.7	53.7 16.37	56.4 17.19	.002		
	•	54.9 - 55.9 - (16.73 - 17.04) - Ground core.							•	



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9806E

HOLE: N-16. Core size:

Section: 98 + 06E Length: 58.0 (17.67m) Elevation: 300.3m Azimuth: 0° Dip: -10°

Dip Tests: Started: Jan. 11, 1981 Completed: Jan. 13, 1981 Logged by: P. McLean

					DES	CRIPT	ION			sample	width	from	to	Tickea	ASSAY	/S
DEPTH from to		•		TE: A11	angles	are measu	red with 1	respect to	the long core axis.	number	width	i roiii	LO	Au oz/tor	1	
		56.4 - and in	58:0 - narrow	(17.19 - seams. /	17.68) A little	- Chlorite dissemina	e breccia, ated pyrit	10% chlor e and the	ite as a replacement odd coarse bleb.	11133	1.6	56.4 17.19	58.0 17.68	.002		
1			(17.68)			•			•							
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Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont.

Co-ordinates: 4992N, 9806E

HOLE: N-16. Core size:

Dip Tests:

Section: 98 + 06E

Length: 58.0 (17.67m)

Elevation: 300.3m

Started: Jan. 11, 1981 Completed: Jan. 13, 1981 Logged by: P. McLean DRILL LOG Drill Contractor - N. Morissette Azimuth: 0° Dip: -10° **ASSAYS** DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au oz/ton from to Ore Sections 11118 1.5 23.7 25.2 .106 0.5 7.2 7.7 11119 3.0 25.2 28.2 .007 0.9 7.7 8.6 11120 2.4 28.2 30.6 .084 0.7 8.6 9.3 11121 2.4 30.6 33.0 .122 0.7 9.3 10.1 9.3 23.7 33.0 .072 2.8 7.2 10.1 la. 4.8 28.2 33.0 | .103 1.5 8.6 10.1 11128 2.1 45.9 48.0 14.6 .154 0.6 14.0 11129 2.0 48.0 50.0 .072 0.6 14.6 15.3 4.1 45.9 50.0 .114 1.3 14.0 15.3

HOLE: N-17-Core size:

Section: 97 + 91E Length: 76.0 (23.2m) Elevation: 300.7m

Dip Tests: Started: Jan. 15, 1981 Completed: Jan. 17, 1981 Logged by: Paul McLean

NORTHGATE EXPLORATION LIMITED

Drill Contractor - N. Morissette

	DRILL LOG	Drill Contractor - N. Morissette Azimuth:	0° Dip: -8°		Logged	by: Pa	ul McLea	an	
DED:		DESCRIPTION	sample e axis. number	width	from	to	Λι. Ι	ASSAYS	; T
DEP		NOTE: All angles are measured with respect to the long cor	e axis. number				Au oz./ton		
from 0.0 0.0	12.0 3.67	Casing.							
12.0 3.67	20.0 6.10	Mostly ground core with only 2 feet of partly ground material remaining is chloritized and carbonated quartzite with a few blebs of pyrite. Ch zone at 20.0 feet (6.10) ground prior to this depth.		8.0 2.43	12.0 3.67	20.0 6.10			
		12.0 - 20.0 - (3.67 - 6.10) - Chloritized and carbonated quartzite with odd bleb of pyrite. 6 feet of ground core included.	the						
20.0 6.10	26.4 8.05	Chlorite zone, 70% to 80% chlorite, disseminated magnetite, pyrite and pyrrhotite throughout, locally very coarse blebs and seams. V.G. as no	ted.						
		20.0 - 21.3 - (6.10 - 6.49) - Chlorite zone, $80%$ chlorite, sparse pyrite few grains of magnetite. Several fine grains of V.G. at 20.3 (6.2) on surface.		1.3	20.0	21.3 6.49			
		21.3 - 23.3 - (6.49 - 7.10) - Chlorite zone, 80% chlorite with 10% sulfacoarse po with some aspy and fine pyrite throughout. Disseminated magner Grain of V.G. outside 2nd half at 21.6 (6.6), also fine grain outside 10 at 21.6 (6.6). Fine grain 1st surface at 21.7 (6.6), and at 22.2 (6.8 22.3 (6.8). Coarse grain V.G. 2nd surface at 22.5 (6.9) also fine groutside 2nd half at 22.5 (6.9). 22.4 - 22.6 (6.8 - 6.9) - coarse patch and py with some aspy with many grains of V.G. outside and inside 1st half several coarse grains outside 2nd half at 22.7 (6.9). Grain 2nd surface 2.8 (7.0). Outside 1st half grains at 22.5 (6.9) and 22.6 (6.9).	etite. st half) and ain of po alf.	2.0	21.3 6.49	23.3 7.10			
		23.3 - 25.0 - (7.10 - 7.62) - Chlorite zone, 70% chlorite with 20% sulplin grains, blebs and patches pyrite, po, disseminated magnetite. Coarso of V.G. at 23.6 (7.2) outside 1st half. Fine V.G. both surfaces at 23.5 speck of V.G. outside 2nd side at 23.9 (7.3), speck of V.G. in po 1st stat 24.1 (7.4). Many grains with po at 24.7 (7.5) both surfaces, also segrains of V.G. at 24.9 (7.6) both surfaces.	e grain 8 (7.3), urface	1.7	23.3 7.10	25.0 7.62	.79		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9792E

HOLE: N-17. Core size:

Section: 97 + 91E

Length: 76.0 (23.2m)

Dip Tests:

Elevation: 300.7m
Azimuth: 0° Dip: -8

Started: Jan. 15, 1981 Completed: Jan. 17, 1981 Logged by: Paul McLean

DRILL LOG	Drill Contractor - N. Morissette Azimuth: 0°	Dip: -8		Logged	by: Par	1 McLea	n
	DESCRIPTION	sample	width	from	to		PSSAYS
DEPTH	NOTE: All angles are measured with respect to the long core axis.	number	WIGGI	11000		Au oz./ton	
from to	25.0 - 26.4 - (7.62 - 8.05) - Chlorite zone, 70% chlorite with coarse blebs of po, 15% sulphides. 25.3 - 25.5 (7.7 - 7.8) - coarse po blebs with many good grains of V.G. on both surfaces and outside both halves. Disseminated magnetite throughout.	11138	1.4	25.0 7.62	26.4 8.05	2.65	
26.4 8.05 9.45	Chlorite breccia, 50% chlorite with 10% sulphides, V.G. as noted. 26.4 - 28.4 - (8.05 - 8.66) - Chlorite breccia, 50% chlorite with coarse sulphides, 7% po and some py in small blebs. Speck of V.G. 2nd surface at 26.7 (8.1) and speck on 1st surface at 27.1 (8.3).	11139	2.0 .61	26.4 8.05	28.4 8.66	.098	
	28.4 - 31.0 - (8.66 - 9.45) - Chlorite breccia, 50% chlorite with 10% magnetite in coarse grains and aggregates. 7% sulphides, mostly py in blebs. Speck of V.G. 1s* surface at 28.7 (8.8), also speck outside 2nd half at 29.2 (8.9).	11140	2.6 .79	28.4 8.66		.206	
31.0 9.45 51.0 15.54	Chlorite breccia, 10% to 20% chlorite as a replacement, and in seams and patches.						
	31.0 - 32.7 - $(9.45 - 9.97)$ - Chlorite breccia, 10% chlorite as a replacement and in seams and small patches. A little disseminated py and magnetite with the chlorite patches. $\frac{1}{2}$ " seam of pyrite ncluded.	11141	1.7 .52	31.0 9.45	32.7 9.97	.057	
	32.7 - 34.0 - (9.97 - 10.36) - Chlorite breccia, 10% chlorite in seams and patches and as a replacement. A few grains of py and magnetite.	11142	1.3 .39	32.7 9.97	34.0 10.36	.098	
	34.0 - 36.0 - (10.36 - 10.97) - Chlorite breccia, 15% chlorite in seams and small patches, and as a replacement. Seams and small blebs of pyrite, 5% pyrite Two specks of V.G. outside 2nd half at 34.3 (10.5).	11143	2.0 .61	34.0 10.36	36.0 10.97	.084	
	36.0 - 39.0 - (10.97- 11.89) - Chlorite brecçia, 15% chlorite as a replacement and in seams and patches in altered reddish quartzite. Rare sulphides.	11144	3.0 .92	36.0 10.97	39.0 11.89	.001	# # # # #



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4992N, 9792E

HOLE: N-17. Core size:

Dip Tests:

Section: 97 + 91E

Length: 76.0 (23.2m)

Elevation: 300.7m Dip: -8° Started: Jan. 15, 1981 Completed: Jan. 17, 1981

Drill Contractor - N. Morissette Logged by: Paul McLean DRILL LOG Azimuth: U. **ASSAYS** samole DESCRIPTION width from to NOTE: All angles are measured with respect to the long core axis. number Au DEPTH oz/tan from to 39.0 - 42.0 - (11.89 - 12.80) - Chloritized quartzite, 10% chlorite in altered 39.0 11145 3.0 42.0 reddish quartzite which is well carbonatized with narrow stringers and small 11.89 .91 12.80 patches of whitish carbonate. Sulphides absent. 42.0 - 45.0 - (12.80 - 13.72) - Chloritized quartzite, 10% chlorite as a 42.0 11146 3.0 45.0 -002 replacement and in very narrow seams. Rare grains of pyrite. .91 12.80 13.72 45.0 - 47.0 - (13.72 - 14.33) - Chlorite breccia, 10% chlorite in frequent 2.0 47.0 11147 45.0 Tr narrow seams and as a replacement. Occasional grain of py and a few small 13.72 .61 14.33 grains of aspy. 47.0 - 49.0 - (14.33 - 14.94) - Chlorite breccia, well brecciated with 15% 11148 2.0 47.0 49.0 .008 chlorite in seams and patches, and as a replacement. 1% pyrite throughout in 14.33 .61 14.94 fine grains and small blebs. 49.0 - 51.0 - (14.94 - 15.54) - Chlorite breccia, 15% chlorite in seams and 11149 2.0 49.0 51.0 .002 patches and as a replacement. Weil brecciated with 5% sulphides, mostly po 14.94 15.54 .61 with some py in small blebs, narrow seams, and grains. 51.0 - 53.1 - (15.54 - 16.18) - Chlorite breccia, 5% chlorite in seam and as a 11150 51.0 2.1 53.1 .002 replacement. 10% sulphides po and py mostly in coarse patches and seams. 15.54 .64 16.18 Chlorite breccia, weakly chloritic with 5% to 10% chlorite, mostly as a replace-51.0 68.0 ment and in narrow seams. This section is well mineralized with 5% to 10% 15.54 20.73 sulphides. 53.1 - 54.9 - (16.18 - 16.73) - Chlorite breccia, 7% chlorite in seam and 11151 53.1 1.8 54.9 .001 patches, well mineralized with 10% sulphides in coarse patches, py po, and a .55 16.18 16.73 little chalco. 54.9 - 57.0 - (16.73 - 17.37) - Carbonate breccia, weakly chloritic with 11152 2.1 54.9 57.0 L001 frequent small carbonate rhombs in reddish altered quartzite. 3% sulphides, .64 16.73 17.37 mostly in blebs of py chalco, and local arsenopyrite.



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 4992N, 9792E

HOLE: N-17. Core size:

Section: 97 + 91E Length: 76.0 (23.2m) Elevation: 300.7m

Dip Tests: Started: Jan. 15, 1981 Completed: Jan. 17, 1981 Logged by: Paul McLean

	sample number width	from	to	ASSAYS	S
NOTE: All angles are measured with respect to the long core axis.	number				
				Au oz./ton	
57.0 - 59.0 - (17.37 - 17.98) - Chlorite breccia, 10% chlorite in altered carbonatized quartzite. Carbonated rhombs and stringers throughout. 10% sulphides, py and some chalco in seams, blebs and cubes, also a few grains of aspy. 2 grains of V.G. in pyrite xtal at 58.7 (17.9).	11153 2.0	57.0 17.37	59.0 17.98	.002	
59.0 - 61.0 - (17.98 - 18.59) - Altered quartzite well carbonatized with many small carbonated rhombs and grains, weakly chloritic. 10% py in seams and blebs with a little associated chalco. A few grains of aspy.	11154 2.0	59.0 17.98		.002	
61.0 - 63.0 - (18.59 - 19.20) - Chloritized quartzite, less carbonated than previous sample. 7% chlorite as a replacement and in narrow seams. 10% pyrite with a little chalco and some fine po, in seams blebs and small xtals.	11155 2.0	61.0 18.59		.001	
63.0 - 65.5 - (19.20 - 19.96) - Chlorite breccia, 7% chlorite in seams and as a replacement. 5% fine po with some py and a little chalco disseminated and in seams.	11156 2.5	63.0 19.20	65.5 19.96		
65.5 - 68.0 - (19.96 - 20.73) - Chlorite breccia, 7% chlorite in seams and as a replacement. 3% to 5% disseminated po and py. Local carbonated stringers.	11157 2.5	65.5 19.96			
Interbedded greywacke and quartzite with greywacke beds replaced by fine chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections.					
68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated.	11158 3.0 .91	68.0 20.73	71.0 21.64		
71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and chalco.	11159 2.5	71.0 21.64	73.5 22.40		
	chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections. 68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated. 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and	chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections. 68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated. 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and .76	chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections. 68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated. 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and .76 21.64	chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections. 68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated. 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and 68.0 71.0 20.73 21.64 20.73 21.64 22.40 21.64 22.40 22.40 22.40 23.64 22.40 23.64	chlorite. Bedding at 80° to the core. 3% po with a little pyrite and chalco. Somewhat brecciated with the best sulphides in the more brecciated sections. 68.0 - 71.0 - (20.73 - 21.64) - Interbedded quartzite and greywacke with 10% chlorite in greywacke beds, as a fine replacement. 3% fine po disseminated and in seams. A little py also present, somewhat brecciated. 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and 71.0 - 73.5 - (21.64 - 22.40) - Interbedded quartzite and greywacke somewhat brecciated with 5% chlorite replacement. 3% to 5% po with a little py and 71.0 - 73.5 - (21.64 - 22.40)



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9792E

HOLE: N-17 Core size:

Section: 97 + 91E Length: 76.0 (23.2m) Elevation: 300.7m Azimuth: 0° Dip: -8°

Dip Tests:

Started: Jan. 15, 1981 Completed: Jan. 17, 1981 Logged by: Paul McLean

	DESCRIPTION	sample	width		to	ul McLean A	ISSAYS
DEPTH from to	NOTE: All angles are measured with respect to the long core axis.	number	WIGGI.	77 0		Au oz./ton	
	73.5 - 76.0 - (22.40 - 23.16) - Interbedded quartzite and greywacke 10% chlorite as a replacement and in narrow seams 5% sulphides, mostly po with some py and chalco. Somewhat brecciated.	11160	2.5 .76	73.5 22.40	76.0 23.16	.001	
	76.0 - (23.16) - End of Hole.						



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9792E

HOLE: N-17 Core size:

Dip Tests:

Section: 97 + 91E

Length: 76.0 (23.2m) Elevation: 300.7m

Started: Jan. 15, 1981 Completed: Jan. 17, 1981

·	DRILL LO	OG Drill Contractor - N. Morissette Elevation: 300.7m Azimuth: 0*	Dip: -8	<u> </u>	Logged	by:Pau	1. 17, 1981 11 McLean
DEP	ТН	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	ASSAYS
from	to	NOIE: All angles are measured with respect to the long core axis.	number	-			Au oz/ton
		Ore Sections	• ,				
		-	11135	1.3	20.0	21.3	2.16
			11136	2.0	21.3	23.3 7.1	1.26
			11137	1.7	23.3	25.0 7.6	0.79
			11138	1.4	25.0 7.6	26.4 8.1	2.65
			11139	2.0 0.6	26.4	28.4 8.7	.098
			11140	2.6 0.8	28.4 8.7	31.0 9.5	.206
			11141	1.7	31.0 9.5	32.7 10.0	.057
			11142	1.3	32.7 10.0	34.0 10.4	.098
·			11143	2.0 0.6	34.0 10.4	36.0 11.0	.084
		1.		16.0 5.0	20.0 6.1	36.0 11.0	.719



Property: 772, D.R. Watt Property. Location: Scadding Twp., Ont. Co-ordinates: 4992N, 9792E

HOLE: N-17. Core size:

Dip Tests:

Section: 97 + 91E Length: 76.0 (23.2m) Elevation: 300.7m

Started: Jan. 15, 1981 Completed: Jan. 17, 1981

		Drill	· · · · · · · · · · · · · · · · · · ·		Elevation: 300.7r Azimuth: 0°					an. 17, 198 aul McLean	ASSAYS
DEP.		•	NOTE: All	DESCRIPTION angles are measured with respect t	to the long core axis.	sample number	width	from	to	Au oz/ton	
from	to	·		· · · · · · · · · · · · · · · · · · ·		<u> </u>			<u> </u>	02/011	
1		Ore Sectio	ns - (Cont'd)							
		la.		·			11.0	20, 0			
							11.0 3.4	20.0	9.5	1.010	
		16.					6.4	20.0	26.4	1.622	
ļ			•				6.4 2.0	20.0 6.1	26.4		
		-									
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							}				
			-			!			1		,



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4998N, 9777E

HOLE: N-18 Core size:

Dip Tests:

Section: 97 + 61E Length: 57.0 (17.37m) Elevation: 303.3m

Started: Jan. 18, 1981 Completed: Jan. 20, 1981 Logged by: Paul McLean

DRILL LOG	Drill Contractor - N. Morissette Azimuth: 0	oip:0°	-	Logge	i by: Pa	JUI MCL	ean		
2			10	£	+0		ASS	SAYS	
ГН	NOTE: All angles are measured with respect to the long core ax			Trom	10	Au oz./to	on		
to				 					
2.6	Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in v patches. Some brownish weathered carbonate areas, some lost core.	/uggy		resident and the second of the					
	0.0 - 2.6 - $(0.0$ - $.79)$ - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample.	1116	2.6	0.0	2.6	Tr			
11.0 3.35	Chlorite breccia, 20% chlorite as a replacement and in narrow seams.								
			1.4	2.6	4.0	Tr	1		
			2.5	4.0	6.5	Tr			į
	in patches. Locally some blebs of pyrite, also fine and disseminated py. S	Speck	2.0	6.5	8.5 2.59	.03			
	8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent.	: 1116	2.5	8.5 2.59	11.0	Tr			
30.0 9.14	Chlorite breccia, 10% to 20% chlorite as a replacement and in seams. Locall well mineralized sections.	ly) !	!
·	11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. 5% pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciated sections. A few irregular white carbonate stringers.	nt 1116	2.0	11.0	13.0 3.96	Tr			-
	11.0 3.35	DESCRIPTION NOTE: All angles are measured with respect to the long core as to 2.6 .79 Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in patches. Some brownish weathered carbonate areas, some lost core. 0.0 - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. 11.0 Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2.6 - 4.0 - (.79 - 1.22) - Chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite sea serelacement. 5% sulphides, po with some py in coarse and fine blebs and greplacement. 5% sulphides, po with some py in coarse and fine blebs and greplacement. 5% sulphides, power blebs of pyrite, also fine and disseminated py. Sof V.G. on 1st surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. 30.0 Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. 5% pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciated sections. A few irregular white carbonate	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. 10 2.6 Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. 0.0 - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. 11.0 Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2.6 - 4.0 - (.79 - 1.22) - Chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. 5% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on lst surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. 20.0 Chlorite breccia, 10% to 20% chlorite as a replacement and in seams. Locally well mineralized sections. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. 5% pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciated sections. A few irregular white carbonate	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. O.O - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. Chlorite breccia, 20% chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. S% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on lst surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. Chlorite breccia, 10% to 20% chlorite as a replacement and in seams. Locally well mineralized sections. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sw pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciated sections. A few irregular white carbonate	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. 0.0 - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2.6 - 4.0 - (.79 - 1.22) - Chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. S% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on 1st surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. 30.0 Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 111.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Syprite in blebs and cubes up to ½". Py with the chlorite in the more bracciated sections. A few irregular white carbonate	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. O.O - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. Chlorite breccia, 20% chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. 5% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on 1st surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 11165 2.5 8.5 11.0 2.59 3.35 Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sulphides absent. 110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sulphides absent. 1110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sulphides absent. 1110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sulphides absent. 1110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sulphides absent. 1110 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narr	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. O.O 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2.6 - 4.0 - (.79 - 1.22) - Chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. 5% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on 1st surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. 30.0 Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sw pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciate sections. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Sw pyrite in blebs and cubes up to ½". Py with the chlorite in the more brecciate sections.	DESCRIPTION NOTE: All angles are measured with respect to the long core axis. DESCRIPTION NOTE: All angles are measured with respect to the long core axis. Chlorite breccia, 40% chlorite in patches. Rusty weathered, 20% pyrite in vuggy patches. Some brownish weathered carbonate areas, some lost core. O.O - 2.6 - (0.079) - Chlorite breccia, 40% chlorite with 20% pyrite in coarse vuggy patches. Some carbonatized sections. Some lost core in this sample. Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2.6 - 4.0 - (.79 - 1.22) - Chlorite breccia, 20% chlorite mostly as a replacement, and in narrow seams. A few rare blebs of pyrite with the chlorite seams. 4.0 - 6.5 - (1.22 - 1.98) - Chlorite breccia, 20% chlorite in seams and as a replacement. 5% sulphides, po with some py in coarse and fine blebs and grains. 6.5 - 8.5 - (1.98 - 2.59) - Chlorite breccia, 30% chlorite as a replacement and in patches. Locally some blebs of pyrite, also fine and disseminated py. Speck of V.G. on lst surface at 7.5 (2.3) in py bleb. 5% sulphides, locally coarse py blebs, also fine po and py. 8.5 - 11.0 - (2.59 - 3.35) - Chlorite breccia, 15% chlorite as a replacement and in narrow seams. Sulphides absent. 30.0 Chlorite breccia, 10% to 20% chlorite as a replacement and in narrow seams. Sulphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Supphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Supphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Supphides absent. 11.0 - 13.0 - (3.35 - 3.96) - Chlorite breccia, 10% chlorite as a replacement and in narrow seams. Supphides absent.	ASSAYS DESCRIPTION NOTE: All angles are measured with respect to the long core axis. DESCRIPTION NOTE: All angles are measured with respect to the long core axis. The number of the



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4998N, 9777E

HOLE: N-18-Core size:

Section: 97 + 61E Length: 57.0 (17.37m) Elevation: 303.3m

Dip Tests: Started: Jan. 18, 1981 Completed: Jan. 20, 1981

		DRILL LOG	Drill Contractor - N. Morissette Azimuth: 0	Dip: 06		Logge	by: Pa	n. 20, ul McLe	1981 30		
The section of	DEP ¹	TU	DESCRIPTION	sample	width	from	to		ASSAY	5	
	from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au 02-/101	1		_
			13.0 - 16.0 - (2.96 - 4.88) - Chlorite breccia, 10% chlorite as a replacement, and in narrow seams, and small patches. 1% pyrite disseminated in small grains throughout. Local narrow white carbonate stringers.	11167	3.0 .92	13.0 2.96	16.0 4.88	Tr			
-			16.0 - 18.0 - (4.88 - 5.49) - Chlorite breccia, well brecciated section with 15% chlorite as a replacement and in narrow seams. 1% disseminated py in blebs and grains. A few grains of arsenopyrite noted.	11168	2.0 .61	16.0 4.88	18.0 5.49	Tr			
			18.0 - 20.0 - (5.49 - 6.10) - Chlorite breccia, 20% chlorite in a well brecciated section, mostly as a replacement and in narrow seams. 3% to 5% pyrite in blebs up to ½", minor chalco.	11169	2.0 .61	18.0 5.49	20.0	Tr			
			20.0 - 23.0 - (6.10 - 7.01) - Chlorite breccia, 20% chlorite as a replacement and in narrow seams. 2% pyrit in blebs and small grains.	11170	3.0 .91	20.0 6.10	23.0	Tr			
-		•	23.0 - 26.0 - (7.01 - 7.92) - Chlorite breccia, $20%$ chlorite as a replacement. $3%$ to $5%$ pyrite in blebs and grains disseminated throughout.	11171	3.0 .91	23.0 7.01	26.0 7.92	Tr			
The state of the s			26.0 - 28.0 - (7.92 - 8.53) - Chlorite breccia, 20% chlorite as a replacement and in seams and small patches. 3% disseminated py throughout.	11172	2.0 .61	26.0 7.92	28.0 8.53	Tr			
			28.0 - 30.0 - (8.53 - 9.14) - Chlorite breccia, 20% chlorite as a replacement and in seams and patches. 5% py disseminated throughout.	11173	2.0 .61	28.0 8.53	30.0 9.14	Tr	# # # # # # # # # # # # # # # # # # #		
	30.0 9.14	33.8 10.30	Quartzite, altered salmon pink with frequent very narrow carbonate threads.								
			30.0 - 33.8 - (9.14 - 10.30) - Quartzite, salmon pink with fine carbonate threads. The odd small py cube.	11174	3.8 1.16	30.0 9.14	33.8 10.30	Tr			
	33.8 10.30	44.0 13.41	Chlorite breccia, 30% chlorite as a replacement and in seams and patches 3% to 10% sulphides in this section.								



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4998N, 9777E

HOLE: N-18. Core size:

Section: 97 + 61E

Length: 57.0 (17.37m)
Elevation: 303.3m
Azimuth: 0 Dip: 0

Dip Tests:

Started: Jan. 18, 1981 Completed: Jan. 20, 1981 Logged by: Paul McLean

		DESCRIPTION	sample	width	from	to	ASSA	YS
DEPT from	to	NOTE: All angles are measured with respect to the long core axis.	number	widen.	i i Oili		Au oz/ten	
		33.8 - 35.7 - (10.30 - 10.88) - Chlorite breccia, 20% chlorite as a replacement and in patches. Well mineralized with 10% sulphides, po in seams and patches, also a little pyrite and minor chalco. Speck of V.G. at 34.0 (10.4) on outside of 2nd half.	11175	1.9 .58	33.8 10.30	35.7 10.88	.03	
		35.7 - 38.0 - (10.88 - 11.58) - Chlorite breccia, 30% chlorite as a replacement and in patches and seams. 5% sulphides mostly po with a little pyrite in fine grains.	11176	2.3 .70	35.7 10.88	38.0 11.58	Tr	
		38.0 - 39.8 - (11.58 - 12.13) - Chlorite breccia, 30% chlorite as a replacement and in seams and patches. The odd grain of py and po.	11177	1.8	38.0 11.58	39.8 12.13	Tr	
		39.8 - 42.0 - (12.13 - 12.80) - Chlorite breccia, 30% chlorite in seams and patches and as a replacement. Vuggy section with 3% sulphides some coarse blebs and grains of py and pyrrhotite.	11178	2.2	39.8 12.13	42.0 12.80	Tr	
		42.0 - 44.0 - (12.80 - 13.41) - Chlorite breccia, 25% chlorite mostly as a replacement. 3% to 5% disseminated sulphides throughout, mostly py.	11179	2.0 .61		44.0 13.41	Tr	1
44.0 13.41	50.9 15.51	Chlorite breccia, weakly chloritic with 10% chlorite mostly as a replacement. Minor disseminated sulphides.						
		44.0 - 47.0 - (13.41 - 14.32) - Chlorite breccia, 10% chlorite as a replacement and in seams. 2% disseminated pyrite thoughout.	11180	3.0 .91	44.0 13.41	47.0 14.32	Tr	
		47.0 - 49.4 - (14.32 - 15.06) - Chlorite breccia, 7% chlorite as a replacement and in narrow seams. The odd grain of pyrite.	11181	2.4	47.0 14.32	49.4 15.06	Tr	; ;
ng a ng pangan na ng pangan na ng pangan na ng pangan na ng pangan na ng pangan na ng pangan na ng pangan na ng		49.4 - 50.9 - (15.06 - 15.51) - Chlorite breccia, 7% chlorite as a replacement, rare grain of pyrite.	11182	1.5	49.4 15.06		Tr	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4998N, 9777E

HOLE: N-18 Core size:

Section: 97 + 61E Length: 57.0 (17.37m) Elevation: 303.3m Azimuth: 0° Dip: 0°

Dip Tests: Started: Jan. 18, 1981 Completed: Jan. 20, 1981 Logged by: Paul McLean

- 3	DRILL LOG	g Drill Contractor - N. Morissette Az <u>imuth: 0°</u>	Dip: 0°		Loggeo	by: Pa	UI MCLE	an	
	DRILL LOC		sample					ASSAY	/S __
DEP	 	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au oz/ton		
from 50.9 15.51	57.0 17.37	Well brecciated and mineralized section, 10% chlorite with some carbonate. Coarse patches of sulphides in the more brecciated sections.			·				
·		50.9 - 52.4 - (15.51 - 15.97) - Chlorite breccia, 15% chlorite in seams and as replacement. 10% sulphides, mostly pyrite with some chalco in coarse seams and blebs in the more brecciated sections. Grain of V.G. at 51.7 (15.8) outside 1st half, and 2 grains at 51.9 (15.8) also outside 1st half.	11183	1.5	50.9 15.51	52.4 15.97			
		52.4 - 54.0 - (15.97 - 16.46) - Chlorite breccia, 10% chlorite in narrow seams. Lucally very coarse sulphides, mostly py, in patches up to 1½". A little po and minor chalco. Approximately 10% sulphides.	11184	1.6	52.4 15.97	54.0 16.46	Tr		
		54.0 - 55.5 - (16.46 - 16.92) - Chlorite breccia, 10% chlorite in seams and as a replacement. Locally very coarse pyrite with some po and a little chalco. 7% sulphides.	11185	1.5	54.0 16.46	55.5 16.92	Tr		
		55.5 - 57.0 - (16.92 - 17.37) - Chlorite breccia, 10% chlorite well brecciated with very coarse pyrite and some po and chalco in seams and patches. 10% sulphides.	11186	1.5	55.5 16.92	57.0 17.37	Tr		1
		57.0 (17.37) - End of Hole.							
									1
•									<u> </u>



Drill Contractor - N. Morissette DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 4937N, 9762E

HOLE: N-19. Core size:

Section: 97 + 61E

Length: 56.6 (17.3)

Elevation: 304.2m Azimuth: 0° Dip: -5°

Dip Tests:

Started: Jan. 21, 1981 Completed: Jan. 22, 1981 Logged by: P. McLean

		DESCRIPTION	sample	طفاد قدر	£		A:	SSAYS
DEP		NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au oz./ton	
from	to		·		 .		!	
0.0	1.6 .49	Chlorite zone, 60% chlorite with 10% coarse pyrite in blebs.	·			•		
-		0.0 - 1.6 - (0.049) - Chlorite zone, 60% chlorite with 10% pyrite in coarse blebs. Speck of V.G. outside 2nd half at 0.1, also grains of V.G. with pyrite on 2nd surface at 0.5 (0.2).	11187	1.6	0.0	1.6	.086	
1.6	4.8 1.46	Chlorite breccia, 40% chlorite in patches and as a replacement.	-					
		1.6 - 3.2 - (.4998) - Chlorite breccia, 40% chlorite in patches, seams and as a replacement. 10% pyrite in blebs with the chlorite. Also 10% magnetite in blebs and disseminated throughout. A few grains of aspy.	11188	1.6	1.6 .49	3.2	.092	
	٠	3.2 - 4.8 - (.98 - 1.46) - Chlorite breccia, 30% chlorite in seams and as a replacement. 5% sulphides, py and po and a few grains of aspy. Also a soft silvery mineral at 3.4 (1.1) and 3.6 (1.1) outside 2nd half, could be silver or a telluride? Disseminated magnetite throughout.	11189	1.6	3.2 .98	4.8	.038	
4.8 1.46	26.0 7.92	Chlorite zone, 50% to 70% chlorite, well mineralized throughout with coarse blebs and seams of py and po.	•					
		4.8 - 6.8 - (1.46 - 2.07) - Chlorite zone, 70% chlorite with 10% sulphides in blebs and disseminated. Mostly py with a few grains of aspy. Some disseminated magnetite, local grey vein quartz.	11190	2.0	4.8	6.8	. 126	
		6.8 - 9.0 - (2.07 - 2.74) - Ch ¹ .tre zone, 60% chlorite with 7% sulphides, py and some po and a few local grus of aspy, intergrown with pyrite. A few grains of magnetite. A few yugs noted. Some ground core in this sample.	11191	2.2	6.8 2.07	9.0		
	-	9.0 - 11.0 - (2.74 - 3.35) - Chlorite zone, 50% chlorite with 7% sulphides, mostly py in blebs and seams, locally some po and a little chalco. Minor magnetite.	11192	2.0 .61	9.0 2.74	11.0	.03	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 4999N, 9762E

HOLE: N-19. Core size:

Section: 97 + 61E

Length: 56.6 (17.3m)

Elevation: 304.2m Azimuth: 0° Dip:-5°

Dip Tests:

Started: Jan. 21, 1981 Completed Jan. 22, 1981 Logged by: P. McLean

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: 0°	[™] Dip:-5°	·	Logge	by: P.	- 22, 1981 McLean	
DEPT	тн	DESCRIPTION	sample	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz./ton	
		11.0 - 12.5 - (3.35 - 3.81) - Chlorite zone, 70% chlorite. Vuggy section with 20% sulphides, mostly py in large blebs and seams. A few grains of aspy. Speck of V.G. on 1st surface at 11.8 (3.6). Speck of V.G. on 2nd surface at 12.1 (3.7). Grain of V.G. outside 1st half at 12.4 (3.8).	11193	1.5	11.0	12.5	.09	
		12.5 - 14.0 - (3.81 - 4.27) - Chlorite zone, 70% chlorite with 20% sulphides, mostly pyrite and po with a little chalco in coarse blebs and seams. Vuggy section wth py xtals in the vugs.	11194	1.5	12.5	14.0 4.27	.067	
14.0	16.0	Ground core Note: very bad place to loose core because of heavy sulphides and vuggy section.						
		16.0 - 18.0 - (4.88 - 5.49) - Chlorite zone, 60% chlorite with 25% sulphides, mostly po in very coarse blebs, also some py. Locally appreciable chalco. A few grains of aspy.	11195	2.0	16.0	18.0 5.49	.009	
		18.0 - 20.0 - (5.49 - 6.10) - Chlorite zone, 60% chlorite with 25% sulphides, mostly py in coarse blebs and seams, also some po. Vuggy section.	11196	2.0	18.0 5.49	20.0	.046	
		20.0 - 22.0 - (6.10 - 6.71) Chlorite zone, 60% chlorite with 20% sulphides, py and po in coarse blebs and seams. A little chalco, rare grain of aspy.	11197	2.0	20.0	22.0	020	
***		22.0 - 24.0 - (6.71 - 7.32) - Chlorite zone, 60% chlorite with 15% sulphides, mostly py in blebs and seams. Some po and a little chalco.	11198	2.0	22.0	24.0 7.32	079	
		24.0 - 26.0 - (7.32 - 7.92) - Chlorite zone, 50% chlorite with 5% sulphides, mostly py in small blebs.	11199	2.0	24.0 7.32	26.0 7.92	Tr	
26.0 7.92	56.6 17.25	Chlorite breccia, 10% to 15% chlorite in narrow seams and as a replacement. 2 - 3% sulphides with the chlorite seams. Similar to chlorite breccia on outcrop to the northwest where low values were obtained.						
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Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4999N, 9762E

HOLE: N-19 Core size:

Section: 97 + 61E Length: 56.6 (17.3m) Elevation: 304.2m Azimuth: 0° Dip: -5°

Dip Tests:

Started: Jan. 21, 1981 Completed: Jan. 22, 1981 Logged by: P. McLean

	DRILL LO	G Drill Contractor - N. Morissette Elevation: 30 Azimuth: 0°		·	Logge	by: P.	n. 22, 19 McLean		
DEPI	ru i	DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core ax	is. number				Au oz./ton		
·		26.0 - 29.0 - (7.92 - 8.84) - Chlorite breccia, 20% chlorite as a replacement and in narrow seams and patches. Sulphides absent.	t 11200	3.0 0.9	26.0 7.92	29.0 8.84	Tr		
		29.0 - 32.0 - (8.84 - 9.75) - Chlorite breccia, 10% chlorite as a replacement and in seams and small patches. Sulphides absent.	11201	3.0 0.9	29.0 8.84	32.0 9.75	Tr		
		32.0 - 35.0 - (9.75 - 10.67) - Chlorite breccia, 20% chlorite as a replacement and in seams and patches 3% sulphides, py and locally coarse po patches in the more brecciated sections.	nt 11202 he	3.0 0.9	32.0 9.75	35.0 10.67	Tr		
		35.0 - 38.0 - (10.67 - 11.58) - Chlorite breccia, 15% chlorite mostly in narr seams and as a replacement. Seams are usually mineralized with sulphides. Local blebs and grains of pyrite, also fine po. 3% sulphides. A little whit carbonate with the chlorite seams.	1	3.0	35.0 10.67	38.0 11.58	Tr		
	-	38.0 - 41.0 - (11.58 - 12.50) - Chlorite breccia, 10% chlorite in narrow seam and as a replacement. White carbonate with the seams. Grains and blebs of pand po with chlorite seams. 1% sulphides.	ns, 11204	3.0	38.0 11.58	41.0	Tr		
		41.0 - 44.0 - (12.50 - 13.41) - Chlorite breccia, 10% chlorite in narrow seam and as a replacement. A few disseminated sulphides throughout.	ns, 11205	3.0 0.9	41.0	44.0	Tr		,
		44.0 - 46.0 - (13.41 - 14.02) - Chlorite breccia, 10% chlorite in seams and a replacement. Local blebs and grains of py and po with chlorite seams. Grain V.G. with a bleb of pyrite at 44.9 (13.7) on 1st surface.	as a 11206 n of	2.0	44.0	46.0	īr		!
46.0	56.6 17.25	Some bedding, contorted from 45° to 65° to the core.							
and the second s		46.0 - 49.0 - (14.02 - 14.93) - Chlorite breccia, 10% chlorite in seams and a replacement. Locally some white carbonate. A few grains and blebs of py a po.	ns 11207	3.0	46.0 14.02	49.0	Tr	1 1 1 1	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 4999N, 9762E

HOLE: N-19. Core size:

Section: 97 + 61E

Length: 56.6 (17.3m)

Dip Tests:

Started: Jan. 21, 1981. Elevation: 304.2m Azimuth: 0 Dip: -5 Completed: Jan. 22, 1981 Logged by: P. McLean

DRILL LOG

Drill Contractor - N. Morissette

DRILL LUG	Drill Contractor - N. Mortssette	Azimuth: 0	Dip: -5"		Logaec	i by: P	. McLea	n
DEPTH	DESCRIPTION		sample	width	from	to		ASSAYS
from to	NOTE: All angles are measured with respec	ct to the long core axis.	number				Au oz./to	on
	49.0 - 52.0 - (14.93 - 15.85) - Chlorite breccia, 15% a replacement. 2% sulphides, mostly po in grains and little chalco.	chlorite in seams and as blebs, also some py and a	11208	3.0 .92	49.0 14.93	52.0 15.85	Tr	
	52.0 - 54.3 - (15.85 - 16.55) - Chlorite breccia, 10% replacement with the odd narrow chlorite seam. A few more chloritic sections.		11209	2.3 .70	52.0 15.85	54.3 16.55	Tr	
	54.3 - 56.6 - (16.55 - 17.25) - Chlorite breccia, 15% a replacement. 2% sulphides, py and po in blebs with are increasing to the end of the hole.	chlorite in seams and as chlorite seams. Sulphide	11210	2.3	54.3 16.55		Tr	
	56.6 - (17.25) - End of Hole.							
-								
					·			



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont: Co-ordinates: 4999N, 9762E

HOLE: N-19 Core size:

Section: 97 + 61E Length: 56.6 (17.3m) Elevation: 304.2m

Dip Tests: Started: Jan. 21, 1981 Completed: Jan. 22, 1981

	DRILL LO	OG Drill Contractor - N. Morissette	Azimuth: 0	Dip: -5_	·	Logge	d by: p	McLean	
DEP)TU	DESCRIPTION NOTE: All angles are measured with respect to the		sample	width	from	to		ASSAYS
from		NOTE: All angles are measured with respect to the	e long core axis.	number				Au oz/ton	
	- paragraphic and a second sec	Ore Sections	•	11187	1.6 0.5	0.0	1.6	.086	
,			•	11188	1.6 0.5	1.6 0.5	3.2	.092	
				11189	1.6 0.5	3.2 1.0	4.8	.038	
		1.		11190	2.0 0.6	4.8 1.5	6.8	.126	
				11191	2.2 0.7	6.8 2.1	9.0	.092	
	-	la.			9.0 2.8	0.0	9.0	.089	
							Age age of the second		
			·						
	•		· · · · · · · · · · · · · · · · · · ·				•		



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5294.0N, 9582.0E

HOLE: N-20. Core size: .

Section: 6+50NW, 6+50NE Length: 427.0 (130.1m)

Dip Tests:

Started: Oct. 6/80 Completed: Oct. 9/80 Locaed by: P. McLean

Elevation: 302.6m Azimuth: S65 W Dip: 45°

. ner	· -	DESCRIPTION	sample	width	from	to		ASSA	YS	
DEF	to	NOTE: All angles are measured with respect to the long core axis.	number	. widen	i i Qui	20	Au			
0.0	34.0 10.4	Casing. Many large boulders.								
34.0 10.4	98.0 29.9	Carbonate breccia, intensely altered brick red quartzite with coarse irregular white carbonate stringers. Locally a little pyrite in blebs. Similar in appearance to some sections of the footwall breccia. Some of the less altered sections show bedding at 70° to the core.	÷		-	•				
:		35.5-39.0 - (10.8 - 11.9) - Greywacke section, dark grey, finely bedded at 70° to the core.								
•		Economic		-						
•	•-	39.0- 44.0 - Carbonate breccia, 20% whitish carbonate in brick red hematized quartzite. Occasional grain of pyrite.	9952	5.0 1.5	39.0 11.9	44.0 13.4				
:		70.0-75.0 - Carbonate breccia, highly hematitic rusty red altered quartzite. Low % of carbonate in this sample	9953	5.0 1.5	70.0 21.3				 	
		70.0-98.0 - (21.4 - 29.9) Intensely altered quartzite and carbonate breccia, highly hematitized very broken and blockey core. This appears to be a strong fault zone.								* * * * * * * * * * * * * * * * * * * *
		` 96.0-98.0 - (29.3 - 29.9) - Lost core.				-				
98.0 29.9	152.0 46.3	Serpent quartzite, mostly light to dark grey, gradually becoming less blockey away from the fault zone.							*	
	-	99.5- 152.0 - (30.3 - 30.8) - Lost core.								

 $104.5-107.0 - (31.9 - 32.7) - Argillite bed, well bedded at 70<math>^{\circ}$ to the core.



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5294.0N, 9582.0E

Core size:

Section: 6+50NW, 6+50NE Length: 427.0 (130.1m) Elevation: 302.6m Azimuth: S65°W Dip: -45°

Dip Tests: Started: Oct. 6/80

Completed: Oct. 9/80 Logged by: P. McLean

· · · · · · · · · · · · · · · · · · ·	DRILL LO	Az miden: 565 W	}		Logge	by: P.	nccean	ASS	AYS	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to				
from	to						Au			
152.0 46.4	177.0 54.0	Carbonate breccia, quartzite contains sections with grey carbonate stringers.								
177.0 54.0	269.0 82.0	Quartzite, light to dark grey. Locally very blockey and broken up core.	-							
		205.0-206.0 - Bedded section at 45° to the core.						ļ		
269.0 82.0	278.0 84.7	Chlorite breccia zone, 20% to 70% chlorite in altered pink quartzite.								
		<u>Economic</u>								
	•	269.0-271.0 - Chlorite breccia, 50% chlorite with some blebs of pyrite in the more chloritic sections.	9954	2.0 0.6	269.0 82.0	271.0 82.6	.005			
,		271.0-273.0 - Chlorite breccia, 20% chlorite in patches and as a replacement. Good sulphides with the more chloritic sections, also a little vein quartz.	9955	2.0 0.6	271.0 82.6	273.0	.01			
		273.0-277.0 - Chlorite zone, 70% chlorite with py in small blebs.	-							
:		<u>Economic</u>							İ	
		`273.0-275.0 - Chlorite zone, 75% chlorite mostly well mineralized with pyrite in blebs and seams. A little chalco. noted. Fine speck of V.G. at 274.0.	9956	2.0 0.6	273.0 83.2	275.0 83.8				
		275.0-277.0 - Chlorite zone, 70% chlorite. Fine pyrite in blebs and grains throughout.	9957	2.0 0.6	275.0 83.8	277.0 84.4				
278.0	302,3 92.1	Quartzite, pink to grey, somewhat altered the odd grain of pyrite.	•							



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.0N, 9582.0E

HOLE: N-20-Core size:

Section: 6+50NW, 6+50NE Length: 427.0 (130.1m) Elevation: 302.6m. Azimuth: S65 ° W Dip: -45°

Dip Tests: Started: Oct. 6/80

Completed: Oct. 9/80 Logged by: P. McLean

		Azimuth: \$65 W	טוף: -45°		Logge	2.5y:P	McLean		
DEP	ידו	DESCRIPTION	sample	width	from	to		ASS/	\YS
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au		
		277.0-279.5 - Quartzite, first foot chloritic then becoming pinkish. Some pyrite in disseminated grains.	9958	2.5 C. 8	277.0 84.4	279.5 85.2	Nil		
302.3 92.1	305.0 93.0	Chlorite breccia zone, 30% chlorite as a replacement and in patches.		-					
		302.3-305.0 - Chlorite breccia, 30% chlorite in altrered quartzite, mostly as a replacement. The odd grain and bleb of pyrite thoughout.	9959	2.7 0.9	302.3 92.1	305.0 93.0	Nil		
305.0 93.0	318.5 96.9	Chlorite zone, 50% to 80% chlorite, local sulphides.						-	
		305.0-307.5 - Chlorite zone, 50% chlorite, locally good pyrite and a little pyrrhotite and chalco. Some vein quartz also mineralized.	9960	2.5 0.7	305.0 93.0	307.5 93.7	Ni 7	-	
	•.	307.5-310.0 - Chlorite zone, 75% chlorite, rare sulphides.	9961	2.5 0.7	307.5 93.7	310.0 94.5	Nil		
		310.0-313.0 - Chlorite zone, 70% chlorite rare sulphides.	.9962	3.0 0.9	310.0 94.5	313.0 95.4	-005		
:		313.0-316.0 - Chlorite zone, 60% chlorite sulphides absent.	9963	3.0 0.9	313.0 95.4	316.0 96.3	Nil		
		316.0 (96.3) - run over core 6".							
		316.0-318.5 - Chlorite zone, 80% chlorite very well mineralized with blebs of pyrite throughout. Run over core, some lost.	9964	2.5 0.7	316.0 96.3	318.5 96.9	.02		
318.5 96.9	326.5 99.5	Chlorite breccia, 20% to 50% chlorite locally good pyrite.							



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.0N, 9582.0E

HOLE: N-20 Core size:

Section: 6+50NW, 6+50NE Length: 427.0 (130.1m) Elevation: 302.6m

Dip Tests:

Started: Oct. 6/80 Completed: Oct. 9/80

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: S65°W		·	Logged	by: P.	McLean	
DEP	TU	DESCRIPTION	sample	width	from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au	
		Economic						
		318.5-321.0 - Chlorite breccia, 20% chlorite with some pyrite throughout.	9965	2.5 0.7	318.5 96.9	321.0 97.8		
		321.0-323.0 - Chlorite breccia, 70% chlorite with 10% pyrite in blebs throughout.	9966	2.0	321.0 97.8	323.0 98.5		
		323.0-325.0 - Chlorite breccia, 60% chlorite with 10% pyrite in blebs and seams. Narrow seam of aspy noted.	9957	2.0 0.6	323.0 98.5	325.0 99.1	.03	
		325.0-326.5 - Chlorite breccia, 20% chlorite in red altered quartzite. Sulphides rare.	9968	1.5 0.4	325.0 99.1	326.5 99.5	.005	
326.5 99.5	335.8 102.4	Auartzite, salmon red with the odd narrow white carbonate stringer.			-			
335.8 102.4	427.0 130.2	Grading into carbonate breccia, salmonpink quartzite with stringers and patches of white carbonate. Local coarse pyrite with the carbonate.						
		391.0-391.6 - (119.3 - 119.5) - Bluish quartz vein at 45° to the core.						
	427.0 130.2	End of Hole			-			
			-					

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5294.5N, 9583.2E

HOLE: N-21-Core size:

Dip Tests:

Section: 6+50NW, 6+50NE Length: 401.0 (122.2m)

Elevation: 302.7m
Azimuth: - Dip: -90°

Started: Oct. 9/80 Completed: Oct. 13/80 Logged by: P. McLean

		Az imuch.	3.530			• • • • • •				
DEP	Tu	DESCRIPTION	sample	width	from	to		ASSAYS	5	
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au			
0.0	25.0 7.6	Casing many boulders.	·		·					
25.0 7.6	74.7 22.8	Carbonate breccia, brick red quartzite with white irregular carbonate stringers and patches. Locally coarse pyrite with the carbonate.				,				
		<u>Economic</u>								
		33.5-34.5 - Carbonate breccia, brick red quartzite with quartz and carbonate stringers well mineralized with pyrite.	9969	1.0	33.5 10.2	34.5 10.4	.002			1
		35.4-37.8 - (10.8 - 11.5) - Diabase dyke, fine grained, dark grey porphyritic texture.								
	•.	49.0-50.0 - (14.9 - 15.3) - Ground core.								!
		53.0-60.6 - (16.2 - 18.5) - Chlorite-carbonate breccia, frequent seams of chlorite 20° to 30° to the core, also small patches of chlorite as well as stringers and patches of whitish carbonate. Well mineralized with pyrite which is mainly associated with the chloritic seams.								1
		<u>Economic</u>								:
		53.0-58.0 - Chlorite-carbonate breccia, frequent seams of chlorite and some small patches. Mineralized throughout with pyrite and the occasional grain of chalco.	9970	5.0 1.6,	53.0 16.2	58.0 17.7	Nil			:
		58.0-60.6 - Chlorite-carbonate breccia, frequent chlorite seams and small patches. 5% pyrite in seams with some local chalcopyrite.	9971	2.6 0.8	58.0 17.7	60.6 18.5	Nil			:
		60.6-61.8 (18.5 - 18.6) - Grey argillite bed.								
							•		į	:



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.5N, 9583.2E

HOLE: N-27 Core size:

Section: 6+50NW, 6+50NE

Length: 401.0 (122.2m)
Elevation: 302.7m
Azimuth: - Dip: -90°

Dip Tests:

Started: Oct. 9/80 Completed: Oct. 13/80 Logged by: P. McLean

· · · · · · · · · · · · · · · · · · ·	0./1.22	Azimuth:	יספב : פוט		Logged	oy: P.	mcLea	n	
250	*.I	DESCRIPTION	sample	width	from	to		ASSA	YS
DEP	'1H	NOTE: All angles are measured with respect to the long core axis.	number	WIGGI	110111	50			
from	to						Au		
74.7 22.8	79.0 24.2	Quartzite, grey to reddish, highly altered broken blockey core.				•			
79.0 24.2	92.0 28.0	Fault zone, quartzite completely altered hematitic and brecciated.							f 1
		80.0-86.0 - (24.4 - 26.2) - Ground core, lost water.	-					!	
92.0 28.0	165.0 50.3	Quartzite, pinkish grey somewhat carbonatized throughout. Local short sections of carbonate breccia. Broken blockey core.							
		94.0-97.0 - (28.7 - 29.6) - Ground core.						1	•
j	-	149.5-151.0 - (45.6 - 46.0) - Lost core.	-					1	:
165.0 50.3	172.5 52.4	Chlorite breccia 5% to 20% chlorite as a replacement and in narrow seams and patches.							
		165.0-169.2 - Chlorite breccia, 5% chlorite as a replacement, and in seams and patches. Rare grains of pyrite and the odd narrow pyrite seam.	.9972	4.2	165.0 50.3	169.2 51.6	.002		:
		169.2-172.5 -Chlorite breccia, 5% chlorite mostly as a replacement, the odd chloritic seam: Sulphides absent.	9973	3.3 1.0	169.2 51.6	172.5 52.6	.005		
172.5 52.4	181.8 55.2	Chlorite zone 60% to 80% chlorite, mostly well mineralized with pyrite, some of which is coarse. V.G. as noted.							!
		172.5-174.6 - Chlorite zone, 70% chlorite with bleb and grains of pyrite common throughout.	9974	2.1	172.5 52.6	174.6 53.2	.03 .01		•
	•	174.6-177.0 - Chlorite zone, 80% chlorite with blebs and grains of pyrite and po throughout. Many good grains of V.G. at 176.5	9975	2.4	174.6 53.2	177.0 53.9	.14		•



Drill Contractor - N. Morissette.

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.5N, 9583.2E

HOLE: N-21 Core size:

Dip Tests:

Section: 6+50NW, 6+50NE Length: 401.0 (122.2m) Elevation: 302.7m Azimuth: _____Dip: _90

Started: Oct. 9/80 Completed: Oct. 13/80 Logoed by: P. NcLean

		AZ I MUCH: _	010: -90		LOGOCO	. Uy			
DEb.	тн	DESCRIPTION	sample	width	from	to		ASSA	YS
from	to	NOTE: All angles are measured with respect to the long core axis.	number -				Au		
		177.0-179.0 - Chlorite zone, 80% chlorite with 15% pyrite in coarse blebs up to 3/4". Several fine grains of V.G. at 177.2, coarse grain at 177.8, several grains on slip at 178.8.	9976	2.0 0.5	177.0 53.9	179.0 54.6	.13		
i i i i i i i i i i i i i i i i i i i		179.0-181.8 - Chlorite zone, 60% chlorite with occasional grains of pyrite and po. Note: Badly ground and run over core estimate 1 foot of core missing.	9977	2.8 0.8	179.0 54.6	181.8 55.4	.01		
181.8 55.2	217.0 66.1	Carbonate breccia, typical footwall, salmon pink quartzite with white carbonate stringers and patches.							
	·	216.7-217.0 - (65.9 - 66.1) - Coarse pyrite in carbonate stringer.	-					, ,	
217.0 66.1	269.5 82.0	Quartzite, grey to pink, only the odd section with carbonate stringers.							
] : :		269.5 - (82.0) - Bedding at 65° to the core.						;	
269.5 82.0	285.0 86.9	Carbonate breccia, irregular carbonate stringers in salmon pink quartzite. Several narrow unbrecciated greywacke beds in this section.							:
285.0 86.9	291.8 88.9	Chlorite breccia, 10% to 50% chlorite minor sulphides.							1
		285.0-2c).5 - Chlorite breccia, 50% chlorite in seams and patches, and as a replacement. Some white carbonate also present. Some fine pyrite in the more chloritic sections in grains and seams. Speck of V.G. in white carbonate at 288.1.	9978	3.5 1.1	285.0 86.9	288.5 87.9			; ;
		288.5-291.8 - Chlorite breccia, 10% chlorite in the odd seam and patch, mostly as a replacement.	9979	3.3 1.0	288.5 87.9	291.8	Nil		



Property: 772, D.R. Watt Property
Location: Scadding Twp. Ont.
Co-ordinates: 5294.5N, 9583.2E

HOLE: N-21.

Section: 6+50NW, 6+50NE

Dip Tests:

Started: Oct. 9/80 Completed: Oct. 13/80

Logged by: P. McLean

Length: 401.0 (122.2m)
Elevation: 302.7m
Azimuth: _ Dio: _ Drill Contractor - N. Morissette DRILL LOG "Dip: _90°

		DESCRIPTION	sample	width	from	to		AS	SAYS
DEP	<u>,</u>	NOTE: All angles are measured with respect to the long core axis.	number	WIGGI	110		Au		
from	to		·						
291.8 88.9	298.0 90.8	Quartzite, weakly chloritized with 5% chlorite as a replacement. Minor sulphides.			-	•			
298.0 90.8	300.0 91.4	Chlorite breccia, 10% chlorite.					-	·	
	-	Economic							}
		298.0-300.0 - Chlorite breccia, 10% chlorite in seams and patches, pyrite absent.	9980	2.0	298.0 88.9	300.0 91.4	.002		
300.0 91.4	302.5 92.2	Chlorite zone, 80% chlorite with fine pyrite throughout.							
	• .	300.0-302.5 - Chlorite zone, 80% chlorite with some grey vein quartz and a little white carbonate. Well mineralized with pyrite and pyrrhotite and minor chalcopyrite.	9981	2.5 0.8	300.0	302.5 92.2	.005		
302.5 92.2	338.3 103.0	Chlorite breccia 10% to 50% chlorite in pink quartzite.							
		302.5-305.0 - Chlorite breccia and chlorite zone 25% chlorite, sulphides absent.	9982	2.5	302.5 92.2	305.0 93.0	.002		
		305.0-307.3 - Chlorite breccia, 5% chlorite as a replacement, sulphides absent.	9983	2.3	305.0 93.0		Nil		
		307.3-309.0 - Chlorite breccia, includes 8" of 80% chlorite with dissem. po. Some vein quartz and a little white carbonate.	9984	1.7	307.3 93.7	309.0 94.2	ווא		i ! !
	-	309.0-312.5 - Chlorite breccia, 10% chlorite as a replacement. Includes 4" of 25% chlorite. Some carbonate stringers. Sulphides absent.	9985	3.5	309.0	3: 5 95.2	ווא		! ! !



DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.5N, 9583.2E

HOLE: N-27 Core size:

Dip Tests:

Section: 6+50NW, 6+50NE

Length: 401.0 (122.2m)
Elevation: 302.7m
Azimuth: _ Dip: 90°

Started: Oct. 9/80 Completed: Oct. 13/80 Logged by: P. McLean

Drill Contractor - N. Morissette

		DESCRIPTION	sample		£			AS	SAYS	
DEP		NOTE: All angles are measured with respect to the long core axis.	number	width	fro n.	to	Au			
from	to	312.5-313.7 - Chlorite breccia, 70% chlorite with a little fine py, po and chalco, also some grey vein quartz.	9986	1.2	312.5 95.2	313.7 95.6	Nil			
		313.7-316.0 - Chlorite-carbonate breccia, 10% sulphides as a replacement and in patches. Locally blebs of py with the chlorite.	9987	2.3	313.7 95.6	316.0 96.3	.002			
	:	316.0-318.4 - Chlorite-carbonate breccia, 10% chlorite as a replacement.	9988	2.4 0.7	316.0 96.3	318.4 97.0	.002			
		318.4-324.8 - (97.1 - 99.1) - Chlorite zone, some sections include white carbonate stringers and veins up to 1 foot. Sulphide mineralization throughout.								
		318.4-321.0 - Chlorite zone, 50% white carbonate veins up to 1 foot. Chlorite well mineralized with po and py, some seams of pyrite in the carbonate.	9989	2.6 0.8	318.4 97.0	321.0 97.8				
	• -	321.0-324.8 - Chlorite zone, 70% chlorite with a little carbonate. Blebs of py, po.	9990	3.8	321.0 97.8	324.8 99.0	Nil			
		324.8-329.1 - Chlorite-carbonate breccia, 50% carbonate, 10% chlorite in seams and patches, and as a replacement. Sulphides rare except for seam of pyrite near bottom of the sample.	.9991	4.3	324.8	329.1 100.3	.005			
		324.8-329.6 - (99.1 - 100.5) - Chlorite-carbonate breccia, 10% to 15% chlorite and up to 50% carbonate.								
		329.1-332.0 - Chlorite zone, 30% chlorite as a replacement, sulphides rare.	9992	2.9	329.1 100.3	332.0 101.2				
		332.0-333.0 - Chlorite zone, 30% chlorite fairly well mineralized with blebs of py.	9993	1.0	332.0 101.2	333.0 101.5	.002			
		333.0-334.8 - (101.5 - 102.0) - Quartz carbonate vein.								



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.

Co-ordinates: 5294.5N, 9583.2E

Dip Tests:

HOLE: N-21

Core size:

Section: 6+50NW, 6+50NE Length: 401.0 (122.2m) Elevation: 302.7m Azimuth: _____Dip:_90°

Started: Oct. 9/80 Completed: Oct. 13/80 Logged by: P. McLean

	DATEL CO	AZIMUCH: -	010: -90		Louden	<u> </u>	LICTES	<u> </u>		
		DESCRIPTION	sample	width	from	to		ASSAY	'S	
DEP		NOTE: All angles are measured with respect to the long core axis.	number	WIGGS	110		Au			
from	to								-	1
		333.0-334.8 - Quartz carbonate vein, white carbonate with 60% vein quartz. A few small chloritic inclusions. Some coarse pyrite in seams in the first 2", otherwise not mineralized.	9994	1.8 0.5	333.0 101.5	334.8 102.0	.002			
		334.8-336.4 - Chlorite zone, 50% chloritic patches and seams. Seams of py and po fairly common.	9995	1.6 0.5	334.8 102.0	336.4 102.5	Nil			
		336.4-338.3 - (102.5 - 103.1) - Quartz carbonate vein.								
		336.4-338.3 - Quartz carbonate vein, 50% white quartz, 50% grey carbonate. Sulphides absent.	9996	1.9 0.6	336.4 102.5	338.3 103.1	Nil			
338.3 103.1	343.5 104.7	Quartzite, dark grey, relatively unaltered.						1		:
	•.	338.3-340.5 - Quartzite, somewhat chloritic no sulphides noted.	9997	2.2 0.7	338.3 103.1	340.5 103.8	Nil			-
		340.5-342.8 - Quartzite, dark grey, minor carbonate.	9998	2.3 0.7	340.5 103.8	342.8 104.5	rin			1
		342.8-345.0 - Quartzite and carbonate breccia, some chlorite in seams and as a replacement. Locally py and po in seams and grains.	9999	2.2 0.7	342.8 104.5	345.0 105.2	.005			
343.5 104.7	401.0 122.2	Carbonate breccia, stringers and patches of white carbonate in grey to pinkish quartzite. 5% to 10% chlorite in seams and patches to 355.0, then normal footwall carbonate breccia.								
		345.0-347.6 - Chlorite-carbonate breccia, 10% chlorite which is well developed with grains and seams of pyrite.	10000	2.6 0.7	345.0 105.2	347.6 105.9	.005			•
									;	



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5294.5N, 9583.2E

HOLE: N-21-Core size:

Section: 6+50NW, 6+50NE Length: 401.0 (122.2m) Elevation: 302.7m

Dip Tests:

Started: Oct. 9/80 Completed: Oct. 13/80

· • • • • • • • • • • • • • • • • • • •	DRILL LO	OG Drill Contractor - N. Morissette Elevation: 302.7r	Dip: _90°		Logge	eted: 0 d by: F	. McLea	n -
DEPT	H	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAYS -
from	to	No.2. At angles are measured with respect to the rong core and	·				Au	
	·	347.6-350.7 - Carbonate breccia, some chloritic seams mineralized with pyrite.	10001	3.1 1.0	347.6 105.9	350.7 106.9	.005	·
ue spirite de se		350.7-353.0 - Mainly quartz carbonate, some blebs of pyrite and pyrrhotite with minor chalco and a few grains of aspy.	10002	2.3 0.8	350.7 106.9	353.0 107.6	.002	
		353.0-355.0 - Chlorite-carbonate breccia, 10% chlorite in seams and as a replace ment. Local grains and seams of py.	- 10003	2.0	353.0 107.6	355.0 108.2	Nil	
		401.0 - (122.3) - End of Hole.						
			·					



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5294.5N, 9583.2E

HOLE: N-21-Core size:

Section: 6+50NW, 6+50NE Length: 401.0 (122.2m)

Dip Tests:

Started: Oct. 9/80 Completed: Oct. 13/80 Logged by: P. McLean

Elevation: 302.7m Azimuth: _ Dip: _90° Drill Contractor - N. Morissette DRILL LOG **ASSAYS** DESCRIPTION sample width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number ft/oz. Au oz/ton from to Ore Sections 9975 174.6 177.0 | 0.14 | 0.336 2.4 0.7 53.3 54.0 .04 b.1 9976 2.0 177.0 179.0 0.13 b.260 0.6 54.0 54.6 .04 .08 4.4 174.6 179.0 0.135 .596 1.3 53.3 54.6 .04 .2



DRILL LOG

211-Oct h. 1981.

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22. Core size:

Section: 7+00 NW

Length: 251' (76.6m)
Elevation: 305.0m
Azimuth: S65°W Dip: -45°

Dip Tests:

Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

		DESCRIPTION	sample		c			ASSAYS	
DEPTI	4	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au		
from	to								
0.0	20.5	Overburden.				:			
20.5 6.2	74.0 22.6	Quartzite, light to med. grey, locally off-white where recrystalized. Hard, brittle with numerous fractures at randam angles. Occasional patches to 3 inches of carbonate bx. Vaguely bedded locally, 60° to core @ 65'. A few pyritic fractures and flecks of py from 57.0 to 58.2.			,				
		57.0-58.2 - Quartzite, pale grey with darker patches. A few fractures to 4 mm., mineralized with pyrite and scattered small py grains.	10301	1.2	57.0 17.4	58.2 17.7	.005		٠
74.0	80.5 24.5	Chlorite, carbonate bx. Patchy dark green to buff coloured. 20 to 30% chlorite in f.g. band quartzite, locally brecciated and carbonated. 10% diss. carbonate 74.8 to 76.7. Locally remnant bedding places 70° to core. Rare flecks of pyrite and occasional streaks and hairline fractures healed with py.							
		74.0-76.0 - Carbonate rich buff coloured quartzite with small patches of chlorite. Rare flecks of pyrite.	10302	2.0	74.0 22.5	76.0 23.1			
		76.0-79.0 - Chlorite bx. Less carbonate and more chlorite than above. Occasional flecks and rare streaks of py.	10303	3.0	76.0 23.1	79.0 24.1	0.03		
		79.0-80,5 - Chlorite bx., as above.	10304	1.5	79.0 24.1	80.5 24.5	0.002		
	84.4 25.7	Quartzite, buff coloured to blotchy grey. Locally slightly brecciated and carbonated. No pyrite obs.	10305	3.9	80.5 24.5	84.4 25.7	Nil		
,	87.0 26.5	Quartzite, chloritic last foot. Dark grey to banded green and buff. Locally f.g. diss. carbonate. Rare flecks of py.	10306	2.6	84.4 25.7	87.0 26.5	0.005		J



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22 Core size:

Dip Tests:

Section: 7+00 NW Length: 251' (76.6m) Elevation: 305.0m Azimuth: S65°W Dip: -45°

Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 305.0m Azimuth: S65*W	n Dip: -45°			by: K.		
DEP	TU	DESCRIPTION	sample number	width	from	to		ASSAYS
		NOTE: All angles are measured with respect to the long core axis.	number	•			Au	
87.0 26.5	89.1 27.2	Chlorite Zone - Chlorite, carbonate bx. with about 50% chlorite and 40% carbonate. Visible gold at 87.6. Plus 5% pyrite as irregular blebs and disseminations in both carbonate and chlorite.				•		
		87.0-88.0 - Chlorite, carbonate bx. 70% chlorite - 25% carbonate with 1 mm. fleck of free gold at 87.6'. 5% pyrite as irregular blebs and dissemination.	10307	1.0	87.0 26.5	88.0 26.8	0.22	
		88.0-89.1 - Chlorite, carbonate bx. 65% carbonate, 30% chlorite. 5% py, po as irregular blebs, mostly in carbonate. No V.G. obs.	10308	1.1	88.0	89.1 27.2	0.07	
89.1 27.2	92.6 28.2	Quartzite, f.g. band, greenish grey to banded buff, moderately jointed. First and last 8 inches chlorite rich. Minor diss. carbonate. Rare minute flecks of py.	10309	3.5	89.1 27.2	92.6 28.2	0.005	
92.6 28.2	94.0 28.7	Chlorite Zone - chlorite carbonate bx. About 30% chlorite, 40% carbonate, remainder quartzite. Minor flecks and occasional small blebs of py and po.	10310	1.4	92.6 28.2	94.0 28.7	0.005	
94.0 28.7	111.2 33.9	Quartzite, light grey to buff coloured, vaguely banded with occasional remnant bedding planes, 65° to 70° to core. Locally zones of brecciation healed with carbonate.	-					
111.2 33.9	113.2 34.5	Chloritic Zone - 10 to 15% diss. carbonate, mostly as trains of subhedral xstals, along foliation. 20% chlorite and 2% pyrite as small blebs and flecks.	10311	2.0	111.2 33.9	113.2 34.5	0.002	
113.2 34.5	119.6 36.5	Quartzite, f.g. grey to patchy light brown. Moderately jointed at randam angles, well bedded 70 ° to core @ 116'.						* * * * *
119.6 36.5	139.0 42.3	Chlorite Zone - 40 to 80% chlorite with local light grey patches of non-chloritized quartzite. Occasional flecks of po, py.						
	-							



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22 Core size:

Section: 7+00 NW

Length: 251' (76.6m)
Elevation: 305.0m
Azimuth: S65°W Dip: -45°

Dip Tests: Started: Occ. 14/80 Completed: Oct. 16/80

Logged by: K. Larsen

		DESCRIPTION	sample	width	from	to		ASSAY	rs
DEPT	тн	NOTE: All angles are measured with respect to the long core axis.	• • •	width	Trom	50	Au		
from	to						-		
		Economics							
		119.5-124.0 - Chloritic quartzite, 40% chlorite. Rare flecks and streaks of po, py.	10313	4.4	119.6 36.4	124.0 37.8	0.005		
		124.0-129.0 - 80% chlorite replacement. Weakly brecciated locally. Feebly mineralized py, po.	10314	4.0 1.5	124.0	129.0 39.3	0.005		
		129.0-131.8 - Weakly brecciated first 8" with 30% chlorite. Remainder 60% chlorite. Feebly mineralized po, py.	10315	2.8	129.0 39.3	131.8	0.002	1	
		131.8-135.0 - Weakly brecciated first 9 inches with 15% chlorite. Remainder 50% chlorite. Rare flecks po, py	10316	3.2	131.8	135.0	0.005		
	٠.	135.0-139.0 - 40% chlorite decreasing to 10% in last 4 inches. Local brownish discoloration. Mineralized very weakly po, py.	10317	4.0	135.0	139.0	0.002		
139.0 42.3	149.0 45.4	Quartzite, buff coloured to light grey, some orange banding. Locally fractured and brecciated with carbonate cement. Occasional flecks of py. 40% chlorite 141.0 to 141.7.	٠.						
		Economics							
		139.0-141.0 - Quartzite, buff coloured, essentially barren.	10318	2.0	139.0 42.3	141.0 43.0		1	
		141.0-141.7 - 40% chlorite replacement. A few flecks of po.	10319	0.7	141.0 43.0	141.7	0.005		
•		141.7-145.0 - Quartzite, buff coloured, some orange banding. Well brecciated and carbonated. Very rare flecks of po.	10320	3.3	141.7 43.2	145.0 44.2			



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont: Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22 Core size:

Section: 7+00 NW Length: 251' (76.6m) Elevation: 305.0m Azimuth: S65°W Dip: -45°

Dip Tests: Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

	DRILL LO	Drill Contractor - N. Morissette Elevation: 305.0m Azimuth: S65°W	Dip: -45°		Logge	d by: K.	Larsen	<u> </u>	
DEP	ידא	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to	<u> </u>	ASSAYS	
from	169.0 51.5						Au		<u></u>
		145.0-149.0 - Quartzite, lightly fractured, some orange banding. Essentially barren.	10321	4.0 1.2	145.0 44.2	149.0 45.4:	0.002		
49.0 45.4		Chlorite Zone - f.g. dark green with local zones of chlorite bx. Chlorite content from 20 to 80%. Very weakly mineralized po, py.							
		Economics		Q					}
		149.0-152.0 - Chlorite breccia. 40% chlorite. Scattered clusters of po flecks.	10322	3.0 0.9	149.0 45.4		0.07		
		152.0-155.0 - Chlorite breccia as above.	10323	3.0 0.9	152.0 46.3		0.005		
	•.	155.0-157.5 - Chlorite breccia. 60% chlorite. Rare flecks po, py.	10324	2.5 0.8	155.0 47.2		0.03		
		157.5-160.5 - 70% chlorite, weakly brecciated locally. Mostly massive even coloured dark green. Rare flecks po, py.	10325	3.0 0.9	157.5 48.0	160.5	0.03		
		160.5-163.0 - Chlorite breccia. Weakly brecciated, 40% chlorite. Essentially barren.	10326	2.5 0.8	160.5 48.9		0.005		
		163.0-166.0 - 60% chlorite. Local patches weakly brecciated. Essentially barren.	10327	3.0	163.0 49.7	166.0 50.6	0.01		
		166.0-169.0 - Chlorite brecija, 20% chlorite. Rare flecks of po.	10328	3.0	166.0 50.6	169.0 51.5	0.005		



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22 Core size:

Section: 7+00 NW

Length: 251' (76.6m)
Elevation: 305.0m
Azimuth: S65°W Dip: -45°

Dip Tests:

Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

		DESCRIPTION	sample	width	from	to		ASSA	YS	
DEP	to	NOTE: All angles are measured with respect to the long core axis.	number	R 1 G G C C	71 (111		Au			
169.0	229.3 69.9	Quartzite, f.g. grey to buff coloured with patches of weak chloritization and spotty brecciation healed with carbonate. Quartz/carbonate vein 186.2 to 186.6. Occasional flecks of po. 3/4" bleb of py at 306.5 and %" band of py @ 208.1. Minor chlorite veining 226.0 to 228.0.		·	·	:				
		<u>Economics</u>								
1		169.0-170.0 - Quartzite, massive, buff to grey. Essentially barren.	10329	1.0 0.3	169.0 51.5	170.0 51.8	Nil		*	
		180.3-181.3 - Weakly chloritized quartzite, 10% chlorite. A few flecks of py.	10330	1.0	180.3 55.3		Nil		1	
; ; ;		181.3-182.3 - Darker green than above, about 40% chlorite. Rare flecks of po.	10331	1.0	181.3 55.3	182.3 55.6	0.002		;	•
; 1; ::		182.3-183.2 - Weakly chloritized quartzite, 10% chlorite. A few small clusters of po, py.	10332	1.0	182.3 55.6	183.3 55.9	NiT		1	
:		183.2-184.9 - Chlorite breccia with 3" quartz/carbonate vein. About 1% po, py as small grains along breccia fragment margins.	10333	1.6 0.5	183.3 55.9	184.9 56.4	0.002			
		184.9-185.9 - Quartzite, 5% chlorite, essentially barren.	10334	1.0	184.9 56.4	185.9 56.7	Nil			
		206.2-207.2 - Quartzite, and carbonate bx. 3/4" Tump of py at 206.8.	10335	1.0	206.2	207.2 63.2	0.02			† : :
		207.2-208.5 - Quartzite, pale grey with ½" band of py. No chlorite.	10336	1.3	207.2	208.5	0.005		8	
	-								•	;



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22 · Core size:

Section: 7+00 NW Length: 251' (76.6m) Elevation: 305.0m Azimuth: S65'W Dio:

Dip Tests: Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

	DRILL LO		1		Logged	by: K.	Larse	n ASSAYS	 S
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to			T
from	to						Αυ		∔
		226.0-227.0 - Quartzite, fractured and weakly brecciated with several fine chlorite stringers.	10337	1.0	226.0 68.9	227.0 69.2	Nil		
229.3 69.9	251.0 76.6	Diabase, f.g. to m.g., dark green to near black, massive, equigranular. Contact with upper unit. Sharp, 60°.							
	251.0 76.6	End of Hole.	-						
	٠.								
								T page and a state of the state	
				,					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



Property: 772, D.R. Watt Property: Location: Scadding Twp., Ont. Co-ordinates: 5269.2N, 9494.8E

HOLE: N-22. Core size:

Section: 7+00 NW Length: 251' (76.6m) Elevation: 305.0m Azimuth: S65°W Dip

Oip Tests: Started: Oct. 14/80 Completed: Oct. 16/80 Logged by: K. Larsen

DRILL L	OG Drill Contractor - N. Morissette	Elevation: 305.0m Azimuth: S65°W Dip: -	45 °	Completed:Oct. 16/80 Logged by: K. Larsen			
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to		1e		to	ASSAYS	
from to	NOTE: All aligies are measured with respect to	the rong core axis. Hamb				Au oz./ton	
	Ore Sections		1.0	87.0 26.5	88.0 26.8	0.22	

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5269.5N, 9495.7E

HOLE: N-23 Core size:

Dip Tests:

Section: 7+00 NW

Length: 276' (84.1m)

Completed: Oct. 18/80

Elevation: 305.0m

Logged by: K. Larsen

Started: Oct. 16/80

Drill Contractor - N. Morissette Dip: -90° DRILL LOG Azimuth: -**ASSAYS** sample DESCRIPTION. width from to number DEPTH NOTE: All angles are measured with respect to the long core axis. Αu ōz./ton to from 0.0 19.3 Overburden/Casing. 0.0 5.9 19.3 84.0 Serpent Quartite, med. grey to buff, f.g. hard, moderately jointed, 5.9 occasionally weakly fractured. Weak chlorite banding 52.0 - 53.5. 25.6 Economic 52.0 Nil 51.0-52.0 - (15.5-15.8) - Quartzite, buff coloured, hard, essentially barren. 10338 1.0 51.0 15.5 15.8 0.3 52.0-53.5 - (15.8-16.3) - Quartzite, weak chlorite replacement, mostly in bands. 52.0 53.5 | Nil 10339 1.5 Weakly fractured with 1% py as small clusters and flecks. 0.5 16.3 15.8 53.5-54.5 - (16.3-16.6) - Quartzite, about 5% chlorite. Essentially barren. 54.5 Nil 10340 1.0 53.5 0.3 16.3 16.6 75.6-86.0 - (23.0-26.2) - Lost core 1.5'. 84.0 91.8 Chlorite Zone, f.q. dark green with about 30% chlorite. Chlorite bx. from 87.5 with 20% chlorite in strongly jointed core. Some buff to pinkish non-25.6 28.0 chloritic patches. Entire section very poorly mineralized. Economics 84.0-86.0 - (25.6-26.2) - 30% chlorite replacement. Rare flecks of po. 2.0 86.0 Nil 10341 84.0 0.6 25.6 26.2 86.0-88.0 - (26.2-26.8) - 60% chlorite, rare flecks of po. 10342 2.0 86.0 Nil 0.88 26.2 0.6 26.8 88.0-91.8 - (26.8-28.0) - Chlorite breccia. 25% chlorite. Rare flecks po, py. 10343 3.8 0.88 91.8 0.002 1.6' of core ground. 26.8 28.0



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5269.5N, 9495.7E

HOLE: N-23 Core size:

Dip Tests:

Section: 7+00 NW Length: 276' (84.1m) Elevation: 305.0m Azimuth: _____Dip: -90

Started: Oct. 16/80 Completed: Oct. 18/80 Logged by: K. Larsen

			sample				ASS	SAYS
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	number	width	from	to	Au	
from	to			·			oz./ton	
91.8 28.0	100.0	Quartzite, buff to pinkish with grey patches. Well bedded 65° to core @ 98'. No pyrite obs.	-			:		
		91.8-95.5 - (28.0-29.1) - Quartzite, pinkish to grey, occasional remnant bedding 65° to core. No py obs.	10344	3.7 1.1	91.8 28.0	95.5 29.1	Nil	
		95.5-98.5 - (29.1-30.0) - Quartzite, as above.	10345 ·	3.0 0.9	95.5 29.1	98.5 30.0	Nil	
		98.5-100.0 - (30.0-30.5) - Quartzite, 5% chlorite. Rare flecks po.	10346	1.5	98.5 30.0	100.0 30.5	0.002	
100.0 30.5	129.0 39.3	Chlorite breccia. Dark green with scattered non-chloritic pink quartzite patches and occasional carbonate zones. 10 to 60% chlorite.						
	• -	<u>Economics</u>						
		100.0-103.0 - (30.5-31.4) - Chlorite breccia. 1.4 feet of lost core in section. 40% chlorite. Rare flecks of py, po.	10347	3.0 0.9	100.0	103.0	0.002	
		103.0-106.0 - (31.4-32.3) - Chiorite breccia. 50% chlorite, mostly even grained replacement, occasional narrow bands at random angles. Rare flecks of po.	10348	3.0	103.0	106.0	0.002	
		106.0-109.0 - (32.3-33.2) - Chlorite breccia, as above but about 40% chlorite.	10349	3.0 0.9	106.0	109.0 33.2	0.002	
		109.0-112.0 - (33.2-34.1) - Chlorite breccia. 40% chlorite. Occasional pink unreplaced quartzite patches. Rare flecks of po.	10350	3.0	109.0	112.0	0.002	
		112.0-114.0 - (34.1-34.7) - Chlorite breccia. 50% chlorite replacement in quartzite. Last 6 inches 60% carbonate. Rare flecks of po.	10351	2.0	112.0	114.0	Nil	



Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5269.5N, 9495.7E

HOLE: N-23-Core size:

Dip Tests:

Section: 7+00 NW Length: 276' (84.1m) Elevation: 305.0m Azimuth: Dip:

Started: Oct. 16/80 Completed: Oct. 18/80 Logged by: K. Larsen

Dip: -90°

	-	DESCRIPTION	sample	width	from	to	•	ASSAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number	Widen	i i Om		Au oz./ton	
110.11		114.0-116.0 - (34.7-35.4) - Chlorite breccia, 30% chlorite replacement in patches and as bands. Rare po flecks	10,352	2.0 0.7	114.0 34.7	116.0 35.4	0.002	
		116.0-119.0 - (35.4-36.3) - Chlorite breccia. 20% chlorite replacement in quartzite. Essentially barren.	10353	3.0 0.9	116.0 35.4	119.0 36.3	Nil	
		119.0-121.0 - (36.3-36.9) - Chlorite breccia, as above.	10354	2.0 0.6	119.0 36.3	121.0 36.9	Nil	
		121.0-124.0 - (36.9-37.8) - Chlorite breccia, weakly br cciated to massive, 20% chlorite replacement and minor banding. Rare po fle ks.	10355	3.0 0.9	121.0 36.9	124.0 37.8	Nil	
		124.0-127.0 - (37.8-38.7) - Chlorite breccia, 30% chlorite with distinct chlorite bands at random angles. Rare po flecks.	10356	3.0 0.9	124.0 37.8	127.0 38.7	0.005	
		127.0-129.0 - (38.7-39.3) - Chlorite breccia, 20% chlorite replacement and banding. Rare sulphide flecks.	1035.7	2.0 0.6	127.0	129.0 39.3	0.01	
129.0 39.3	177.0	Quartzite, pink to grey-green, locally weakly brecciated and carbonated. Spotty remnant bedding 60 to 70 to core. A few patches of weak chlorite replacement in last two feet.	•	redeling and redeling the redeling of the rede				
177.0 53.9	206.7 63.0	Chloritic Zone, quartzite with very patchy chlorite replacement. Up to 50% chlorite in some patches. Quartzite is generally weakly brecciated and fractured, pink, with occasional calcite stringers.	:					
		Economics				-		
		177.0-177.9 - (53.9-54.2) - Chlorite breccia, 50% chlorite in pink weakly brecciated quartzite. About 1% diss. po.	10358	0.9	177.0 53.9	177.9 54.2	Nil	



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5269.5N, 9495.7E

HOLE: N-23 Core size:

Section: 7+00 NW
Length: 276' (84.1m)
Elevation: 305.0m
Azimuth: Dip: -90

Dip Tests: Started: Oct. 16/80 Completed: Oct. 18/80 Logged by: K. Larsen

		DESCRIPTION	Dip: -90 sample	width	from	to	ASSA	AYS
DEP		NOTE: All angles are measured with respect to the long core axis.	number	widen	11011	}	Au oz./ton	
from	to	177.9-180.0 - (54.2-54.9) - Pink quartzite with 2 to 3% patchy chlorite	10359	2.1	177.9	180.0		
		replacement. No sulphides observed.	1000	0.7	54.2			
		180.0-184.0 - (54.9-56.!) - Quartzite, 20% chlorite replacement in patches. A few scattered po, py grains.	10360	4.0	180.0 54.9		Nil	
		184.0-185.0 - (56.1-56.4) - 40% chlorite replacement. $\frac{1}{2}$ to 1% po, py as minute grains.	10361	1.0	184.0 55.1	185.0 56.4	ווא	
		185.0-189.4 - (56.4-57.7) - Quartzite, pink to banded pinkish green. 5% chlorite. Rare flecks po.	10362	4.4	185.0 56.4	189.4 57.7	NiT	
		189.4-190.4 - (57.7-58.0) - Chlorite breccia. 60% chlorite. A few flecks of po.	10363	1.0	189.4 57.7		Nil	
	•-	190.4-193.0 - (58.0-58.8) - Pink quartzite with patchy chloritic replacement. Rare flecks po.	10364	2.6 0.8	190.4 58.0		Nil	
		193.0-196.5 - (58.8-59.9) - As above, 15% chlorite rich patches in pink quartzite. Essentially barren.	10365	3.5	193.0 58.8		0.002	
		196.5-200.0 - (59.9-61.0) - 30% chlorite rich patches in pink quartzite, weakly brecciated. No sulphides obs.	10366	3.5	196.5 59.9		Ni?	
		200.0-203.0 - (61.0-61.9) - As above, 20% chlorite rich patches.	10367	3.0	200.0		Nil	
·		203.0-206.7 - (61.9-63.0) - Pink quartzite, 10% chlorite rich patches. No sulphides obs.	10368	3.7	203.0 61.9	206.7 63.0		
					-			•



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5269.5N, 9495.7E

HOLE: N-23 Core size:

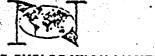
Dip Tests:

Section: 7+00 MW Length: 276' (84.1m)

Started: Oct. 16/80 Completed: Oct. 18/80 Logged by: K. Larsen

Elevation: 305.0m Azimuth: ____Dip: -90°

DRILL LO	G Drill Contractor - N. Morissette Elevation: 305.0m Azimuth:	n Dip: -90°	·	Logge	d by: K	t. 18/80 Larsen	
DEPTH	DESCRIPTION	sample	width	from	to		ASSAYS
from to	NOTE: All angles are measured with respect to the long core axis.	number	•.			Au oz./ton	
206.7 276.0 63.0 84.1	Carbonate breccia. Pink to buff coloured quartzite, brecciated and carbonated. Frequent brownish chert bands. Brecciation and carbonate content increases gradually. Small blebs and clusters of pyrite frequently noted in carbonate. Occasional small amounts of chlorite.						
	Trial Samples: 253.4-254.4 - (77.3-77.6) - Pink q artzite/carbonate breccia with a little chlorite banding and about 2% py.	10369	1.0	253.4 77.3	254.4 77.6	0.01	
	257.6-258.6 - (78.5-78.8) - Carbonate breccia, 40% pink quartzite fragments, 60% grey calcite with 1% pyrite.	10370	1.0	257.6 78.5	258.6 78.8	0.01	
	276.0 - (84.1) - Hole terminated.						



DRILL LOG Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-24
Co-ordinates: 5284.5N, 9493.1E Core size:

Section: 7+50 NW Length: 243.0 (74.0) Elevation: 304.3m Azimuth: S65°W Dip: -90°

Dip Tests:

Started: Oct. 20/80 Completed: Oct. 22/80 Logged by: K. Larsen

		DESCRIPTION	sample					ASS	SAYS
DEP		NOTE: All angles are measured with respect to the long core axis.		width	from	to	Au oz/to	20	
from	to				 		02/40		
0.0	11.0	Overburden/Casing.				:			
11.0	226.0	Carbonate breccia. Pink to buff coloured brecciated quartzite healed and cemented with carbonate. Fault Zone - 52.5-53.0 - (16.0-16.2) - Prominent red hematite staining 30° to core and minor fault gouge. Several open joints and numerous hematite stained fractures 131.0-184.0 - (53.2-55.7). 1.5' lost core 185.0 to 187.0. A little chlorite 191.5 (58.4) to 192.0 (58.6) and 196.5 (59.9) to 197.3 (60.2). Strong carbonate breccia zone 203.6 (62.1) to 206.8 (63.1) with several irregular lumps and clusters of pyrite. Contacts sharp, upper 40°, lower 60° to core.							
	٠.	195.2-196.2 - (59.5-59.8) - Chlorite, carbonate breccia. Some 30% orange coloured quartzite fragments, 20% carbonate with remainder carrying some 40% chlorite and scattered grains of po.	10371	1.0	195.2 59.5	196.2 59.8			
		203.6-205.1 - (62.1-62.6) - Carbonate breccia. 60% carbonate, 40% pale grey quartzite fragment. 2% pyrite.	10372	1.5	203.6	205.1		,	
226.0 68.9	243.0 74.0	205.1-206.8 - (62.6-63.1) - Carbonate breccia, as above. Greywacke. Bluish grey medium grained, equigranular. Some finer grained grey quartzite beds last two feet. A few carbonated fractures. Rare flecks of po.	10373	1.7 0.5	205.1 62.6	206.8	0.002	es de descripto de la constante de la constant	
		243.0 - (74.0) - Hole terminated.				P			die a son anderson is



Property: 772, D.R. Watt Property

HOLE: N-25 Location: Scadding Twp., Ont. Co-ordinates: 5319.2N, 9582.1E Core size:

Section: 7+50 NW

Length: 398.0 (121.3) Elevation: 301.9m

Azimuth: -Dip: -90° Dip Tests:

Started: Oct. 24/80 Completed: Oct. 26/80 Logged by: K. Larsen

DRILL LOG Drill Contractor - N. Morissette **ASSAYS** DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Αu oz/ton from 42.0 Overburden/casing. 0.0 12.8 0.0 42.0 Serpent quartzite, alternating pink to orange and grey, locally 160.7 brecciated. carbonate healed zones. Hematitic open joints @ 82.5 12.8 49.0 and 104.6. Occasional remnant bedding, mostly 60° to core. A few irregular cherty zones. 160.7 232.0 Greywacke, quartzite. Mainly f.g. to m.g. dark grey greywacke 49.0 with minor interbedded quartzite. Thinly bedded 199.0 - 201.0, 70.7 75 to 80° to core and 206.0 to 209.0 - 45° to core. Frequent thin beds and irregular patches of buff coloured chert, occasional microfaulted. Quartzite beds often finely fractured to weakly brecciated. Economics 230.0-231.0 - (70.1-70.4) - Dark grey greywacke. No sulphides obs. 230.0 231.0 Nil 10374 1.0 70.1 70.4 0.3 231.0-232.0 - (70.4-70.7) - Thinly bedded greywacke and quartzite. 231.0 232.0 Nil 10375 1.0 Very weakly diss. pyrite. 0.3 70.4 70.7 232.0 235.5 Chlorite zone. Dark green to near black, 10 to 40% chlorite replacement in greywacke. Very weakly mineralized po, py. 70.7 71.8 Economics 232.0-233.5 - (70.7-71.2) - 30% chlorite bands in bleached, altered 10376 1.5 232.0 233.5 0.002 greywacke. Very weakly diss. pyrite, 15% or less. 0.5 70.7 71.2



Property: 772, D.R. Watt Property
Ont HOLE: N-25 Location: Scadding Twp., Ont. Co-ordinates: 5319.2N, 9582.1E

Core size:

Section: 7+50 NW

Dip Tests:

Started: Oct. 24/80 Completed: Oct. 26/80 Logged by: K. Larsen

Length: 398.0 (121.3)
Elevation: 301.9m
Azimuth: - Dip: -90° DRILL LOG Drill Contractor - N. Morissette

		DESCRIPTION	sample	width	from	to		ASSAYS	
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	width	T P Oill		Au oz/ton	ı	
		233.5-234.5 - (71.2-71.5) - 30 to 40% chlorite replacement. Scattered minute grains of pyrite.	10377	1.0	233.5	234.5 71.5			
		234.5-235.5 - (71.5-71.8) - Weakly brecciated greywacke and chert. A little carbonate cement and rare flecks of pyrite.	10378	1.0	234.5 71.5	235.5			
235.5 71.8	254.5 77.6	Greywacke and impure quartzite. Med. to dark grey. Occasional thinly laminated buff coloured chert beds. 248.0 to 254.5, mainly weakly brecciated and finely fractured impure quartzite. Rare carbonate cemented fractures. A few scattered grains of pyrite 235.5 - 237.5.							
		<u>Economics</u>							
	٠.	235.5-237.5 - (71.8-72.4) - Weakly bedded greywacke. Rare fleck py.	10379	2.0	235.5	237.5			
254.5 77.6	300.6 91.6	Quartzite, pinkish to orange coloured with grey green unaltered patches. Numerous euhedral carbonate crystals to 4 mm. within patches of pinkish to orange alteration. Frequent carbonate cemented brecciated zones and old structures. Occasional patches of very weakly diss. pyrite.							
		Trial Sample							
		296.0-297.0 - (90.2-90.5) - Pale buff to pinkish quartzite with scattered grains of pyrite (Less than $\frac{1}{2}\%$).	10380	1.0	296.0	297.0	Nil		
								• •	



Property: 772, D.R. Watt Property
Ont. HOLE: N-25 Location: Scadding Twp., Ont. Co-ordinates: 5319.2N, 9582.1E

Core size:

Section: 7+50 NW

Length: 398.0 (121.3)
Elevation: 301.9m
Azimuth: - Dip: -90°

Dip Tests:

Started: Oct. 24/80 Completed: Oct. 26/80 Logged by: K. Larsen

· 	DRILL LO	B Drill Contractor - N. Morissette Elevation: 301. Azimuth: -	9m Dip: _90°			etea: Od i by: K.	t. 26/80 Larsen) 	
DEP	o r u	DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , ,		Au oz/ton		
300.3 91.6	353.1 107.6	Quartzite and greywacke. 300.6 to 302.5 mainly unaltered dark grey greywacke except for minor bleaching along fractures. Gradually becoming bleached light to medium grey with patches of dark grey unaltered wacke. Much interbedded quartzite. Pinkish to orange alteration in patches from 308.0, frequently associated with brecciation and carbonate healed fractures. Local patches of very weakly diss. f.g. pyrite.			·	÷			
	1	Economics							
		300.3-302.0 - (91.5-92.0) - Dark grey metagreywacke with a few pistacio green band of alteration. Scattered grains of pyrite and a few of chalcopyrite.	10381	1.7 0.5		302.0	0.002		
	· .	302.0-304.0 - (92.0-92.7) - Bleached patchy dark grey and light grey metagreywacke. Occasional flecks of pyrite.	10382	2.0 0.7		304.0 92.7	Nii		
	-	304.0-306.0 - (92.7-93.3) - As above, minute grains of pyrite - less than $\frac{1}{2}\%$.	10383	2.0 0.6		306.0	Nil		
353.1	355.8	Chlorite breccia. Altered, bleached, brecciated metagreywacke. Distinct chloritic fragments in a carbonate matrix and insipient chloritization in margins of breccia zone. Very little pyrite.							
		353.1-354.1 - (107.6-107.9) - First 3 inches chloritized metagreywacke, remainder chlorite breccia with about 10% chlorite and 20% carbonate. Rare flecks of pyrite.	10384	1.0	353.1 107.6		Nil		
	•	354.1-354.8 - (107.9-108.1) - Chlorite breccia. Fragments of chloritized greywacke in a carbonate matrix and carbonate fragment in chlorite rich bands. Very little pyrite as minute grains.	10385	0.7 0.2	354.1 107.9	354.8 108.1	0.002		
								!	'



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ontl HOLE: N-25.
Co-ordinates: 5319.2N, 9582.1E Core size:

Dip Tests:

Section: 7+50 NW Length: 398.0 (121.3) Elevation: 301.9m Azimuth: - Dip: -90°

Started: Oct. 24/80 Completed: Oct. 26/80 Logged by: K. Larsen

DRILL LOG Drill Contractor - N. Morissette

DRILL LOG	Drill Contractor - N. Morissette	Azimuth: -	Dip: -90		Logge	1 by: K.	Larsen	
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to	the long core axis.	sample	width	from	to		ASSAYS
from to	NOIL. All digits are measured with respect to						Au oz/ton	
	354.8-355.8 - (108.1-108.4) - Weakly chloritized g chlorite. Essentially barren	reywacke, 20%	10386	1.0	354.8 108.1	355.8 108.:4		
355.8 398.0 108.4 121.3	Greywacke and siltstone (quartzite) interbedded. Greywacke is dark grey, light grey where bleached and altered. Siltstone thinly bedded, 60° to core, med. grey to buff coloured. Occaemented fractures. Brecciated and fractured "crackle brecci Locally well bedded 60 to 80° to core 385.0 to 398.0.	s med. grained sections are sional carbonate a" 375.0 to 378.0.				-		
	398.0 - (121.3) - Hole terminated.							
			-					



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property HOLE: N-26. Location: Scadding Twp., Ont. Core size: Co-ordinates: 5242.1N, 9509.7E

Dip Tests:

Section:

Length: 452' (137.8m)
Elevation: 307.2m
Azimuth: - Dip: -90

Started: Oct. 27/80 Completed: Oct. 30/80 Logged by: K. Larsen

0.5	0.711	DESCRIPTION	sample	width	from	tc		ASSAYS	
from	PTH to	NOTE: All angles are measured with respect to the long core axis.	number	Widen	110		Au oz/ton		
0.0	12.0	Overburden/casing.	. •			:			
12.0	89.0 27.1	Serpent Quartzite. Massive to weakly bedded meta sub-greyworke to greywacke, light to dark grey in patches due to leaching and alteration. Bedding mostly 60° to core. Often weakly fractured with intense bleaching along fractures. Occasional carbonate healed structures, generally 1" or less wide. Series of strongly slickensided joints 36.0 (11.0) to 37.0' (11.3), and single strongly slickensided joint. 20° to core at 91.2' (27.8). Infrequent chloritic hairline fractures and minor local chlorite bands. Very scattered flecks of pyrite.	·						
		Economics (Trial Samples) 72.0-73.0 - (21.9-22.2) - 20% weak chlorite banding 40° to core with 30% diss. carbonate. Rare flecks of pyrite.	10387	1.0	72.0	73.0 22.2	Nil		
		73.0-74.5 - (22.2-22.7) - Partly brecciated, carbonated subgrey-wacke, strongly bleached last foot. Scattered flecks and small blebs of pyrite.	10388	1.5		74.5	0.002		:
89.0 27.1		Quartzite, pink to buff alteration, rarely orange. Locally brecciated and fractured, carbonate healed. Rare chlorite stringers and small patches in brecciated sections.							7 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
		Economics - (Trial Sample)							,
		91.5-92.5 - (27.9-28.2) - Pinkish quartzite breccia with minor carbonate cement. 40% pyrite 92.1 to 92.3.	10389	1.0	191.0 58.2	192.0 58.5	0.005		4



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-26
Co-ordinates: 5242.1N, 9509.7E Core size:

Section:

Length: 452' (137.8m) Elevation: 307.2m

Dip Tests: Started: Oct. 27/80 Completed: Oct. 30/80

Drill Contractor - N. Morissette DRILL LOG Azimuth: -Dip: -90° Logged by: K. Larsen **ASSAYS** sample

DEP	T1)	DESCRIPTION	sample	width	from	to			
		NOTE: All angles are measured with respect to the long core axis.	number		, , , , , , , , ,		Au oz/to	~	
from	to						02/10		
102.0 31.1	237.0 72.2	Quartzite. Light grey bleached metasubgreywacke, lightly fractured and brecciated. Minor carbonate cement. Occasional siltstone beds. Rare buff coloured chert fragments in brecciated			. •	:			
		sections. Local diss. pyrité. Several slickensided joints 105.0 to 106.0 in carbonate, chlorite breccia zone. Strong aquafer, discharging water through casing.							
	• -	<u>Economics</u>						{	
		191.0-192.0 - (58.2-58.5) - Well brecciated quartzite with minor carbonate cement and 3% pyrite.	10390	1.0	191.0 58.2	192.0 58.5	0.005		
237.0 72.2	248.2 75.6	Quartzite breccia, pink to buff coloured alteration. A few carbonated patches. A little buff coloured chert. Rare clusters of radial magnetite. Scattered flecks and threads of chlorite, increasing to 10% as small 1/4" to 1" patches in last 8 inches. A little pyrite associated with chlorite.							
		<u>Economics</u>							
		246.6-248.2 - (75.2-75.7) - Quartzite breccia, pinkish alteration, minor carbonate cement. Small patches of chlorite in last 8 inches. Occasional pyrite flecks.	10391	1.6	246.6 75.2	248.2 75.7	0.01		
248.2 75.6	268.0 81.7	Chlorite breccia. Intensely chloritized zone of quartzite breccia A few pink non-chloritic patches to 4". 40 to 60% chlorite in remainder. A little quartz cementing local areas of brecciation. Carbonate essentially absent. Subhedral to euhedral cubes of pyrite and local patches of dissiminated py, po. Several grains of gold at 262.7'.		· •					



Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property
Location: Scadding Twp. Ont. HOLE: N-26 Location: Scadding Twp. Ont.

Co-ordinates: 5242.1N, 9509.7E . Core size:

Section:

Length: 452' (137.8m) Elevation: 307.2m

Dip: -90°

Dip Tests:

Started: Oct. 27/80 Completed: Oct. 30/80

DRILL LOG Logged by: K. Larsen Azimuth: '-ASSAYS sample DESCRIPTION width to from DEPTH NOTE: All angles are measured with respect to the long core axis. number Αu oz./ton from to Economics 248.2 249.2 0.08 248.2-249.2 - (75.7-76.0) - Chlorite breccia. 40% unreplaced 10392 1.0 75.7 76.0 0.3 grey quartzite. 3% py, po as subhedral cubes. 249.2 251.4 0.05 249.2-251.4 - (76.0-76.6) - Chlorite breccia. 3" pink quartzite 2.2 10393 fragment and a little grey non-chloritic quartzite, remainder has 76.0 76.6 0.6 about 40% chlorite. A few subhedral py, po cubes and scattered py grains. 251.4 254.0 0.005 2.6 251.4-254.0 - (76.6-77.4) - Chlorite breccia, weakly brecciated to 10394 massive. 60% chlorite replacement. Rare flecks and minute grains 76.6 77.4 0.8 of py, po. 254.0 257.0 0.03 254.0-257.0 - (77.4-78.3) - Chlorite breccia, weakly brecciated to massive. 10395 3.0 50 to 60% chlorite replacement. Very rare flecks of pyrite. 77.4 78.3 0.9 257.0 260.0 0.002 257.0-260.0 - (78.3-79.2) - Chlorite breccia, 40% chlorite replace- 10396 3.0 ment. A little bluish quartz cement. Scarce pyrite blebs and 0.9 78.3 | 79.2 flecks. 260.0 262.6 0.01 260.0-262.6 - (79.2-80.0) - Non-brecciated, 30% chlorite replace-10397 2.6 ment. Rare blebs and flecks py, po. 0.8 79.2 80.0 0.8 262.6 263.4 0.84 262.6-263.4 - (80.0-80.3) - Chlorite breccia, 14 small grains of 10398 free gold in a cluster at 262.7'. Remainder has a few blebs of 80.0 | 80.3 0.3 py, po. 263.4-265.2 - (80.3-80.8) - Chlorite breccia, quartz healed. 40% 263.4 265.2 0.12 1.8 10399 chlorite replacement. 3% py, po. 0.5 80.3 | 80.8



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-26
Co-ordinates: 5242.1N, 9509.7E Core size:

Section:

Length: 452' (137.8m) Elevation: 307.2m Azimuth: _____Dip: _90*

Dip Tests:

Started: Oct. 27/80 Completed: Oct. 30/80 Logged by: K. Larsen

	DRILL LO	G Drill Contractor - N. Morissette Elevation: 307.2 Azimuth: -	m Dip: _90*				ct. 30/1 . Larsen		
DEP	TH.	DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/ton		
		265.2-268.0 - (80.8-81.7) - 20% chloritem mostly as 2 to 10 mm. bands. Very rare flecks po, py	10400	2.6 0.9		268.0 81.7			
268.0 81.7	288.4 87.9	Quartzite. Light to medium grey, locally slightly brecciated and carbonated. Occasional pinkish alteration along hairline fractures and in brecciated zones. Increasing pink alteration 286.6 to 288.4.							
283.4 87.9	320.5 97.5	Chlorite Breccia Zone. Several pink quartzite breccia sections with little or no chlorite.							
		288.4-298.0 - (87.9-90.8) - Weakly brecciated zone, well chloritized with up to 60% chlorite replacement. A little bluish quartz and rare carbonate healed fractures.							
		298.0-304.0 - Pink quartzite breccia. 20% chlorite, mostly as fracture fillings and interstitial to breccia fragments. Prominent c.g. breccia in last foot.							
		304.0-308.6 - (92.6-94.1) - Quartzite breccia, pink with scattered carbonated fractures. 10% chlorite or less as fracture fillings and spotty replacement.							
		308.6-310.4 - (94.1-94.6) - Chlorite breccia, 40% chlorite replacement in quartzite breccia.		•					
		310.4-311.0 - (94.6-94.9) - Grey quartzite, vaguely chloritic.							
		311.0-311.4 - (94.9-95.1) - Band of heavy chlorite replacement.							
	•	311.4-319.0 - (95.1-97.2) - Quartzite, pink to light grey, non-chloritic, locally brecciated and carbonated, weakly fractured.						•	



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-26
Co-ordinates: 5242.1N, 9509.7E Core size:

Section:

Length: 452' (137.8m)

Elevation: 307.2m

Dip Tests:

Started: Oct. 27/80 Completed: Oct. 30/80

DEP	T11	DESCRIPTION	Dip: -90° sample	width	Logged	om to		ASSAYS		
from	to	NOTE: All angles are measured with respect to the long core axis.	number	Wideli			Au oz/ton			
		319.0-320.5 - (97.2-97.7) - Chlorite-carbonate breccia. 30% chlorite replacement in zone of-quartzite breccia. Several carbonate healed fractures, re-fractured and chloritized.			·	:				
		Economics 288.4-290.2 - (87.9-88.5) - Chlorite breccia. 30% chlorite replacement. 2" band of non-chloritic grey quartzite in first foot. Strongly sheared last 8 inches with numerous slicks. Rare flecks of po, py.	10401	1.8	288.4	290.2				
1		290.2-291.0 - (88.5-88.7) - Grey quartzite, essentially barren.	10402	0.8	290.2 88.5	291.0 88.7	Ni7			
	-	291.0-292.0 - (88.7-89.0) - 40% chlorite replacement. 2% diss. py, po.	10403	1.0	291.0 88.7	292.0 89.0	0.07			
		292.0-295.0 - (89.0-89.9) - 40% chlorite replacement. A little carbonate at 294.0. Poorly mineralized with very rare flecks of py, po.	10404	3.n 0.9	292 0 89.0	295.0 89.9				
		295.0-298.0 (89.9-90.8) - 50% chlorite replacement. Rather `massive looking. A little bluish quartz locally. Rare flecks po, py.	10405	3.0 0.9	295.0 89.9	298.0 90.8				
		298.0-301.0 - (90.8-91.7) - Chlorite breccia. 20% chlorite as fracture fillings and patchy replacement in pink quartzite breccia. Very little pyrite as scattered flecks.	10406	3.0 0.9	298.0	301.0 91.7				
		301.0-304.0 - (91.7-92.6) - Chlorite breccia. As above, but 10% chlorite interstitial to breccia fragments. Rare fleck po, py	10407	3.0	301.0	304.0				



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-26Co-ordinates: 5242.1N, 9509.7E Core size:

Section:

Length: 452' (137.8m)
Elevation: 307.2m

Started: Oct. 27/80 Completed: Oct. 30/80

Dip Tests:

	DRILL LO	G Drill Contractor - N. Morissette Elevation: 307.2	2m Dip: -90°				t. 30/80 Larsen	:
DEP	TU	DESCRIPTION	sample	width	from	to	AS	SAYS
from	to	NOTE: All angles are measured with respect to the long core axis.	number			,	Au oz/ton	
		304.0-307.0 - (92.6-93.5) - Quartzite, pink to buff coloured, 5% chlorite, 20% carbonate in fractures and brecciated zones. Essentially barren.	10408	3.0 0.9		307.0 93.5		
		307.0-308.6 - (93.5-94.1) - Quartzite, 10% chlorite replacement - rare flecks py, po.	10409	1.6		308.6 94.1		
		308.6-310.4 - (94.1-94.6) - Chlorite breccia, 50% chlorite replacement with 2% diss. po, py.	10410	1.8		310.4 94.6		
		310.4-313.4 - (94.6-95.5) - Quartzite, pink alteration. Scattered carbonate filled fractures. 2" patch of 40% chlorite replacement with 1% pyrite at 311.2'.	10411	3.0 0.9		313.4 95.5		
		313.4-317.0 - (95.5-96.6) - Quartzite, grey with pinkish alteration. Scattered carbonate healed fractures. Generally weakly brecciated. Essentially barren.	10412	3.6 1.1		317.0 96.6		
		317.0-319.0 - (96.6-97.2) - Quartzite, as above.	10413	2.0 0.6		319.0 97.2		
		319.0-320.5 - (97.2-97.7) - Chlorite breccia. 30% chlorite replacement in quartzite. 3 carbonate stringers ½ to 2". Rare flecks po, py.	10414	1.5		320.5 97.7		
320.5 97.7	452.0 137.8	Quartzite, brecciated, carbonated, grey to locally faintly pinkish. Rare buff coloured chert bands. Carbonate breccia from 428.0 with sharp increase in carbonate content and brecciation. Open vuggy joints at 343.0, 405.5 and 447.0. No chlorite or pyrite. Entire section typical F.W.						
		452.0 - (137.8) Hole terminated.						



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5242.1N, 9509.7E HOLE: N-26 Core size:

Section:

Length: 452' (137.8m)
Elevation: 307.2m
Azimuth: - Dip: -90°

Dip Tests:

Started: Oct. 27/80 Completed: Oct. 30/80 Logged by: K. Larsen

			DESCRIPTION		sample number	width	from	to		ASSAYS
DEP [*]	TH _to	NOTE: A1	DESCRIPTION langles are measured with respect to	the long core axis.	number	wiath	rrom		Au oz	/ft.
		Ore Sections								
				•	10398	0.8 0.2	262.5 80.1	263.4 80.3	0.84 .6	72
					10399	1.8 0.6	263.4 80.3	265.2 80.9	0.12 .2	7
		1.				2.6 0.8	262.6 80.1	265.2 80.9	.342 .8	388
		•								



Property: 772, D.R. Watt Property HOLE: N-27. Location: Scadding Twp., Ont. Co-ordinates: 5255.2N, 9502.9E Core size:

Dip Tests:

Section: 5+50 NW
Length: 377.5 (115.1m)
Elevation: 306.5m
Azimuth: - Dip: -90°

Started: Oct. 31/80

Completed: Nov. 8/80 Logged by: K. Larsen

. '	DRILL LOG		levation: 306.5m cimuth: - Di	ip: -90°			by: K.			
DEP	ידט	DESCRIPTION		sample	width	from	to		ASSA	YS
from	to	NOTE: All angles are measured with respect to the l	ong core axis.	number	•-	.		Au/ oz.to	n	
; 10:11										
0.0	8.0 2.4	Overburden, cased to 12.0'.	•				:			
3.0 2.4	141.0	Serpent quartzite, light to medium grey, massive to we and locally brecciated, carbonated. Rather strongly j to 80.0. Bedding 70° to core @ 85'. Rare flecks and s	jointed 37.0							
		129.0-133.0 - (39.3-40.6) - Ground core.								
141.0 43.0	156.0 47.6	Quartzite, pinkish to salmon coloured alteration, loca healed structures and brecciated zones. Core slightly								
		Economics	-	-						
		154.0-156.0 - (46.9-47.6) - Quartzite, pinkish, 2% car fractures. Last 4 inches weakly chloritic. Rare flec		10419	2.0	154.0 46.9	156.0 47.6			
156.0 47.6	179.2 54.6	Chlorite Zone. Variable chlorite replacement in weakl moderately brecciated quartzite. Some unreplaced pink coloured quartzite. Strongly slickensided slips at 16 and 168.2. The latter is composed of several slips 10 to core with a little ground pyrite and soft chlorite	to buff 53.0, 166.1 0° to 30°							
		Economics								
		156.0-158.1 - (47.6-48.2) - 20% chloritic bands and pa quartzite breccia. Rare fleck of py and a few pyritiz fractures. A single 4 mm. spot of chalcopyrite at 157	zed hairline	10420	2.1	156.0 47.6	158.1 48.2			
		158.1-159.1 - (48.2-48.5) - 10% chlorite as bands in p quartzite. 5 minute grains of V.G. at 158.6. No pyri		10421	1.0	158.1 48.2	159.1 48.5		V.G.?	
	1			1.			L	L		



Section: 5+50 NW

Length: 377.5 (115.1m)

Location: Scadding Twp., Ont.

Co-ordinates: 5255.2N, 9502.9E

Elevation: 306.5m

Completed: Nov. 8/80 Logged by: K. Larsen

Core size:

Dio Tests:

Started: Oct. 31/80

Property: 772, D.R. Watt Property HOLE: N-27

Azimuth: - Dip: -90° Drill Contractor - N. Morissette DRILL LOG ASSAYS sample DESCRIPTION from to width NOTE: All angles are measured with respect to the long core axis. number Au/ DEPTH bz/tdn from to 159.1 162.1 0.01 159.1-162.1 - (48.5-49.4) - 40% chlorite replacement. A few small 10422 3.0 48.5 49.4 grey unreplaced quartzite patches. No sulphides observed. 0.9 162.1 164.0 0.005 162.1-164.0 - (49.4-50.0) - 30% chlorite replacement. 0.5 feet 10423 1.9 49.4 50.0 of core ground between 163.2 and 163.7. No sulphides observed. 0.6 164.0| 165.0|0.005 164.0-165.0 - (50.0-50.3) - 20% chlorite replacement. No sulphides 1.0 10424 50.0 50.3 0.3 observed. 165.0| 166.0|0.002 V.G. 165.0-166.0 - (50.3-50.6) - 20% chlorite replacement. Rare flecks 10425 1.0 50.3 50.6 of py, po. 5 small clusters of V.G. spread over length of core. 0.3 166.0 168.2 0.005 2.2 166.0-168.2 - (50.6-51.3) - 30% chlorite replacement. Scattered 10426 50.6 51.3 0.7 minute flecks of py, po. 168.2 | 169.2 | 0.37 | V.G. 168.2-169.2-(51.3-51.6) - 40% chlorite replacement. 2 to 10 mm. veinlet of 1.0 10427 51.3 51.6 .11 pyrite, chalco - pyrite and c.g. disseminations of same in first 0.5 feet. 0.3 169.2 170.8 0.005 169.2-170.8 - (51.6-52.1) - 20% chlorite replacement, diminishing 10428 1.6 51.6 52.1 to 10% in last 6 inches. A single speck of V.G. at 170.6'. Rare 0.5 flecks of py, po. 170.8 174.0 0.002 3.2 170.8-174.0 - (52.1-53.0) - Quartzite, buff to pinkish coloured. 10429 52.1 53.0 5% chlorite in first 3 inches. No sulphides observed. 174.0 | 175.3 | 0.002 174.0-175.3 - (53.0-53.4) - Chlorite breccia. 20% chlorite in 1.3 10430 53.0 53.4 0.4 pinkish brecciated quartzite. Rare flecks of py. 175.3 176.6 1.58 V.G. 175.3-176.6 - (53.4-53.8) - Chlorite breccia. 50% chlorite. 15% 10431 1.3 pyrite - c.g. euhedral cubes and anhedral masses up to one inch in 53.4 53.8 0.5 0.4 diameter. Two small clusters and several small specks of v.g.



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-27
Co-ordinates: 5255.2N, 9502.9E Core size:

Section: 5+50 NW Length: 377.5 (115.1m) Elevation: 306.5m Azimuth: - Dip: -90°

Dip Tests:

Started: Oct. 31/80 Completed: Nov. 8/80 Logged by: K. Larsen

· .	DRILL LO	Drill Contractor - N. Morissette Elevation: 306.5	m Dip: -90°				ov. 8/80 Larsen	
255	7711	DESCRIPTION	sample	width	from	to		ASSAYS
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Au/ oz/ton	
	-	176.6-178.2 - (53.8-54.3) - Chlorite breccia. 20% chlorite in brecciated, fractured quartzite. A little pinkish non-chloritic quartzite. 4% pyrite as scattered cubes to 10 mm. Large 30 mm. composite pyrite cube at 178.0. Cluster of V.G. at 177.3	10432	1.6	176.6	178.2 54.3		
		178.2-179.2 - (54.3-54.6) - Chlorite breccia. 10% chlorite as stringers and patches in brecciated pinkish quartzite. No sulphides observed.	10433	1.0	178.2 54.3			
179.2 54.6	192.2 58.6	Quartzite. Light grey to buff with patches and bands of slightly salmon pink alteration. Lightly fractured. Some remnant bedding 60° to core. Occasionally a little chlorite along hairline fractures.		·				
	•.	Economics						
		179.2-184.2 - (54.6-56.2) - Quartzite, massive to lightly fractured with rare flecks of py.	10434	5.0 1.6	179.2 54.6	184.2		
		184.2-189.0 - (56.2-57.6) - Quartzite, as above.	10435	3.8 0.4	184.2	189.0 57.6	0.002	
		` 189.0-192.2 - (57.6-58.6) - Quartzite, buff to brownish, well bedded locally. Essentially barren.	10,436	3.2 1.0	189.0 57.6	192.2 58.6		
192.2 58.6	251.0 76.5	Chlorite breccia. Quite variable chlorite content, 5 to 60% with small unreplaced quartzite patches, frequently exhibiting excellent breccia texture. Frequent slickensided joints. At 204.0' (62.2) 2" of runover core.						



Property: 772, D.R. Watt Property Location: Scadding Twp., Cnt. HOLE: N-27 Core size: Co-ordinates: 5255.2N, 9502.9E

Section: 5+50 NW

Length: 377.5 (115.1m)

Elevation: 306.5m

Dip Tests:

Started: Oct. 31/80 Completed: Nov. 8/80 Logged by: K. Larsen

DRILL LOG		Elevation: 306.5m Azimuth: _ Dip: -90°				V. 8/80 Larsen
	DESCRIPTION	sample	width	from	to	ASSAYS
DEPTH	NOTE: All angles are measured with respect to the	e long core axis. number		7. 0		Au/ oz.tcn
from to	219.0-221.5 - (66.7-67.5) - Fault Zone? Strongly structure about 5° to core. Core split in thin slice parallel to long axis. Some carbonate coated pieces	es near			:	
	239.0-251.0 - (72.6-76.5) - Gradually decreasing chloecoming patchy and stringy with much unreplaced pir					
	Economics 192.2-194.4 - (58.6-59.3) - 20 to 30% chlorite replaced massive with a couple of small unreplaced quartzite Scattered flecks of py, po.		2.2	192.2 58.6	194.4 59.3	
٠.	194.4-196.4 - (59.3-59.9) - Chlorite breccia. Weak! 5 to 10% in lightly brecciated quartzite. Essential		2.0	194.4	196.4 59.9	
	196.4-198.6 - (59.9-60.5) - Quartzite, buff to pinki a little remnant bedding 55° to core. No sulphides		2.2	196.4	198.6 60.5	
	198.6-200.6 - (60.5-61.2) - Chlorite breccia. 10% of first foot, then rapidly increasing to 40%. Very rasulphide.		2.0	198.6	200.6	
	200.6-201.6 - (61.1-61.5) - Chlorite breccia, 40% ch flecks of py, po. Single speck of V.G. at 201.1.	nlorite. Rare 10441	1.0	200.6	201.6	
	201.6-204.6 - (61.5-62.4) - Chlorite breccia. 20% of bands and small patches. 0.7' lost core at 204.0. fault zone, 5° to core. Rare flecks of pyrite.		3.0	201.6		0.02
	204.6-206.6 - (62.4-63.0) - Chlorite breccia, 20% ch bands and irregular small patches. Scarce flecks of		2.0	204.6	206.6	0.01



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-27Co-ordinates: 5255.2N, 9502.9E Core size:

Dip Tests:

Section: 5+50 NW

Length: 377.5 (115.1m)

Elevation: 306.5m

Started: Oct. 31/80 Completed: Nov. 8/80

	DRILL LOG	Drill Contractor - N. Morissette Azimuth: -	Dip: -90°		Logged	by: K.	Larsen	<u> </u>	
<u> </u>		DESCRIPTION	sample	width	from	to		ASSAY	' S
DEP		NOTE: All angles are measured with respect to the long core axis	number	width	i rom	•	Au/ oz.to	n	
from	to	206.6-208.0 - (63.0-63.4) - Chlorite breccia. 40% chlorite. A little bluish quartz and 2% py,-po, mostly 2 to 4 mm. anhedral forms.	10444	1.4	206.6		0.06		
		208.0-211.0 - (63.4-64.3) - Chlorite breccia. Pinkish quartzite with about 10% chlorite. Essentially barren.	10445	3.0	208.0		0.02		
		211.0-214.0 - $(64.3-65.2)$ - Chlorite breccia. 15% chlorite in first 1.5 feet, then 30% in remainder. About 1% po, py. Weakly diss. throughout.	10446	3.0	211.0				
		214.0-217.0 - (65.2-66.1) - Chlorite breccia. 25% chlorite. A few small patches of light grey quartzite. Rare flecks of sulphides.	10447	3.0	214.0 65.2		0.03		
	•.	217.0-219.0 - (66.1-66.8) - Chlorite breccia. 40% chlorite, a little bluish quartz. Occasional flecks of py, po.	10448	2.0	217.0		0.02		
		219.0-221.0 - (66.8-67.4) - Chlorite breccia. 50% chlorite. With narrow irregular bands, pods and streaks of po, py, cpy, about 6% total sulphides. Core badly split and fractured by slightly vuggy structure undulating at 5° to core. 2 specks of V.G. at 220.4'.	h 10449	2.0	219.0 66.8		1.08	V.G.	
÷		221.0-224.0 - (67.4-68.3) - Chlorite breccia. 40 to 60% chlorite quite massive. ½% po, py as scattered flecks.	, 10450	3.0	221.0		0.05		;
		224.0-227.0 - (68.3-69.2) - Chlorite breccia 20 to 30% chlorite, rare flecks po, py. Run over core 226.0 - 227.0.	10451	3.0	224.0		0.05	; ; ; ; ;	
	•	227.0-230.0 - (69.2-70.1) Chlorite breccia. 30% chlorite. Essentially barren.	10452	3.0	227.0	230.0	0.01		



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont. HOLE: N-27
Co-ordinates: 5255.2N, 9502.9E Core size:

Dip Tests:

Section: 5+50 NW

Length: 377.5 (115.1m)
Elevation: 306.5m
Azimuth: - Dip: -90°

Started: Oct. 31/80 Completed: Nov. 8/80 Logged by: K. Larsen

·	DRILL LOG	Drill Contractor - N. Morissette Elevation: 306.5 Azimuth: -	Dip: -90*	·	Logge	ted: No	Larse	en		
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to			SAYS	
from	to	NOTE: All angles are measured with respect to the long cold date.		• -			Au/ oz.t			
		230.0-233.5 - (70.1 - 71.2) - 40% chlorite replacement, quite massive. Occasional flecks and small blebs of po. 233.5-235.0 - (71.2 - 71.6) - Chlorite breccia. 5 to 10% chlorite in brecciated quartzite. No sulphides observed.	10453	3.5 1.1 1.5 0.4	70,1	233.5 71.2 235.0 71.6	0.02			
	-	235.0-238.0 - (71.6 - 72.5) - Chlorite breccia. 40% chlorite. Massive with minor bluish quartz and rare flecks of po, py.	10455	3.0 0.9	235.0	238.0	0.02			
-		238.0-241.0-(72.5-73.5) - Chlorite breccia. Chlorite becoming patchy with 30% pink unreplaced quartzite patches. Scarce flecks of po, py.	10456	3.0		241.0 73.5				
		241.0-244.0 - (73.5 - 74.4) - Chlorite breccia, 10% chlorite in pink brecciated quartzite. Essentially barren.	10457	3.0		244.0			•	
		244.0-247.6 - (74.4 - 75.5) - Chlorite breccia. 5% chlorite in pink brecciated quartzite. No sulphides observed.	10458	3.6 1.10		247.6 75.5			† ; ;	
		247.6-251.0 - (75.5 - 76.5) - Chlorite breccia, as above.	10459	3.4		251.0 76.5		Nil		
51.0 76.5	297.5 90.7	`Quartzite breccia, pink, typical carbonate cemented fractures. Pink alteration gradually fades. Occasional thin chlorite band or streak.								
-		283.0-284.0 - (86.3 - 86.6) - Fault Zone. A little fault breccia and red hematite. A narrow chlorite zone appears to be the loci of the fault. 5 to 10° to core.							•	

Property: 772, D.R. Watt Property HOLE: N-27 Location: Scadding Twp., Ont. Core size:

Co-ordinates: 5255.2N, 9502.9E

Section: 5+50 NW

Length: 377.5 (115.1m)

Dip Tests:

Started: Oct. 31/80 Completed: Nov. 8/80

Elevation: 306.5m Logged by: K. Larsen Azimuth: - Dip: -90° Drill Contractor - N. Morissette DRILL LOG ASSAYS samole from width DESCRIPTION number NOTE: All angles are measured with respect to the long core axis. Au/ DEPTH loz.ton to from At 297.5 - (90.7) - Fault contact with following unit. Fault is tight, strongly slickensided, 30.0 to core. Slicks indicate a vertical movement relative to dip of hole. Carbonate breccia. Typical grey carbonated quartzite. Locally 377.5 297.5 some remnant bedding 60° to core. Change from pink quartzite 115.16 90.7 above to grey quartzite abrubt at fault contact. Brecciation increases gradually and becomes coarser with distinct quartzite fragments up to one inch in a carbonate fabric. Patches of unaltered subgreywacke from 367.0'. 377.5 - (115.16) - End of Hole.



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5255.20, 9502.9E

HOLE: N-27 Core size:

Section: 5+50 NW Length: 377.5 (115.1m) Elevation: 306.5m

Dip Tests:

Started: Oct. 31, 1980 Completed: Nov. 8, 1980

	DRILL LO	Drill Contractor - N. Morissette	<u> </u>	Azimuth: -	"Dip: -90°		Logge	by: K.	Larsen		
DEP.	тн	DESCRIP NOTE: All angles are meas	T I O N ured with respect to th	e long core axis.	sample number	width	from	to	Au ·	ASSAYS	
from	to								oz/ton	ft./oz.	
		Ore Sections									
•	• • • • • • • • • • • • • • • • • • •	1.			10427	1.0	168.2 51.3	169.2 51.6	.37		; ;
				. •	10431	1.3 0.4	175.3 53.5	176.6 53.9	1.58	2.054 0.6	
					10432	1.6	176.6 53.9	178.2 54.4	0.26	.416	:
		2.				2.9	175.3 53.5	178.2 54.4	0.85	2.470	;
	-	3.			10441	1.0 0.3	200.6	201.6	0.69		;
		4.			10446	3.0 0.9	211.0	214.0 65.3	0.23		1
		5.		·	10449	2.0	219.0 66.8	221.0 67.4	1.08		
					-						: ;
				•							,



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5219.2N, 9457.3E

HOLE: N-28 Core size:

Section: 6+00NW, 1+25NE Length: 205' (62.5m) Elevation: 310.7m Azimuth: Dip: -90°

Dip Tests:

Started: November 9, 1980 Completed: November 12, 1980

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 310./m Azimuth:	Dip: -90°			by: K.		2, 1980	,
		DESCRIPTION	sample	width	from	to -		ASSAYS	
DEP	'TH	NOTE: All angles are measured with respect to the long core axis.	number		., •				
from	to								-
0.0 0.0	16.0	Overburden - casing.				:	-		
16.0 4.9	139.0 42.37	Pinkish to grey quartzite, scattered carbonated fractures. Small amounts of chlorite locally, often as narrow zones, one foot or less, but also associated with light fracturing.							
		16.0 - 24.8 - (4.9 - 7.56) - Quartzite, pinkish alteration. Numerous rust stained joints (surface effect). Weakly chloritic in small one inch patches and along hairline fractures. Run over core 19.2' to 20.6'.							
		24.8 - 25.0 - (7.56 - 7.62) - Fault. Heavy rust staining, one inch of fault by. 5 to 15° to core.							
	•.	25.0 - 41.0 - (7.62 - 12.5) - Quartzite, pinkish alteration. Some unaltered grey patches. 34.8 - 35.8 heavy chlorite bands.			-				
		41.0 - 70.8 - (12.5 - 21.6) - Quartzite, light grey with carbonate healed fractures. Pink alteration absent. Scattered bits of chlorite, less than 2% total.			of the order of th				
		70.8 - 139.0 - (21.6 - 42.4) - Quartzite, pinkish alteration. Typical carton ted fractures. Minor chlorite as streaks and rarely thin bands. Chlorite zone 69.8 to 71.8 and 100.0' to 100.8'. Drastic increase in pinkish alteration toward base of unit. Occasional chert beds up to 2".							
		<u>Economics</u> - (Trial Samples)							:
•		21.(- 24.8 - (6.40 - 7.56) - Pink quartzite, weakly brecciated with 2 to 5% chi rite and scattered flecks of my, po.	10460	3.8		24.8 7.56			



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5219.2N, 9457.3E

HOLE: N-28 Core size:

Section: 6+00NW, 1+25NE Length: 205' (62.5m) Elevation: 310.7m Azimuth: Dip: -90°

Dip Tests:

•	DATE LOS	AZ TRIUCIT.	01030				 		
		DESCRIPTION		width	from	to	 ASSAY	/S	
DEP	YTH	NOTE: All angles are measured with respect to the long core axis.	number						
from	to		<u> </u>	<u> </u>			 	-	
		33.0 - 34.8 - (10.06 - 10.61) - Pink to grey quartzite, essentially barren.	10461	1.8	33.0 10:06	34.8 10.61			
		34.8 - 36.0 - (10.61 - 10.97) - Chlorite breccia. Mainly 2 bands of chlorite, 2" wide in pink quartzite carrying minor chlorite in fractures. A little coarse pyrite near end of sample. Contact with upper unit sharp, slightly slickensided, 50° to core.	10462	1.2	34.8 10.61	36.0 10.97	egy po est ma minima instituto espera		
		36.0 - 38.0 - (10.97 - 11.58) - Quartzite, pinkish to buff, essentially barren.	10463	2.0	36.0 10.97	38.0 11.58			
		54.5 - 57.0 - (16.61 - 17.37) - Quartzite, light grey with 3 to 5% chlorite in slightly brecciated zones. No sulphides observed.	10464	2.5	54.5 16.61	57.0 17.37			
		70.2 - 71.2 - (21.40 - 21.70) - Quartzite, pink, minor carbonate in fractures. No sulphides observed.	10465	1.0	70.2 21.40	71.2 21.70			
		71.2 - 72.2 - (21.70 - 22.00) - Quartzite, med. grey to buff with some pinkish alteration. 2% pyrite as dissiminations and thin bands.	10466	1.0	71.2	72.2 22.00			
		72.2 - 74.8 - (22.00 - 22.80) - Quartzite, buff to grey, pinkish last foot. No sulphides observed.	10467	2.6	72.2 22.00	74.8 22.80			
		`74.8 - 76.7 - (22.80 - 23.38) - Chlorite breccia, 30% chlorite in pink, brecciated quartzite. 1% diss. py. Contact with upper unit sharp, slickensided, 40° to core.	10468	1.9	74.8 22.80	76.7 23.38			; ; ;
•		7 - 77.7 - (23.38 - 23.68) - Chlorite breccia, 10% chlorite in pinkish Lieuciated quartzite, occasional flecks of py, po.	10469	1.0	76.7 23.38	77.7 23.68			
		96.5 - 97.5 - (29.41 - 29.72) - Chlorite breccia. 10% chlorite with scattered blebs of py in pink brecciated quartzite.	10470	1.0	96.5	97.5 29.72			



Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5219.2N, 9457.3E

Core size:

Section: 6+00NW, 1+25NE Length: 205' (62.5m) Elevation: 310.7m Azimuth: Dip: -90°

Dip Tests:

	•	•			
DRILL LOG	Drill	Contractor	- N.	Morissette	-

		sample					ASS	SAYS	
NOTE: All and	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to				
· 									
	- (29.72 - 30.39) - Quartzite, pink to buff coloured, weakly nd carbonated. No sulphides observed.	10471	2.2 0.7	97.5 29.72	99.7 30.39				
	- (30.39 - 30.69) - 6" chlorite breccia zone in pink quartzite. po in chlorite, remainder barren.	10472	1.0	99.7 30.39	100.7 30.69				
} .	ccia. Chloritization varies from 5% to locally 60%. A few small ink quartzite section generally poorly mineralized. Strong slips to core.					-			
C							1		
	0 - (42.37 - 42.98) - Chlorite breccia. 20% chlorite in pinkish mostly as bands. A little vein qtz. @ 141.0'. No sulphides observed.	10473	2.0 0.6	139.0 42.37	141.0 42.98				
	0 - (42.98 - 43.28) - Chlorite breccia. 40% chlorite with 1% py. ck of v.q. at 141.4'.	10474	1.0		142.0 43.28		1		
	0 - (43.28 - 44.20) - Chlorite breccia. 15% chlorite in grey to te, poorly brecciated. Rare flecks of py.	10475	3.0		145.0 44.20				;
	0 - (44.20 - 45.11) - Chlorite breccia, 10% to 15% chlorite. Fink non-chloritic quartzite. Poorly mineralized with rare flecks py	10476	3.0	145.0 44.20	148.0 45.11			1	
I i	6 - (45.11 - 46.21) - Chlorite breccia, 10% chlorite or less. Poorly	10477	3.6	148.0 45.11	151.6 46.21				
. i t	.6 - (46.21 - 47.12) - 5 to 10% chlorite in very weakly brecciated No sulphides observed.	10478	3.0 0.9					•	
-	.6 - (46.21 - 47.12) - 5 to 10% chlorite in very weakly brecciated	10478		3.0	3.0 151.6	3.0 151.6 154.6	3.0 151.6 154.6	3.0 151.6 154.6	3.0 151.6 154.6

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, U.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5219.2N, 9457.3E

HOLE: N-28. Core size:

Section: 6+00NW, 1+25NE Length: 205' (62.5m) Elevation: 310.7m Azimuth: Dip: -90°

Dip Tests:

050711		DESCRIPTION					ASSAY	\$
DEPTI	H	NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		
from	to		·				 	+
		154.6 - 156.0 - (47.12 - 47.55) - Chlorite breccia. 20% chlorite, mostly in bands to one inch. Rare flecks py, po.	10479	1.4		156.0 47.55		
		156.0 - 159.0 - (47.55 - 48.46) - As above, but 25% chlorite as bands.	10480	3.0 0.9		159.0 48.46		
		159.0 - 162.0 - (48.4649.38) - 25% chlorite in weakly brecciated quartzite. A little bluish quartz in matrix. Essentially barren.	10481	3.0 0.9		162.0 49.38		
		162.0 - 165.0 - (49.38 - 50.29) - 20% chlorite replacement in non-brecciated quartzite. Rare flecks of py, po.	10482	3.0	162.0 49.38	165.0 50.29		
		165.0 - 168.0 - (50.29 - 51.21) - 10% chlorite in weakly brecciated quartzite. Essentially barren.	10483	3.0	165.0 50.29	168.0 51.21		
	٠.	168.0 - 171.0 - (51.21 - 52.12) - Quartzite, buff coloured to grey, less than 5% chlorite. No sulphides observed.	10484	3.0	168.0 51.21	171.0 52.12		
		171.0 - 174.0 - (52.12 - 53.04) - Chlorite breccia. 20% chlorite as bands and replacement. 1% diss. py, po.	10485	3.0	171.0 52.12	174.0 53.04		
		174.0 - 177.5 - (53.04 - 54.10) - 10% chlorite replacement. Rare flecks po, py.	10486	3.5	174.0 53.04	177.5 54.10		
		177.5 - 180.0 - (54.10 - 54.87) - Chlorite breccia. 20% chlorite in well brecciated quartzite. 1% to 1.5% py, po as streaks and scattered flecks.	10487	2.5	177.5 54.10	180.0 54.87		
180.0 54.87	191.5 58.40	Quartzite, pink to buff coloured, well brecciated and carbonated. Occasionally a little buff coloured chert in irregular broken bands. A few streaks of chlorite in first foot.						
							# # # #	

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5219.2N, 9457.3E

HOLE: N-28. Core size:

Section: `6+00NW, 1+25NE Length: 205' (62.5m) Elevation: 310.7m Azimuth: Dip: -90°

Dip Tests:

	AZIMUTA:	U1D: -90		Logged	by: K.	<u>Larsen</u>		
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width		to	ASSA		
from to	note. The uniques are measured when respect to the teng to anti-	-						
	<u>Economics</u>				•			
	180.0 - 182.0 - (54.87 - 55.47) - Quartzite, pink to buff coloured with a few spots and streaks of chlorite. No sulphides observed.	10488	2.0 0.6	180.0 54.87	182.0 55.47			
191.5 58.40 205.0 62.49	Quartzite, grey to greyish brown, bleached light grey along fractures. Rare carbonate healed fractures. A little chlorite at 196.5'.							
205.0 324.0 62.49 98.76	Carbonate breccia. Grey quartzite breccia, carbonate healed fractures and zones of brecciation. Occasional thin irregular beds of buff coloured chert. Rare small blebs of pyrite, quite isolated. Some zones strongly brecciated with angular fragments of quartzite in a carbonate matrix.							
	324.0 - (98.76) - Hole terminated.							
					Andrew or agreement of the control o			der erreigenen den de erreigenen en erreigenen

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5205.1N, 9464.3E

HOLE: N-29.

Section: 5+50NW, 1+25NE

Dip Tests: Started: N

Length: 280' (85.4m) Elevation: 312.0m Started: November 13, 1980 Completed: November 15, 1980

Azimuth: Dip: -90°

Logged by: K. Larsen

ASSAYS DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number to from Overburden - casing. 10.0 0.0 3.0 0.0 Quartzite, brecciated, pink to buff coloured with scattered streaks and small 63.0 10.0 patches of weak chloritization. Section is similar to N-28, 16.0' to 139.0'. 19.2 3.0 Fractures and breccia zone carbonate healed. Note: Assay was made on section of BQ core believed to be a boulder: from 7.0' 2.5 9.5 7.0 2.9 to 9.5' - This is probably bedrock. 0.8 2.1 Economics 3.0 10.0 - 13.0 - (3.0 - 4.0) - Pink to buff quartzite with 5% chlorite as streaks 10489 10.0 13.0 and weak replacement. Core slightly rusty coloured and pitted where pyrite was 0.9 4.0 3.0 leached out. 13.0 - 16.0 - (4.0 - 5.0) - Quartzite, pink, carbonated. 2 to 3% chlorite and 10490 3.0 16.0 13.0 rare flecks py. 0.9 4.0 5.0 16.0 - 19.0 - (5.0 - 5.8) - Quartzite, pink, fairly massive. 2% chlorite as 10491 3.0 19.0 16.0 streaks. Poorly mineralized. 0.9 5.0 5.8 19.0 - 22.0 - (5.8 - 6.8) - Quartzite, buff coloured, massive, non brecciated. 22.0 10492 3.0 19.0 No sulphides observed. 0.9 5.8 6.8 22.0 - 25.0 - (6.8 - 7.6) - Quartzite breccia. 5% chlorite as seams and streaks. 10493 3.0 22.0 25.0 scattered blebs of py, po, less than 1%. 0.9 6.8 7.6 43.0 - 46.0 - (13.1 - 14.0) - Quartzite. Fairly well brecciated and carbonated 10494 46.0 3.0 43.0 with scattered seams of chlorite. 1% pyrite and a few flecks of chalco-pyrite. 14.0 0.9 13.1

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5205.1N, 9464.3E

HOLE: N-29 Core size:

Section: 5+50NW, 1+25NE Length: 280' (85.4m) Elevation: 312.0m Azimuth: Dip:-90°

Dip Tests:

DEP	тн	DESCRIPTION	sample	width	from	to	ASSAYS		ASSAYS		
from	to	NOTE: All angles are measured with respect to the long core axis.	number								
		46.0 - 48.6 - (14.0 - 14.8) - Quartzite, well brecciated, but very few seams of chlorite. Rare flecks of py.	10495	2.6 0.8	46.0 14.0	48.6 14.8.					
		48.6 - 51.6 - (14.8 - 15.7) - Quartzite, pinkish, carbonated, weakly brecciated. Barren.	10496	3.0 0.9	48.6 14.8	51.6 15.7					
		51.6 - 52.6 - (15.7 - 16.0) - Quartzite, buff to dk. grey, fractured and brecciated. 1.5% diss. py.	10497	1.0	51.6 15.7	52.6 16.0					
		52.6 - 55.0 - (16.0 - 16.8) - Quartzite, buff to grey, unaltered, massive, barren.	10498	2.4	52.6 16.0	55.0 16.8	-				
63.0 19.2	125.0 38.1	Quartzite, non-brecciated, quite massive with only occasional carbonated fractures. Pinkish alteration in patches common. Some sections with remnant bedding 50° to core.									
125.0 38.1	179.0 54.6	Quartzite, pink, well brecciated with frequent carbonate healed seams and fractures. Local weak chloritization.									
		134.0 - 134.7 - (40.9 - 41.1) - Carbonate seam, 50° to core. A little run over core in this.								;	
		172.0 - 174.0 - (52.5 - 53.1) - Core badly broken. Several slips 50° to 70° to core.									
		Economics - (Trial Sample)								4	
		135.3 - 137.7 - (41.2 - 41.8) - Pink to buff brecciated quartzite with 5% chlorite in seams and irregular bands. ½ to 1% diss. py.	10499	2.4	135.3	137.7					
179.0 54.6	193.0 58.8	Chlorite breccia. 5% to locally 60% chlorite. Scattered small patches of white to pinkish non-chloritic quartzite.							•	• • • • • • • • • • • • • • • • • • •	

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5205.1N, 9464.3E

HOLE: N-29 . Core size:

Dip Tests:

Section: 5+50NW. 1+25NE Length: 280' (85.4m)

Started: November 13, 1980

Completed: November 15, 1980 Elevation: 312.0m Logged by: K. Larsen

Dip: _90° Drill Contractor - N. Morissette Azimuth: DRILL LOG ASSAYS samole DESCRIPTION width from to NOTE: All angles are measured with respect to the long core axis. number **DEPTH** from to Economics 181.0 10500 2.0 179.0 179.0 - 181.0 - (54.6 - 55.2) - 3% chlorite as seams and small bands, in 0.6 55.2 brecciated grey quartzite. Rare flecks of pyrite. 54.6 181.0 - 183.0 - (55.2 - 55.9) - Chlorite breccia. 10% chlorite as seams and 183.5 10501 2.5 181.0 small patches. Very rare flecks of py, po. 0.8 55.2 55.9 185.0 183.5 183.5 - 185.0 - (55.9 - 56.4) - Chlorite breccia 25% chlorite as patches, seams 10502 1.5 0.5 55.9 56.4 and streaks. A few blebs of py, po, lest than 1%. 185.0 - 187.0 - (56.4 - 57.0) - Chlorite breccia. 30% chlorite, patches, seams 10503 2.0 185.0 187.0 and weak replacement. Occasional flecks of py, po. 0.6 56.4 57.0 187.0 - 189.0 - (57.0 - 57.6) - Chlorite breccia. 40% chlorite, mostly replace-10504 2.0 187.0 189.0 ment in weakly brecciated quartzite. Occasional small flecks of py, po. 0.6 57.0 57.6 10505 2.0 189.0 191.0 189.0 - 191.0 - (57.6 - 58.2) - Chlorite breccia. 30% chlorite, mainly replace-57.6 58.2 ment. A little bluish quartz in matrix. Rare flecks py, po. 0.6 191.0 - 193.0 - (58.2 - 58.8) - Weakly fractured quartzite with 20% chlorite 10506 2.0 191.0 193.0 replacement. No sulphides observed. 0.6 58.2 58.8 'Quartzite, brecciated, pinkish to buff coloured, typical carbonated fractures 193.0 208.9 and seams. Some dark grey, less altered patches. Rare seams of chlorite. 63.7 58.8 Economics 193.0 - 198.0 - (58.8 - 60.4) - Quartzite, pinkish. Occasional carbonate healed 10507 193.0 198.0 fractures and seams. Rare chlorite seams. No sulphides observed. 58.8 60.4

DRILL LOG Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5205.1N, 9464.3E

HOLE: N-29 Core size:

Dip Tests:

Started: November 13, 1980

Section: 5+50NW, 1+25NE Length: 280' (85.4m)

Elevation: 312.0m
Azimuth: Dip: -90°

Completed: November 15, 1980 Logged by: K. Larsen

<u> </u>	Diviter cov	Azimuth:	01p: -90		Logged	by: K.	_Larsen	j	
- DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to		ASSAYS	;
from	to								
		198.0 - 203.0 - (60.4 - 61.9) - Quartzite, pink to buff coloured, slightly brecciated to massive. Rare flecks of py, po.	10508	5.0 1.5	198.0 60.4	203.0 61.9			
		203.0 - 208.9 - (61.9 - 63.7) - Quartzite, buff coloured with some less altered grey patches. Rather massive with occasional remmant bedding 60° to core. Essentially barren.	10509	5.9 1.8	203.0 61.9	208.9 63.7			
208.9 63.7	215.0 65.5	Chlorite breccia. 10 to 40% chlorite, small patches of replacement and irregular bands and seams. A few patches of pinkish to grey unreplaced quartzite.		· Constitution of the cons					
		<u>Economics</u>							
	*-	208.9 - 210.8 - (63.7 - 64.3) - Chlorite breccia. 30 to 40% chlorite in weakly brecciated quartzite. Scattered flecks of pyrite.	10510	1.9	208.9	210.8			
		210.8 - 212.8 - (64.3 - 64.9) - Chlorite breccia. 40% chlorite in lightly brecciated quartzite. Rare pyritic hairline fractures.	10511	2.0 0.6	210.8	212.8 64.9			
		212.8 - 215.0 - (64.9 - 65.5) - Chlorite breccia. 20% chlorite in strongly brecciated pinkish quartzite. Rare flecks of py, po.	10512	2.2	212.8	215.0 65.5			:
215.0 65.5	234.0 71.3	Quartzite, pink to buff coloured, locally brecciated and carbonated. A few small zones of chloritization.							
		Economics							
		215.0 - 217.0 - (65.5 - 66.1) - Pink quartzite breccia, with carbonated fractures. A few streaks of chlorite. Essentially barren.	10513	2.0 0.6	215.0 65.5	217.0 66.1			
		217.0 - 219.5 - (66.1 - 66.9) - Pink quartzite, carbonated fractures. A few chlorite streaks. Essentially barren.	10514	2.5 0.8	217.0	219.5 66.9			

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5205.1N, 9464.3E

HOLE: N-29. Core size:

Dip Tests:

Section: `5+50NW, 1+25NE

Started: November 13, 1980 Completed: November 15, 1980 Logged by: K. Larsen

Length: 280' (85.4m)
Elevation: 312.0m
Azimuth: Dip: -90°

Drill Contractor - N. Morissette

···	DATE COO	DESCRIPTION	sample	2 141			ASSAYS	
DEP.		NOTE: All angles are measured with respect to the long core axis.	number	width	from	to		
from	to							
		219.5 - 222.0 - (66.9 - 67.7) - Pink to grey quartzite. A 1" band of chlorite @ 219.5 and 15% chlorite from 221.0 to-222.0, remainder has a few chlorite streaks. A few flecks of py, po in entire section.	10515	2.5	219.5 66.9	222.0 67.7:		
		222.0 - 225.0 - (67.7 - 68.6) - Quartzite, pinkish to buff, weakly brecciated and carbonated. Essentially barren.	10516	3.0 0.9	222.0 57.7	225.0 68.6		
		225.0 - 227.0 - (68.6 - 69.2) - Quartzite, buff coloured to pink with $\frac{1}{2}\%$ fine diss. pyrite.	10517	2.0	225.0 68.6	227.0 69.2		
		227.0 - 231.0 - (69.2 - 70.4) - Quartzite, pinkish with a few buff to grey patches. Essentially barren.	10518	4.0	227.0 69.2	231.0 70.4		
		231.0 - 234.0 - (70.4 - 71.3) - Quartzite, brecciated, pinkish to grey. 20% chlorite as streaks, irregular bands and weak replacement. Scattered grains of pyrite and chalcopyrite.	10519	3.0	231.0			
234.0 71.3	237.0 72.2	Quartzite, pinkish to buff coloured. Occasional small bleb of pyrite. No chlorite, but minor carbonated fractures.						
237.0 72.2	280.0 85.4	Quartzite, light to med. grey with rare patch of faintly pinkish alteration. Lightly to moderately brecciated and carbonated. Rare small isolated blebs of pyrite. Typical F.W.						
		280.0 - (85.4) - Hole Terminated.						

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5183.5N, 9422.1E

Core size: Dip Tests:

HOLE: N-30.

Section:

Started: November 17, 1980 Completed: November 19, 1980 Logged by: K. Larsen

Length: 325' (99.1m)
Elevation: 310.6m
Azimuth: Dip: -90° Drill Contractor - N. Morissette DRILL LOG

		DESCRIPTION	samole		£	•	A:	SSAYS		
DEPT	Н	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to				
from	to					· · · · · · · · · · · · · · · · · · ·	 		 	+
0.0	7.0	Overburden/casing.	-			:				
7.0 2.13	93.0 28.35	Quartzite, grey to pale grey with small brownish coloured zones of greywacke. Weakly to moderately brecciated and fractured locally. Moderately to strongly jointed. Minor carbonate to 84 feet.								
		84.0 - 93.0 - (25.62 - 28.35) - Faintly pinkish quartzite with numerous carbonate stringers.	-						and the state of t	•
93.0 28.35	188.5 57.46	Carbonate breccia. Grey quartzite, moderately to well brecciated and carbonated. Some brownish greywackish zones. Frequent slickensided joints.								1
	٠.	160.0 - 188.5 - (48.8 - 57.46) - Scattered pink to orange zones of alteration. Much carbonate with these. Occasionally strongly brecciated with small augular pink quartzite fragments in a carbonate matrix. Rare streaks and flecks of pyrite.								
188.5 57.46	193.0 58.83	Chlorite breccia. 10 to 30% chlorite in seams, streaks and small fracture fillings. Much carbonate with this. Some thin buff coloured chert beds 191.0 - 192.0 - (58.25 - 58.56), 15° to core.								
		Economics								•
		188.5 - 190.5 - (57.46 - 58.07) - Chlorite breccia. 10% chlorite in brecciated grey quartzite with rare flecks of pyrite.	10520	2.0	188.5 57.46	190.5 58.07				i
		190.5 - 191.5 - (58.07 - 58.37) - Chlorite breccia. 30% chlorite interstitial to breccia fragment. 3% pyrite.	10521	1.0		191.5 58.37				; 6 1
193.0 58.83	232.0 70.72	Carbonate breccia. Grey to pale grey quartzite. Well brecciated with much carbonate. Rare very pale pinkish zones to 8 inches. Occasional buff chert beds dislocated or fragmented.	10522	1.5		193.0 58.83				:



Property: 772, D.R. Watt Property Location: Scadding Twp., Ontario Co-ordinates: 5183.5N, 9422.1E

HOLE: N-30 Core size:

Dip Tests:

Section:

Length: 325' (99.1m)
Elevation: 310.6m
Azimuth: Dip: -90

Started: November 17, 1980 Completed: November 19, 1980 Logged by: K. Larsen

Drill Contractor - N. Morissette DRILL LOG

		DESCRIPTION	sample	width	fwom	**	ASSAY	S
DEP	TH	NOTE: All angles are measured with respect to the long core axis.		wiath	from	to		
from	to						 	_
232.0 70.72	294.6 89.80	Quartzite, light to dark grey, massive to very weakly fractured. Only 3 carbonated fractures noted. Frequent bedded, unbleached greywacke and siltstone beds. Bedding generally 60° to core. Rare flecks of fuchsite, bright green.				:		
294.6 89.80	298.1 90.86	Carbonate breccia. 75% grey to white carbonate with 25% grey to pale grey and buff coloured quartzite fragments. Upper contact sharp, slickensided, 45° to core. Lower contact with following unit ground.				ı		
298.1 90.86	325.0 99.06	Quartzite, grey to pale grey, bleached with frequent non-bleached greywacke sections. Very few carbonate healed fractures. Numerous thin buff coloured chert beds 318.0 - 321.5.						
		325.0 - (99.1m) - Hole Terminated.						

177.6 - 179.6 - (54.13 - 54.74) - Well brecciated grey to faintly pinkish

188.2 - 189.2 - (57.36 - 57.67) - Chlorite breccia. 20% chlorite in well

quartizte with 10% chlorite as streaks and small blobs. A few grains of

Drill Contractor - N. Morissette



NORTHGATE EXPLORATION LIMITED

magnetite and py.

brecciated quartzite, 5% diss. py.

DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

HOLE: N-31. Core size:

Dip Tests:

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m)

Started: November 21, 1980

179.6

189.2

57.67

54.74

177.6

54.13

188.2

57.36

Elevation: 309.2m
Dip: -90°

Completed: November 24, 1980 Logged by: K. Larsen

10524

10525

2.0

0.6

1.0

0.3

ASSAYS samole DESCRIPTION. width to from DEPTH NOTE: All angles are measured with respect to the long core axis. number from to Overburden/casing. 9.0 0.0 2.74 0.0 Quartzite, grey, frequently bleached near white, fractured and brecciated with 9.0 193.1 frequent carbonate healed fractures. Some grey non-bleached greywackish 2.74 58:86 sections. Rare small zones of faintly pinkish alteration. 55.0 - 67.0 (16.77 - 20.43) blocky ground with numerous joints and slips. 77.0 - 175.6 - (23.5 - 53.6) - Grey to light grey quartzite, weakly to moderately brecciated and fractured with 10% carbonate healed fractures. 175.6 - 176.1 - (53.6 - 53.7) - Grey brecciated quartzite with a few streaks of chlorite. A little buff coloured chert. 177.6 - 179.3 - (54.2 - 54.7) - Grey brecciated quartzite with scattered blebs and streaks of chlorite. A few flecks of pyrite. 188.0 - 192.3 - (57.3 - 58.7) - As above, a few blobs of py. Well mineralized py 0 189.2. Economics 175.6 - 177.6 - (53.52 - 54.13) - Weakly brecciated grey to bleached pale grey quartzite with scattered streaks and blobs of chlorite. Rare flecks py, po. 175.6 10523 2.0 177.6 53.52 0.6 54.13

DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates:5230.9N, 9520.8E

HOLE: N-31 Core size:

Section:5+50NW, 3+50NE Length: 411.0' (125.3m) Elevation: 309.2m Azimuth: Dip: -90°

Dip Tests:

Started: November 21, 1980 Completed: November 24, 1980 Logged by: K. Larsen

	:	DESCRIPTION	sample	width	from	to	ASSAY	5
DEP	TH	NOTE: All angles are measured with respect to the long core axis.	number	width	t POIII	.0		
from	to						 	-
		189.2 - 190.7 - (57.67 - 58.13) - Poorly brecciated grey quartzite. A few vaguely pinkish spots and rare streaks of chlorite. Essentially barren.	10526	1.5 0.5		190.7 58.13		
		190.7 - 193.1 - (58.13 - 58.86) - Chlorite breccia. 15% chlorite in small blobs and patches in grey brecciated quartzite. A few subhedral cubes of py. to 5 mm.	10527	1.4		193.1 58.86		
193.1 58.86	266.0 81.08	Quartzite, grey, massive to locally weakly brecciated. Carbonate essentially absent. A few lightly bleached sections. Scattered irregular thin beds of buff coloured chert. Local remnant bedding 60° to core.						
266.0 81.08	285.0 86.87	Quartzite, moderately brecciated, pink alteration in patches throughout. 5% carbonate cemented fractures, rare streaks of chlorite.						
285.0 86.87	287.6 87.66	Chlorite breccia. 5 to 30% chlorite in well brecciated pink to grey quartzite. Chlorite content increased gradually to about 30% ub kast 4 inches, core is well sheared with several strongly slickensided joints, mostly 20° to core.						
		Economics						
		285.0 - 286.2 - (86.87 - 87.24) - Chlorite breccia, 5 to 10% chlorite as streaks and bands, in grey to pink brecciated quartzite. A single irregular ½" band of pyrite at 285.5, followed by scattered flecks.	10528	1.2		286.2 87.24		
		286.2 - 287.6 - (87.24 - 87.66) - Chlorite breccia. 10% to 30% chlorite. First 8 inches sheared with scattered grains of py. Remainder well chloritized with 4% pyrite in last 4 inches.	10529	1.4		287.6 87.66		
287.	294.6 89.80	Quartzite, brecciated, pink alteration with scattered streaks and fracture fillings of chlorite. 10 to 15% carbonate cemented fractures.						
				İ				

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

HOLE: N-31 Core size:

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m) Elevation: 309.2m

Dip Tests:

Started: November 21, 1980 Completed: November 24, 1980

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 309.2π	n Dip:_90°		Comple Logged	ted: Nove	mber 24 arsen	, 1980	
DEP	TH	DESCRIPTION	cample number	width	from	to _		ASSAYS	 -
from	to	NOTE: All angles are measured with respect to the long core axis.	Milber						
11011		<u>Economics</u>	10500		00.5				
		287.6 - 291.0 - (87.66 - 88.70) - Pink brecciated, carbonated quartzite with 2 to 4% chlorite as streaks and fracture fillings. Essentially barren.	10530	3.4 1.0	287.6 87.66	291.0 88.70			
		291.0 - 294.6 - (88.70 - 89.80) - Chlorite breccia, 5% to 8% chloriate as fracture fillings, small bands and patches of replacement, in pinkish quartzite, well brecciated, with 3% carbonated fractures. Rare flecks of py, po.	10531	3.6 1.1	291.0 88.70	294.6 89.80			
294.6 89.80	324.9 99.03	Chlorite breccia. 10% to 60% chlorite as streaks, bands and patches, in pinkish to bleached pale grey brecciated quartzite. Core is moderately fractured and jointed.							
		<u>Economics</u>							
	••	294.6 - 297.0 - (89.80 - 90.53) - Chlorite breccia, 20% chlorite, 35% in first foot, 10% in remainder. Rare grains of py, po.	10532	2.4	294.6 89.80	297.0 90.53			
		297.0 - 299.0 - (90.53 - 91.14) - Chlorite breccia. 40% chlorite in first foot, remainder 15% as fracture fillings in brecciated grey to pinkish quartzite. A 1" X ½" bleb of py at 297.5, with scattered occasional grains in remainder.	10533	2.0	297.0 90.53	299.0 91.14			
		(299.0 - 301.0 - (91.14 - 91.75) - Chlorite breccia. 40% chlorite as replacement and fracture fillings in brecciated grey quartzite. Scattered small grains of py, po.	10534	2.0	299.0 91.14	301.0 91.75			
		301.0 - 302.0 - (91.75 - 92.05) - Chlorite breccia. 50% chlorite. 1% py, po in hairline fractures and as small grains. 2 grains of V.G., one at beginning and one near end of sample.	10535	1.0	301.0 91.75	302.0 92.05			
		302.0 - 303.2 - (92.05 - 92.42) - Chlorite breccia, 40% chlorite. A little bluish quartz in matrix and occasional small grain of py.	10536	1.2	302.0 92.05	303.2 92.42			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

Core size: Dip Tests:

HOLE: N-31

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m)

Started: November 21, 1980

Completed: November 24, 1980 Elevation: 309.2m

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 309.2m	Dip: -90°			ted: Nove by: K. L		4, 1980	1
DEPT	·u	DESCRIPTION	sample number	width	from	to		ASSAYS	5
	to	NOTE: All angles are measured with respect to the long core axis.	number						
from		303.2 - 304.2 - (92.42 - 92.72) - Chlorite breccia. 20% chlorite, mostly replace ment. Rare grains of bo, py.	- 10537	1.0	303.2 92.42	304.2 92.72			
		304.2 - 305.4 - (92.72 - 93.09) - Chlorite breccia. 40% chlorite, 4" of ground core at beginning of sample. 2 small specks of V.G. @ 304.5.	10538	1.2	304.2 92.72	305.4 93.09			
		305.4 - 308.4 ~ (93.09 - 94.00) - Chlorite breccia. 5 to 10% chlorite as fracture fillings, streaks, bands and irregular small patches in brecciated pinkish quartzite. Essentially barren.	10539	3.0 0.9	305.4 93.09	308.4 94.00			-
		308.4 - 311.6 - (94.00 - 94.98) - Chlorite breccia. Poorly to moderately brecciated quartzite with 5 to 15% chlorite in patches and as fracture fillings Rare flecks of py, po.	10540	3.2		311.6 94.98	+		
	٠.,	311.6 - 314.2 - (94.98 - 95.77) - Chlorite breccia, 30 to 40% chlorite, mostly even replacement, imparting a granular texture to core. A couple of spots of weakly diss. f.g. py.	10541	2.6	311.6 94.98	314.2 95.77			
		314.2 - 317.4 - (95.77 - 96.75) - Chlorite breccia. 20 to 30% chlorite in patches and as fracture fillings. Rare flecks py, po.	.10542	3.2	314.2 95.77	317.4 96.75			
1		317.4 - 321.1 - (96.75 - 97.87) - Chlorite breccia. 10% chlorite, mostly as fracture fillings in brecciated grey to faintly pinkish quartzite. Rare flecks of po, py.	10543	3.7		321.1 97.87			
		321.1 - 323.1 - (97.87 - 98.48) - Chlorite breccia. 30% chlorite, mostly replacement. 1% f.g. diss. py, po and rare flecks of chalcopyrite.	10544	2.0		323.1 98.48			1
	·	323.1 - 324.9 - (98.48 - 99.03) - Chlorite breccia. 20% chlorite as irregular patches in grey bleached, brecciated quartzite. Essentially barren.	10545	1.8		324.9 99.03			

Drill Contractor - N. Morissette

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m) Elevation: 309.2m Azimuth: Dip: -90°

Dip Tests:

HOLE: N-31. Core size:

Started: November 21, 1980 Completed: November 24, 1980 Logged by: K. Larsen

		DESCRIPTION	sample				Carsen	ASSAY	'S	
DEP	TH	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to				
from	to		·							
324.9 99.03	355.2 108.27	Quartzite, pinkish, locally salmon red, moderately to well brecciated with 5 to 10% carbonate filled fractures. 3 to 5% chlorite in scattered small patches and local fracture fillings.	-		-	•				!!
		Economics								1
		324.9 - 329.0 - (99.03 - 100.28) - Quartzite, weakly to non-brecciated, pinkish to light brown. 2% chlorite as small spots and fracture fillings. Essentially barren.	10546	4.1	324.9 99.03	329.0 100.28		Activities of the second secon		
		329.0 - 333.0 - (100.28 - 101.50) - Quartzite, weakly to moderately brecciated in patches. 3 to 5% chlorite as fracture fillings. Last 1.5 feet no chlorite. Rare carbonated fractures. No sulphides observed.	10547	4.0	329.0 100.28	333.0 101.50				
		333.0 - 337.0 - (101.50 - 102.71) - Quartzite, pink, locally unaltered grey-brown. Weakly brecciated first two feet, then well brecciated, bright pink to salmon red, well brecciated with 2% chlorite as fracture fillings. No sulphides observed. 5% carbonated fractures.	10548	4.0	333.0 101.50	337.0 102.71		Andrea de Carlos		
	· called a constant of the con	337.0 - 342.0 - (102.71 - 104.24) - Quartzite, weakly to moderately brecciated, grey to faintly pink. 5 to 8% carbonate healed fractures. Essentially barren.	10549	5.0	337.0 102.71	342.0 104.24				•
		342.0 - 343.5 - (104.24 - 104.70) - Quartzite, as above.	10550	1.5	342.0 104.24	343.5 104.70				:
		343.5 - 344.3 - (104.70 - 104.94) - Small chlorite breccia zone. 20% chlorite in small spots and a single band, 3" wide. 1% py, po as small subhedral cubes.	10551	0.8	343.5 104.70	344.3 104.94				; ; ;
		344.3 - 349.0 - (104.94 - 106.38) - Quartzite, pink with 10% carbonate healed fractures. Rare small spot of chlorite. No sulphides observed. 4" ground core.	10552	4.7	344.3 104.94	349.0 106.38				



DRILL LOG

Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

HOLE: N-31. Core size:

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m) Elevation: 309.2m Azimuth: Dip: -90°

Dip Tests:

Started: November 21, 1980 Completed: November 24, 1980 Logged by: K. Larsen

		DESCRIPTION	sample	width	from	to	ASSAY	YS
DEPT		NOTE: All angles are measured with respect to the long core axis.	number	width	11.0111			
from	to						-	
		349.0 - 352.0 - (106.38 - 107.29) - Quartzite, grey to faintly pinkish, well brecciated in patches. A little granular pyrite, less than 1%.	10553	3.0 0.9	349.0 106.38	352.0 107.29		
		352.0 - 355.2 - (107.29 - 108.27) - Quartzite, pink to grey with 5% carbonate healed fractures. Chlorite essentially absent. No sulphides observed.	10554	3.2 1.0	352.0 107.29	355.2 108.27		
355.2 108.27	359.8 109.67	Chlorite breccia zone. 10 to 30% chlorite as patches, bands and fracture fillings in pale grey to pinkish quartzite. Run over core 356.0 to 357.0. A few carbonate stringers.						
		<u>Economics</u>						1
		355.2 - 356.2 - (108.27 - 108.57) - Chlorite breccia. 30% chlorite, mostly replacement. Some carbonate stringer. A few small cubes and grains of py.	10555	1.0	355.2 108.27	356.2 108.57		
	• .	356.2 - 358.0 - (108.57 - 109.12) - Chlorite breccia, 10% chlorite in pink, carbonated quartzite breccia. Rare grains of py, po.	10556	1.8	356.2 108.57	358.0 109.12		
		358.0 - 359.8 - (109.12 - 109.67) - Chlorite breccia. 20% chlorite as patches in brecciated grey quartzite. Chlorite content declines rapidly toward end of sample. Essentially barren.	10557	1.8	358.0 109.12	359.8 109.67		
359.8 109.67	411.0 125.27	Quartzite, grey to pale grey, occasional patches less altered, dark grey. Moderately brecciated with about 5% carbonate cemented fractures. Rare blebs of granular pyrite.	·					
		411.0 - (125.27) - Hole Terminated.						
								- !



Property: 772, D.R. Watt Property-Location: Scadding Twp., Ont. Co-ordinates: 5230.9N, 9520.8E

HOLE: N-31 Core size:

Section: 5+50NW, 3+50NE Length: 411.0' (125.3m) Elevation: 309.2m

Dip Tests:

Started: November 21, 1980 Completed: November 24, 1980

DRILL	LOG Drill Contractor - N. Morissette	Elevation: 309.2m	n Dip: _90*		Comple Logge	ted: No	vember 24, Larsen	1980
DEPTH .	DESCRIPTION NOTE: All angles are measured with respect to the		1 . (width	from	to	A	SSAYS
from to	NOTE: All angles are measured with respect to the	ne long core axis.	number	-			Au/ oz/ton	
	Ore Sections	•						
	1.		10544	2.0 0.6	321.1 97.93	323.1 98.54	0.100	
	2.	:	10555	1.0	355.2 108.3	356.2 108.6	0.110	
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					denga que o cidazaceo religidade mon espa	refris manufacturer of the property of the pro		
		· .						
								•



Property: 772, D.R.Watt Property Location: Scadding Twp, Ont.

Co-ordinates: 5230.8N, 9520.6E

HOLE: N-32 Core size:

Section: 5+50NW, 3+50NE Length: 320' (97.17m) Elevation: 309.3m Azimuth:

Dip Tests:

Started: Nov. 25/80 Completed: Nov. 27/80 Logged by: K. Larsen Nov. 25/80 -

		DRILL LO	G Drill Contractors - N. Morissette Elevation: 309.3m Azimuth:	n Dip: -75 ⁰		Comple Logged	ted: N _by:K.	ov. 27 Larse	7/80 n			
	DEP	rrн	DESCRIPTION	sample	width	from	to	,	AS	SAYS		
	from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/t	on			
	0.0 0.0	6.0 1.83m	Overburden - casing	·			:					
	6.0 1.83m	270.2 82.51m	Quartzite, grey to pale grey bleached, lightly to locally well brecciated. 5 to 10% carbonate healed fractures. Occ. bleb of granular pyrite.								1	
			18.0-19.0 - 2" wide feld. porphyry dyke, 50 to core.									
; !			44.5-49.0 - Numerous brecciated chert beds:									
			78.0-79.0 - Glossy qtz. veinlet 80 to core.									
!			158.0-186.0 - Very blocky ground, numerous joints at random angles.								1	
: ; : !		•.	0 215.0 - Fault zone. Badly broken core with sandy gauge. Looks like about 60° to core.			·						
			215.0-241.0 - Badly broken core, several sections of ground core up to 1.0 ft.									
			243.0-264.0 - Core box spilled by drill crew. Core completely mixed up, but no zones of economic interest.									
	270.2 82.51m	285.5 87.02m	Chlorite breccia. Poorly chloritized grey to faintly pinkish brecciated quartzite. Many patches non-brecciated, massive quartzite. Locally 5 to 20% carbonate.									
			Economics: 270.2-271.4 - Chlorite breccia. Grey quartzite, moderately brecciated with 10 to 15% chlorite as small irreg. patches. One small 2" patch carries about 5% po.	10558	1.2	270.2 82.36m						



Property: 772, D.R.Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5230.8N, 9520.6E

HOLE: N-32 Core size:

Section: 5+50NW, 3+50NE Length: 320' (97.17m) Elevation: 309.3m Azimuth: Dip: -75°

Dip Tests: Started: Nov. 25/80 Completed: Nov. 27/80 Logged by: K. Larsen

חרו	,,	DESCRIPTION	sample	width	from	to	-	ASSAYS
DEF from	to	NOTE: All angles are measured with respect to the long core axis.	number		110		Au oz/ton	
		271.4-274.0 - Quartzite, poorly brecciated pinkish to grey. A few streaks and fracture fillings of chlorite. A little carbonate. No sulphides noted.	10559	2.6 .27m		274.0 83.52m		
		274.0-276.5 - Quartzite, weakly brecciated, grey to pale brown, a few carbonate cemented fractures. No chlorite nor sulphides.	10560	2.5 .76m	274.0 83.52m	276.5 84.28m	nil	-
		276.5-279.0 - Chlorite breccia. 10 to 15% chlorite as bands and fracture fillings in moderately brecciated grey to faintly pink quartzite. Rare streak or small cluster of pyrite.	10561	2.5 .76m		279.0 85.04m		
		279.0-281.8 - Quartzite, weakly brecciated, pale grey to pale brown. A few streaks and fracture fillings of chlorite. No sulphides noted.	10562	2.8 .85m	279.0 85.04m	281.8 85.89m	nil	
		281.8-284.0 - Chlorite breccia. 20% chlorite as bands and irregular fracture fillings in moderately brecciated pale grey quartzite. Some carbonated fractures. Local diss. py in chlorite bands.	10563	2.2 .67m		284.0 86.56m		
		284.0-285.5 - Chlorite breccia. Poorly brecciated in first foot with a few streaks of chlorite. Remainder well brecciated with 30% chlorite. Rare flecks of py, po.	10564	1.5 .46		285.5 87.02m		
85.5 87.02m	306.0 93.27m	Quartzite, pale grey bleached to faintly pinkish. Not well brecciated. Scattered streaks, bands and fracture fillings of chlorite. Occ. carbonate cemented fractures.						
•		Economics: 285.5-292.0 - Only 3.8' of core, remainder missing or ground. Quartzite, pale grey to brown and faintly pinkish. 5% carbonated fractures. A few less altered dark grey patches of greywackish material. Essentially barren.	10565	6.5 1.98m	285.5 87.02m	292.0 89.00m	0.002	



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5230.8N, 9520.6E

HOLE: N-32 Core size:

5+50NW, 3+50NE Section:

Length: 320' (97.17m) Dip Tests: Started:

Elevation: 309.3m

Nov. 25/80 · Completed: Nov. 27/80

Drill Contractor - N. Morissette DRILL LOG Dip: -750 Azimuth: Logged by: K. Larsen. **ASSAYS** DESCRIPTION samole width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au oz/toh from to 292.0-295.5 - Quartzite, pale grey. Weakly to locally well brecciated. 10566 3.5 292.0 295.5. nil A few streaks and bands of chlorite with rare py, po flecks. 1.07m | 89.00m | 90.07m 295.5-297.0 - Chlorite breccia zone. 10% chlorite in well brecciated grey 10567 295.5 297.0 1.5 nil quartzite. 3% granular pyrite in blebs and irregular pods. .47m 90.07m 90.53m 297.0-302.0 - Quartzite, pink to pale grey, moderately brecciated with rare 10568 5.0 297.0 302.0 nil streaks of chlorite. 2% carbonate cemented fractures. Essentially barren. 1.52m | 90.53m | 92.05m 302.0-306.0 - Quartzite, as above. 10569 4.0 302.0 306.0 nil 1.22m | 92.05m | 93.27m 306.0 Chlorite breccia zone, poorly to well developed with chlorite content variable 318.8 93.27m from nil to 30%. Last 3 feet contains 1/2 to 3/4 inch rhombs of carbonate 97.17m and irregular pods of quarts to 3/4". Economics: 306.0-309.0 - Chlorite breccia. Well brecciated grey quartzite with 20% 10570 3.0 306.0 309.0 0.005 chlorite as fracture fillings, blebs and Fg. replacement. Rare flecks of .91m | 93.27m | 94.18m po, py. 309.0-312.8 - Quartzite, bleached pale grey, massive to lightly fractured. 3.8 10571 309.0 312.8 nil Barren. 1.16m | 94.18m | 95.34m 312.8-314.6 - Chlorite breccia. 20% chlorite in strongly brecciated grey to 10572 312.8 1.8 314.6 0.005 pale brown quartzite. A few streaks and blebs of py, po. .55m | 95.34m | 95.89m 314.6-316.1 - Quartzite, poorly brecciated with 15% chlorite or less as 10573 1.5 314.6 0.002 B16.1 fracture fillings, and replacement. Essentially barren. .47m | 95.89m 96.35m

Property: Location: 772, D.R. Watt Property Scadding Twp., Ont.

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HOLE: N-32 Core size:

Co-ordinates: 5230.8N, 9520.6E

Dip Tests:

Section: 5+50NW, 3+50NE Length: 320' (97.17m) Elevation: 309.3m Azimuth: Dip: -750 Section:

Started: Nov. 25/80 Completed: Nov. 27/80 Logged by: K. Larsen

Drill Contractor - N. Morissette DRILL LOG

		Azimuth:	U1p: -75°		Logge	Dy: K	<u>. Larsen</u>		
ner	PTH	DESCRIPTION	sample	width	from	to		ASSAYS	· · · · · · · · · · · · · · · · · · ·
from	to	NOTE: All angles are measured with respect to the long core axis.	number				Au oz/ton		
		316.1-318.8 - Chlorite breccia. Strongly brecciated quartzite with 30 to 40% chlorite. Carries large rhombs of carbonate and pods of milky white quartz. About 1% po, py as streaks, small blebs and fracture fillings.	10574	2.7 .82m	316.1 96.35m	318.8 97.17m	0.06		
		318.8 - Hole terminated. 97.17m		·					
		Last chlorite zone estimated to be within 10 feet of FW.							
1									
			·						



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5279.3N, 9445.1E

HOLE: N-33 Core size:

Started: November 29, 1980

Dip Tests:

Section: 8+00NW, 2+00NE

Length: 213.0'(64.9m)

Completed: November 30, 1980 Elevation: 304.7m Drill Contractor - N. Morissette Dip: -90° Locaed by: K. Larsen DRILL LOG Azimuth: -ASSAYS sample DESCRIPTION width from to NOTE: All angles are measured with respect to the long core axis. number DEPTH from to 0.0 Overburden/casing. (casing removed after hole completed) 32.0 9.8 0.0 101.0 Chlorite breccia. Both replacement and as fillings in brecciated zones. A few 32.0 small sections of non chloritic to weakly chloritized pink quartzite. 9.8 30.8 Carbonate cement in brecciated sections. Economics 32.0 - 35.0 - (9.8 - 10.7) - Chlorite breccia. Very finely brecciated grey 10819 3.0 32.0 35.0 quartzite with about 10% chlorite. Odd grain of py. 0.9 9.8 10.7 35.0 - 38.0 - (10.7 - 11.6) - As above, slightly more pyrite, but less than 10820 3.0 35.0 38.0 0.9 11.6 10.7 3%. 10821 41.0 38.0 - 41.0 - (11.6 - 12.5) - 10% chlorite, mostly insipient replacement in 3.0 38.0 poorly brecciated quartzite. Essentially barren. 0.9 11.6 12.5 3.0 41.0 - 44.0 - (12.5 - 13.4) - 10% chlorite in poorly brecciated quartzite. 44.0 10822 41.0 12.5 13.4 No sulphide noted. 0.9 44.0 - 47.0 - (13.4 - 14.3) - 40% chlorite replacement in poorly brecciated 3.0 47.0 10823 44.0 quartzite. Essentially barren. 0.9 13.4 14.3 47.0 - 50.0 - (14.3 - 15.2) - As above. 10824 3.0 47.0 50.0 0.9 14.3 15.2 50.0 - 53.0 - (15.2 - 16.2) - Chlorite gradually fading, becoming moderately 3.0 53.0 10825 50.0 brecciated pink quartzite at 52.0'. Essentially barren. 16.2 0.9 15.2 53.0 - 54.4 - (16.2 - 16.6) - Pink quartzite, gradually becoming chloritic. 54.4 10826 1.4 53.0 No sulphides observed. 16.2 16.6 0.4

Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property
Location: Scadding Twp., Ont.
Co-ordinates: 5279.3N, 9445.1E

HOLE: N-33. Core size:

Section: 8+00NW, 2+00NE

Length: 213.0' (64.9m)
Elevation: 304.7m
Azimuth: Dip: -90°

Dip Tests:

-Started: November 29, 1980 Completed: November 30, 1980

Logged by: K. Larsen

	DKIEL COO	DESCRIPTION	sample				1.01261	 SAYS	*
DEPT	гн	NOTE: All angles are measured with respect to the long core axis.	number	width	from	to			
from	to							 	 -
		55.4 - 56.4 - (16.9 - 17.2) - Chlorite breccia. A single 1" wide breccia zone 15 - 20° to core in otherwise massive 40% chloritized quartzite. The narrow breccia zone carries some 4% vuggy py, po.	10828	1.0	55.4 16.9	56.4 17.2			
		NOTE: 1.6' of ground core from 56.4 to 59.0 in two areas: one at 56.5 - estimated to be 0.9' and one at 58.3 estimated to be 0.7'.							
		56.4 - 58.1 - (17.2 - 17.7) - Chlorite breccia. 0.9' of ground core. 40% chlorite. Well brecciated, quartz-carbonate cemented. 1% py, po as streaks and scattered blebs.	10829	1.7 0.5	56.4 17.2	58.1 17.7			
		58.1 - 59.0 - (17.7 - 18.0) - Chlorite breccia. 0.7' of ground core. Mostly small nubbins of run over core. Occasional flecks of py, po. About 40% chlorite	. 10830	0.9 0.3	58.1 17.7	59.0 18.0			
	- .	59.0 - 62.0 - (18.0 - 18.9) - Chlorite breccia. Moderately well brecciated with 20% chlorite. Some pinkish non-chloritic patches.	10831	3.0 0.9	59.0 18.0	62.0 18.9	.		
		62.0 - 65.0 - (18.9 - 19.8) - Chlorite zone, 40% chlorite replacement. Very rare flecks po, py.	10832	3.0 0.9	62.0 18.9	65.0 19.8			
		65.0 - 68.0 - (19.8 - 20.7) - Chlorite breccia. 30% chlorite replacement and fracture fillings. Rare flecks po, py.	10833	3.0 0.9	65.0 19.8	68.0 20.7			•
The state of the s		68.0 - 71.0 - (20.7 - 21.6) - Chlorite breccia. 10% chlorite in well brecciated grey quartzite. Essentially barren.	10834	3.0 0.9	68.0 20.7	71.0 21.6			
		71.0 - 74.0 - (21.6 - 22.5) - As above, but scattered flecks and small blebs of granular po.	10835	3.0 0.9	71.0 21.6	74.0 22.5	<i>:</i>		
	٠	74.0 - 77.4 - (22.5 - 23.6) - Chlorite breccia, 20% chlorite in moderately brecciated quartzite. Rare flecks py, po.	10836	3.4 1.0	74.0 22.5	77.4 23.6			



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5279.3N, 9445.1E

HOLE: N-33 Core size:

Dip Tests:

Section: 8+00NW, 2+00NE

Length: 213.0'(64.9m)

Elevation: 304.7m

Started: November 29, 1980 Completed: November 30, 1980

DRI	LL LOG Drill Contractor - N. Morissette	Elevation: 304.7m Azimuth: — Dip	o: -90°	Logged by	: November 30, 1980 v: K. Larsen
050711	DESCRIPTION	·	sample width	from t	ASSAYS
DEPTH from to	NOTE: All angles are measured w	th respect to the long core axis. n	number Widen		
	77.4 - 80.9 - (23.6 - 24.4) - Quartzite, light few carbonate cemented fractures. Barren.	brown to buff, unaltered with a 10			1.9
	80.9 - 81.8 - (24.4 - 24.9) - Chlorite zone -	10% chlorite, barren.			.8
	81.9 - 83.0 - (24.9 - 25.3) - Chlorite breccia carbonate cemented, then refractured and chlor chalcopyrite and 2% po. V.G. in two small clu	itized. About 20% chlorite, 3%			3.0
	83.0 - 84.6 - (25.3 - 25.8) - Chlorite Zone. chlorite replacement. A few blebs of po.	Non-brecciated zone of 20%			.6
•.	84.6 - 85.4 - (25.8 - 26.0) - Chlorite breccia carbonate, refractured and chloritized. 10% woof chalcopyrite.				3.4
	85.4 - 87.0 - (26.0 - 26.5) - Chlorite Zone. quartzite. No sulphides noted.	10% chlorite replacement in			.0
	87.0 - 90.0 - (26.5 - 27.4) - Chlorite Zone. 1" wide at 88.9', remainder 10% chlorite replacementations, remainder barren.		0843 3.0 0.9	- 1	0.0
	90.0 - 92.8 - (27.4 - 28.3) - Chlorite Zone. grey-green quartzite. Barren.	10% chlorite or less in massive 10	0844 2.8 0.9		2.8
	92.8 - 93.8 - (28.3 - 28.6) - Chlorite Zone. cemented structure. About 1% diss. py, po in		0845 1.0 0.3		3.8
	93.8 - 96.8 - (28.6 - 29.5) - Chlorite breccia 10% chlorite. No sulphides.	. Poorly brecciated to massive. 10			.8



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5279.3N, 9445.1E

HOLE: N-33 . Core size:

Section: 8+00NW, 2+00NE Length: 213.0' (64.9m) Elevation: 304.7m Azimuth: - Dip: -90°

Dip Tests:

Started: November 29, 1980 Completed: November 30, 1980 Logged by: K. Larsen

DRILL LOG Drill Contractor - N. Morissette

DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.		width	from	to	ASSAY	'S
from	to	NOTE: All angles are measured with respect to the long core axis.	number					
		96.8 - 99.0 - (29.5 - 30.2) - Chlorite breccia. Well brecciated with much carbonate cement, but no sulphides observed.	10847	2.2	96.8 29.5	99.0 30.2		
		99.0 - 100.0 - (30.2 - 30.5) - Chlorite Zone. A single quartz-carbonate cemented fracture ½" wide - 25° to core. Well mineralized py, po. Remainder barren.	10848	1.0	99.0 30.2	100.0 30.5		
		100.0 - 101.0 - (30.5 - 30.8) - Chlorite breccia. 40% chlorite. Barren.	10849	1.0	100.0	101.0 30.8		
101.0 30.8	213.0 65.0	Quartzite, strongly brecciated, pinkish to buff coloured to 121.0, then carbonate breccia of typical F.W. type with numerous thombs of grey carbonate in highly brecciated quartzite.						
		213.0 - (65.0) - Hole Terminated.						



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.: Co-ordinates: 5279.3N, 9445.1E

HOLE: N-33 Core size:

Section: 8+00NW, 2+00NE Length: 213.0' (64.9m) Elevation: 304.7m

Dip Tests:

Started: November 29, 1980 Completed: November 30, 1980

DRILL LO	OG Drill Contractor - N. Morissette	Elevation: 304.7m Azimuth: —	Dip: -90*		Comple Logged	ted: No	vember 30, . Larsen	1980
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to			width	from	to	A	ISSAYS
from to		<u> </u>					Au oz/ton	
from to	Ore Sections 1. 2.		10827	1.0 0.3 1.2 0.4	54.4 16.59 81.8 24.94	: 55.4 16.89 83.0 25.31	0.26 0.07	



Drill Contractor - N. Morissette

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5278.6N, 9443.8E HOLE: N-34 . Core size:

Section: 8+00NW, 2+00NE Length: 148.0' (45.1m)

Elevation: 304.6m

Dip Tests:

Started: December 1, 1980 Completed: December 2, 1980

DRILL LOG Azimuth: S65°W Dip: -45° Logged by: K._Larsen **ASSAYS** samole DESCRIPTION width from to DEPTH number NOTE: All angles are measured with respect to the long core axis. from to Casing through overburden. Casing removed after completion of hole. 0.0 42.0 12.8 0.0 42.0 93.3 Chlorite breccia. 10 to 40% chlorite replacement and in fillings in brecciated zones associated with carbonate. Locally a little vein quartz. Generally 12.8 28.4 poorly mineralized. Economics 42.0 - 45.0 - (12.8 - 13.7) - 40% chlorite replacement. Rather massive, non-10871 3.0 45.0 42.0 brecciated material. No sulphides observed. 12.8 0.9 13.7 45.0 - 48.0 - (13.7 - 14.6) - 20% chlorite replacement, some patches of 5% 10872 3.0 45.0 48.0 replacement in light brownish quartzite. No sulphides observed. 0.9 113.7 14.6 48.0 - 51.0 - (14.6 - 15.5) - 20% chlorite replacement in non-brecciated 10873 48.0 51.0 3.0 quartzite. No sulphides observed. 14.6 15.5 0.9 51.0 - 53.0 - (15.5 - 16.2) - Chlorite breccia. Weakly brecciated with a little 10374 2.0 151.0 53.0 carbonate. Scattered grains of py, po. 0.6 15.5 16.2 53.0 - 56.5 - (16.2 - 17.2) - 30% chlorite replacement in massive quartzite. 10875 3.5 53.0 56.5 Essentially barren. 1.1 16.2 17.2 56.5 - 60.0 - (17.2 - 18.2) - Some grey, glassy vein quartz in first 6", 10876 56.5 3.5 60.0 remainder 20% chlorite replacement, massive. A few grains of py with vein qtz. 1.1 17.2 18.2 60.0 - 63.0 - (18.2 - 19.1) - 25% chlorite replacement in weakly brecciated 10877 3.0 60.0 63.0 quartzite. A little dull grey quartz healing a couple of irregular fractures. 0.9 19.1 18.2 Essentially barren.



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5278.6N, 9443.8E

Dip Tests:

HOLE: N-34.

Core size:

Section: 8+00NW, 2+00NE Length: 148.0' (45.1m)

Elevation: 304.6m

Azimuth: S65°W Dip: -45°

Started: December 1, 1980 Completed: December 2, 1980

Drill Contractor - N. Morissette DRILL LOG Logged by: K. Larsen ASSAYS sample DESCRIPTION width from to DEPTH number NOTE: All angles are measured with respect to the long core axis. from to 63.0 - 66.0 - (19.1 - 20.0) - As above.10878 63.0 3.0 66.0 0.9 19.1 20.0: 66.0 - 71.0 - (20.0 - 21.6) - 20 to 30% chlorite replacement in massive 66.0 10879 5.0 71.0 quartzite. No sulphides observed. 1.5 20.0 21.6 71.0 - 74.0 - (21.6 - 22.5) - Chlorite breccia. A few patches of carbonate, 10880 3.0 71.0 74.0 quartz-chlorite healed fractures. A few grains of pyrite with these. 0.9 21.6 22.5 Remainder 30% chlorite replacement, massive. 74.0 - 76.5 - (22.5 - 23.3) - Chlorite breccia. Weakly brecciated with minor 10881 2.5 74.0 76.5 carbonate and 20% chlorite. Rare flecks of po. py. 0.8 22.5 23.3 76.5 - 78.0 - (23.3 - 23.8) - Chlorite breccia. 1% py as Vuggy blebs. 40% 10882 1.5 78.0 76.5 chlorite. 0.5 23.3 23.8 78.0 - 82.0 - (23.8 - 25.0) - 20% chlorite replacement in massive quartzite. 10883 4.0 78.0 82.0 Essentially barren. 1.2 23.8 25.0 82.0 - 86.0 - (25.0 - 26.2) - 10 to 20% chlorite replacement in massive 10884 4.0 82.0 86.0 quartzite. A few small blebs and vague spots of bluish quartz in matrix. 1.2 25.0 26.2 No sulphides observed. 86.0 - 87.5 - (26.2 - 26.7) - As above. 10885 1.5 86.0 87.5 26.2 0.5 26.7 87.5 - 91.0 - (26.7 - 27.7) - Chlorite breccia. Well brecciated, with typical 10886 3.5 87.5 91.0 carbonated structures and breccia zones. 20 to 30% chlorite. Rare flecks of 1.1 26.7 27.7 po, py. 91.0 - 93.3 - (27.7 - 28.4) - Chlorite breccia. Well brecciated, as above, but 10887 2.3 91.0 93.3 chlorite content rapidly declining. Distinct angular fragments of quartzite in a 28.4 0.7 27.7 carbonate-matrix. 5% chlorite. Essentially barren.

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5278.6N, 9443.8E

HOLE: N-34. Core size:

Section: 8+00NW, 2+00NE Length: 148.0' (45.1m) Elevation: 304.6m

Dip Tests:

Started: December 1, 1980 Completed: December 2, 1980

	DRILL LO		Elevation: 304.6m Azimuth: S65°W Dip: -45°		Logged	ted: Dec	Larsen	ASSAYS	_
DEP	אדי	DESCRIPTION NOTE: All angles are measured with respect to the	long core axis. number	width	from	to		7.5575	_
from	to								
93.3 28.4	148.0 45.1	Quartzite, strongly brecciated with much carbonate cement. Mode pink alteration throughout. 10 to 20% carbonate. Typical F.W.	rate to strong carbonate breccia.			•			
		148.0 - (45.1) - Hole Terminated.							
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	-	• · · · · · · · · · · · · · · · · · · ·							
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Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5291.2N, 9472.7E

HOLE: N-35-Core size:

Dip Tests:

Section: 8+00NW, 3+00NE Length: 162.6' (49.6) Elevation: 302.9m Azimuth: S65°W Dip: -45°

Started: December 4, 1980 Completed: December 5, 1980 Logged by: K. Larsen

<u>*</u>	DRILL LOG	Drill Contractor - N. Morissette Elevation: 56	302.9m 5°W Dip: -45°		Comple Logged	eted: De d by: K.	cember <u>Larse</u>	5, 1980	
DEF	PTH	DESCRIPTION NOTE: All angles are measured with respect to the long core	sample axis. number	widțh	from	to		ASSAY:	5
from	to						-		
0.0	24.0	Overburden/casing. Casing removed after completion of hole.							
24.0 7.3	39.4 12.0	Quartzite. Fairly massive, pink alteration, occasional carbonate cemente fracture.	ed						
39.4 12.0	68.0 20.7	Quartzite. Pink to buff coloured, scattered bits of chlorite. Generally well brecciated with numerous carbonate cemented fractures. Some zones of strongly brecciated material, healed with pale grey carbonate and quartz. Mineralization associated with these.	of .						
1		Economics							
		39.4 - 40.4 - (12.0 - 12.3) - Quartzite, weakly brecciated, pinkish to bu coloured. A few streaky beds of buff coloured chert. Rare grains of pyr	off 10850	1.0	39.4 12.0	40.4 12.3			
· · · · · · · · · · · · · · · · · · ·		40.4 - 41.4 - (12.3 - 12.6) - Quartzite with quartz-carbonate structure f 40.8 to 41.2, well mineralized, 10% pyrite as blebs and subhedral cubes. Remainder of sample has only rare grains of py.	rom 10851	1.0	40.4 12.3	41.4			
-		41.4 - 44.0 - (12.6 - 13.4) - Quartzite, non-chloritic with scattered carbonate healed fractures. Bright pink in bands. Rare flecks of py.	10852	2.6 0.8	41.4 12.6	44.0 13.4		-	
		44.0 - 45.0 - (13.4 - 13.7) - Chlorite breccia. Poorly developed with on 5% chlorite, but well brecciated and mineralized. Quartz-carbonate cemen healing fractures. 3% pyrite directly associated with quartz-carbonate.	ly 10853	1.0	44.0 13.4	45.0 13.7			
		45.0 - 47.5 - (13.7 - 14.5) - Quartzite, pink, poorly brecciated. One to % chlorite. Rare grains of py. Very little carbonate.	two 10854	2.5 0.8	45.0 13.7	47.5 14.5			
	-	47.5 - 49.0 - (14.5 - 14.9) - Quartzite, 5% chlorite. Moderately well brecciated, quartz-carbonate healed. 1% py as scattered blebs associated quartz-carbonate.	with 10855	1.5 0.5	47.5 14.5	49.0 14.9			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

HOLE: N-35-Core size:

	NORTHGAT	Location: So Co-ordinate Co-ordinate	Location: Scadding Twp., Ont. Co-ordinates: 5291.2N, 9472.7E					HULE: N-35 Core size:					
	DRILL LOG	Section: 8- Length: 162 Elevation:	-00NW, 3+00NE 6' (49.6) 802.9m 5°W Dip: -4		Comp 1	ests: ed: Decer eted:Dece d by: K.	ember !	5, 1980					
DEP	тн	DESCRIPTION NOTE: All angles are measured with respect to the long core	samplaxis. numbe	מזחוש ו	from	to		ASSAY	rs				
from	to	Note: All angles are measured with respect to the long core	ux13. Humoc	<u> </u>									
		49.0 - 51.0 - (14.9 - 15.5) - Quartzite, non-chloritic, but appearance oth wise same as above. Scattered grains of py. May possibly be F.W. type py	er- 10856 rite.	2.0	49.0 14.9	51.0 15.5 ·							
		51.0 - 55.0 - (15.5 - 16.8) - Quartz, grey to dark grey and pink. Carbona structure $52.0 - 52.3$ ($15.86 - 15.95$), some blebs of py with this. Rest essentially barren.	te 10857	4.0 1.2	51.0 15.5	55.0 16.8							
		55.0 - 56.5 - (16.8 - 17.2) - Carbonate Structure. Heavy pyrite 55.2 (16.55.6 (16.9), about 30%, but looks like granular pyrite found in F.W. No V noted.	8) - 10858 .G.	1.5	55.0 16.8	56.5 17.2							
		56.5 - 57.8 - (17.2 - 17.6) - Quartzite, well brecciated and carbonated. Essentially barren. Looks like F.W.	10859	1.3	56.5 17.2	57.8 17.6							
	-	57.8-68.0-(17.6-20.7) - Quartzite, pink altered to buff, some chert Numerous rhombs of carbonate, typical of F.W. material. All barren - no staken.	beds. amples		-								
8.0 0.7	69.3 21.1	Fault Zone. Brick red hematite staining in highly sheared and brecciated quartzite. No angles could be obtained. Tentatively named #1 Fault. Sam intercepted in N-24.	e as		Madellinia des Cyrispianos de Mariado								
9.3 1.1	77.3 23.6	Chlorite breccia. Distinct zone of mostly chlorite replacement in weakly brecciated quartzite. Section is poorly mineralized.											
		Economics							1				
	-	69.3 - 71.3 - (21.1 - 21.7) - Chlorite breccia. First 7" quartzite, pink, with 2 to 5% chlorite. Remainder chlorite breccia, 10 to 15% chlorite. R grain of py, cpy.	10860	2.0	69.3	71.3	Aggie d'és réprépagation :						



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5291.2N, 9472.7E

HOLE: N-35 Core size:

Section: 8+00NW, 3+00NE Length: 162.6' (49.6) Elevation: 302.9m

Dip Tests: Started: December 4, 1980 Completed: December 5, 1980

DRILL LOG		Drill Contractor - N. Morissette Azimuth: S65°W	Dip: -45°		Logge	by: K.	 	
DEP	TH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.	sample number	width	from	to _	ASSAYS	
from	to						 	_
		71.3 - 72.7 - (21.7 - 22.2) - Chlorite breccia. 20 - 30% chlorite in first foot, then 10% chlorite replacement in-remainder. A few grains of pyrite and chalcopyrite.	10861	1.4 0.4	71.3	72.7. 22.2		
		72.7 - 74.7 - (22.2 - 22.8) - Chlorite breccia. 30% chlorite, essentially barren.	10862	2.0 0.6	72.7 22.2	74.7 22.8		
		74.7 - 77.3 - (22.8 - 23.6) - Chlorite breccia. 10 - 15% chlorite, rapidly declining to straight non-chloritic quartzite. Essentially barren.	10863	2.6 0.8	74.7 22.8	77.3		
77.3 23.6	126.3 38.5	Quartzite, mostly buff to light brown, brecciated with much carbonate. Frequent chert beds. Pinkish alteration is vague.						
26.3 38.5	136.5 41.6	Chlorite breccia. Patchy, well brecciated quartzite with several carbonate structures. Chloritization best developed in highly brecciated zones. Locally some py, po, and rarely chalcopyrite.						
		Economics						
		126.3 - 127.3 - (38.5 - 38.7) - Quartzite, rather massive with 5% chlorite replacement. No sulphides noted.	10864	1.0 0.3	126.3 38.5			
		127.3 - 128.5 - (38.7 - 39.2) - Carbonate structure with 4" inclusion of highly chloritized quartzite. A few grains of py.	10865	1.2 0.4	127.3	128.5 39.2		
		128.5 - 130.3 - (39.2 - 39.7) - Chlorite breccia. Continuation of above carbonate structure. Structure has been re-fractured and chloritized - mineralized. About 10% chlorite as fracture fillings in carbonate. Several blebs of py and V.G. at 129.5 (39.4) - some 4 small grains in a cluster.	10866	1.8	128.5 39.2	130.3		
	-	130.3 - 133.0 - (39.7 - 40.5) - Quartzite, grev to slightly banded green, 2 to 5% chlorite replacement. Barren.	10867	2.7	130.3			



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5291.2N, 9472.7E

HOLE: N-35 · Core size:

Section: 8+00NW, 3+00NE Length: 162.6' (49.6) Elevation: 302.9m

Dip Tests: Started: December 4, 1980 Completed: December 5, 1980

DRILL LOG

	DRILL LO	Drill Contractor - N. Morissette Azimuth: S65°	W Dip: -45	,	Logaed	d by: K.	Larsen						
DEP	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.									from	to		ASSAYS
from	to												
:		133.0 - 134.0 - (40.5 - 40.8) - Chlorite breccia. 40% chlorite, well brecci with some carbonate. 2% py, po as small blebs.	lated 10868	1.0	133.0	134.0 40.8							
		134.0 - 135.1 - (40.8 - 41.2) - Quartzite, faintly green, non-brecciated, wi 2 to 5% chlorite replacement. No sulphides.	th 10869	1.1	134.0 40.8								
		135.1 - 136.5 - (41.2 - 41.6) - Chlorite breccia. 20% chlorite in brecciate carbonate rich zone. A couple of small blebs of chalcopyrite and a little p	ed, 10870	1.4 0.4	135.1 41.2	136.5 41.6							
136.5 41.6	162.6 50.0	Quartzite, well brecciated with numerous carbonate cemented structures and fractures. Light brown to buff, lacking pink alteration. Typical F.W. carbonate breccia.			to the contract of the contrac								
		162.6 - (50.0) - Hole Terminated.											
							1						



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5291.2N, 9472.7E

HOLE: N-35. Core size:

Section: 8+00NW, 3+00NE Length: 162.6' (49.6) Elevation: 302.9m

Dip Tests: Started: December 4, 1980 Completed: December 5, 1980

			Azimuth: S65°W				<u></u>	Larsen	ASSAYS
DEP ⁻	TH to	DESCRIPTION NOTE: All angles are measured with respect to the	e long core axis.	sample number	width	from	to	Au oz/ton	pz/ft
17011	.0							102,000	
		Ore Sections							
				10866	1.8 0.5	128.5 39.2	130.3	0.26 0.08	.468
				10867	2.7 0.8	130.3 39.7	133.0 40.6	0.002 0.0006	0.005
				10868	1.0 0.3	133.0 40.6	134.0	0.13	130
		1.			5.5 1.7	128.5 39.2	134.0 40.9	0.110	.603 0.18
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Drill Contractor - N. Morissette DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5291.8N, 9473.8E

Dip Tests:

HOLE: N-36.

Core size:

Section: 8+00NW, 3+00NE Length: 147.0' (44.8m)

Elevation: 302.8m

Azimuth: -"Dip: −90° Started: December 5, 1980 Completed: December 6, 1980

Logged by: K. Larsen ASSAYS DESCRIPTION sample width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number from to Casing through overburden. Casing left in hole. 0.0 14.0 0.0 4.3 Quartzite, pink to reddish, brown and arey with 10 to 20% grey to off-white 147.0. 14.0 carbonate as fracture fillings in well brecciated host. Only one small chlorite 44.8 4.3 breccia section from 28.7 to 29.6, with 5% chlorite and a few flecks of po. Typical F.W. rock throughout. Some grey to light brown non-brecciated sections as well as siltstone beds. Pink and red alteration associated with fractures in brecciated sections only. 89.0 - 92.5 - (27.1 - 28.2) - f.g. grey siltstone. 95.0 - 99.0 - (29.0 - 30.2) - f.g. grey siltstone, red to pink altered where fractured. @ 112.0 - (34.2) - Drillers reported lost water at this point. No sign of a fault in core. A slightly slickensided joint is present, with 1" of broken core. There appear to be some fine "sand" in the joint, as well as smears of "sand" on the core below the joint. 147.0 - (44.8) - Hole Terminated.



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5308.5N, 9431.6E

HOLE: N-37 . Core size:

Section: 9+00NW, 2+00NE Length: 307' (93.6) Elevation: 301.8m

Dip Tests:

Started: December 8, 1980 Completed: December 9, 1980

i		DRILL LOG	Drill Contractor - N. Morissette	Azimuth: S65 W C)ip: -45°			by: K. La		
	DES	тн	DESCRIPTION NOTE: All angles are measured with respect to the		sample number	width	from	to	AS	SSAYS
-	from	to	More. Arrangles are measured with respect to the							;
	0.0 0.0	40.0 12.2	Casing through overburden. Numerous boulders, mostly diabase and quartzite. Casing removed after completion of hole.	nd pink to red				•		
	40.0 12.2	70.3 21.4	Serpent quartzite, buff coloured to red and pink, massive with except rare thin stringer. A few small irregular patches of greless altered "subgreywacke". Occasional vague remnant bedding (ey to dark grey						
	70.3 21.4	93.6 28.5	Diabase, chilled, f.g. margins, coarser grained in center. Con- unit 45° to core, lower contact same angle. 73.0 to 73.6, stro- joint 10° to core, 1/8" soft gouge.							
and the state of t	93.6 28.5	134.7 41.1	Quartzite, mostly buff coloured with some pink alteration in pais still very scarce. Quartz vein 109.0 to 109.4, 75° to core. blebs of chlorite in this and a network of pink alteration assorandomly oriented hairline fractures. Frequent zones of "crack this being numerous fine hairline fractures of random orientation earlier deformations. This would appear to be the result of by post ore faulting.	A couple of ciated with le breccia", on superimposed						
**************************************			94.4 - 95.3 - (28.79 - 29.06) - Possible fault zone. Quartzite sheared and brecciated but lacks hematite staining typically as major faults.							
*			` 102.0 - 102.8 - (31.11 - 31.35) - Possible weak fault. Core is disrupted and brecciated, but lacks hematite staining.	sheared,						:
5	134.7 41.1	137.9 42.1	Diabase dyke. Upper contact fingered, with red-brown quartzite dykelets. Lower contact sharply defined 10° to core, strongly							
drama un da			135.4 - 137.9 - (41.29 - 42.05) - Fault Zone. Very strong brech sheared diabase. Some vuggy carbonate. Fault is well defined Spots of hematite stained.	ciated and 10° to core.					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•



Property: 772, D.R. Watt Property

Location: Scadding Twp. Ont. Co-ordinates: 5308.5N, 9431.6E

HOLE: N-37. Core size:

Section: 9+00NW, 2+00NE Length: 307' (93.6) Elevation: 301.8m Azimuth: S65°W Dip: -4

Dip Tests: Started: December 8, 1980

Completed: December 9, 1980

	DRILL LO	Drill Contractor - N. Morissette Elevation: 301. Azimuth: S65°W				eted:Decem 1 by: K. L		80	
	**************************************	DESCRIPTION	sample	width	from	to	AS	SAYS	
DE	PTH	NOTE: All angles are measured with respect to the long core axis	. number	WIGGI	170				
from	to								-
137.9 42.1	139.5 42.5	Quartzite, disrupted, fractured and strongly hematite stained.				:			
139.5 42.5	165.0 50.3	Quartzite, buff coloured, with declining pink alteration and very rare carbonated thin fracture. Last 7' med. to light grey, nearly unaltered.							1
165.0 50.3	175.3 53.5	Quartzite, sudden increase in carbonate cemented fractures with patches of "crackle breccia". About 10% carbonate.							:
175.3 53.5	177.1 54.0	Fault Zone. A narrow 1" zone, 8° to core, strongly sheared with ½" of gouge. Quartzite on upper side of fault well brecciated.							•
177.1 54.0	179.3 54.7	Quartzite, buff coloured with much buff to brown f.g. chert.							1
179.3 54.7	182.4 55.6	Fault Zone. Narrow 1" zone 8° to core, strongly sheared and brecciated with 3/4" gouge and vuggy carbonate. Core is much broken up.							*
182.4 55.6	204.6 62.4	Greywacke or subgreywacke, dark grey, unaltered, massive, but strongly jointed Several strong slips 10° to 15° to core. No carbonate present, but occasional small patch of very vague bleaching, generally associated with weak fracturing Very f.g. diss. pyrite throughout. Minute amounts of chlorite and small one t two mm. grains of py along hairline fractures. Entire sequence lacks bedding.							
		<u>Trial Sample</u>						† 1	:
		199.0 - 200.5 - (60.65 - 61.11) - Greywacke with 0.3% f.g. diss. pyrite.	10888	1.5	199.0	200.5		• • • •	:
		At 204.6 (62.4) - Angular unconformity.						•	•



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5308.5N, 9431.6E

HOLE: N-37 Core size:

Section: 9+00NW, 2+00NE Length: 307' (93.6) Elevation:

Dip Tests: Started: December 8, 1980 Completed: December 9, 1980

	DRILL LO	G Drill Contractor - N. Morissette Azimuth: S65 W	Dip: -45°		Logge	by: K.	Larsen		
0.50		DESCRIPTION	sample	width	from	to		ASSAYS	
DEP	'1H	NOTE: All angles are measured with respect to the long core axi	s. number						!
from	to		<u> </u>						
204.6 62.4	223.5 68.2	Interbedded argillite, argillaceous greywacke and siltstone. Bedding well developed, 7 to 10° to core throughout. Small disruptions of beds due to microfaulting common.			·	·			
-		219.2 - 221.0 - (66.85 - 67.40) - Vuggy joint, carbonate cemented, mineralize py, Apy and specular hematite. Joint is ½" wide.	d						•
223.5 68.2	265.2 80.9	Diabase, chilled margins, c.g. to m.g. in center. Upper contact fingered, lower contact sharp, 35° to core.							1
265.2 80.9	307.0 93.6	Greywacke, rather f.g. with some interbedded siltstone. Bedding is 10° to 15 to core. Except for last 10 feet, section is not as well bedded as 204.6 to 223.5, but otherwise much the same in appearance. Lacks interbedded argillit							
		307.0 - (93.6) - Hole Terminated.							:
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Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5374N, 9437E

HOLE: N-38 Core size: .

Dip Tests:

Section: 11+00 NW Length: 605' (184.5m) Elevation: 300.3m

Started: Dec. 11, 1980 Completed: Dec. 16, 1980

3 6 7	DRILL LO	Drill Contractor - N. Morissette	Elevation: 300.3m Azimuth: S65°W Dip: -45°		Comple Logged	ted: Dec. by: K. L	16, 19: arsen	80				
DEPTH		DESCRIPTION NOTE: All angles are measured with respect to	the long core axis. number	width	from	to	ASSAYS					
from	to											
0.0	30.0 9.2	Casing through overburden.			-							
30.0 9.2	445.0 135.7	Quartzite, clean, f.g., light to medium grey, unaltered excaltered spots at 96.6 (29.5) and 103.0 (31.4) associated where the solution with only scattered joints and slips at random Non-bedded to locally vaguely bedded. At 189.0' (57.7), becore. Rare narrow zones of fracturing and brecciation, of seams. 287.0 (87.5) and 290.0 (88.5) typical of this type brecciation.	ith mild fracturing. m angles to core. edding is 20° to ten with minor quartz									
		319.0 - 320.0 (97.3 - 97.6) - strong shearing 8° to core.										
	•	321.4 - 322.0 (98.0 - 98.2) - strong shearing 20° to core.							!			
445.0 135.7	489.7 149.4	Diabase, f.g. to medium grained with chilled contact areas to core, lower contact irregular, 65° to core.	. Upper contact 45									
489.7 149.4	561.0 171.1	Quartzite, light grey, unaltered, somewhat broken up and fi (151.9) due to diabase intrusion.	ractured to 498.0									
		547.0 - 551.0 (166.8 - 168.1) - bedded section with thin charting with dark grey argillaceous beds and lighter grey que to core. This is the uppermost part of the transition zone	uartzite beds, 50°									
561.0 171.1	562.5 171.6	. Major fault zone. Only soft clay gouge recovered.										
562.5 171.6	592.0 180.6	Transition Zone. Interbedded argillite, silt, chert and que core.	uartzite, 50° to									



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5374N, 9437E

HOLE: N-38 . Core size:

Section: 11+00 NW Length: 605' (184.5m) Elevation: 300.3m

Dip Tests: Started: Dec. 11, 1980 Completed: Dec. 16, 1980

	DRILL LOG				
DEPTH		DESCRIPTION NOTE: All angles are measured with respect to the long core axis. sample number width from to	ASSAYS		
from	to	Note: All angles are measured main respect to the very			
592.0 180.6	603.0 183.9	Mainly clean quartzite, unaltered.			
603.0	605.0	Fault Zone, muddy to sandy gouge. No core recovery.			
183.9	184.5	Note: Hole terminated at 605.0'(184.5) where drill bit got stuck. Recovered after several attempts.			
	605.0 184.5	End of Hole.	***************************************		
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Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5015.5N, 9746E

HOLE: N-43-Core size:

Dip Tests:

Section:

Length: 164.0' (49.9m)

Elevation: 307.4 m
Azimuth: 0° Dip: -39°

Started: January 20, 1981 Completed: January 24, 1981 Logged by: K. Larsen

	01/122 20	Azimuth: .'U'	U1p: -39		rogged	1 0y. K	<u>. Larsen</u>		
DEPTH from to		DESCRIPTION	sample	width	from	to		ASSAYS	5
		NOTE: All angles are measured with respect to the long core axis.	number	Width	1 P Out	20	Au oz./ton		1
from	to		<u> </u>						+
0.0	7.5 2.29	Casing through overburden.			·	•			
7.5 2.29	61.0 - 18.59	Quartzite, grey with scattered zones of bleaching and minor brecciation with a few sections of slight pinkish alteration. Core very blocky.							
		35.0 - 36.3 - (10.67 - 11.06) - 3 to 5% chlorite as streaks and irregular stringers. No sulphides.							
		54.2 - 55.6 - (16.52 - 16.95) - Thinly bedded section with a few streaks of chlorite and rare flecks of py.							
		59.2 - 59.7 - (18.04 - 18.21) - 5% chlorite in small brecciated zone. No sulphides.					,		
	• •	Economics - (Trial Samples)							Ì
		35.0 - 37.0 - (10.67 - 11.28) - Grey quartzite with 3 to 5% chlorite in first 1.3 feet, mostly streaks and thin stringers. Essentially barren.	10799	2.0 0.6	35.0 10.67	37.0 11.28			
		54.0 - 56.0 - (16.46 - 17.07) - Bedded section with chlorite replacement along some bedding planes. Slightly fractured or brecciated. Rare grain of py.	10800	2.0 0.6	54.0 16.47	56.0 17.07	Nil		
61.0 18.59	164.0 49.99	Quartzite, massive, unaltered except for local minor bleaching along joint and irregular fractures. No pink alteration and no bedding or brecciation.							
		164.0 - (49.99) - End of Hole.							
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Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44 - Core size:

Section:

Length: 307' (93.6)

Elevation: 307.3 m Azimuth: — Dip: -90°

Dip Tests:

Started: January 24, 1981 Completed: January 27, 1981 Looged by: K. Larsen

		AZ tind cri.	رحتت سنند	,,			·		
		DESCRIPTION	sample	width	from	to		ASSAYS	<u> </u>
DEPTH		NOTE: All angles are measured with respect to the long core axis.	number		, t V		Au oz./to	on .	
from	to						021,		-
0.0	4.0 1.22	Casing through overburden.				•			
4.0 1.22	36.5 11.13	Quartzite, well brecciated, grey green to pink, locally with a little chlorite.							
		4.0 - 21.0 - (1.22 - 6.40) - Pink altered well brecciated quartzite, locally a little carbonate and scattered grains of magnetite in brecciated zones. Pink alteration is distinct but spotty. 10.0 to 11.0 ground core.	-						
		16.0 - 18.0 - (4.88 - 5.49) - Mottled buff, grey, green and pink quartzite breccia with 3 to 5% chlorite as hairline fracture fillings and interstitial to breccia fragments.							
		18.0 - 36.5 - (5.49 - 11.13) - Quartzite, light to dark grey, massive to weakly fractured, locally slightly bleached.							
		<u>Economics</u>	·						
		16.0 - 18.0 - (4.88 - 5.49) - Mottled grey to green and vaguely pink quartzite with 3 to 5% chlorite. Occasional small subhedral cubes and blebs plus streaks of py, po.	11401	2.0 0.6	16.0 4.88	18.0 5.49			
36.5 11.13	97.7 29.78	`Quartzite. Mottled dark grey, light grey, buff to bleached white. Very well brecciated with only small sections of massive quartzite. Entire section is generally composed of dirty, brecciated quartzite or meta-greywacke. Occasional broken up chert bands or pods. Chlorite can be seen throughout this zone but in very small quantities, generally healing hairline fractures and as interstitial cement between fragment. Brown f.g. biotite development common. F.g. diss. py, po and locally blebs and streaks present in many scattered zones.							
		@ 34.3 (10.45) 1" fault gouge, soft, muddy 35° to core.							:



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5013.5N, 9746E

HOLE: N-44 Core size:

Section:

Length: 307' (93.6)
Elevation: 307.3 m
Azimuth: — Di

Dip Tests: Started: January 24, 1981 Completed: January 27, 1981 Logged by: K. Larsen

Dip: -90°

Drill Contractor - N. Morissette DRILL LOG

050711		DESCRIPTION	sample	width	from	to		AS	SAYS
DEP `rom	to	NOTE: All angles are measured with respect to the long core axis.	number	WIGCH	i i Om	ζŪ	Au oz./t	on	
		@ 39.7 (12.10) - 2" zone, highly fractured with a little soft gouge. Possible fault. Economics - Trial Samples				• *		,	
		62.0 - 64.5 - (18.90 - 19.66) - Quartzite, well brecciated mottled dark grey to off white. 2 to 5% chlorite interstitial to fragments. Scattered grains, blebs and streaks of py, po and cpy, about 2% total by volume. Mineralization clearly associated with minute fractures.	11402	2.5 0.8	62.0 18.90	64.5 19.66		-	
		81.0 - 83.5 - (24.69 - 25.45) - Quartzite, as above, but more buff coloured fragments. Chlorite interstitial to fragments. Scattered isolated cluster of py cubes and occasional blebs and streaks.	11403	2.5 0.8	81.0 24.69	83.5 25.45			
		83.5 - 84.5 - (25.45 - 25.76) - Quartzite, well brecciated dark grey with light grey to buff fragments. 2% chlorite interstitial to fragments. A little py as streaks and small blebs.	11404	1.0	83.5 25.45	84.5 25.76			
		84.5 - 87.5 - (25.76 - 26.67) - Quartzite, dark grey to bleached light grey, massive to lightly fractured with chlorite along fractures. Py streaks and small grains in chlorite.	11405	3.0 0.9	84.5 25.76	87.5 26.67			
•		87.5 - 91.0 - (26.67 - 27.74) - Quartzite, fractured and lightly brecciated with streaks of chlorite and occasional blebs and streaks of py, po.	11406	3.5 1.1	87.5 26.67	91.0 27.74			
		91.0 - 95.0 - (27.74 - 28.96) - Quartzite. Well brecciated to 92.5 with pink alteration and a little carbonate, remainder massive to lightly fractured dark grey to slightly bleached. Chlorite persistent along hairline fractures but in very small amounts. Scattered grains of py.	11407	4.0	91.0 27.74	95.0 28.96			radipages case of the descript of description
		95.0 - 97.7 - (28.96 - 29.78) - Quartzite, dark grey massive meta-subgreywacke. A few chloritic hairline fractures. Rare small grains of py. Last 3 inches	11408	2.7 0.8	95.0 28.96	97.7 29.78			



DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44. Core size:

Dip Tests:

Section:

Length: 307' (93.6)
Elevation: 307.3 m
Azimuth: Di

Started: January 24, 1981 Completed: January 27, 1981 Logged by: K. Larsen "Dip: -90°

Drill Contractor - N. Morissette

DEPTH		DESCRIPTION	sample number	width	from	to	ASSAY		SAYS	
fro		NOTE: All angles are measured with respect to the long core axis.		W / G CH			Au oz./t	ton		
		becoming brecciated with increase in chlorite content.				•				
97.7 29.78	126.1 38.44	Chlorite breccia. 10% to very locally 60% chlorite in well brecciated dark grey meta-subgreywacke. Much bleaching and pink altered fragments. Locally some carbonate cement. Several zones well mineralized py, po, cpy and v.g. as noted.								
		Economics								
		97.7 - 100.0 - (29.78 - 30.48) - Chlorite breccia. 15% chlorite in brecciated quartzite. Fragments vary from dark grey to buff and pink. A little carbonate locally. Scattered grains of po.	11409	2.3 0.7	97.7 29.78	100.0 30.48				
		100.0 - 103.0 - (30.48 - 31.39) - Chlorite breccia. 25% chlorite in highly brecciated quartzite. Fragments generally quite small, dark grey, buff to pink and off white. Scattere: clusters of diss. py, po and occasional cpy.	11410	3.0 0.9	100.0	103.0 31.39				
		103.0 - 106.0 - (31.39 - 32.31) - Chlorite breccia. 25% chlorite, as above.	11411	3.0 0.9	103.0 31.39	106.0 32.31				
		106.0 - 107.0 - (32.31 - 32.61) - Chlorite breccia. 30% chlorite and a little carbonate in well brecciated dark grey quartzite. Some bluish quartz in matrix. 1% po, py, f.g., diss.	11412	1.0	106.0 32.31	107.0 32.61				
	-	107.0 - 110.0 - (32.61 - 33.53) - Chlorite breccia. 15% chlorite in finely brecciated quartzite. Odd grains of py.	11413	3.0 0.9	107.0 32.61	110.0 33.53				
		110.0 - 113.0 - (33.53 - 34.44) - Chlorite breccia, as above but 10% chlorite and coarser brecciation.	11414	3.0 0.9	110.0 33.53	113.0 34.44				
		113.0 - 116.0 - (34.44 - 35.36) - Chlorite breccia. 20% chlorite. Well brecciated with a little carbonate. Odd bleb of po, py.	11415	3.0 0.9	113.0 34.44	116.0 35.36				



NORTHGATE EXPLORATION LIMITED

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44 . Core size:

Dip Tests:

Section:

Length: 307' (93.6)

Started: January 24, 1981 Completed: January 27, 1981 Logged by: K. Larsen

Elevation: 307.3 m
Azimuth: - Dip: ~90°

	DRILL LOG	Drill Contractor - N. Morissette Elevation: 30 Azimuth: -	7.3 m Dip: -90°		Logged	l by: K.	luary 27 Larsen	, 1981	
250		DESCRIPTION	sample	width	from	to		ASSAYS	;
DEP [*]	to	NOTE: All angles are measured with respect to the long core ax	is. number				Au oz/ton		
17011		116.0 - 117.0 - (35.36 - 35.66) - Chlorite breccia. 10% chlorite and a few small grains of py.	11416	1.0		117.0 35.66	.013		
		117.0 - 118.0 - (35.66 - 35.97) - Chlorite breccia. 20% chlorite in well brecciated quartzite. 20 to 25% combined py, po, cpy and 5 small grains of v.g. at 117.2. Section is very well mineralized.	11417	1.0		118.0 35.97	.576		
		118.0 - 119.0 - (35.97 - 36.27) - Chlorite breccia. 10% chlorite in moderat brecciated bleached quartzite. 4% py, po, cpy and 5 grains of v.g. 118.8 - 119.0 (36.23 - 36.27).	e 11418	1.0		119.0 36.27	.062		
		119.0 - 120.0 - (36.27 - 36.58) - Chlorite breccia. Chloritic quartzite fragments with 30% interstitial carbonate. 3% combined vuggy py, po, cpy.	11419	1.0		120.0 36.58			
		120.0 - 121.0 - (36.58 - 36.88) - Chlorite breccia. 20% chlorite. 3 separa grains of v.g. @ 120.5. 3% vuggy py, po, cpy. A little carbonate.	te 11420	1.0		121.0 36.88			
		121.0 - 122.0 - (36.88 - 37.19) - Chlorite breccia. 10% chlorite. 2% vuggy py, po, cpy and a little carbonate.	11421	1.0		122.0 37.19			
·		122.0 - 123.7 - (37.19 - 37.70) - Chlorite breccia. 5% chlorite in massive weakly brecciated meta-subgreywacke. Rare grain of py.	to 11422	1.7		123.7 37.70			
		123.7 - 126.1 - (37.70 - 38.44) - Chlorite bx. 15% chlorite in well breccia quartzite, some buff to pink altered fragment. 2% py, po, cpy. Pyrite is slightly vuggy. A little carbonate as irregular spots.	ted 11423	2.4		126.1 38.44			
126.1 38.44	214.5 65.38	Quartzite, dark grey, f.g., with local brecciated zones alternating with mor massive to weakly bedded meta subgreywacke and argillaceous siltstone. Some pink fragments in brecciated zones. Carbonate essentially absent. Chlorite present in very small amounts in brecciated zones, interstitial to breccia fragments and healing hairline fractures. Both pyrite and pyrrhotite occur	is						



Drill Contractor - N. Morissette

NORTHGATE EXPLORATION LIMITED

DRILL LOG

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44 Core size:

Section:

Length: 307' (93.6)
Elevation: 307.3 m
Azimuth: - Dip: -90°

Dip Tests:

Started: January 24, 1981 Completed: January 27, 1981 Logged by: K. Larsen

	DEPTH		DESCRIPTION	sample	width	from	to		ASSAY	5	
1			NOTE: All angles are measured with respect to the long core axis.	number	width	1 POH	to	Au oz/tor	1		
	from 214.5 65.38	298.0 90.83	irregular blebs, streaks and occasional large subhedral cubes in many brecciated zones. Samples below are trial samples of the best mineralized zones. Economics - (Trial Samples) 145.0 - 146.0 - (44.20 - 44.50) - Quartzite, brecciated, dark grey with buff to vaguely pinkish fragments. 2% interstitial chlorite. A few small blebs of py, po. 146.0 - 147.0 - (44.50 - 44.81) - Quartzite, well brecciated with 2 to 5% interstitial chlorite. 15% pyrite as large subhedral cubes and irregular blebs. 147.0 - 148.0 - (44.81 - 45.11) - Quartzite, massive, med. grey with a few fine specks of py and a single 5 mm. py veinlet 90° to core. No chlorite noted. 164.3 - 165.9 - (50.08 - 50.57) - Quartzite, brecciated, 2 to 3% chlorite interstitial to fragments. 2% po, py, cpy. Core on both sides of this zone is barren - massive, non-brecciated. 185.0 - 188.0 - (56.39 - 57.30) - Quartzite breccia zone. 3 to 4% chlorite cement. Scattered grains, streaks and blebs of po, py. Quartzite. Dark grey to med. grey massive to well brecciated meta-subgreywacke to argillaceous siltstone zone is conspicuous by the presence of numerous pink altered fragments in the brecciated zones. Small amounts of chlorite in breccia zones. 214.5 - 221.0 - (65.38 - 67.36) - Several coarse breccia zones with much pink alteration.	11424 11425 11426 11427	1.0 0.3 1.0 0.3 1.6 0.5	145.0 44.20 146.0 44.50 147.0 44.81 164.3 50.08	147.0 44.81 148.0 45.11 165.9 50.57	Tr .002 Tr			AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
			221.0 - 265.0 - (67.36 - 80.77) - Mainly massive dark grey impure quartzite with only occasional very narrow zones of brecciation.								



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44 Core size:

Dip Tests:

Section:

Length: 307' (93.6)
Elevation: 307.3m
Azimuth: - Dip

Started: January 24, 1981 Completed: January 27, 1981 Logged by: K. Larsen

Dip: -90

DRILL LOG

Drill Contractor - N. Morissette

DEPTH		DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	. number	HIGGI	11000		Oz./ton		
		265.0 - 291.0 - (80.77 - 88.70) - Mainly brecciated impure quartzite with numerous pink altered fragments. Local mineralized sections. 291.0 - 298.0 - (88.70 - 90.83) - Only slightly brecciated impure quartzite.			·	÷			
		Trial Samples 214.5 - 216.0 - (65.38 - 65.84) - Pink quartzite bx. with 2 to 3% chlorite between fragments. Several blebs and clusters of small py, po grains. A few specks of cpy.	11429	1.5 0.5		216.0 65.84	Tr		
		274.5 - 276.0 - (83.67 - 84.12) - Quartzite bx. Numerous small pink fragments and several dark grey green. 3 to 5% chlorite interstitial to fragments. 3% pyrite as small subhedral cubes between quartzite fragments.	11430	1.5 0.5	274.5 83.67	276.0 84.12	.025		
	-	285.0 - 286.0 - (86.87 - 87.17) - Quartzite, moderately brecciated with 2 to 3% interstitial chlorite, some pink fragments and 3% pyrite irregular lumps and small blebs.	11431	1.0		286.0 87.17	Tr		
		289.0 - 290.0 - (88.09 - 88.39) - Quartzite. Well brecciated with prominent pink fragments. 5% coarse pyrite, mostly subhedral cubes to 10 mm.	11432	1.0		290.0 88.39	.003		
298.0 90.83	307.0 93.57	Quartzite, argillaceous, dark grey to near black with local bleaching and slight fracturing. Pink alteration is absent. A little brown biotite development and possibly some chlorite suggested by greenish tinge to some zones.							
; · !		307.0 - (93.57) - End of Hole.							
	-								

NORTHGATE EXPLORATION LIMITED

Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5013.5N, 9746E

HOLE: N-44-Core size:

Section:

Length: 307' (93.6) Elevation: 307.3 m

Dip Tests:

Started: January 24, 1981 Completed: January 27, 1981

DEPTH	DESCRIPTION NOTE: All angles are measured with respect to t			sample	width	from	to		ASSAYS		
from to		NOTE: All a	angles are measured	with respect	to the long core	axis. number				Au oz/ton	
	Ore Section	c									
•	010 3000101	~	· . <u> -</u>	· ·		11415	3.0 0.9	113.0 34.5	116.0 35.4	.364	
			·			11416	1.0 0,3	116.0 35.4	117.0 35.7	.013	
						11417	1.0 0.3	117.0 35.7	118.0 36.0	.576	
		·				11418	1.0	118.0 36.0	119.0	.062	
						11419	1.0 0.3	119.0 36.3	120.0 36.6	.222	
						11420	1.0 0.3	120.0 36.6	121.0 36.9	.129	
	. 1.	•					8.0 2.5	113.0 34.5	121.0 36.9	.276	
									Constitution of the Consti		
				·							1



Property:772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5014.0N, 9746E

HOLE: N-45 · Core size:

Section:

Length: 209.0' (63.74) Elevation: 307.3 m

Dip Tests: Started: January 27, 1981 Completed: January 30, 1981

<u></u>	DRILL LO	G Drill Contractor - N. Morissette Azimuth: 0°	m Dip: -70°	,		by: K			301	
DEP	TH	DESCRIPTION	sample	width	from	to		ASS	SAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number	iser			Au oz/to	n		
0.0	4.0 1.2	Casing through overburden.				·				
4.0	76.4 23.3	Quartzite, med. grey and brecciated with spotty pink alteration to 21.0 feet, then grey to dark grey unaltered, fairly massive to 76.4'. No bedding observed. Becoming lighter grey in colour from 52 feet. Pink alteration in last two feet of zone.								
		7.0 to 11.0 - (2.1 - 3.4) - Ground core.							1	
		52.0 to 54.0 - (15.9 - 16.5) - Ground core.								
76.4 23.3	101.0 30.8	Chlorite breccia. A poorly developed zone composed of greywacke, somewhat argillaceous in places, with local brecciation, bleaching and pink alteration. Chlorite content variable but rarely over 20%.								
		<u>Economics</u>								
		76.4 - 78.4 - (23.3 - 23.9) - Chlorite breccia. 5% chlorite in pink to grey quartzite, poorly brecciated. No sulphides observed.	11462	2.0 0.6	76.4 23.3	78.4 23.9	Tr			
		78.4 - 79.9 - (23.9 - 24.4) - Chlorite breccia. 20% chlorite in well brecciated, pink altered quartzite. No sulphides observed.	11463	1.5 0.5	78.4 23.9	79.9 24.4	.020			
		79.9 - 83.0 - (24.4 - 25.3) - Chlorite breccia. 20% chlorite in well brecciated quartzite. Some small spots of pink alteration. Rare flecks of po, py.	11464	3.1 0.9	79.9 24.4	83.0 25.3	.084			
		83.0 - 86.0 - (25.3 - 26.2) - Chlorite breccia. 10% chlorite in poorly brecciated grey to pink quartzite. Some small massive greywacke sections - unaltered. No sulphides observed.	111465	3.0 0.9	83.0 25.3	86.0 26.2	.001			
		sulphides observed.						-		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont. Co-ordinates: 5014.0N, 9746E

HOLE: N-45-Core size:

Section:

Length: 209.0' (63.74)

Elevation: 307.3 m

Dip Tests:

Started: January 27, 1981 Completed: January 30, 1981

DRILL LOG		LOG Drill Contractor - N. Morissette Elevation: 307.3 m Azimuth: 0° Dip: -70°				ted: Ja	nuary 3 Larsen), 1981	
DEP'	TH	DESCRIPTION	sample	width	from	to		ASSAYS	
from	to	NOTE: All angles are measured with respect to the long core axis.	number						
		86.0 - 89.0 - (26.2 - 27.1) - Quartzite with scattered narrow brecciated zones carrying 5% chlorite. Some pink alteration. No sulphides observed.	11466	3.0 0.9	86.0 26.2	89.0 27.1	.003		
		89.0 - 93.0 - (27.1 - 28.4) - Quartzite, bright pink with a few streaks of chlorite to 91.0, the dark grey f.g. to m.g. wacke. No sulphides observed.	11467	4.0 1.2	89.0 27.1	93.0 28.4	.001		
		93.0 - 96.0 - (28.4 - 29.3) - Quartzite, dark grey, massive to weakly fractured. No alteration. A few grains of pyrite.	11468	3.0 0.9	93.0 28.4	96.0 29.3		1	
		96.0 - 98.0 - (29.3 - 30.0) - Greywacke, becoming fractured and weakly brecciate but essentially unaltered. A little chlorite replacement in last few inches. No sulphides observed.	d, 11469	2.0 0.6	96.0 29.3	98.0 30.0	Tr		
		98.0 - 101.0 - (30.0 - 30.8) - Chlorite breccia. 5 to 10% chlorite in weakly brecciated and fractured, pink altered quartzite. Chlorite as fracture fillings with a little py associated.	11470	3.0 0.9	98.0 30.0	101.0	.003		
101.0 30.8	127.0 38.7	Quartzite, dark grey, argillaceous, massive to weakly fractured. A little pink alteration 106.0 to 107.0, remainder unaltered to 119.0, then becoming weakly brecciated and slightly bleached in narrow bands.							
127.0 38.7	141.6 43.2	Quartzite, locally interbedded with near black argillite. Mostly well brecciated with patches of bleaching and pink alteration. Bedding variable from 35° to 60° to core. A little chlorite and pyrite in brecciated sections. Zone appears to be a weakly developed chlorite breccia zone.							
		Ec voc.es				!			•
		127.0 - 128.0 - (38.7 - 39.0) - Chlorite breccia. 10% chlorite in pinkish altered quartzite. Scattered flecks of py.	11471	1.0	127.0 38.7	128.0 39.0	Tr		



Property: 772, D.R. Watt Property Location: Scadding Twp., Ont.

Co-ordinates: 5014.0N, 9746E

HOLE: N-45 Core size:

Section:

Length: 209.0' (63.74)
Elevation: 307.3 m
Azimuth: 0° Dip:

Dip Tests:

Started: January 27, 1981 Completed: January 30, 1981

0°	Dii	p: -70`	Loaged	by	y:	Κ.	Larser

	DRILL LOG	Drill Contractor - N. Morissette	Elevation: 307.3 m Azimuth: 0° Dip: -70	·			nuary 30, Larsen	1981
DEP	тн	DESCRIPTION	samole		from	to		ASSAYS
from	to	NOTE: All angles are measured with respect to the	ne long core axis. number				Au oz./ton	
		128.0 - 130.5 - (39.0 - 39.8) - Interbedded argillite and qua 50° to core. Not brecciated. No sulphides observed.	rtzite. Bedding 11472	2.5	128.0 39.0	130.5 39.8	Tr	
		130.5 - 132.5 - (39.8 - 40.4) - Chlorite breccia. Well brecclight grey quartzite with 3 to 5% chlorite as fracture filling and a little chalcopyrite.	iated bleached 11473 gs. 3% pyrite	2.0	130.5 39.8	132.5	Tr	
		132.5 - 136.1 - (40.4 - 41.5) - Quartzite, slightly bleached pink alteration. Rather massive. No chlorite. Rare grains	locally, but no 11474 of py.	3.6 1.1	132.5 40.4	136.1	Tr	
		136.1 - 138.7 - (41.5 - 42.3) - Quartzite, impure, argillaceon brecciated first foot, then massive with banded cleaching. On	us, slightly 11475	2.6 0.8	136.1 41.5	138.7	Tr .	
	.•	138.7 - 141.6 - (42.3 - 43.2) - Chlorite breccia. Moderately grey quartzite with streaks and blebs of chlorite. Fairly we 2% to 3% pyrite as fracture fillings.	well brecciated 11476	2.9	138.7 42.3	141.6	Tr	
141.6 43.2	195.0 59.5	Quartzite, clean, grey to light grey, generally massive, non-locational narrow brecciated section. Locally some fine pale development. Last 3 feet strongly bleached pale grey.	brown biotite					
195.0 59.5	209.0 63.7	Quartzite, dark grey, impure, some narrow argillite beds. West breccia 195.0 - 199.0 - No sulphides. Brecciated with pink at 209.0. A few blebs of chlorite in this, but no sulphides.	ak chlorite teration 207.0 -					
		209.0 - (63.7) - End of Hole.						
	-							



DRILL LOG

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5011.0 N 9738.2 E

Dip Tests:

HOLE: N-46 Core size:

Section:

Length: 127' (38.8) Elevation: 307.5m Azimuth: 0° Dip: -55° Started: Jan. 30, 1981 Completed: Feb. 1, 1981 Logged by: K. Larsen

	0.1.1.2.2. 2.0.1	Azimuth: U	ככי : קוט		Logge	i by: K.	Larse	<u>en </u>		
250	7.1	DESCRIPTION	sample	width	from	to		AS	SSAYS	
DEP	IH.	NOTE: All angles are measured with respect to the long core axis.	number	Wideli	i r Qili	100	Au			T
from	to						oz./t	on		1
0.0	6.0 1.8	Casing through overburden. Nubbins of chlorite bx. 5.0 (1.5) to 6.0 (1.8), possibly a boulder. Not mineralized:-				÷				
6.0 1.8	36.0 11.0	Quartzite, dirty grey, mostly brecciated with much pir alteration. Locally small amounts of carbonate. Pink alteration increasing from 27.0 (8.2). No chlorite or sulphides noted.								
36.0 11.0	47.0 14.3	Quartzite, grey with much pink alteration. Locally brecciated, but little or no carbonate. Rare bleb of chlorite. No sulphides noted. Core badly broken.								
47.0 14.3	56.4 17.2	Chlorite breccia. A poorly developed chloritic zone, composed mainly of deep pink quartzite with blebs, streaks and rarely bands of chlorite. Locally weakly mineralized po, py.								
		Economics						1		
		47.0 - 48.6 - (14.3 - 14.8) - Chlorite breccia. 10% chlorite in pink altered, brecciated quartzite. Rare grain of py, po.	11508	1.6 0.5	47.0 14.3	48.6 14.8	.001			-
		48.6 - 49.8 - (14.8 - 15.2) - Chlorite zone. 50% chlorite, mainly replacement. A few streaks and blebs of po, py and a single grain of V.G. @ 49.1' (15.0)	11509	1.2 0.4	48.6 14.8	49.8 15.2	.396			
		49.8 - 51.5 - (15.2 - 15.7) - Chlorite breccia. 30% chlorite as large blobs or bands in pink quartzite. A few pyritic hairline fractures and scarce small grains of po, py with a few flecks of cpy associated with pyrite.	11510	1.7 0.5	49.8 15.2	51.5 15.7	.079			
		51.5 - 54.0 - (15.7 - 16.5) - Quartzite, bright pink, slightly fractured with chlorite healing hairline fractures. Occasional small blebs of chlorite. Essentially barren.	11511	2.5 0.8	51.5 15.7	54.0 16.5	.012			
		54.0 - 56.4 - (16.5 - 17.2) - As above, but 5% chlorite and ½% pyrite.	11512	2.4 0.7	54.0 16.5	56.4 17.2	.002			

Drill Contractor - N. Morissette



Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont. Co-ordinates: 5011.0 N

9738.2 E

Dip Tests:

Section:

Length: 127' (38.8) Elevation: 307.5 m

Started: Jan. 30, 1981 Completed: Feb. 1, 1981

4015: N-46

Come size:

DRILL LOG Dio: -55° Drill Contractor - N. Morissette Logged by: K. Larsen Azimuth: **ASSAYS** sample DESCRIPTION width from to DEPTH NOTE: All angles are measured with respect to the long core axis. number Au oz./ton from to Quartzite, med. to lt. grey, massive, non-brecciated, non-bedded. No sulphides 56.4 66.4 17.2 20.3 and no chlorite. Samples: Sampled as a matter of record. 56.4 - 61.4 - (17.2 - 18.7) - Quartzite, med. grey, massive, barren. 11513 5.0 56.4 61.4 1 Tr 1.5 17.2 18.7 61.4 - 66.4 - (18.7 - 20.3) - Quartzite, as above, barren. 11514 5.0 61.4 66.4 Tr 1.5 18.7 20.3 66.4 78.5 Chlorite breccia. 5 to 30% chlorite in pink altered, brecciated quartzite. 20.3 23.9 Economics 66.4 - 68.0 - (20.3 - 20.7) - Chlorite breccia. Purely brecciated, pink 11515 1.6 66.4 68.0 .001 altered quartzite with 5% chlorite as small blebs and streaks. 0.5 20.3 20.7 68.0 - 69.0 - (20.7 - 21.0) - Chlorite breccia. 15% chlorite in pink quartzite 11516 1.0 68.0 69.0 .130 breccia. 1/2 to 1% po, py as streaks and small irregular grains. 0.3 21.0 20.7 69.0 - 71.0 - (21.0 - 21.7) - Quartzite, non-brecciated, buff to grey, weakly 11517 2.0 69.0 71.0 .009 fractured. No sulphides observed. 0.6 21.7 21.0 71.0 - 74.0 - (21.7 - 22.6) - Chlorite breccia. 30% chlorite in well brecciated 11518 3.0 71.0 74.0 .059 pink quartzite. 1% po, py and scarce grains of cpy. 0.9 21.7 22.6 74.0 - 77.5 - (22.6 - 23.6) - Chlorite breccia. 25% chlorite as irregular pods 11519 3.5 74.0 .120 77.5 blebs and stringers in bleached lt. grey quartzite. A little po, py and rare 1.1 22.6 23.6 flecks of cpy.



NORTHGATE EXPLORATION LIMITED

Property: 772, D.R. Watt Property

Location: Scadding Twp., Ont.

Co-ordinates: 5011.0 N 9738.2 E

Core size: Dip Tests:

Section:

Length: 127' (38.8)

Completed: Feb. 1, 1981

HOLE: N-46 .

Elevation: 307.5 m

Started: Jan. 30, 1981

חבה	-	DESCRIPTION	sample	width	from	to		ASSAYS
DEP from	to	NOTE: All angles are measured with respect to the long core axis.	number	Wideli	11 0			on
		77.5 - 78.5 - (23.6 - 23.9) - Chlorite breccia. 5% chlorite or less as streaks and stringers in grey to vaguely pinkish lightly fractured quartzite. Sample represents lower margin of chlorite breccia zone.	11520	1.0	77.5 23.6	78.5 23.9	.001	
78.5 23.9	92.5 28.2	Quartzite, grey to brownish grey, relatively pure, massive to weakly fractured. No pink alteration and no chlorite.						
92.5 28.2	108.0 32.9	Quartzite. Strongly bleached light grey, weakly brecciated to strongly fractured. Fractures generally slightly chloritic with small grains of magnetite and siderite and rarely isolated grains of py, po. Entire zone represents a poorly developed chlorite breccia zone with isolated chloritized fractures and rarely narrow breccia zones.						
08.0 32.9	127.0 38.7	Quartzite, mainly grey, massive, interrupted only locally by narrow zones of brecciation. Some argillaceous beds begin to appear with bedding angles 45° to 50° to core. 116.0 (35.4) to 117.0 (35.7) quartz rich zone of breccia with 15% chlorite and a little carbonate. No sulphides.						
		127.0 (38.7) - End of Hole.						



NORTHGATE EXPLORATION LIMITED

Property: 772, D.R. Watt Property. Location: Scadding Twp., Ont. Co-ordinates: 5011.0 N

9738.2 E

HOLE: N-46. Core size:

Section:

Length: 127' (38.8)
Elevation: 307.5 m
Azimuth: 0° Dip: -55°

Dip Tests:

Started: Jan. 30, 1981 Completed: Feb. 1, 1981 Logged by: K. Larsen

DRILL LOG

* * * * * * * * * * * * * * * * * * * *	Azimuth: 0°	ככ-: קוט		Logge	r uy	. Larsen
DEPTH	DESCRIPTION NOTE: All angles are measured with respect to the long core axis.		width	from	to	ASSAYS
from to						Au oz./ton
	Ore Sections					
		11509	1.2 0.4	48.6 14.8	49.8 15.2	. 396
		11510	1.7 0.5	49.8 15.2	51.5 15.7	.079
	1.		2.9 0.9	48.6 14.8	51.5 15.7	.21
	2.	11516	1.0	68.0 20.7	69.0 21.1	.130
		11518	3.0 0.9	71.0 21.7	74.0 22.6	.059
	3.	11519	3.5 1.07	74.0 22.6	77.5 23.6	.120
	3a.		6.5 2.0	71.0 21.7	77.5 23.6	.091
	· .					
-						



41110NE0185 0016 SCADDING

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SUMMARY REPORT
EXPLORATION ACTIVITIES OF
SCADDING TOWNSHIP PROPERTIES
Project 772
Oct. - Dec. 31, 1980

G. Harper Chief Geologist W. Weber Manager Exploration

Toronto, Ontario February 4, 1981

2.4121 duplicate

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EXPLORATION ACTIVITIES OF
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SUMMARY REPORT - ASHIGAMI PROJECT 772 SCADDING TOWNSHIP, SUDBURY DISTRICT, ONTARIO

1.0 Summary

Exploratory work on the property commenced early in October. The first drill arrived on the property October 1, followed by a second drill 4 days later and a third drill early in December.

The total footage completed by December 31, 1980 was 11,602 feet in 32 holes.

Surveyors (Sutcliffe & Co.) were engaged to define the concession lines, survey previous and current drill holes, produce section profiles and conduct a boundary survey preparatory to lease application.

Overburden clearing of the East-West Zone, the Intermediate Zone and North-West structure was largely completed. There remains to be done, the hydraulic sluicing to completely expose the rock surface.

The campsite comprising driller's quarters, crew living quarters, office with propane, electrical and septic systems have been completed and are operational. Core shacks, open and covered, have been built with a capacity for over 40,000 lineal feat of core.

Roads to the drill sites, campsite and campsite area have been gravelled and improved to all-weather category.

The line cutting on the property is 75% completed with the balance deferred until the spring of 1981. A total of 285 line kilometers or 178 line miles have been cut, chained and picketed.

The magnetometer survey is underway with coverage of the N-W Grid largely completed. Further I.P. or E.M. surveys have been deferred until the spring.

The proposed exploration 1981 budget for the Scadding groups totals \$1.0 Million exclusive of the development and mining proposed for the 4 claim lease area.

In the appended outline of the 1980 exploration activities and expenditures, the full coverage of the work program is readily visible and accountable.

Ore reserves presently confirm the original report of W.W. Weber, March, 1980, and total in the completed test work approximately 250,000 tons grading 0.22 oz. Au/ton. Final definition of the ore reserve picture will be available in late February 1981, following the completion of Phase I drill program.

EXPLORATION EXPENDITURES

Project 772 - Scadding Township

SERI	ES	CATEGOR	RY	BUDGET OCT-80	UNITS	OMEP	% COMPL.	ACTUAL EXPENDITURE	TRANSFER
100		OUND CONTRO							
	ii)	Line cutti Photogramm Surveying	_	61,985.	429 LKm 8000 ac.	11,845. (Gulf Grp)	55% 100%	38,719.13 42,048.49	-27,000. +42,000.
	,		Boundary Sites	25,000. 15,000.	30 Km 100 Km	9,000.	100% 100%	60,671.82	+20,000.
			TOTAL	\$101,985.				99,692.41	
200		LOGY Stripping							
		Site Clear Metallurgy		13,980. 3,500.		16,000.	100% 100%	5,843.50	
300	GE	COCHEMISTRY	TOTAL	\$17,480.				5,843.50	-11,000.
			TOTAL	Nil					
400		COPHYSICS I.P. Surv	iov.	18,600.	31 Km	9,000.	Ni1		
	ii)	Magnetome EM-16 VLF	ter	3,100. 3,720.		10,000. 8,750.	30% Ni1	3,692.40	- 2,500.
			TOTAL	\$28,420.				3,692.40	•
500	i)	RILLING Contract Assays		150,000. 10,000.	•	380,000. (20,000')	116%	203,393.01	
	11,	nssays	ም ርሞ ልን	·	1,000	(20,000)	,	•	TEU 000
600	TH	RANSPORT	TOTAL	\$160,000.				210,937.15	+50,000.
	-	Rentals &						3,948.39	
	-	Maintenan Shipping		8,800.				1,364.67 1,300.90	
		Commercia	_					2,046.26	
			TOTAL					8,918.48	+100.
700	CA	AMPSITE, AC	COMODATION					0,,,,,,,,	
		Core Rack		8,810.		6,500.		6,765.15	
		Site Bldg		9,320.		7,500.		14,190.55	
		Motel etc		4,500.				2,959.52	
	-	Communica Site Clea	itions irance, Roa	500. ds 7,500.				625.66 7,031.50	
	* /	Dite of	•	•				•	
800-	900 S	SUPERVISION	TOTAL	\$30,630.				31,572.38	+1,000.
000~		Project P		29,500.	•			34,328.42	
		Drafting		7,000.				4,966.48	
		Head Offi	.ce	17,500.				13,122.37	
	-	Site Offi		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				8.016.33	
			TOTAL	54,000.				60,433.60	+10,000.
SUMM	ARV	r	OTAL	371,715.	· · · · · · · · · · · · · · · · · · ·			428,943.15	
OMEP			VIND	83,279.				94,428.00	
~ · · · · · ·			NET	288,436.				,	
CONT	INGEN	ICY		36,791.					
SITE	•			325,227.				•	
901	HEAD	OFFICE		45,500.	578	A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		See Above	-45,000.
		T T	OTAL	\$370,727.0	טע	448,100.00		330,515.00	

Summary Report of The Exploration Activities

On the Ashigami Project 772

Scadding Township, Sudbury District, Ontario N.T.S. 411/10

Period Oct. 1 - Dec. 31, 1980

2.0 Introduction

The Watt properties comprise 206 claims, now divided into 6 separate groups; Projects 772, 723, 724, 725, 726 and 727. The acquisition in the fall of 1980 followed a lengthy period of evaluation and negotiation which commenced in June, 1978.

The terms of acquisition of a 100% interest required (a) a front end payment satisified by the issue of 110,000 treasury shares of Northgate, (b) a reservation to the vendors of a 30% net profits royalty as well as assumption of the "Gulf royalty" of \$1.00 per ton mined on the original group of 40 claims, and a commitment to spend in exploration and development programs, at least one million dollars in the 18 month period following the date of the agreement.

The properties are located in Scadding Township, 31 miles north and east of Sudbury, one of the major mining centres in Canada. The access, availability of water, energy and ancilliary services including labour supply is comparable to the best in Canada.

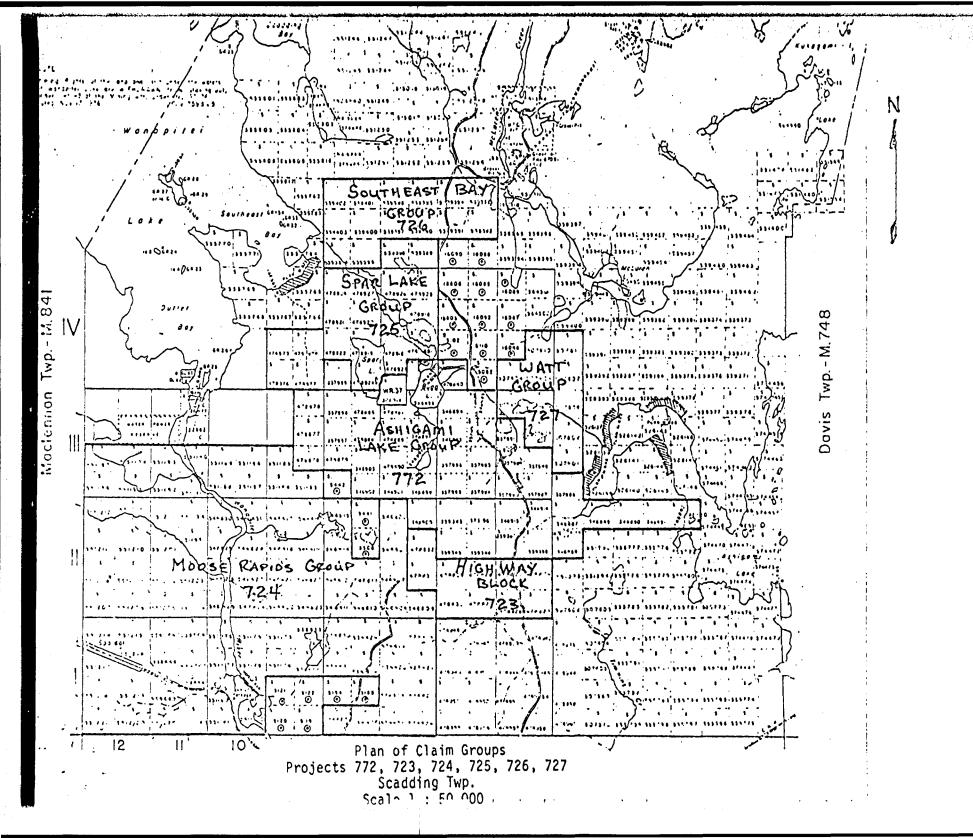
Exploration in Scadding Township has been sporadic since the first discovery of gold in 1888. The flurries of major exploratory work involved gold in the pre-World War II era; gold, copper and uranium during the fifties and sixties and currently the recent activity sparked by the McLean discoveries in the period 1974-1980.

The dominant regional geological feature of the area is the Huronian sedimentary basin, a counterpart of the Blind River basin but separated by the Sudbury intrusive lopolith. The sedimentary rocks span the Mississagi, Bruce, Serpent and Gowganda formations. The underlying basement is Archean granites, gneisses and schists. Flat-lying Nipissing diabasic sills and Killarnean olivine diabase dikes intrude the sediments.

The structural deformation and disruption of continuity is considerable and in part post-ore.

In 1974, a small sulphide ore zone (31,000 tons) was defined on the Gulf-Getty claims. D.R. Watt acquired the Gulf claims in 1977 and following the expenditure of \$292,000, two additional gold-bearing zones were partially drill-indicated.

Considering the potential ore to be significant, Northgate embarked on an intensive exploration program to confirm the potential reserves in anticipation of early development and probable exploitation during the coming year.



2.1 Property and Ownership

The total of the Watt properties in Scadding Township comprises 206 claims and records in area 8240 acres or nearly 40% of the township. The claim blocks are contiguous except for three patent claims,5508, 5441 and 5442, property of the former Alkin Gold Mines Limited, located in lot 8, concession II and III, Scadding Twp. The majority of the claims (exception 28) lie within the surveyed subdivided segment, lots 5 to 12, Conc. I-IV inc., Scadding Township, Sudbury District, Ontario.

The original grouping of the claims was as follows:

	·				Number
l.	D. R. Watt				
	(a) Gulf Group	S346887-346903	incl.		17
	•	S346914-346916	incl.		3
		S357986-35 7 999	incl.		14
		S359359-359 3 60	incl.		2
		S373196			1
		S359343-359345	incl.	,	$\frac{3}{40}$
	,				40
	(b) Staked Addition	S478823-478832	incl.		10
		S478876-478881	incl.		6
		S478886-478890	incl.		5
		\$507801-507811	incl.		11
					32
2.	P. McLean				
	Control of the state of the sta	5478916-478928	inal		13
		S478976-478979			4
		S539398	Inci.		i
		S478891			î
		S539389			1
					$\frac{\overline{20}}{20}$
3.	Watt-McLean				
		0520//2 520//0	21		~
	(a) Southwest	S538663-538669			7
		S538818-538833			16
		S546805-546831			27
		S551173-551182 S551183-551222			10 40
		5551165-551422	inci.		$\frac{40}{100}$
	(b) Northwest	S539390-539397	i1		0
	(b) Northwest	\$539399-539403			8 5
		S539384	Incl.		1
		JJJ7J04			$\frac{1}{14}$
					(
				TOTAL	206 Claims

The significant notation to this grouping refers to Group 1(a) the Gulf Group-40 claims property on which there remains a residual royalty of \$1.00 per ton ore removed in favour of Gulf Minerals.

For project definition and assessment purposes, the claim groups have been regrouped into the following blocks (See Figure 1).

Claims to Patent and Mining Lease

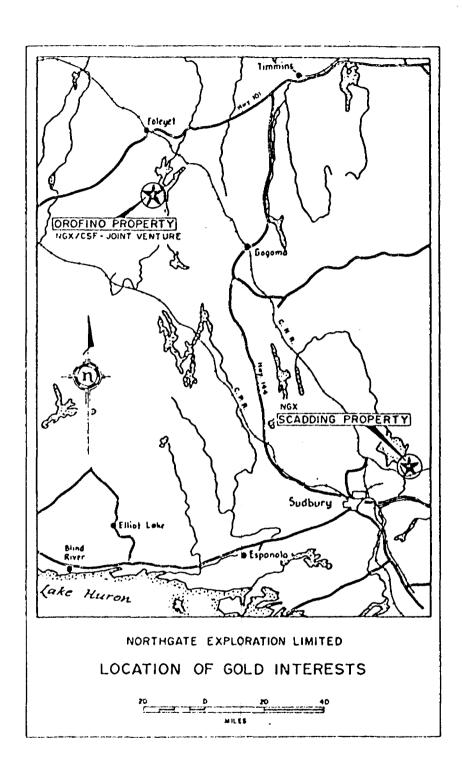
	(Ashigami Group) Project 772	
	\$346887-346903 incl.	17 claims
	\$346914-346916 incl.	3
	\$357986-357999 incl.	14
	\$359359-359360 incl.	2
	S373196	1
	S359343-359345 incl.	3
	S478876-478881 incl.	6
	S478886-478890 incl.	_5
		51 claims
2.	Project 723 Highway Group	
	S478823-478832 incl.	10 claims
3.	Project 724 Moose Rapids Group	
	S538663-538669 incl.	7 claims
	S538818-538833 incl.	16
	S546805-546831 incl.	27
	S551173-551222 incl.	50
	ossii/s ssizzz ziici.	100 claims
4.	Project 725 Spar Lake Group	
	S478916-478928 incl.	13 claims
	S478976-478979 incl.	4
	\$539398	1
	\$539389	1 .
	S478891	1
		20 claims
5.	Project 726 Southeast Bay Group	
	S539390-539397 incl.	8 claims
	\$539399-539403 incl.	5
	\$539384	1
		14 claims
6.	Project 727 Watt Group	
-		11 -1-1
	\$507801-507811	<u>ll claims</u>

TOTAL

An examination of the abstracts of the claims (Oct. 1/80) indicates the claims are all in good standing save for two possible disputes which are in the course of correction. The first action required was a boundary survey to fulfil lease requirements for (1) a four claim group enclosing the ore zones and (2) the Gulf Group. A geodetic survey has been completed to satisfy the lease requirements as well as provide profiles of the sections and accurate eastings, northings and azimuths for the drill holes completed. These sections have been replotted at 1:500 metric scale.

These claim groups are held in trust by Northgate Exploration pending the fulfillment of the salient terms of acquisition outlined in the following summary.

206 claims



PROPERTY LOCATION

- (a) a front-end payment satisfied by the issue of 110,000 treasury shares of Northgate Exploration.
- (b) reservation to the vendors of a 30% net profits royalty on ore removed from the property as well as assumption by Northgate of the "Gulf royalty" on the 40 claim group (\$1.00 per ton ore removed from the designated claims).
- (c) a commitment to spend in exploration and development work at least one million dollars within a period of 18 months following the date of the memorandum of agreement. The purpose of this program is to delineate an economically mineable orebody and bring the project to a positive feasibility stage. In the second stage it is provided that the ongoing development shall proceed under Northgate's elective right to production on a tonnage scale to be determined by the results of the above first stage program.

2.2 Location and Access (See Figure 2)

The Watt properties are located in the Sudbury District of Ontario, approximately 18 air line miles northeast of this main mining community. The population of Sudbury is currently at the 93,000 level. Road distance from the properties to the city centre via Trans Canada Highway #17 is 30 miles. An unnamed highway (locally known as the Ashigami Lodge road) leads from Highway 17 at the village of Callum northward nine miles to the site of the mineralized zone, some 1,200 feet west off this road. This road is of all-weather standard and will meet all the requirements of the exploration and development stages. Numerous logging roads originating from the Ashigami Lodge road provide ready access to all but the Moose River group to the southwest. Access to this group will involve moving in from the west via CNR tracks and offshoot roads west of the Wanapitei River. This river is a sizeable north-south flowing water course dividing the Moose Rapids group into approximately two equal segments.

Sudbury is 200 air miles (42 minutes north and slightly west of Toronto.)
Several flights (Air Canada) to and from Toronto serve this community daily.
In addition, NorOntair, the Ontario Government airline serving Northern Ontario, provides short hop links to the other mining and northern communities within its network of airports.

Charter fixed wing and helicopter services are available in Sudbury for some minimal needs in remote areas of the claim groups.

2.3 Auxiliary Services

2.3.1 Water

There are numerous lakes and water courses on and about the Watt properties. The major nearby lake is Wanapitei Lake, off to the northwest. This lake, approximately two square miles in a circular dimension, is the source of the water supply for the City of Sudbury and hence the lake and river of the same name passing through the property are environmentally sensitive. There are four smaller lakes (Bugg, Spar) within the property confines and a second large lake, Ashigami Lake, directly adjoining to the east. Water, therefore, is in ample supply subject to restrictions pertinent to the human consumption needs of the City of Sudbury.

There are numerous small creeks and brooks in local drill water supply.

2.3.2 Timber

In the vicinity of the known showings on the Ashigami group, a forest fire some 30 years ago burned a strip nearly a mile wide along a northeasterly trend across the eastern segment of the properties. Second growth has been scrub poplar and cotton wood. Elsewhere on the property, the regrowth of the spruce following the original log-off is now halfway to a mature stand.

Timber supplies for mining purposes are readily available in Sudbury.

2.3.3 Electrical Power and Energy

The electrical high tension power lines follow Highway 17, some 9 miles south of the mineral prospects. Ontario Hydro generates a local source of power on the Wanapitei system at Timmins Chute.

The gas pipeline serving Sudbury also follows Highway 17, a branch line from the main line at North Bay.

Except for the extension of these services to the site, there are ample sources of power and energy relatively close to the site.

2.3.4 Mining Equipment and Supplies

Sudbury is probably the best supplied and serviced mining centre in Canada. Many suppliers maintain warehouses in this region and materials are available on short notice.

Likewise, mining contractors such as MacIsacc at Sudbury, J. Redpath at North Bay, Raise at Elliot lake are close at hand and offer a full range of services for underground development and/or the production phases.

Sudbury has a good supply of skilled labourers of a high standard and accustomed to the top flight pay scale.

2.3.5 Transport

Road transport from the mine site to Highway 17 (Trans Canada) is nine miles. From this point, Copper Cliff is 20 miles west; Falconbridge 22 miles west and north; North Bay 65 miles to the east. Road haul to Noranda is 267 miles; to Pamour, near Timmins, is 326 miles.

The main line CNR (North Bay-Sudbury) crosses the Ashigami Lodge road three miles south of the mine site, and the nearest siding now existing is at Crerar, three miles to the east. A graded spur siding previously existed along the CNR line at the Ashigami crossing and can be rebuilt with minimal effort.

Since the railways follow the roads, rail distances to the main centres of interest closely approximate the road distances.

Sudbury airport is eight air miles due west of the mine site, but the road distance is 30 miles via Highways 17 and 541.

2.3.6 Environmental Sensitivity

Scadding Township has been logged off around the turn of the century. The second growth has been destroyed by at least two extensive forest fires which has left little in the way of merchantable timber currently.



TOPOGRAPHIC PLAN SHOWING LOCATION OF MINERALIZED ZONE D. K. WATT PROPERTY Scale 1:250,000

Figure 3

In the area of the mineral prospects, the trees are second growth poplar and cottonwood.

Drill cuttings must be kept from entering any water-course since the drainage is to the west into the Wanapitei system, source of the Sudbury drinking water.

The normal regulations regarding oil spill, sewage, overburden removal, etc., will be enforced with greater frequency since we are close and accessible from the Sudbury office.

Work : permits are required for our general exploration and development work.

Wood cutting permits have been granted to third parties over claims of the Watt properties. These people can be of concern since in their cutting activities they destroy survey markers, cut lines, etc. These permits should be discouraged by Northgate with valid reasons for objection.

2.4 Topography

The claim groups lie within the Precambrian glaciated peneplain. Elevations range from 900 to 1,100 feet ASL, but relief is rarely more than 50 feet in local situations. The south-central part of Scadding Township, especially Lots 5 to 8, Concession I, are drift-covered and devoid of outcrop. Elsewhere outcrop is reasonably plentiful (3-10%) and tends to occur as ridges, usually northwest trending. A thin mantle of overburden obscures the rock surface in most instances. Glacial outwash sand and gravel deposits are most common in the southern limits of the properties.

The swampy or marshy muskeg areas tend to be the areas of lowest elevation and are noted on the appended Figure 3. The drainage flows to the west and the south into the Wanapitei system.

2.5 Climate

The Sudbury District lies in a belt which experiences a continental climatic pattern modified slightly by the nearby Great Lakes.

The summer season, which begins in May and continues to mid-September, is accompanied by warm temperatures (average 20°C), but can be as high as 28 to 30°C for short periods. The summer season can be marred by persistent overcast skies, abundant rainfall and cool temperatures.

Spring and fall have considerable sunny, cool days with frost at night. Most of the rainfall (average 34 inches) comes during these seasons.

The winter may start as early as mid-October and last until May, but more frequently snow does not stay on the ground until mid to late November and disappears late in April. Snow accumulations, partly in late winter, are generally up to three feet in the bush and temperatures may drop below -40°C for short periods, generally in February.

3.0 Previous Work

See "Introductory Report, D. R. Watt Properties, Projects 772, 723, 724 725, 726 and 727, Scadding Township, Sudbury District, Ontario," W. W. Weber, November 7, 1980.

as follows: 2.1 Pre-World War II pgs. 7-8
2.2 Previous Work Post World War II pgs. 8-11
2.3 Uranium pg. 12
2.4 Recent Exploration pgs. 13-14.

3.1 Previous Work D. R. Watt (Gulf Option)

Ref. Summary Report - Gulf-Getty Joint Venture, Sudbury Project, Paul McLean, November 6, 1974.

The original showing now known as the East-West Zone was discovered in the thirties and at this time trenching, sampling and stripping of the overburden left their marks, which were not rediscovered until the mapping program of the Ontario Government in 1973.

Under the Gulf-Getty option, the work program in 1973 comprised further rock trenching and sampling, detailed geological mapping and a self-potential geophysical survey.

In 1974 the grid (100' spacing) was extended 4,000 feet to the west and geological mapping and a self-potential survey were completed on the new grid. In addition, magnetometer and electromagnetic surveys were completed over the entire grid. Limited soil sampling investigated the environs.

The field work was followed by a diamond drilling program comprising 20 holes (S-14-33) totalling 3,794 feet of coring. This work was almost entirely concentrated on the East-West Zone, as well as the geophysical anomalies.

Based on the drilling results, an ore shoot (East-West Zone) was calculated to contain 34,125 tons grading 0.303 oz. Au/ton. The property was allowed to go dormant until an agreement was reached on December 15, 1977 with Gulf Minerals, calling for the acquisition of a 40 claim group by D. R. Watt for the following considerations:

- (a) expenditure of \$200,000 on the 40 claims prior to December 15, 1979.
- (b) retention of a royalty of \$1.00 per ton on any ore milled from these claims.

3.1.1 D. R. Watt Program

During the early part of 1978, nine holes (1,847 feet) were completed on the property. The last four holes intersected the N-W Structure. In addition, grid lines were established on the 17W structure, and detailed mapping, magnetometer and self-potential surveys completed. A new gold showing was located 525 feet northwest of the previous drilling. A limited drill program, six holes (1,256 feet), was completed.

Following the recommendations of Paul McLean, the 1979 program comprised geological mapping¹, magnetometer surveys and 10,058 feet of drilling in 35 holes, mainly on the "Chimney and N-W Structure". A total expenditure

⁽¹⁾ Summary Report, November 15, 1978.

DRILL RESULTS, D.R. WATT PROGRAM

S-45 42.1- 44.4 2.3 .21 107.1-118.3 11.2 .18 S-46 40.6- 50.4 9.8 .25 W-6 121.3-122.5 1.3 .25 W-7 110-4-113.3 2.6 .18 W-8 113.5-120.1 6.6 .60 126.9-130.5 3.6 .073 143.0-148.5 5.4 .186 W-9 65.0-66.3 1.3 .44 109.1-116.7 6.6 .93 139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 <	Hole No.	Footage	Width	Average Grade
S-46 40.6-50.4 9.8 .25 W-6 121.3-122.5 1.3 .25 W-7 110-4-113.3 2.6 .18 W-8 113.5-120.1 6.6 .60 126.9-130.5 3.6 .073 143.0-148.5 5.4 .186 W-9 65.0-66.3 1.3 .44 109.1-116.7 6.6 .93 139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30	S-45	42.1- 44.4	2.3	.21
W-6		107.1-118.3	11.2	.18
W-7 110-4-113.3 2.6 .18 W-8 113.5-120.1 6.6 .60 126.9-130.5 3.6 .073 143.0-148.5 5.4 .186 W-9 65.0-66.3 1.3 .44 109.1-116.7 6.6 .93 139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33	S-46	40.6- 50.4	9.8	.25
W-8	W-6	121.3-122.5	1.3	.25
126.9-130.5 3.6 .073 143.0-148.5 5.4 .186 W-9	W-7	110-4-113.3	2.6	.18
W-9 65.0-66.3 1.3 .44 109.1-116.7 6.6 .93 139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-8	113.5-120.1	6.6	.60
W-9 65.0-66.3 109.1-116.7 6.6 139.5-147.3 7.8 118 160.5-175.3 14.8 309 184.2-193.5 9.3 063 W-10 50.7-55.0 4.3 49 W-12 60.7-62.7 1.8 15 W-24 48.5-64.8 16.3 097 88.0-96.0 8.0 333 W-25 82.4-85.0 2.6 14.1-16.1 2.0 341 209.9-232.5 22.6 341 209.9-232.5 22.6 341 209.9-232.5 22.6 341 209.9-232.5 22.6 355 409.2-412.0 2.8 155 W-30 166.5-175.0 8.5 211.6-279.5 67.9 397 W-31 233.0-241.5 8.5 237 W-33 258.7-259.7 1.0		126.9-130.5	3.6	.073
109.1-116.7 6.6 .93 139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 W-29 298.6-404.1 105.5 .35 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		143.0-148.5	5.4	.186
139.5-147.3 7.8 .18 160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-9	65.0- 66.3	1.3	.44
160.5-175.3 14.8 .309 184.2-193.5 9.3 .063 W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		109.1-116.7	6.6	.93
W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 W-30 166.5-175.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		139.5-147.3	7.8	.18
W-10 50.7-55.0 4.3 .49 W-12 60.7-62.7 1.8 .15 W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		160.5-175.3	14.8	.309
W-12 60.7- 62.7 1.8 .15 W-24 48.5- 64.8 16.3 .097 88.0- 96.0 8.0 .333 W-25 82.4- 85.0 2.6 .153 W-26 14.1- 16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		184.2-193.5	9.3	.063
W-24 48.5-64.8 16.3 .097 88.0-96.0 8.0 .333 W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-10	50.7- 55.0	4.3	
88.0- 96.0 8.0 .333 W-25 82.4- 85.0 2.6 .153 W-26 14.1- 16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-12	60.7- 62.7	1.8	
W-25 82.4-85.0 2.6 .153 W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-24	48.5- 64.8		
W-26 14.1-16.1 2.0 .10 W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16		88.0- 96.0		
W-28 147.6-170.2 22.6 .341 209.9-232.5 22.6 .108 W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-25	82.4- 85.0		
W-29 298.6-404.1 105.5 105	W-26			
W-29 298.6-404.1 105.5 .35 409.2-412.0 2.8 .15 W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-28			
W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16				
W-30 166.5-175.0 8.5 .53 211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-29			
211.6-279.5 67.9 .397 W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16				
W-31 233.0-241.5 8.5 .237 W-33 258.7-259.7 1.0 .16	W-30			
W-33 258.7-259.7 1.0 .16				
	W-33			
284.4-286.4 2.0 .09				
W-34 290.0-295.8 5.8 .846				
W-35 105.6-147.5 41.9 .299	W-35			
154.0-167.0 13.0 .073		= "		
W-43 21.0- 51.7 30.7 .274	W-43			
89.2- 92.4 3.2 .08				
105.3-119.6 14.3 .137				
W-44 62.9- 77.0 14.1 .276	W-44			
133.0-151.8 18.8 .099	11 AF			
W-45 84.7-101.0 16.3 .167	W-45			
117.5-120.2 2.7 .14 142.1-155.1 13.0 .338	,			
	11 16			
W-46 80.3-82.3 2.0 .17 104.0-110.4 6.4 .222	W-40			
139.8-144.8 5.0 .171				
155.2-170.4 15.2 .065				
182.8-186.8 4.0 .065				
W-47 109.8-120.0 10.2 .314	U_			
W-48 254.4-255.5 1.1 .10				
W-49 289.3-292.8 3.5 .30				

of \$245,416.29 in the specified two-year period fulfilled the second condition of acquisition.

In his summary report of January 15, 1980, P. McLean tabulated the results of the drilling and estimated the following reserves:

1) Chimney Shoot

a)	Sect.	1+00SE	and	0+50SE	81,896	tons	0	0.41	oz.	Au/ton
ь)	Sect.	0+50SE	and	0+00	135,800	tons	0	0.359	oz.	Au/ton
-		0+00			111,240	tons	0	0.304	oz.	Au/ton
d)	Sect.	0+50NW	and	1+00NW	68,400	tons	0	0.295	oz.	Au/ton
	TOTAL		TOTAL	397,336	tons	0	0.343	oz.	Au/ton	

2) N-W Structure

a) Sect. 5+50 NW ~ Sect. 6+50NW

		Shoot	•					Au/ton
ii)	Lower	Shoot	77,844	tons	(0	0.150	oz.	Au/ton
		TOTAL	107,548	tons	0	0.175	oz.	Au/ton

Combined with the East-West Zone defined in 1974, the total estimated drill indicated ore reserves were calculated to be 539,049 tons grading 0.307 oz. Au/ton.

The author then visited P. McLean and examined the core at his residence in North Bay, and completed an appraisal report (March 21, 1980) evaluating the ore reserves and additional ore potential.

In this report the estimated ore reserves were defined on the less optimistic standard of the Association of Professional Engineers and were as follows:

1) Drill Indicated Ore

East-West Zone	34,125 tons @ 0.30 oz. Au/ton
North-West Zone	36,180 tons @ 0.227 oz. Au/ton
Intermediate or Chimney Zone	163,100 tons @ 0.251 oz. Au/ton
TOTAL	233,405 tons @ 0.254 oz. Au/ton

2) Possible Ore

South-East Zone Intermediate Zone North-West Zone		14,640 tons @ 0.325 oz. Au/ton 15,600 tons @ 0.304 oz. Au/ton 12,480 tons @ 0.06 oz. Au/ton
	TOTAL	42,720 tons @ 0.24 oz. Au/ton

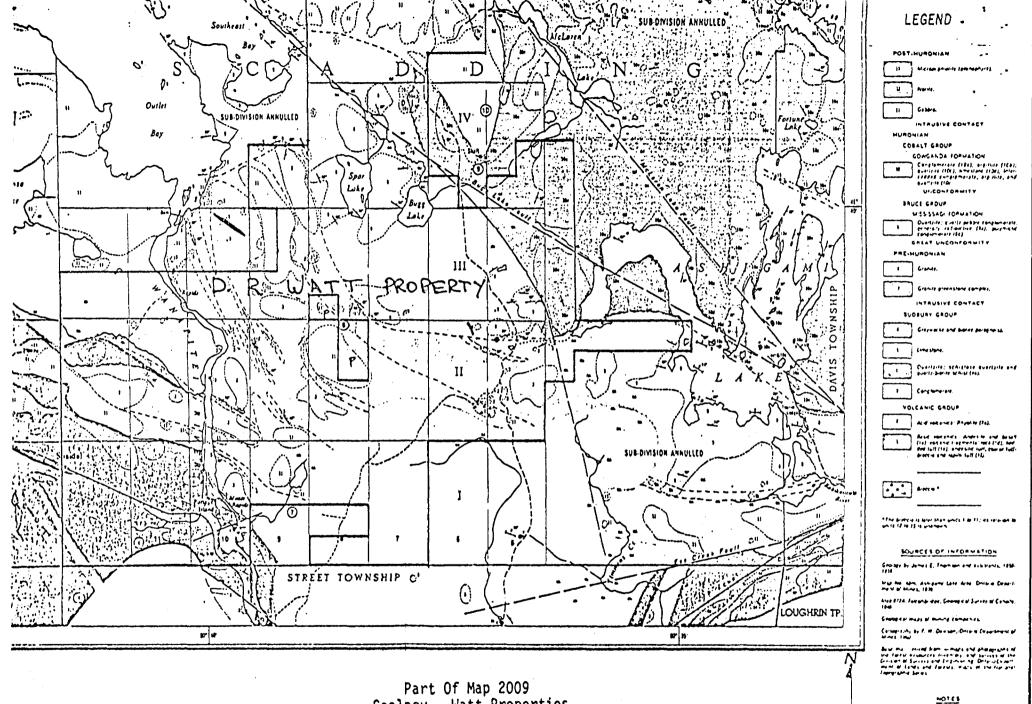
In addition, it was reported that the ore potential may be of the order of 500,000 tons, but 8,000 feet of coring on specified sections was required to effectively drill indicate this possible potential.

4.0 General Geology of the District

See "Introductory Report ... Scadding Twp., ... November 7, 1980, W.W. Weber. pgs. 17-36.

4.01 Structural Geology

See "Introductory Report ... Scadding Twp., ... November 7, 1980, W.W. Weber, pgs. 41-45.



Part Of Map 2009 Geology - Watt Properties Scadding Twp. Scale 1:19641 Figure 4

Majorie decourant anno il maior P. maai, 1827.

4.1 Local Geology of the Watt Properties

Reference P. McLean Report, January 15, 1980

The Watt claims are mainly underlain by Serpent quartzite, Bruce limestone, and Bruce conglomerate. Gowganda conglomerate and argillite occur on the eastern section of the property. A large sill of Nipissing diabase underlies the southernmost claims. Northwesterly-trending olivine diabase dikes are present in some areas of the property. (See Figure 4)

A strong northerly-trending fault zone passes through the east arm of Ashigami Lake, where Gowganda conglomerate is faulted against Mississagi quartzite. This structure is marked by intense brecciation and pyrite mineralization, but does not carry gold values.

The East-West Gold Structure.

The east-west zone is situated within the Serpent quartzite near the base of the formation. The structure consists of an east-west striking chlorite breccia zone which dips 65° to the south. The host quartzite has been intensely chloritized and varies from 10% to 90% chlorite. Gold values are associated with the chlorite, usually where it is well mineralized with pyrite or pyrrhotite or locally with arsenopyrite. A little chalcopyrite may also be present, along with a minor amount of vein quartz.

As previously mentioned, it is estimated that this zone contains 34,125 tons of material grading 0.303 oz. gold per ton. Recent drilling has shown that this zone plunges at 45° to the west and that the gold values do not extend beyond the area outlined by Gulf.

The 17 West Gold Structure:

Previous work has indicated the presence of a strong northwesterly trending chlorite breccia zone in the 17 west area. This zone is similar in appearance to the east-west structure except for the absence of arsenopyrite, and the presence of more fine visible gold.

The structure varies from 10 feet up to 135 feet in width and has frequently been offset by faulting. Several post-ore olivine diabase dikes intrude the zone and displace it by as much as their widths. A 100 foot wide dike near the south end of the explored area displaces the structure some 100 feet to the west.

Results of the recently completed drilling program have confimed that the 17 west structure is an important locus for the deposition of gold ore shoots. The zone has now been partly tested by drilling for a length of 1,250 feet, and has been found to contain at least three ore shoots having a substantial aggregate tonnage of ore grade material. The breccia zone remains unexplored beyond this length and it is expected to continue in both directions. The structure has been intersected down to a vertical depth of over 400 feet and is thought to persist to depth. Gold values are present on the surface some 200 feet southeast of the last hole in this direction and chlorite boulders have been found some 1,200 feet on strike to the northwest of the most northerly drill holes.

STRATIGRAPHIC SEQUENCE - ASHIGAMI PROPERTY*

FORMATION	UNIT	LITHOLOGY	Au MINERALIZED ZONES
Serpent Fm.	Diabase Dykes Upper Quartzite Unit	a clean quartzite, gradational from lower unit	•
berpent rm.	Upper Chlorite Zone	5-15 m thick, gradtional from lower unit, abundant facies changes; a dirty quartzite with locally abundant chlorite.	
	Intermediate Quartzite Zone	30-60m thick, gradational from lower unit, A cleaner quartzite with rare chlorite zones and no evidence of facies changes.	
	Intermediate Chlorite Zone	5-60m thick, gradational from lower unit. Abundant facies changes and interbedding with adjacent units; a dirty quartzite with locally abundant chlorite. Au present usually at interface of chlorite rich and poor zones.	N.W. Zone, Main Zone, N33-N34 Zone
	Lower Quartzite Unit	25-50m thick, gradational from lower unit, facies changes less evident, a cleaner quartzite with very minor chlorite zones.	
	Lower Chlorite Zone	t and the contains added the body desty quart	EW. Zone, W35 Zone, S51-S52 Zone
	Transition Zone	0-25m thick, abundant facies changes, lenses of dirty quartzite, limestone, siltstone, greywacke conglomerate. Gradational from below. In extreme north unit is in excess of 50 m thick.	
Espanola Fm.	Limestone Unit	A coherent unit of limestone or limestone breccia with minor interbedded sandstone lenses in excess of 20 m thick.	

^{*}This sequence is based on an interpretation of sections, updated to 15-1-81, by G. Harper.

4.1.1 Recent Geological Information

The 1980 drilling by Northgate, combined with previous drilling and surface mapping, has allowed gradual build up of a detailed picture of stratigraphic and structural complexity of the central property area. The Espanola Formation limestone unit has been defined as the local base above which a 230 metre maximum thickness of Serpent Formation is detailed. In keeping with similar Huronian Supergroup sediments elsewhere in the Southern Province the sequence has been cross-folded and faulted along ENE and NW-NNW trends. The local sequence has been metamorphosed to upper greenschist facies and is characterized by zones of strong alteration; chloritization, carbonatization, epidotisation, silicification and feldspathization. Na, Fe and Ca are relatively enriched and K and Mg depleted.

There is a gradual transition from typical Espanola limestone up into the Serpent quartzite through a zone containing bands or lenses of limestone, limestone breccia, sandstone, siltstone and chloritic quartzite. The latter, refered to as the lower chlorite zone, is believed to be the result of metamorphism of an originally "dirty" clayey sandstone. This is overlain by another chloritic quartzite zone and then more "clean" quartzite. This is referred to as the intermediate chlorite zone as there are indications that there may be another dirty to clean quartzite cycle above this. Individual units vary in thickness rapidly suggesting considerable facies variation and rapid deposition in a high energy environment.

Folding about an easterly axis, with cross-folding about a NNW axis has resulted in an overturned south dipping limb at the south, reappearing as a gently southeast dipping limb in the north and dipping moderately to steeply to the east around the western limits of an easterly plunging syncline. Faulting roughly parallels each fold trend resulting in horst and graben style movement of local blocks.

Two ages of diabase dikes cut the folded sequence but have been offset by faulting.

4.1.2 Mineralization

Gold mineralization is localized within the chloritic zones where it is associated with pyrite and in the East West Zone, with arsenopyrite and pyrrhotite. The mineralized zones form shoots which appear to rake in conformity with the plunges of both directions of folding and are commonly within an envelope of brecciation and strong alteration.

The gold values appear to be concentrated in four separate areas.

1) South Zone

Near the south end, west of the E-W zone, gold values were encountered in holes W-34 and W-35. This zone will be drilled in 1981. The intersections indicate the zone to be a small lens, possibly 100 feet in length on strike and similar to the East-West Zone.

2) East-West Zone

This canoe-shaped lens lies between 9746 to 9840 sections in the lower limits of the Serpent quartzite. The strike is east-west and the plunge is to the southwest. The length is approximately 100m with a maximum width of 18m and an average width of 4m. The deepest point of the ore established in the current drilling is 45m. The presence of arsenopyrite in the ore is unique to this zone. Subject to the final definition of the ore zone in the current drilling, the ore is estimated at 30.000 tons grading 0.30 oz Au/ton.

3) Intermediate Zone

This ore lens has a length of 60m, a width up to 35m and an average thickness of 12m. The strike is N30°W and the plunge is to the southeast at approximately 65° apparent. The maximum depth of ore encountered is 140m below surface. It lies between 2+30 to 2+90NW.

The year end evaluation of the ore tonnage in this zone is 140,267 grading 0.138 oz. Au/ton.

N-W Zone

This zone is located between 4+24 to 4+54 Sections on the N-W Grid. Thelength is 42 m. and the local spreading on section 4+54 has a maximum width of 107m. The thickness averages 17m. The strike is N25°W and the plunge an apparent 35° to the southeast.

The year end estimate of ore in this zone is 90,487 tons grading 0.160 oz. Au/ton.

4.2 Additional Exploration 1980

4.2.1 Line Cutting

Three grids have been established on the property. No. 1 grid follows the N-W Structure with the base line oriented at N25°W and lines at 50 feet separation with stations at 50 foot intervals covering the area of interest adjacent to and on the extension of the ore horizon. Total line miles- 42.98.

Grid No. 2, the former McLean grid, has been refurbished and re-chained (N-S). Lines at 100 foot intervals and 50 foot stations have been re-established on this group of claims lying to the north of Grid No. 1. A total of 26.4 line miles was involved in this grid.

Grid No. 3 is a regional grid, (N-S and E-W), covering the outlying claims with lines at 100m separation and sections at 30m intervals. A total of 102 line miles has been completed as follows:

- (a) 18.5 line miles Conc. I, Moose Rapids Group, 724
- (b) 47.0 line miles Conc. II, (i) Moose Rapids and Highway Group, 723-724 - 35.3 line miles
 (ii) Ashigami, 772 - 11.7 line miles
- (c) 2.0 line miles Conc. III, Ashigami, 772
- (d) 34.5 line miles, Conc. IV, (i) Ashigami, 772 3.5 line miles (ii) Spar Lake, 725 - 31.0 line miles

An appended plan of the line cutting (Plan 101), shows the extent and orientation of the completed lines as of December 31, 1980.

4.2.2 Surveying

The prime purposes of the surveys were three fold:

- (i) to establish the boundary lines of the lease areas
- (ii) to pick-up site locations of the new and old drill holes and produce profiles for the sections.
- (iii) establish a ground control for the photogrammetric aerial survey.

Geodetic elevations have been established on the property from the base on the C.N.R. transcontinental line.

The surveying currently is:

- (i) completed, filed and accepted for the small lease area (4 claims)
- (ii) completed in the field except for pick-up of the original claim posts for the 40 claim lease area
- (iii) completed for the location (co-ordinates and elevations) for 88 drill holes as well as profiles of sections within the ore zones
- (iv) completed for the establishment of numerous ground control stations necessary for the accurate production of the photogrammetric base plans covering the entire 8,500 acre property.

4.2.3 Photogrammetric Survey

This aerial survey was flown in late October to produce topographic base maps for the entire property.

The base plans from the 1:8,000 photography will be produced as a mosaic for the entire property with the plans for field work at 1:2,000 and local detail in the areas of potential production at 1:500.

The preliminary plans have been received and final copies will be ready well in advance of the spring field work.

4.2.4 Magnetometer Survey

In the 1980 program, the field work commenced in mid-December and 539 stations were recorded on the No. 1 Grid mainly to assist the drilling program.

In 1981, the entire claim groups will be covered by magnetic and EM-16 VLF surveys.

4.2.5 Site Clearance and Roads

Over 800m of gravel roads were built to provide access to the campsite, drill holes and sites of the ore zones.

- (i) Kukigami Road to Campsite 400m
- (ii) Kukigami Road to East-West Zone 200m
- (iii) Campsite to N-W Zone 200m

In addition an area $50 \times 70m$ was levelled and filled to produce the campsite. This work required the movement of 3,960 cubic yards from a local gravel pit.

Site clearance or overburden removal was completed for three areas:

- 1. N-W Zone $15m \times 15m$
- 2. Intermediate Zone 100m x 80m
- 3. E-W Zone $80m \times 30m$

The bulldozing of the overburden involved an estimated removal of 10,625 cubic metres.

In the spring, the light soil cover will be hy 'aulically removed to expose the bare rock for detailed mapping.

4.2.6 Campsite

An office-core logging trailer, a mobile home trailer, complete with a 4500KW electrical generator and electric system, propane lighting and heating, and a septic sewage system have been installed on the campsite.

A radio-telephone service is now operable providing direct contact with the site.

Over 40,000 feet of core racks have been built to provide core storage for the drill programs.

5.0 1981 Budget Data

Project 772 - Ashigami Lake

Total Budget: \$849,830.00 Possible OMEP Grant: \$150,000.00

Net Cost \$699,830.00

1980 Program: This exploration activity started October 2, 1980. The principal thrust has been diamond drilling of the Intermediate or Chimney Zone and the N-W structure. In addition, a camp has been established; lines cut and grid refurbished; lease survey and drill hole survey underway; and bulldozer clearance of overburden on the 3 known mineralized areas.

1981 Program: Line cutting and geophysics expected to be completed by year end will extend into the 1981 period. Drilling footage has exceeded expectations in 1980 but the complexity of the structure and erratic nature of the gold will require further extensive drilling especially in the first quarter of 1981. This attempt to outline and extend the ore reserves will be the prime activity for the next two months with greater emphasis in the summer on the possible repetition of the gold occurrences on the untested portions of the Ashigami Lake group. Reconnaissance programs to pinpoint potential target areas will be carried out at this time on the five adjoining projects.

Details of the work program and the scheduled rate of cash outflow are appended to this report.

Project 723 - Highway Block

Total Budget: \$ 31,000.00

Project 724 - Moose Rapids Group

Total Budget: \$122,000.00

Project 725 - Spar Lake Group

Total Budget: \$ 87,000.00

Project 726 - Southeast Bay Group

Total Budget: \$ 31,000.00

Project 727 - Watt Group

Total Budget: \$ 31,000.00

Although these projects have been budgeted separately, for descriptive purposes and field operational purposes, they have been grouped together.

All five blocks of claims adjoin the central Ashigami Lake group (772), containing the gold deposits referred to as the D.R. Watt Prospect. These surrounding protective claims have had little detailed work other than locally around some old prospects. In view of the careful prospecting required to locate showings, as demonstrated by Paul McLean, the work programme envisaged for these claims starts from grass roots.

Line cutting initiated in 1980, will be completed as soon as snow conditions allow in 1981. Approximately 250 line kms. will be cut in April-May 1981. by a contractor.

Geological mapping will cover all claims with greatest detail in the areas along strike from the showings, i.e. Spar Lake and Highway Blocks. Prospecting will be undertaken in conjunction with mapping.

Areas of interest defined by mapping and prospecting will be subjected to small humus sampling grids.

Detailed ground magnetic and VLF-EM surveys will cover all claim blocks.

It is anticipated that at least one prospect will be discovered that warrants drilling, probably on the Spar Lake Block, along strike from the existing N-W Zone.

Serpent Formation quartzites and conglomerates, which host the D.R. Watt gold mineralization outcrop on the various claim blocks in the following estimated proportions:

723	Highway Block	5	7	of	area
724	Moose Rapids Group	15	%	of	area
725	Spar Lake Group	80	%	of	area
726	Southeast Bay Group	20	%	οf	area
727	Watt Group	15	%	of	area

Estimated expenditures have been distributed to reflect the proportion of Serpent Formation rocks underlying each grouping with the exception of specific logistic-related costs.

G. Harper Chief Geologist

W. W. Weber Manager Exploration N.A.

Toronto, Ontario February 4, 1981

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LIST OF PLANS - 1980

			**************************************	Scale	Plan No.			
Northwest Zone								
Plan o	of Drill	Holes -	North Sheet	1:500	772-500-1			
11 11		н	South Sheet	11	772-500-2			
Drill	Section	110 NW		H	772-500-3			
11 .	"	123 NW		H	772-500-4			
11	11	137 NW		II .	772-500-5			
11	11	153 NW		lt .	772-500-6			
н	11	169 NW		n	772-500-7			
11	11	182 NW		H	772-500-8			
11	11	198 NW		11	772-500-9			
11	71	225 NW	·	11	772-500-10			
11	17	232 NW		11	772-500-11			
11	11	240 NW		11	772-500-12			
11	11	257 NW		11	772-500-13			
11	11	272 NW		11	772-500-14			
11	11	288 NW		H	772-500-15			
11	11	303 NW		n	772-500-16			
11	**	318 NW		11	772-500-17			
11	18	362 NW		11	772-500-18			
11	11	393 NW		11	772-500-19			
11	11	424 NW		11	772-500-20			
11	17	439 NW		11	772-500-21			
11 .	11	454 NW		11	772-500-22			
11	11	469 NW		11	772-500-23			
11	71	484 NW		t i	772-500-24			
11	11	499 NW		11	772-500-25			
11	11	531 NW		11	772-500-26			
11	11	588 NW		11	772-500-27			
		J00 NW			772 300 27			
East V	Vest Zon	e						
D1	of Drill	Volos		1:250	772-500-28			
		9851 E		11	772-500-29			
DETII	266.6.1011	9836 E		11	772-500-30			
**	11	9821 E		11	772-500-30			
11	11	9791 E		11	772-500-31			
11	11	9776 E		11	772-500-32			
11	11	9761 E		1)	772-500-34			
11	11	9761 E 9746 E		11	772-500-35			
11	11			11	772-500-35			
11	11	97385 E 97275 E		11	772-500-30			
		31213 E			772~300~37			
Longit	udinal	Section	along Baseline	1:250	772-500-38			
Level		05M		II	772-500-39			
11		00M		11	772-500-40			
11		95M		11	772-500-41			
11		90M		11	772-500-42			
11		85M		11	772-500-43			
H		80M		H	772-500-44			
**		75M		11	772-500-45			

SCHEDULE I

SCADDING TWP. - DRILLING

DDH	LOCAT:	ION EAST	ELEV.	DlP	BEAR.	рертн	METRIC SECT.	GULF SECT	DATE STARTED	DATE COMPLETED
N-1	5054.4	9497.2	318.9	-45°	S65°W	78.3M	272	0+50NW	10/ 2/80	10/ 5/80
N-2	5070.7	9533.8	318.1	-45°	865°W	122.3M	272		10/ 7/80	10/ 9/80
N-3	5070.7	9533.5	318.1	-60°	S65°W	141.4M	272		10/16/80	10/19/80
N-4	5085.7	9566.5	312.3	-60°	S65°W	183.2M	272		10/20/80	10/17/80
N-5	5049.6	9561.8	311.8	-45°	S65°W	154.5M	240		10/28/80	11/ 5/80
N-6	5056.9	9541.0	315.5	-70°	S65°W	191.1M	257	0+00	11/ 3/80	11/12/80
N-7	4928.9	9507.7	308.3	-45°	S65°W	104.2M	153		11/14/80	11/12/80
N-8		9533.9	312.0	-51°	365°W	144.8M	169		11/17/80	11/10/80
N-9	4957.1	9572.3	313.3	-45°	S65°W	162.1M	182		11/17/80	11/21/80
	4966.8	9540.0	315.5	-45°	S65°W	102.1M	257	0+00	11/28/80	11/2//80
N-10	5056.4			-90°	- 30J W	87.2M	240		12/ 3/80	
N-11	5012.1	9476.8	320.2		_ S65°W	187.5M		0+00		12/ 5/80
N-12	5087.7	9612.4	315.5	-45°			257	0+00	12/ 7/80	12/13/80
N-13*	4994.0	9836.0	300.3	- 0°	0°.	17.4M			12/15/80	12/16/80
N-14*	4995.0	9828.3	300.7	- 0°	0°	16.5M			12/16/80	12/16/80
Ì					holes dri			5**		
N-20	5294.0	9582.0	302.6	-45°	S65°W	130.1M	454		10/ 6/80	10/ 9/80
N-21	5294.5	9583.2	302.7	-90°	<u>-</u> '	122.2M	454	6+50NW	10/ 9/80	10/13/80
N-22	5269.2	9494.8	305.0	-45°	S65°W	76.5M	469	7+00NW	10/14/80	10/16/80
N-23	5269.5	9495.7	305.0	-90°	-	84.1M	469	7+00NW	10/16/80	10/18/80
N-24	5284.5	9493.1	304.5	-90°	-	74.0M	484	7+50NW	10/20/80	10/22/80
N-25	5319.2	9582.1	301.9	-90°	-	121.3M	484	7+50NW	10/24/80	10/26/80
N-26	5242.1	9509.7	307.2	-90°	: ::::	137.8M	439	6+00NW	10/27/80	10/30/80
N-27	5255.2	9502.9	306.5	-90°	-	115.1M	424	5+50NW	10/31/80	11/ 8/80
N-28	5219.2	9457.2	310.7	-90°	-	-62.5M	439	6+00nw	11/ 9/80	11/12/80
N-29	5205.1	9464.3	312.0	-90°	-	85.3M	424	5+50NW	11/13/80	11/15/80
N-30	5183.5	9422.1	310.6	-90°		99.1M	424	5+50NW	11/17/80	11/19/80
N-31	5230.9	9520.8	309.2	-90°	-	125.3M	424	5+50NW	11/21/80	11/24/80
N-32	5230.8	9520.6	309.3	-75°	s65°W	97.5M	424	5+50NW	11/25/80	11/27/80
N-33	5297.3	9445.1	304.7	-90°	-	64.9M	499	8+00NW	11/29/80	11/30/80
N-34	5278.6	9443.8	304.6	-45°	S65°W	45.1M	499		12/ 1/80	12/ 2/80
N-35	5291.2	9472.7	302.9	-45°	s65°W	49.5M	499		12/ 4/80	12/ 5/80
ท−36	5291.8	9473.8	302.8	-90°	_	44.8M	499		12/ 5/80	12/ 6/80
N-37	5308.5	9431.6	301.8	-45°	s65°W	93.6	531		12/ 8/80	12/ 9/80
N-38	5374.0	9436.8	300.3	-45°	S65°W	185.3			12/11/80	12/16/80
N-30	J3/4.U	7450.0		7.7	OUJ A	100.0		44 1 0 0 11 W	12/11/00	12/10/00

SCADDING TWP. - ORE INTERSECTIONS

DDH #	Intersection	Core from	Footage to	Length	Au oz/ton gm/tonne	* - ·
N-1	1	123.0' 37.49m	126.0' 38.41m	3.0' 0.91m	0.17 . 5.829	
	2	141.3' 43.07m	143.7' 43.90m	2.4' 0.73m	0.21 7.200	
	3 .	162.9' 49.65m	168.2' 51.27m	5.3' 1.62m	0.58 19.886	
	3a	159.0' 48.46m	168.2' 51.27m	9.2' 2.81m	0.36 12.343	,
	4	197.5' 60.20m	199.1' 60.69	1.6' 0.49m	0.30	
N-2	1	220.3' 67.15m	224.3 ¹ 68.37m	4.0' 1.22m	0.180 6.172	
,	2	240.7° 73.37m	247.0' 75.29m	6.3' 1.92m	0.106 3.635	
	3	280.3 ¹ 85.44m	283.3 [†] 86.35m	3.0 ¹ 0.91m	0.316 10.836	
	3a	286.4' 87.30m	290.9' 88.67m	4.5' 1.37m	0.166 5.692	
	3ъ	280.3 ¹ 85.44m	290.9' 88.67m	10.6' 3.23m	0.166 5.692	
	4	354.9' 108.18m	358.5 ¹ 109.27m	3.6' 1.09m	0.220 7.544	
N-3	la	276.6' 84.31m	282.5' 86.11m	5.9 ¹ 1.80m	0.177 6.378	
	1ъ	276.6' 84.31m	286.5' 87.33m	9.9' 3.02m	0.126	
	2	305.0' 92.97m	307.6' 93.76m	2.6' 0.79m	0.45	
	3	330.0' 100.59m	332.6' 101.38	2.6' 0.79m	0.14 4.801	
	4	340.5' 103.79	357.0' 108.82m	16.5' 5.03m	0.302 10.698	
	5	370.3' 112.87m	372.7 ¹ 113.60m	2.0' 0.61m	0.097 3.429	
N-4	No ore intersection	ns			•	
N-5	1	254.9° 77.70m	256.7' 78.24m	1.8° 0.55m	0.270	
	2	363.6' 110.83	366.8' 111.80m	3.2' 0.97m	0.118	

_	·	, .	_	. .			
.D	DH #.	Intersection	Core from	Footage to	Length		u gm/tonne
N	1-6	1	164.2° 50.05m	167.5' 51.05m	3.3' 1.00m	0.167	5.726
N	1-7	No ore intersections	•				
N	1-8	No ore intersections	•		•		
N	1-9	No ore intersections	•				
N	N-10	1	287.6' 87.66m	309.5' 94.34m	21.9° 6.68m	1.10	37.723
		2	287.6' 87.66m	331.4' 101.01m	43.8' 13.35m	0.603	20.68
	•	3	359.3' 109.51m	360.9' 110.00m	1.6° 0.49m	0.480	16.46
N	V-11	1	33.9' 10.33m	36.6' 11.16m	2.7' 0.83m	0.161	5.513
		2	72.6' 22.13m	73.8' 22.49m	1.2' 0.36m	0.040	1.369
			73.8' 22.49	75.1' 22.89m	1.3' 0.40m	0.340	11.643
		2a	72.6' 22.13m	75.1' 22.89m	2.5' 0.76m	0.196	6.712
		3	134.8' 41.08m	136.8' 41.70m	2.0° 0.62m	2.470	84.589
		3a	125.8' 38.34m	136.8' 41.69m	11.0° 3.35m	0.558	19.109
			122.3' 37.27m	136.8' 41.69m	14.5 ¹ 4.42m	0.438	16.438
		4	180.8' 55.11m	184.1' 56.11m	3.3° 1.0m	0.682	23.356
		4a	189.6' 57.79m	196.5' 59.89m	6.9' 2.1m	0.426	14.589
		4b	197.7' 60.26m	201.7' 61.48m	4.0' 1.22m	0.195	6.678
		4 c	208.0' 63.40m	215.0' 65.53m	7.0' 2.13m	0.160	5.479
		4d	180.8' 55.11m	217.7' 66.35m	36.9 ¹ 11.24m	0.203	6.592
N	I-12	1	568.0' 173.12m	571.5' 174.19m	3.5° 1.07m	0.32	10.958
e de la companya de l			571.5' 174.19m	574.5' 175.11m	3.0' 0.92m	0.04	1.369
		2	577.0' 175.87m	580.0' 176.78m	3.0' 0.91m	0.13	4.452
		2a	568.0' 173.12m	580.0' 176.78m	12.0' 3.66m	0.138	4.726

DDH #	Intersect		Footage	Length		u
·····	·	from	to		oz/ton	gm/tonne
ท-20	No Ore	Intersections				
N-21	1	174.6' 53.22m	179.0' 54.56	4.4° 1.34m	0.135	4.623
N-22	1	87.0' 26.52m	88.0' 26.82m	1.0' 0.32m	0.22	7.534
N-23	No Ore	Intersections				
N-24	No Ore	Intersections				
N-25	No Ore	Intersections				
N-26	1	262.6° 80.04m	265.2 [†] 80.83m	2.5° 0.79m	0.342	11.712
N-27	1	168.2' 51.26m	169.2' 51.57m	1.0' 0.31m	0.37	12.67
	2	175.3' 53.43m	176.6 ¹ 53.82m	1.3' 0.39m	1.58	54.10
	3	200.6' 61.14m	201.6' 61.44m	1.0' 0.30m	0.69	23.630
	4	211.0° 64.31m	214.0¹ 65.23m	3.0' 0.92m	0.23	7.876
	5	219.0' 66.75m	221.0' 67.36m	2.0 ¹ 0.61m	1.08	36.986
N-28	No Ore	Intersections				
N-29	No Ore	Intersections				,
N-30	No Ore	Intersections				
N-31	1	321.1' 97.87m	323.1' 98.48m	2.0' 0.61m	0.100	3.425
	2	355.2' 108.26m	356.2' 108.57m	1.0' 0.31m	0.110	3.767
N-32	No Ore	Intersections				
N-33	1	54.4 ¹ 16.58m	55.4' 16.88m	1.0' 0.30m	0.26	8.904
	2	81.8' 24.93m	83.0 ¹ 25.30m	1.2' 0.37m	0.25	8.562
N-34	No Ore	Intersections				
N5	1	128.5 ¹ 39.17m	134.0' 40.84m	5.5° 1.67m	0.110	3.767
N-36	No Ore	Intersections				
N-37	No Ore	Intersections				
N-38	No Ore	Intersections				

Service Servic

SCHEDULE II

Northgate Exploration Limited
Project 772 Scadding Twp. Budget 1981

Code	Activity	Active <u>Party</u>	Total Cost	Labour <u>Requirement</u> NGX	Labour Cost NGX	Remarks
120 107 116 201	Line cutting Legal Ground Rent Photogrammetry Survey Control	Contract Subtotal Contract Contract	\$ 9,000 10,000 1,000 \$ 20,000 9,400 3,100	•		60 KM * H.O. Expense Acquisition * Shared with Operations * """"""""""""""""""""""""""""""""""""
201 Geology	Patent Survey	Contract Subtotal	25,000 \$ 37,500			• H H H
201 201 206 228 228	Recce Detail Project Geologist Trenching Sampling Assays	Contract Contract NGX NGX Subtotal	5,000 10,000 7,500 6,000 1,000 \$ 29,500	20 md. 40 md. 60 md. 30 md.	7,500 4,500	Scale 1:2500 Scale 1:500
Geochem	nistry					
330 330 301 304	Recce Detail Supervision Assays	NGX NGX Contract Subtotal	7,000 4,400 7,500 34,200 \$ 53,100	40 md. 30 md. 60 md.	3,500 4,000	3,500 samples 2,200 samples-Summer studei Assistant 5,700 samples
Geophys	sics					
437 436 437 436 401 406	Recce VLF Recce Mag. Detail VLF Detail Mag. I.P. Supervision/Consulting	NGX/C NGX/C NGX/C NGX/C Contract Contract Subtotal	6,000 4,800 6,600 5,280 17,500 5,000 45,180	20 md. 20 md. 30 md. 30 md.	5,000 4,200 5,300 4,800	60 KM 60 KM 66 KM 66 KM 35 KM

	Project /	//2 - (Cont a)		· .			rage Z
	Code	Activity	Active Party	Total Cost	Labour <u>Requirement</u> NGX	Labour Cost NGX	Remarks
	Drilling	L					
	501 506 506 504	Drilling Supervision Core Grabber Assays	Contract NGX NGX Subtotal	\$360,000 15,000 7,500 20,000 \$402,500		15,000 7,500	20,000 ft. * 6 mos. * 6 mos. * 2,000 samples
:	Transport	<u>t</u>			•		Ţ
1	603 607 645 602 645	Gas, Oil Repairs Registration-Insce. Airlines etc. Leased or Rental Vehicles Shipping charges	Subtotal	\$ 5,000 1,500 2,250 10,000 2,000 \$ 20,750			20,000 KM
!	Campsite	•		•			
	701 702 703 705 708	Construction & Write Off Equipment & Write Off Supplies Motel Communications		12,000 15,000 17,500 4,000 8,000	700 md.	•	* Radio telephone - shared
1	749	Cook		6,000			Operations Cook 4 mosshared
			Subtotal	\$ 62,500	•		Exploration
.	Regional	Office					
	806 808 803 806 809 809	Driver-Expediter Communications Vehicle Expense Supervision Drafting Typist	NGX NGX Contract Contract Subtotal	6,000 2,000 8,000 15,000 3,000 2,000 36,000	, , ,	4,000	4 mos. 6 mosshared Exploration
	1	•					

Project //2 - (Cont'd)			Page 3
Code Activity	Active Party	Total Cost	Labour Labour <u>Remarks</u> Requirement Cost NGX NGX
Head Office		• •	
901 Consulting 902 Equipment 903 Supplies 904 Assays 905 Rent O.H.	NGX	\$ 20,000 2,500 2,500 1,000 20,000	<pre>\$ 20,000</pre>
906 H.O. Reports 908 Communications	NGX	10,000 2,500	* shared operations
909 Secretary 910 Drafting 955 Appraisals 956 Soc. Conventions 957 Library		8,000 10,000 5,000 2,000 1,000	* shared operations
	Subtotal	\$ 84,500	
<u>Recap</u>			<u>Personnel</u>
100 Series 200 Series Survey 200 Series Geology 300 Series 400 Series 500 Series 600 Series 700 Series 800 Series 900 Series		\$ 20,000 37,500 29,500 34,200 45,180 402,500 20,750 62,500 36,000 84,500	Mgr. of Exploration Cons. Geologist Project Geologist Core Grabber Em & Mag Technician Mapping Geologist Student Assistants Secretary H.O. Casual Labour Driver-Expediter Cook 40% 120 md. 120 md. 120 md. 120 md.
10	Total % Contingency	\$772,630 	
Le	ss Poss. DMEP	150,000	
N. 0	G.X. Net Cost	\$699,830	

SCHEDULE III

ORTHOPHOTOGRAMMETRIC SURVEY

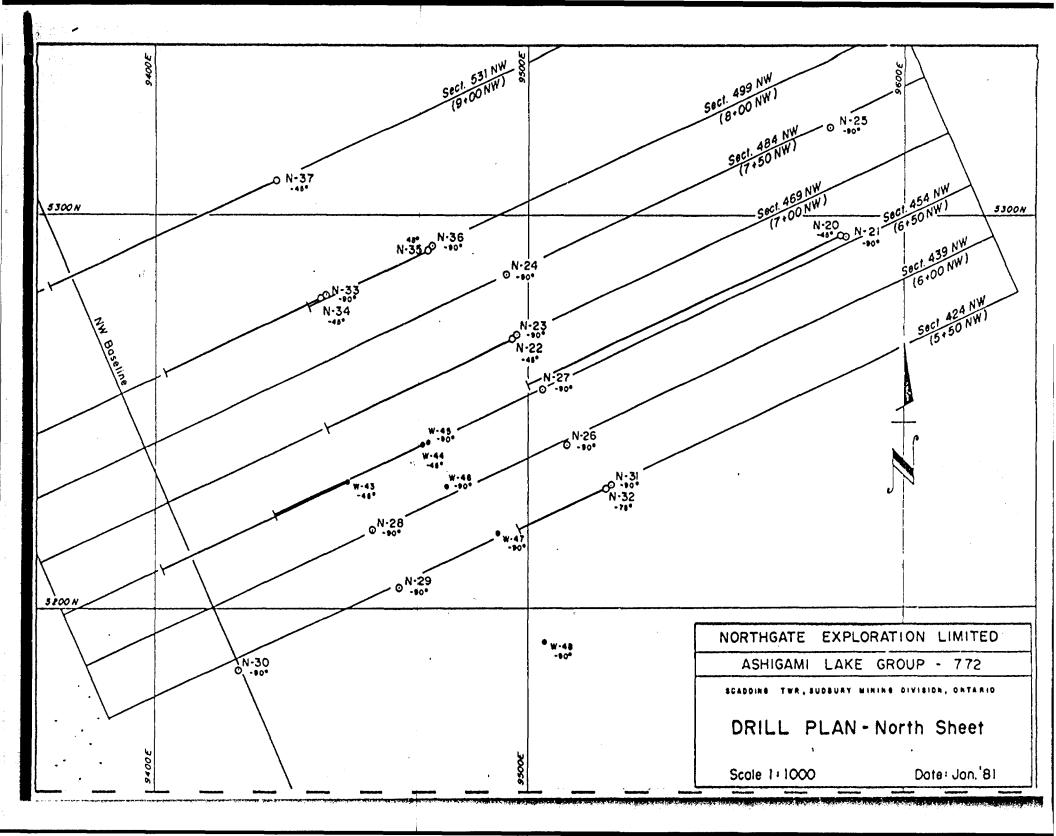
Northway Gestalt Corporation of Toronto was contracted in the fall of 1980 to provide air coverage of the Scadding Township property and to draft topographically contoured base plans.

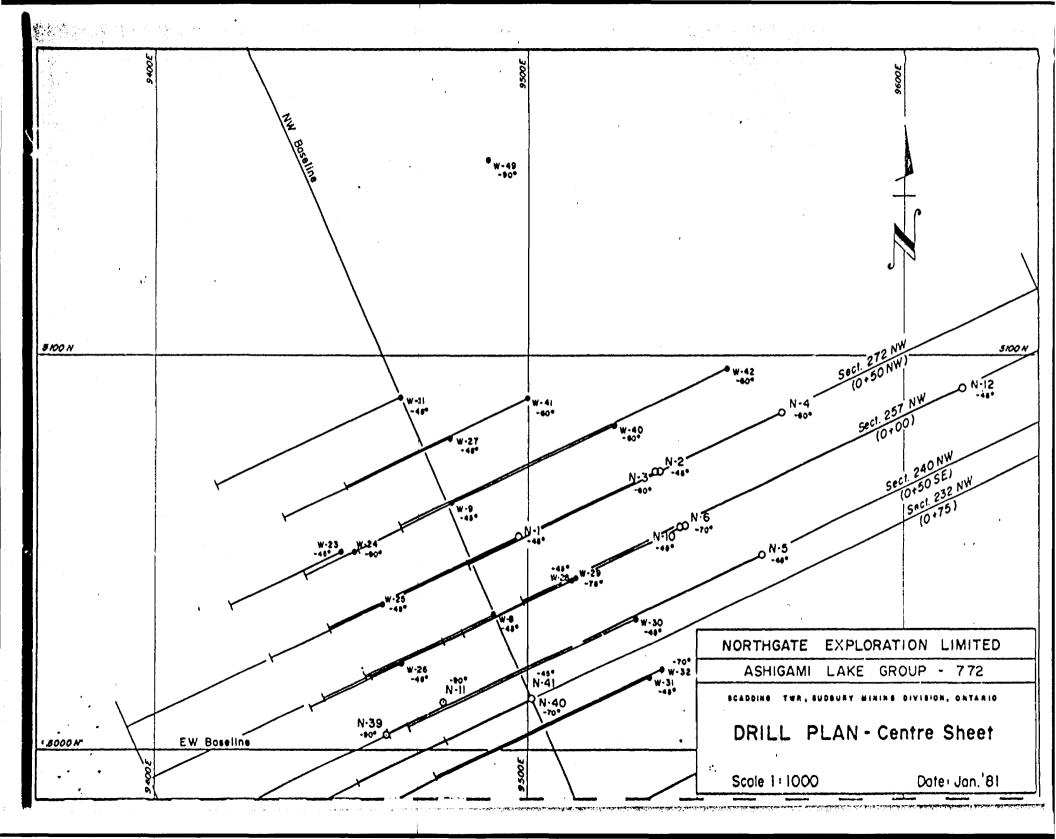
The property was flown in November 1980. The survey was performed by visual navigation in a CGMAP aircraft, using an RC-8 and an RC-10 Wild Camera. This instrument has an accuracy of 1/100 mm. The altitude at which the survey was flown was 4000'. Total flying distance was 39 miles with a .8 mile line spacing.

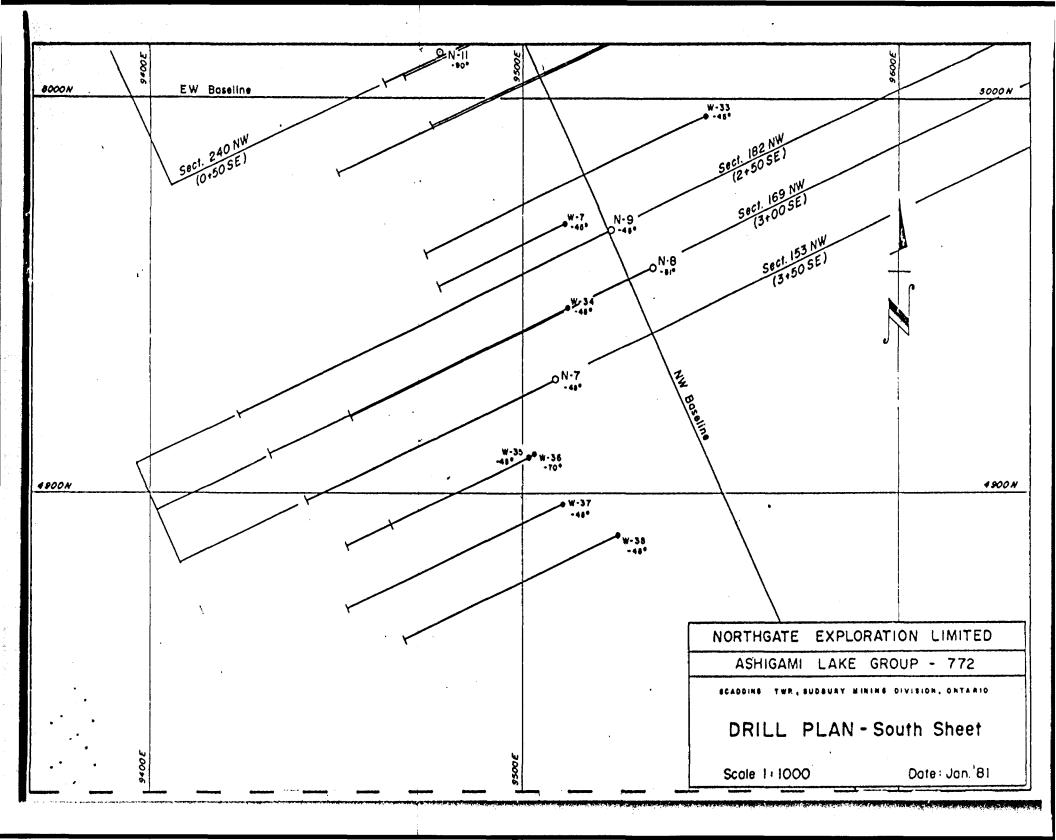
Summary and Conclusions

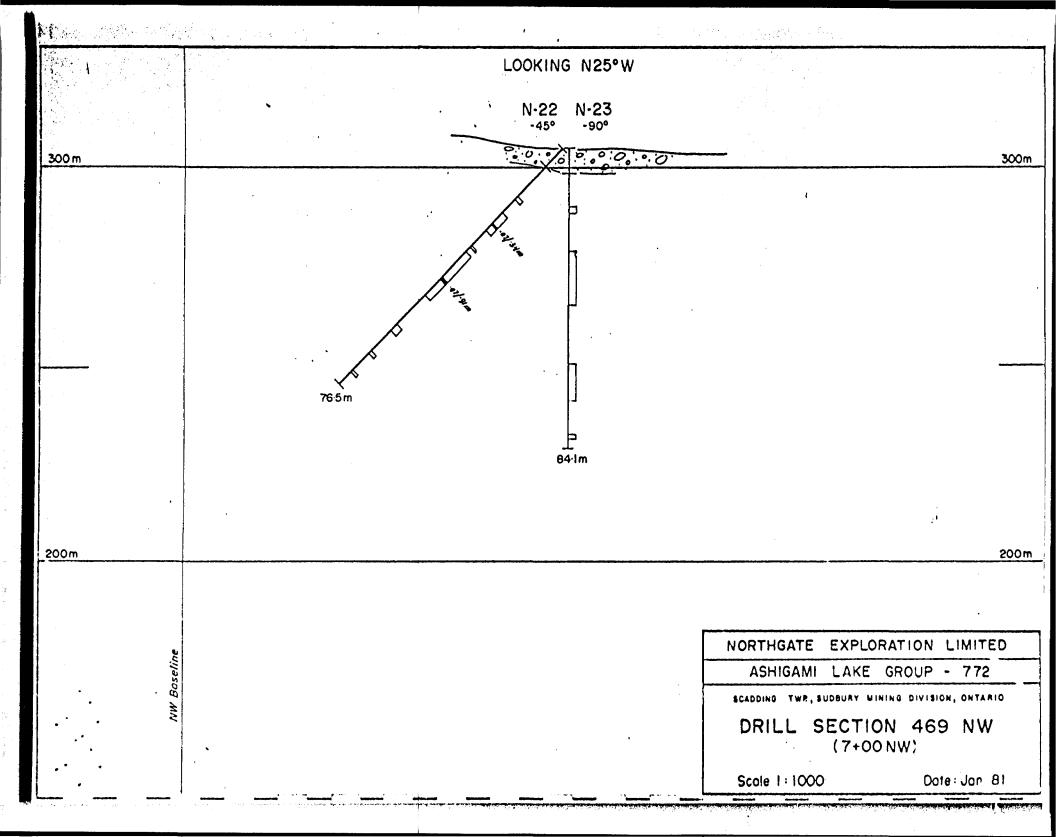
The results of the survey may be seen in the following maps: a 1:8000' scale photomosaic, a duplicate set of 1:8000' scale air photographs, a 1:1000' scale enlargement of the known ore zones, and a 1:2000' scale topographic sheet with 2 metre contour intervals.

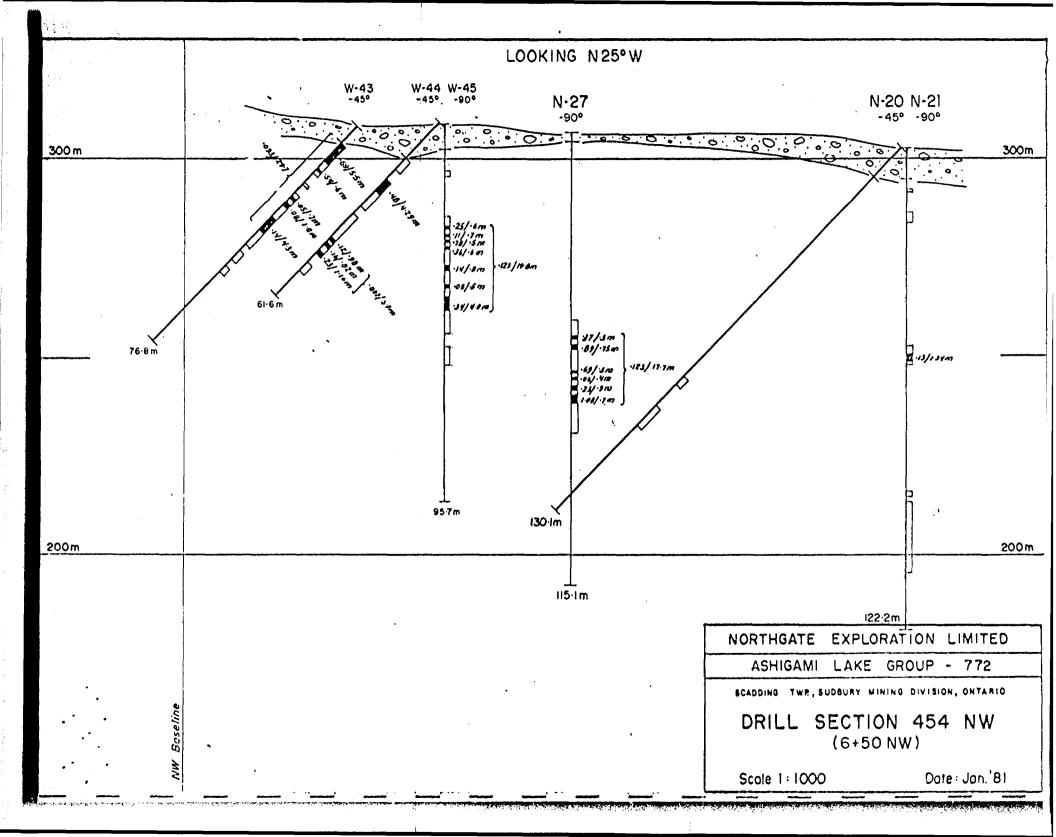
The orthophotogrammetric survey has succeeded in providing r mapping control for the field crew and will by used as a ground control for any further exploration activities.

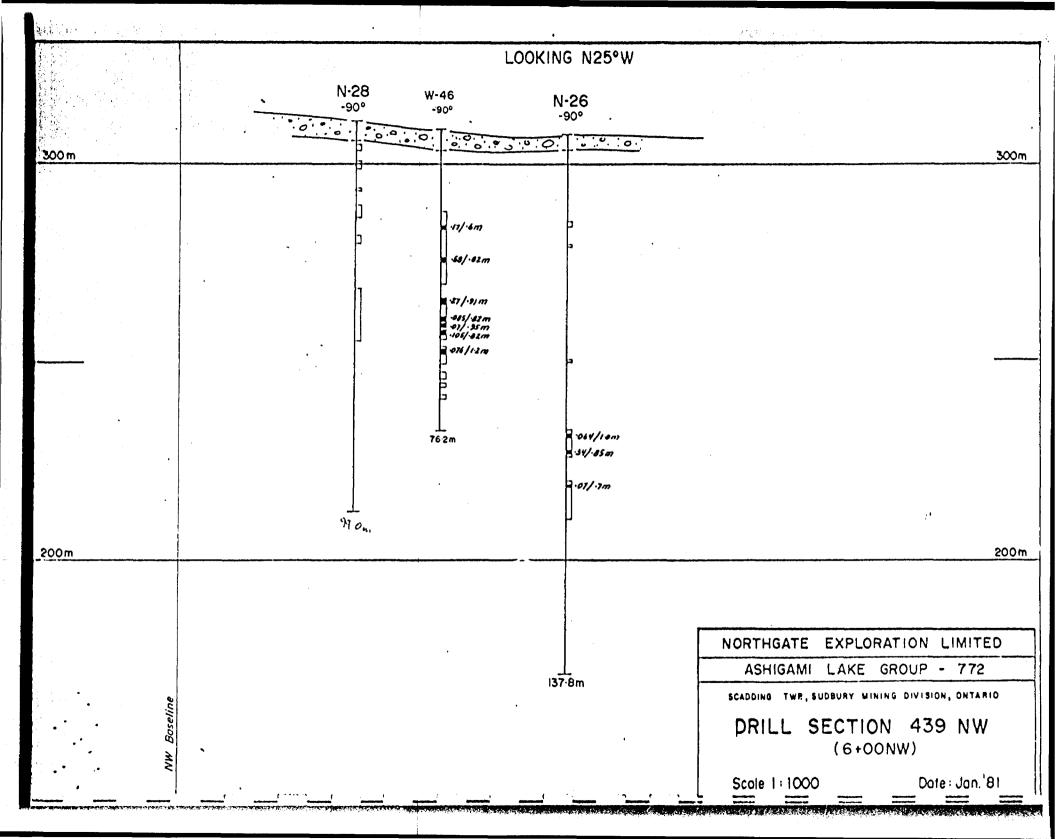


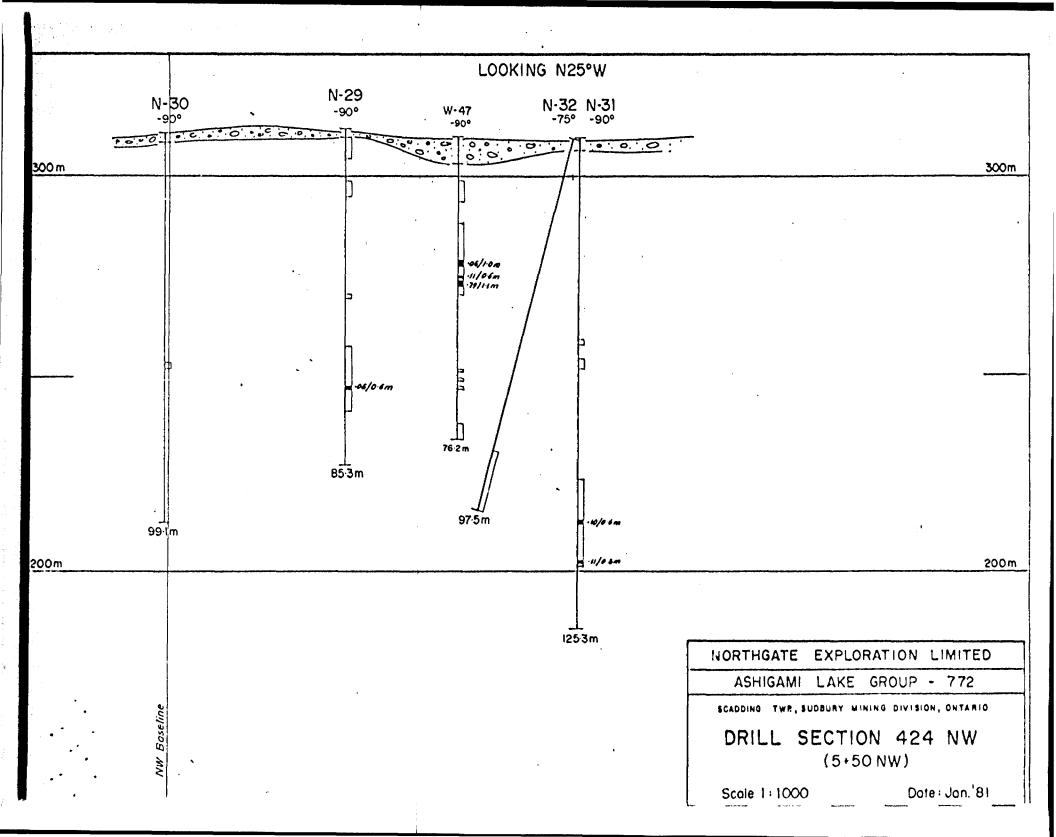


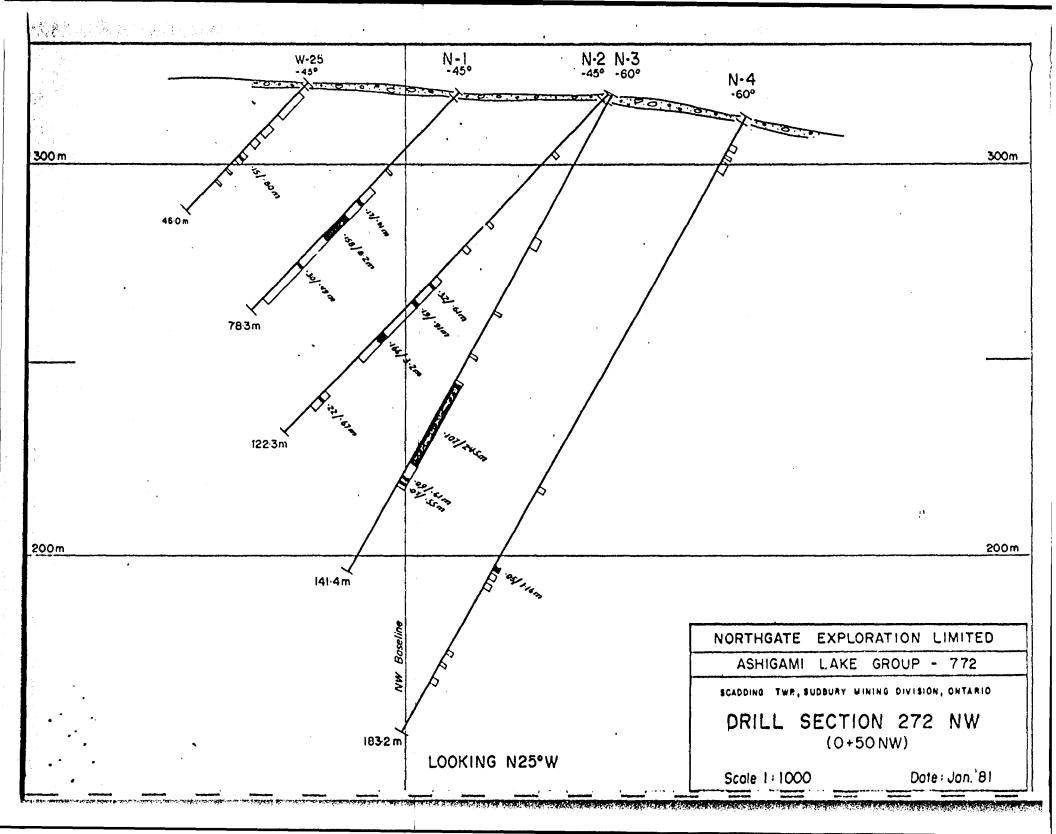


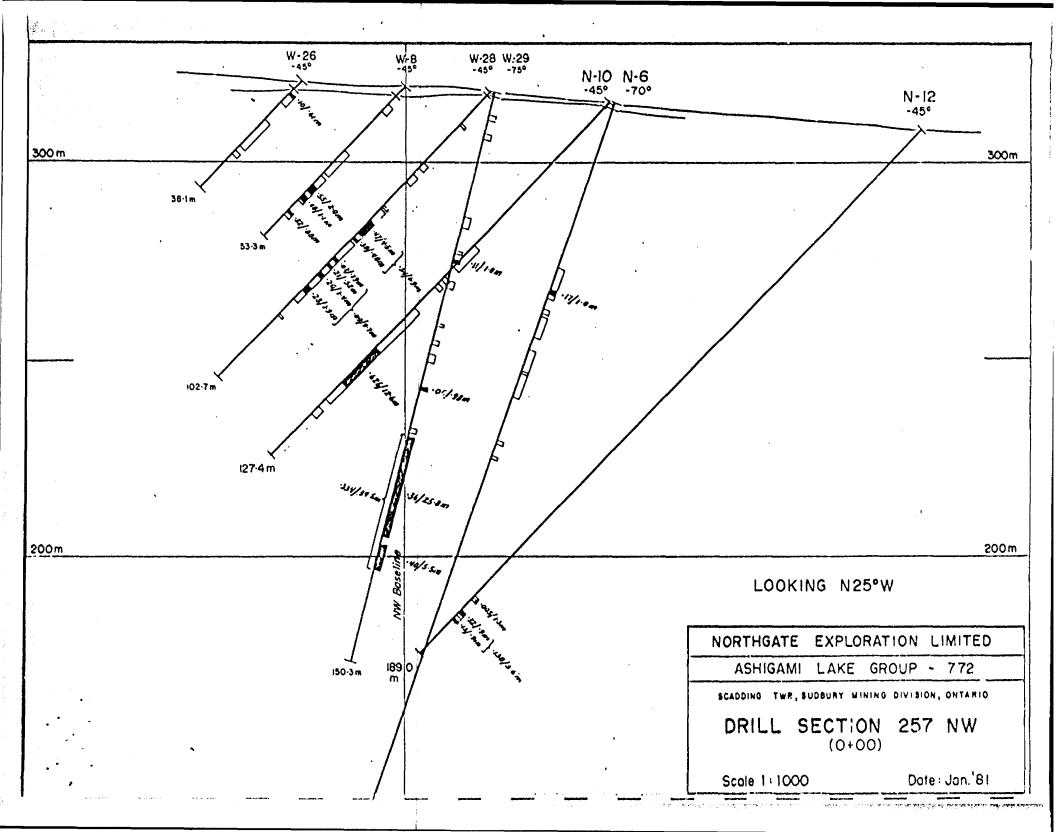


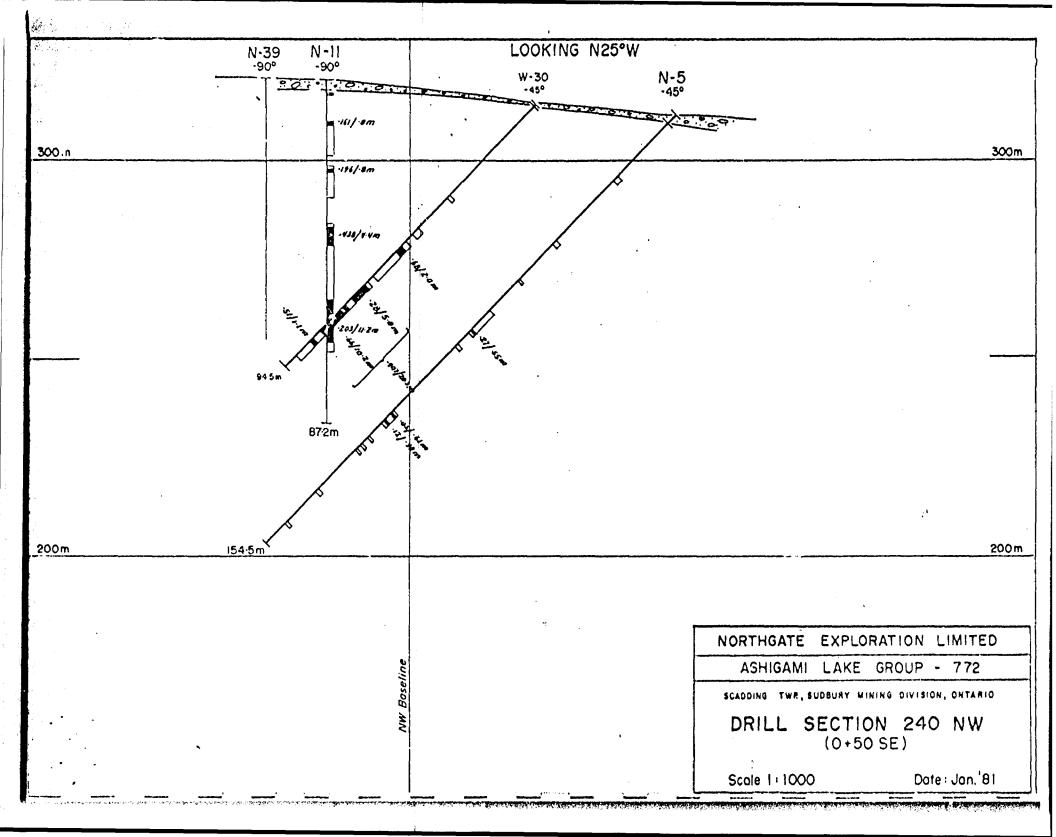


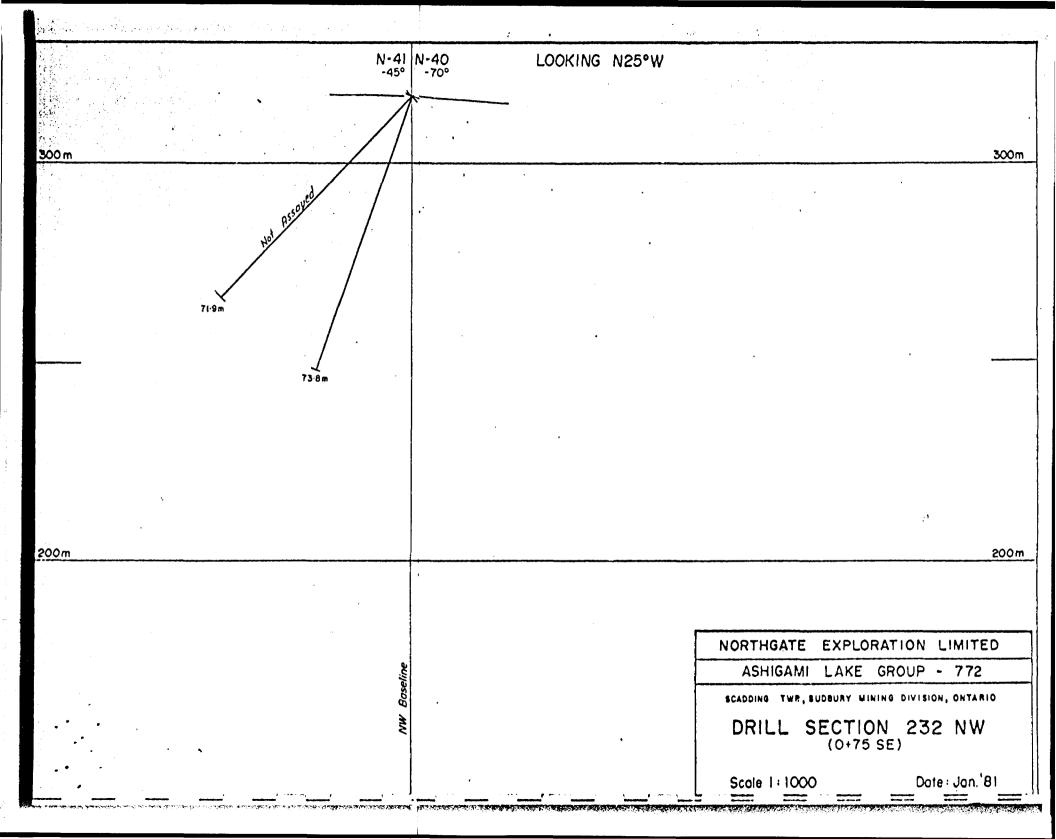


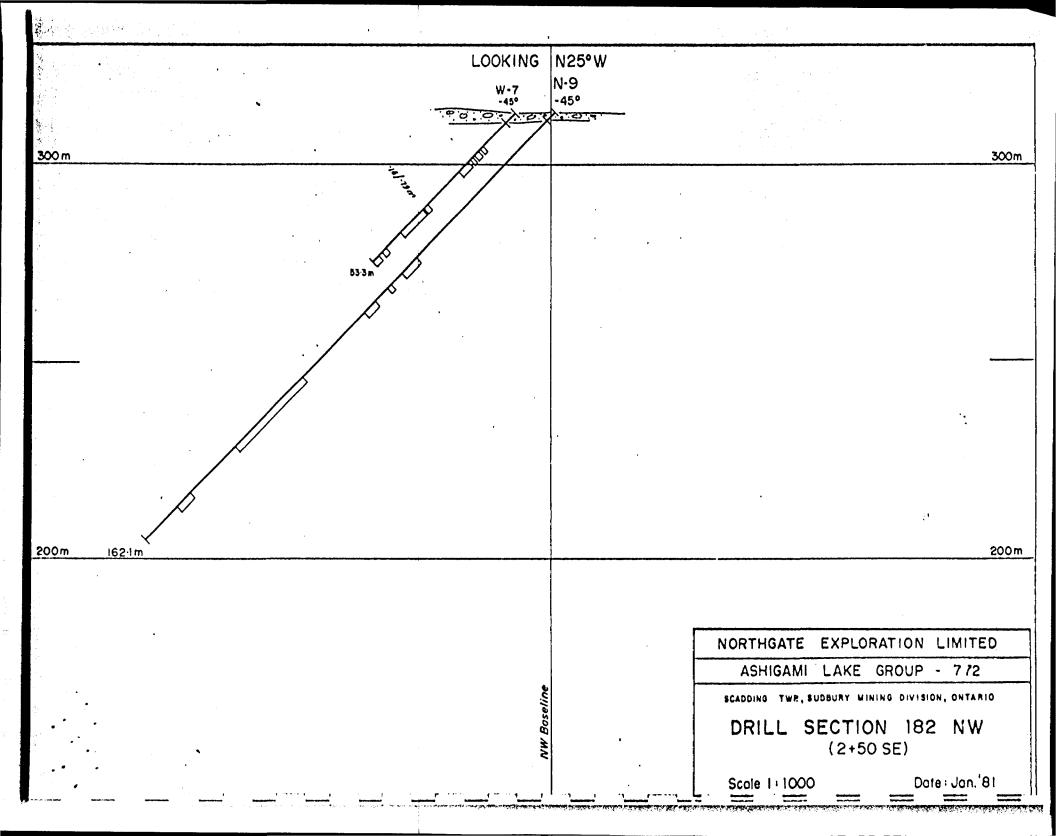


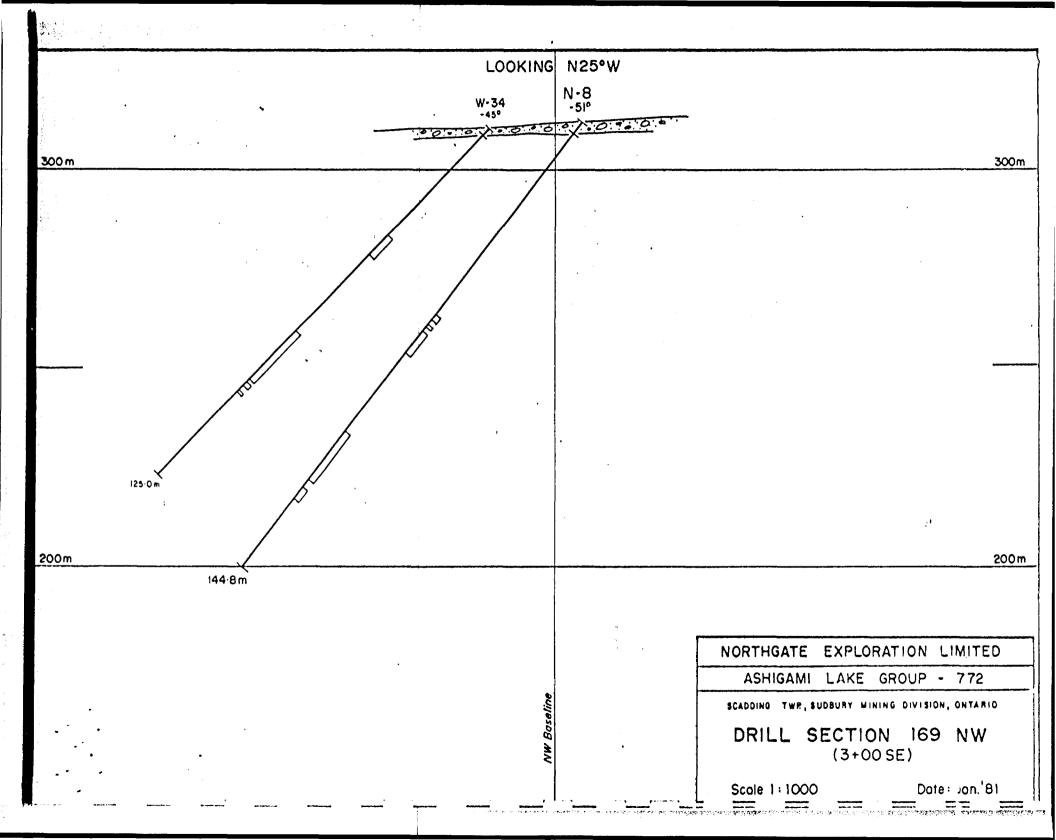


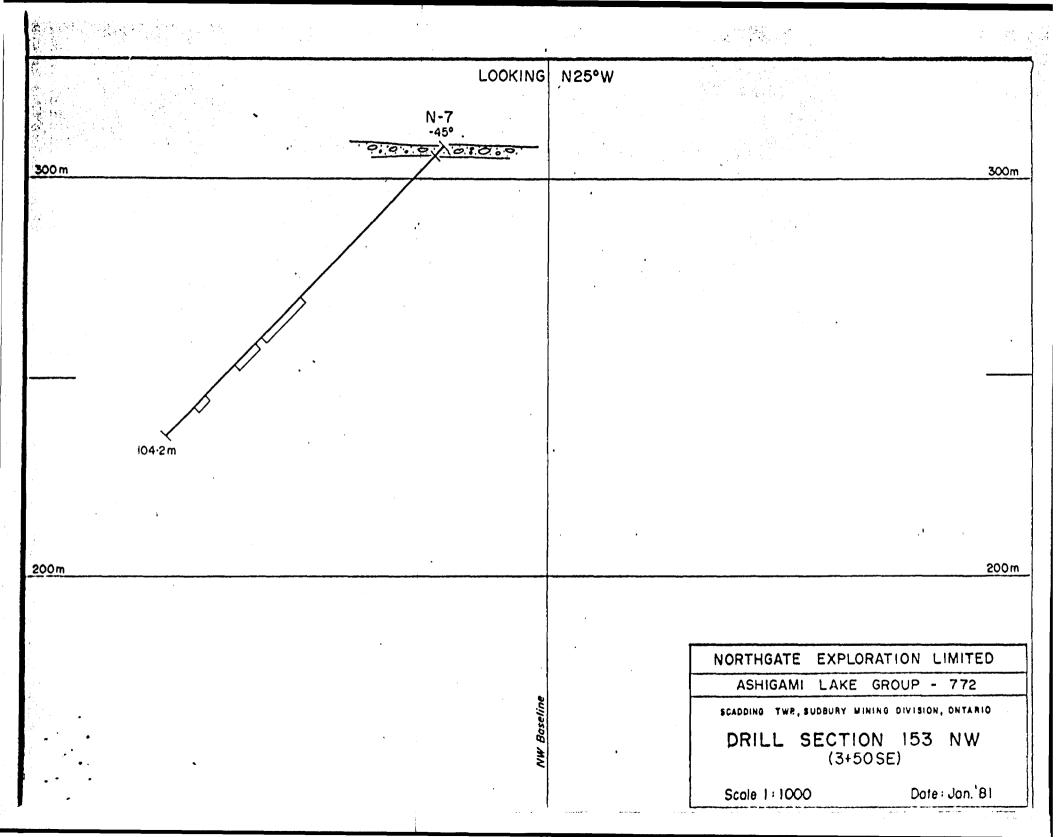


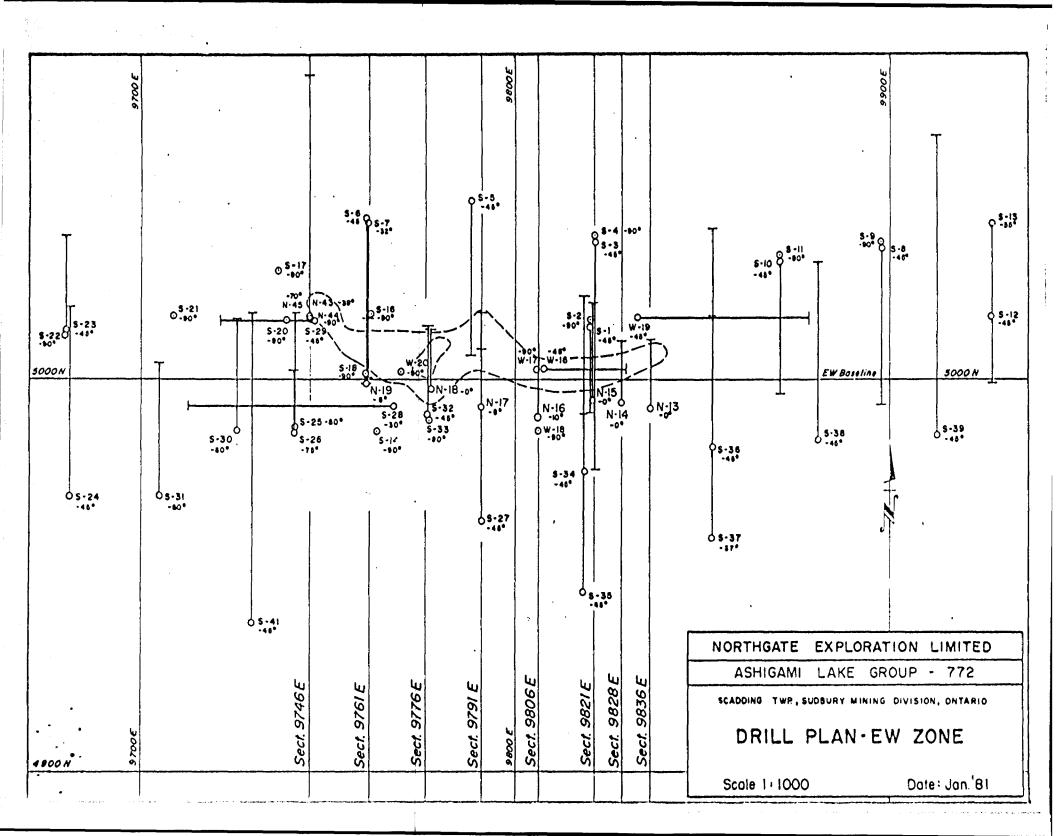


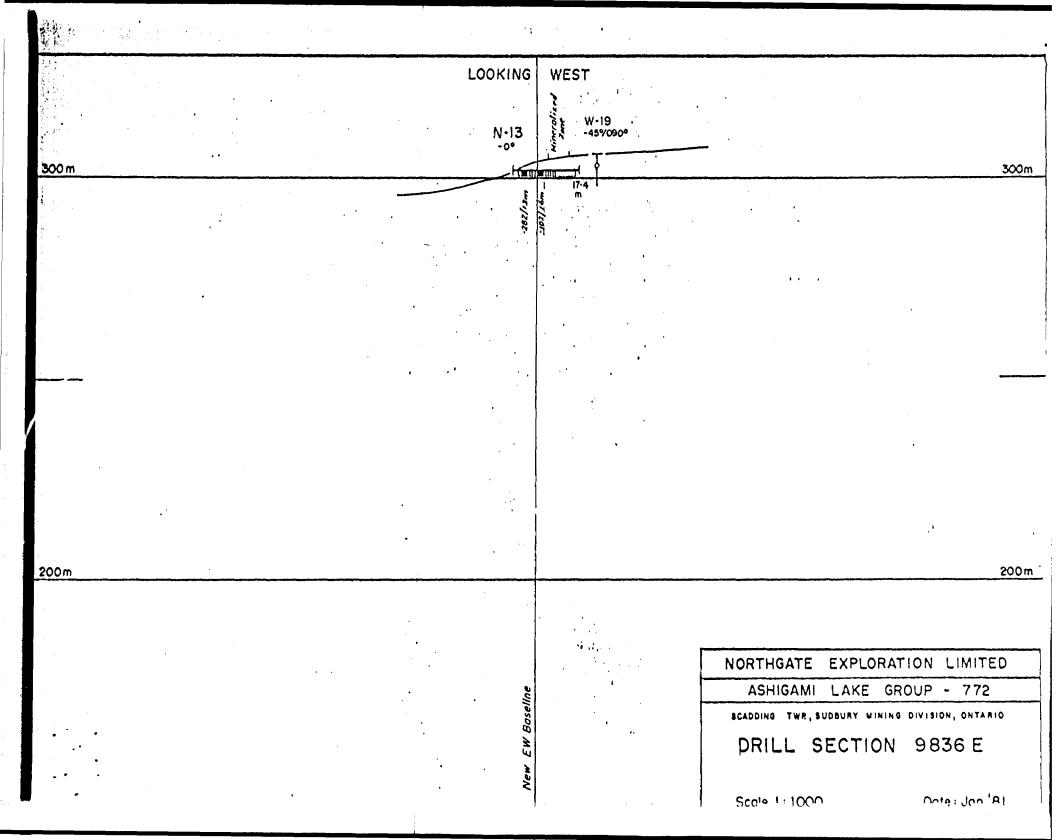


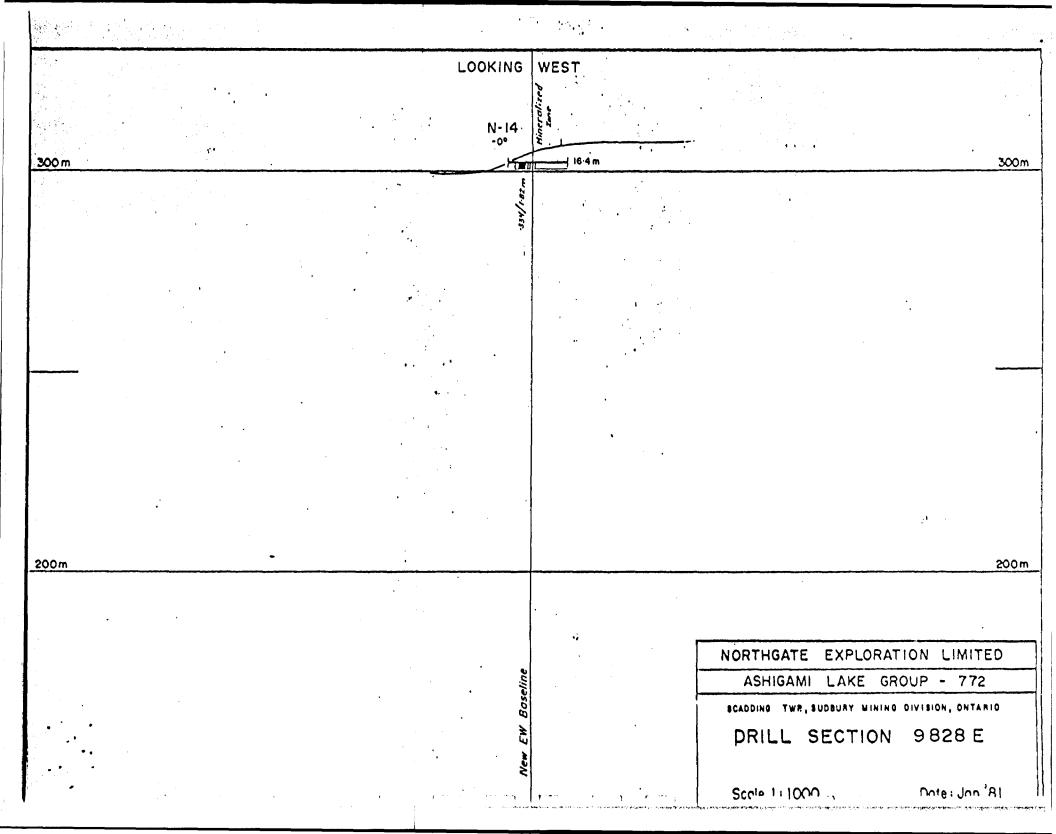


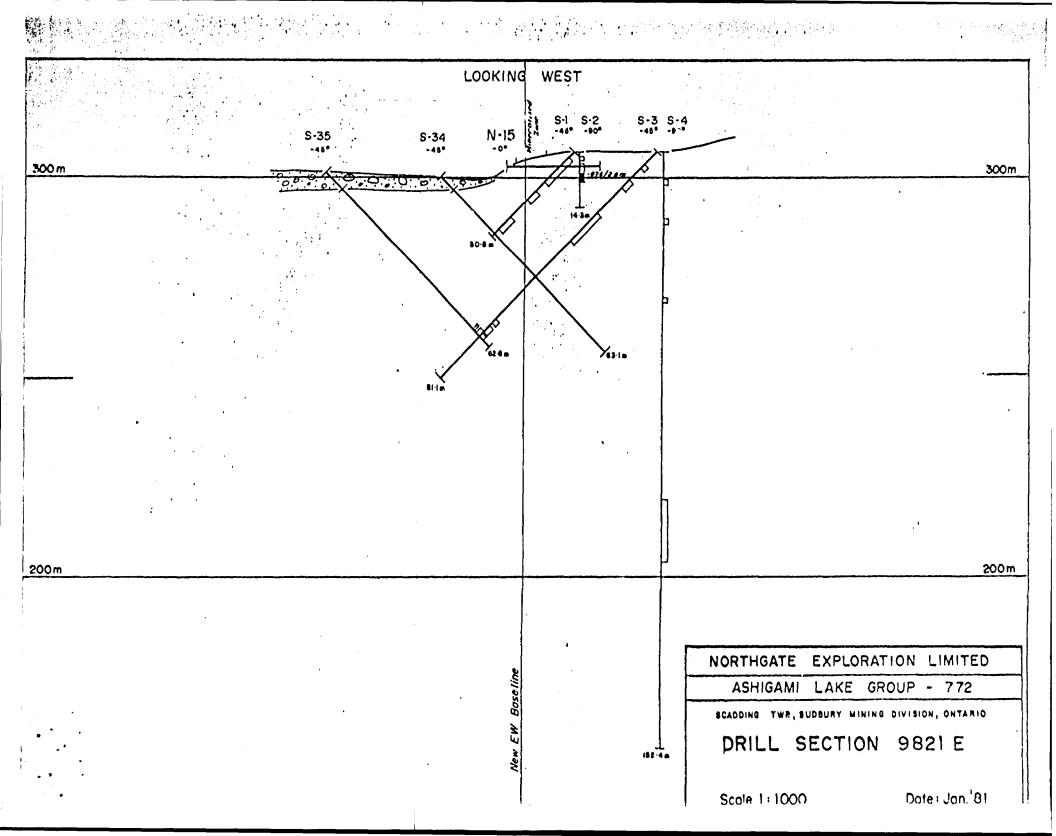


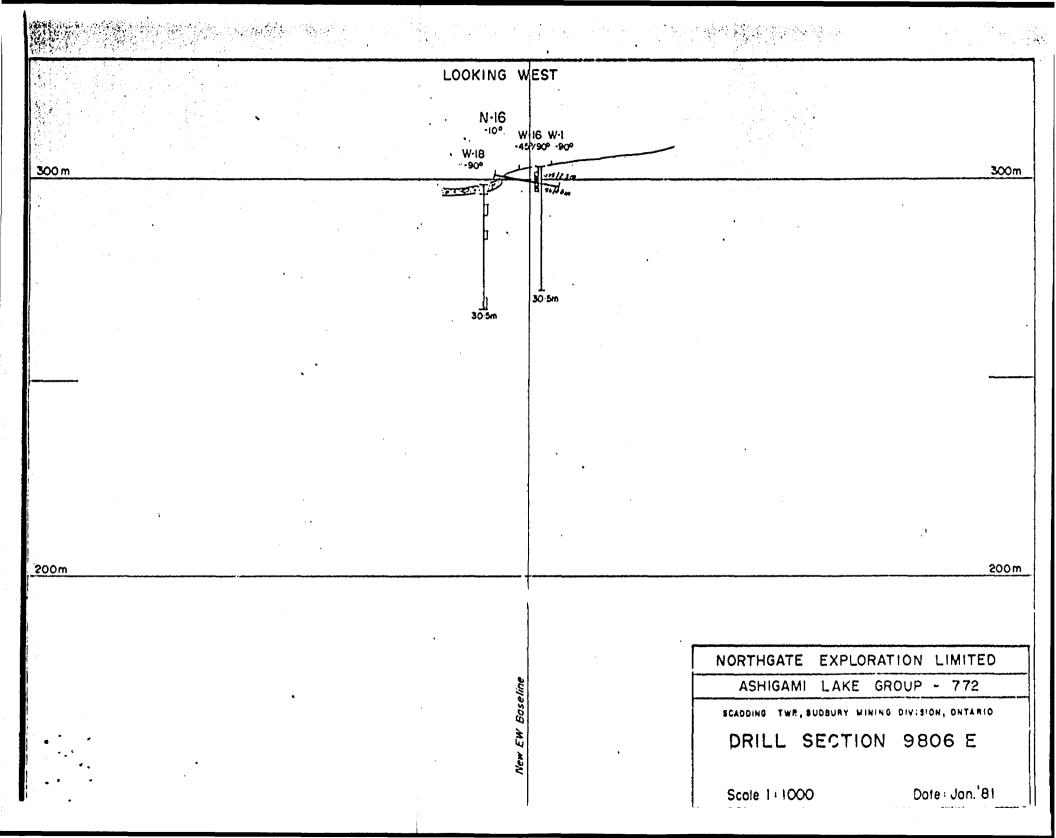


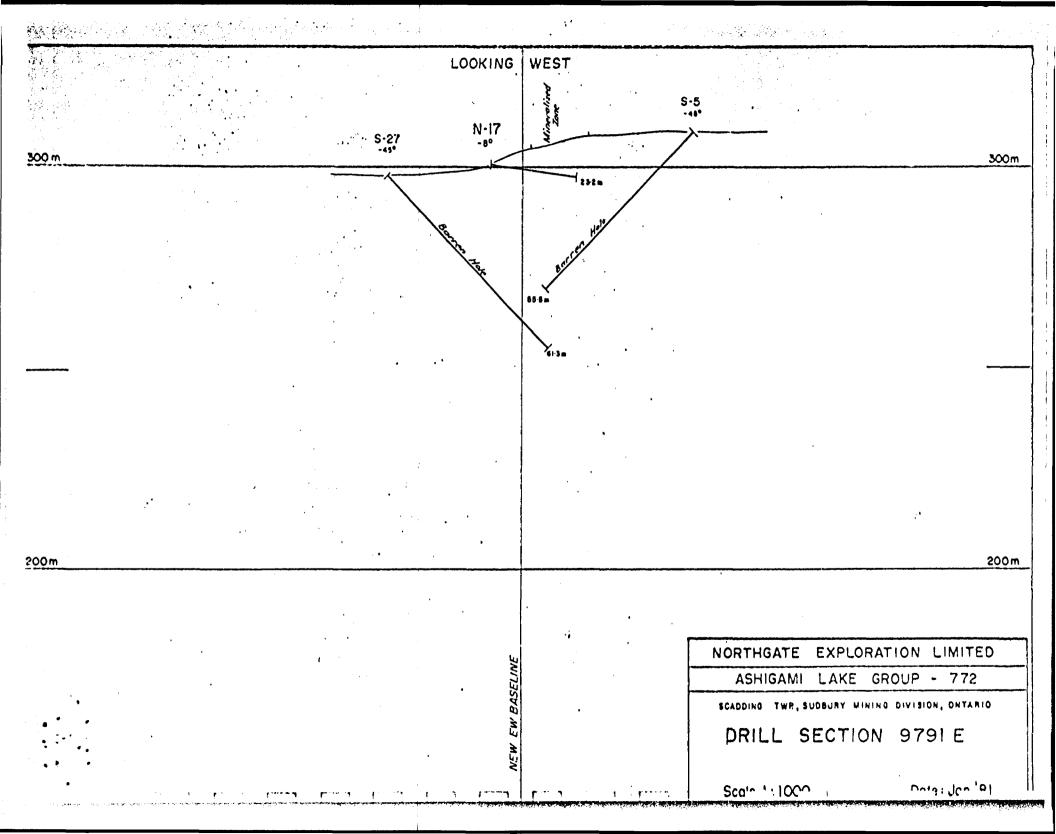


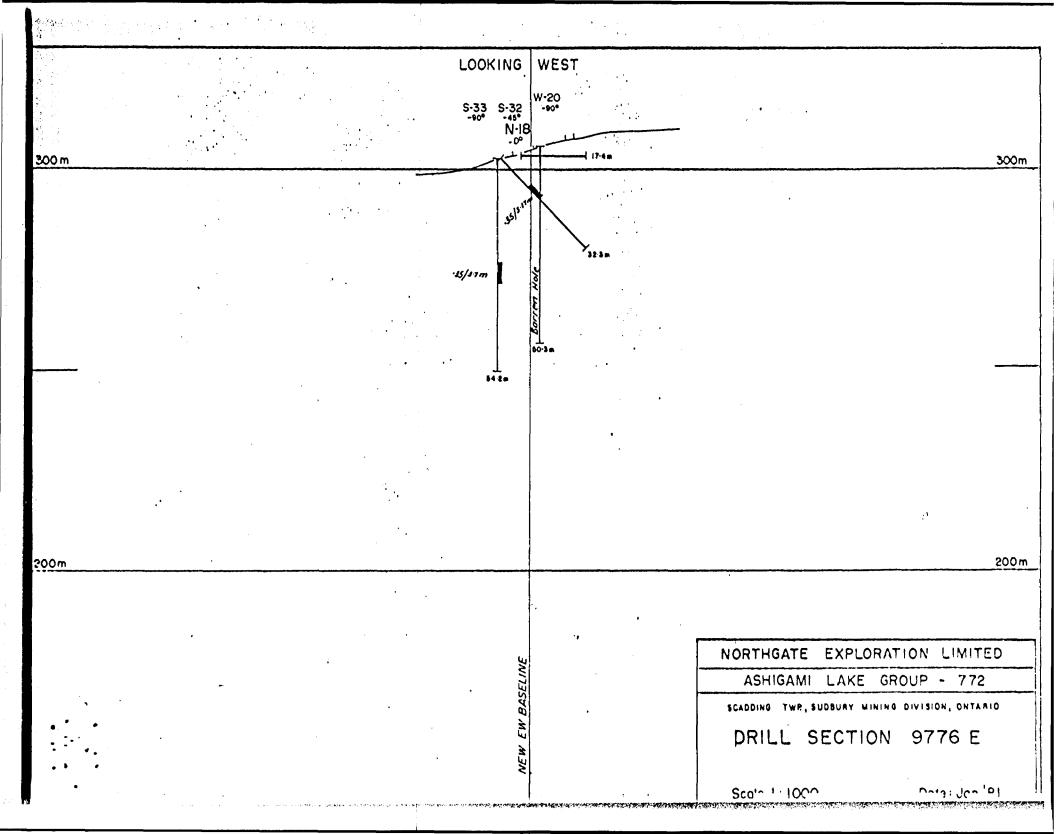


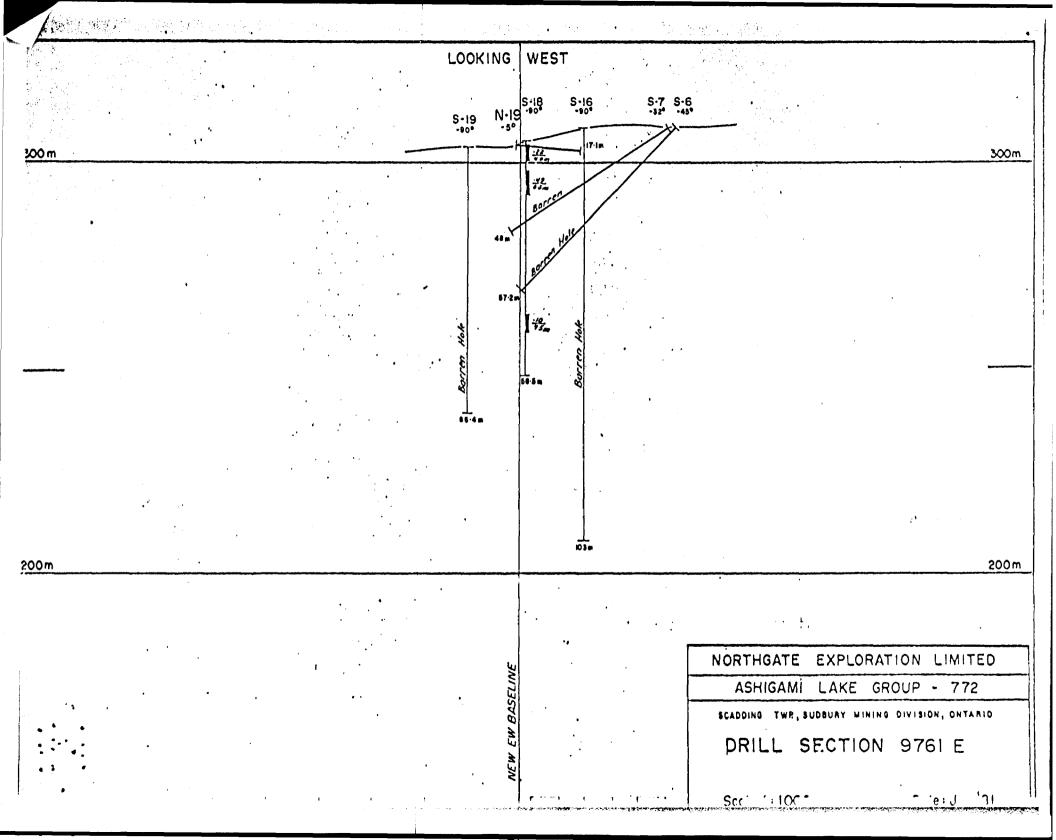


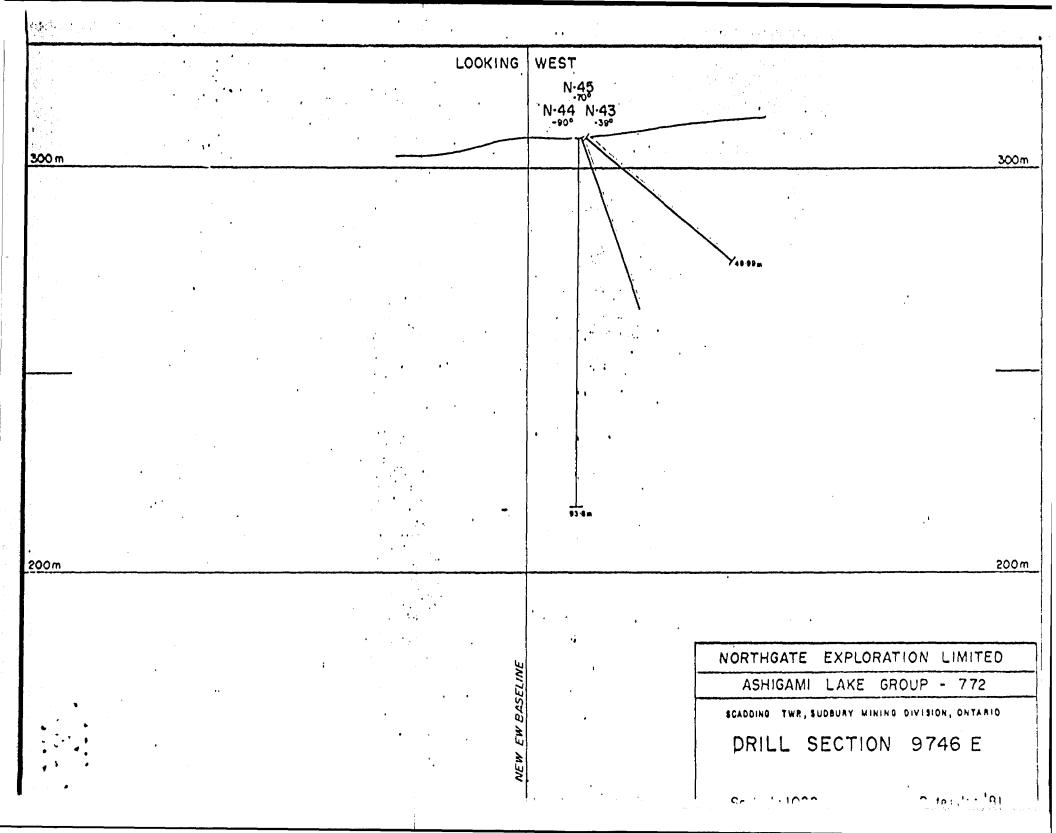














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SUMMARY REPORT EXPLORATION ACTIVITIES OF SCADDING TOWNSHIP PROPERTIES PROJECT 772

Jan. 1 - Mar. 31, 1981

K. Larsen Consulting Geologist

2 1x- October 1981.

SUMMARY REPORT - ASHIGAMI PROJECT 772 SCADDING TOWNSHIP, SUDBURY DISTRICT, ONTARIO

J.O Summary

Exploratory diamond drilling continued on January 5, following a short break for Christmas. Two drills were employed up to February 12, at which time drilling in the central zone was completed. A single small drill was retained to complete drilling in the south zone. On February 24, all drilling was terminated.

The total footage completed in 1981 was 4538 feet (1383 meters) in 24 holes, including deepening of one hole by 103 feet. The grand total footage, including drilling completed during 1980 is 16,239 feet (4949.6 meters) in 56 holes, of which 438 feet was drilled with NQ coring equipment in the East-West zone. This core was forwarded to INCO Metals Ltd. in Sudbury, where it was sawed in half. One half of the core was retained by INCO for analysis, the other half was sent to Lakefield for analysis. Surveyors (Sutcliffe & Co.) completed all survey work involving boundaries, concession lines, road right-of-ways and drill hole locations in the third week of February. In addition, elevation profiles were established at 15 meter intervals in the East-West zone.

Magnetometer and V.L.F. surveys were carried out intermittently on the N-W grid during January and February. In early March, a contractor took over this work. Geophysical surveys on all line grids are expected to be completed in the first half of April. I.P. and/or E.M. surveys will be carried out in late spring.

Ore reserves were extensively reviewed, following detailed drilling of known ore zones. The net result is a slightly lower tonnage than indicated by previous drilling. Details of ore reserves and grades are outlined in 4.0.

Summary Report of the Exploration Activities
On the Ashigami Project 772
Scadding Township, Sudbury District, Ontario N.T.S. 411/10
Period Jan. 5 - March 31, 1981

2.0 Introduction

Property ownership, location, access, logistics, previous work and general geology of the area, is outlined in the Summary report: "Exploration Activities of Scadding Township Properties, Oct.1 - Dec.31, 1980", and will not be delt in this report.

Detail drilling of known ore lenses resulted in a better understanding of the physical shape and structural setting of these. Several faults were outlined, partly with the aid of magnetometer surveys, and partly through drill hole intercepts.

The stratigraphic sequence from the upper Serpent quartzite through the upper part of the Bruce limestone, both of Huronian age, were studied in order to obtain data useful in correlating lithologic information obtained from drill holes. Lateral variation in the sediments can be demonstrated, both through changing lithologic characters and changing thickness. The latter is somewhat complicated by block faulting.

The chlorite breccia zones, within which all known gold mineralization occur in the area, is situated within a relatively narrow (40 to 100 meters) wide zone of intensely deformed and brecciated Huronian quartzite. In the East-West zone, it lies in contact with the Bruce limestone, In the South and Central zones, it lies within the lower transitional, argillaceous Serpent quartzite. In the North zone, the chloritic breccia zones are located in the lower part of the relatively clean upper Serpent quartzite.

Geophysical surveys, both previous and more recent, were helpful in outling diabase dykes and major faults, but failed to aid directly in locating mineralized zones within the chlorite breccia, as well as the chlorite breccia zones themselves. The diabase dykes frequently cut the chlorite breccia zones, or lie within close vicinity of these and tend to create a masking effect, shielding the presence of the feebly magnetic chlorite breccia zones. Recent V.L.F. work also outline the diabase dykes.

. 2

3.0 Detailed geology of East-West, South, Central and North Zones

3.1 The East-West zone

Ore grade material occurs within an East-West striking zone of intensely brecciated and chloritized argillaceous quartzite at or near the base of the Serpent formation. It lies in contact with the Bruce limestone from section E9821 on eastward. The chlorite breccia dips 75° to the north in the east end, gradually changing to near vertical in the central area around section E9791.

A fault striking northwest between sections E9761 and E9746 uplifted the entire zone east of it, resulting in its' exposure to the effects of weathering. West of the fault, the chlorite breccia zone is not exposed on surface. Drilling indicates it is dipping to the south at an angle of 45° to 50° and plunging to the west with rapid narrowing of the zone.

. Ore grade material suitable for mining by open pit methods is confined to an area between metric sections E9836 and E9750. A total of seven large diameter (NQ) diamond drill holes were drilled at angles ranging from zero to minus ten degrees, at 15 meter intervals between sections E9836 and E9761. These holes resulted in a new interpretation of the shape of the ore zone, as well as the chlorite breccia zone. Several sections indicate a rapid mushrooming effect of the chlorite breccia zone, from a width of less than one meter to over twenty meters within a vertical distance of as little as 30 meters. Armed with this knowledge, it was evident that additional sampling is needed on the surface of the zone, in order to arrive at final ore reserve figures. Trenching and sampling is planned for the earliest possible period in April. Prior to trenching, the surface area will be sluiced clean of overburden remaining from previous stripping operations by bulldozer. This work will be done in liason with the engineering department to satisfy their needs for information pertinent to design of an open pit.

West of the fault, on section E9746, three AQ holes were drilled to test the westerly extension of the ore zone. Hole number N 44 was drilled at an angle of -90 for a distance of 307 feet, without intercepting the Bruce limestone. Several aspects of this hole may be of some geological significance. The chlorite breccia zone proper is well developed and merits only comments when considered in conjunction with the remainder of the hole.

Both above and below the chlorite breccia zone, which carried several grains of visible gold, a conspicuous pattern of intermittent zones of brecciation, accompanied by pinkish, hematitic alteration, bleaching and varying amount of pyrite and

pyrrhotite mineralization was noted. Between these zones, the metasediments were found to be essentially unaltered and non-brecciated. This suggests the presence of a macro breccia, with large blocks of unaltered metasediments, bordered by zones of intense alteration and brecciation. These brecciated borders in essence represents the matrix of the macro breccia, and invariable carry small amounts of chlorite on the order of two to five per cent. The sulphide mineralization found within these breccia zones may locally carry some gold values of potential economic interest. Unless these values are on the order of ounces per ton, it is very doubtful they could be considered ore, in view of the disproportionally large volume of barren rock these macro breccias carry.

The main chlorite zone appear in every respect to have continuity both in depth and along strike. This zone must be considered as having a structural control of different proportions and possibly of different origin than the breccia zones enveloping the large macro breccia fragments.

The chlorite breccia zone appear to extend at least as far as E9946 as indicated by nine diamond drill holes of the Gulph "S" series. The lithology in the "S" series holes is for the most part poorly described in the logs. Unfortunately, the core from many of the holes is missing, thus preventing a review of the lithology of these. Gulph Minerals Canada Ltd., in their 1975 report on Scadding Township, stated that east of line 5+00W (E9851 on NGX plans) copper replaces much of the gold so that gold values become sub-economic. Evidence from many holes drilled under the present program does not substantiate this statement. Chalcopyrite is present in all known gold bearing zones and appear to be a late stage mineral.

3.2 The South Zone

The south zone comprises an area between section 1+98 in the north and the Bruce limestone contact with the Serpent quartzite to the south at section 0+65 NW.

The dominant geologic feature within the area is a northwesterly striking diabase dyke. The presently known strike length of this dyke is over 400 meters. It cuts through both the Bruce limestone and the overlying Serpent quartzite formation and dips 60 degrees to the northeast.

A small chlorite breccia zone is situated on the SW side of the diabase dyke, between sections 1+23 NW and 1+82 NW. A series of small, discontinuous lenses or ore grade material were found by diamond drilling. The erratic nature of these lenses renders this zone uneconomic under present conditions. Bruce limestone were intercepted in a number of drill holes between sections 1+23 NW and 1-82 NW. Projections of these intercepts to surface suggest the presence of a narrow, northwesterly striking fold in the limestone. There are no outcrops in this area of the surface to confirm this. It is anticipated that the currently on-going magnetometer survey will shed some additional light on this problem.

Along the SE. side of the diabase dyke on section 1+10 NW and 0+70 NW, chlorite breccia zones were interecpted in DDH. W 38, W 39 and W 39A. While no mineralization of economic interest were found in these zones, they are significant from a geological point of view. This chlorite breccia may be a part of the upper chlorite zone, thus leaving the chlorite breccia on the SW side of the dyke as a part of the lower chlorite zone, equal in its stratigraphic position to the lower chlorite zone seen in the north zone. Little is known about the potential existence of a lower chlorite zone : between the south zone and the north zone. DDH. S-50, drilled from section 1+98 with a strike of N45° W and angle of -45°. some 137 meters SW of the baseline, intercepted a narrow zone of chlorite breccia at 322 feet. This zone lies in the FW. of the upper chlorite breccia zone and may thus partly substantiate the presence of a lower chlorite zone in this area.

3.3 The Central Zone

This zone is located between sections 1+98 NW and 3+18 NW on grid number one. It is bounded in the north by #4 fault, which strikes N42 E and dips steeply northwest.

The chlorite breccia zone strikes N25 W and dips 60 to 70 northeast. It is composed of several parallel chloritized breccia zones in the lower Serpent quartzite unit. The uppermost H.W. zone has continuity along strike and dip. The remaining parallel zones below this appear to be lenselike and discontinuous, both along strike and dip.

Drilling in this zone between sections 2+33NW and 2+88NW outlined a cone or V-shaped ore lense. The upper and lower limits of the ore shoot are respectively 24 meters and 135 meters below daylight surface. The lower part forms a sharp "V" as indicated by D.D.H. N-6 and N-12 on section 2+57 NW. The overall shape of the ore lense can be seen on fig. 1, a plan in the plane of the ore shoot, appended to the rear of this report.

The ore shoot is composed of a central, fairly homogeneous core, centered on section 2+57 NW. Northeast and southwest of this, it rapidly lenses out into a series of smaller ore

shoots, separated by waste or subeconcric mineralization.

Final evaluation of the ore tonnage in this lense is 96,000 tons grading 0.264 oz. Au/ton. The category of this reserve is: "Indicated".

Near the top and some ten meters above the H.W. of the main ore shoot, a small satelite ore shoot was intercepted on sections 2+32 NW, 2+40 NW and 2+57 NW. The average height of the core lense is 25 meters, top and bottom being respectively 10 to 22 meters and 30 to 56 meters below surface, raking to the southeast. Calculated ore reserves for this lense is 6773.0 tons, grading 0.383 oz. Au/ton. The category for this reserve is also: "Indicated".

No further drilling is required in the intermediate ore zone.

3.4 The North Zone

The North Zone is defined as the area lying north of #4 fault. The area between #4 fault and #3 fault, generally referred to as "The Gap", comprises a large downfaulted block, within which only traces of the upper chlorite zone were found. Several vertical holes failed to locate a suspected deepseated chlorite breccia zone or any economic mineralization. Within the downfaulted block, bounded by #3 and #4 faults, an east-west striking fault was intercepted in D.D.H. N-28 and N-32 at N5220. The fault dips 80 to the north and appear to be a hinge fault with increasing vertical displacement to the west.

Two chlorite breccia zones, respectively referred to as the upper and lower zones, occurs between number three fault in the south and number two fault in the north, within a wedge-shaped block formed by the two faults. The upper chlorite zone is well defined by several D.D.H. intercepts. The lower chlorite breccia zone was intercepted only as far north as section 4+54 NW and remains to be explored from this section up to number two fault where it is believed to terminate or be offset as is the case with the upper chlorite zone.

Early drilling under the Watt program outlined an ore shoot on Section 4+54 NW. Follow-up drilling confirmed the presence of a V-shaped ore shoot with its' apex reaching the surface. The ore shoot is composed of TWO lenses, one each in the upper and lower chlorite breccia zone. They dip 40 north-easterly and are separated by waste or subeconomic mineralization from five to fifteen meters wide. Down dip and slightly northeast of D.D.H. N-27, the ore shoot appears to be cut off by a fault.

Prilling NE. and SW. of section 4:54 indicated a rapid ingering out of the upper ore shoot in both directions into a series of small individual lenses of subeconomic value. The ore shoot in the lower chlorite zone remains open along strike to the NW., and requires additional drilling. The lower chlorite zone appear to be diverging away from the upper chlorite zone in a northwesterly direction and was not intercepted north of section 4+54 NW., due mainly to late recognition of its changing strike.

The chlorite breccia zones are stratigraphically located within the lower part of the upper, relatively clean, Serpent quartzite. The HW. and FW. are altered pinkish to orange in colour, probably due to iron enrichment. This alteration pattern is typical in all areas where chlorite breccia zones are known and may, in part, be useful as a guide in future exploration.

4.0 ORE RESERVES

4.1 The Intermediate Zone

The method of polygons was chosen for calculating reserves in this ore lense. The method of polygons, also commonly known as: 'Areas of equal influence'; is based on the concept that all factors, determined for a certain point of a mineral body, extend half the distance to adjoining and surrounding points, thus forming an area of influence.

Cross sections through the ore shoot were drafted and lines drawn at 90° to the dip of each ore section, in areas where grade and thickness information was desirable. After calculating these, the information was transferred to a plan in the plane of the ore shoot, symbolized as points. Areas of equal influence (polygons) were then established by using perpendicular bisectors erected from the middle of the sides of triangles, established by lines connecting individual points.

Computation of ore reserves by the use of above method is somewhat slow and requires numerous calculations. The author has used this method many times on various gold and base metal ore deposits, and found it to be more reliable than most other methods, consequently worth the extra time required.

Modifications to normal polygon construction were required along the fringe areas of the ore shoot. Tonnage, grade and thickness of each polygon and fringe area is listed under 4.1.1.

A plan in the plane of the ore shoot, showing location of individual polygons is appended to the rear of this report. (Fig.1)

The final calculated tonnage for the intermediate ore shoot is 96,000 tons grading 0.264 or. Au per ton.

A small satelite ore body in the H.W. of the intermediate ore shoot is calculated to contain 6,773.0 tons grading 0.383 oz. Au per ton. The ore reserve category for both of the above is "Indicated".

4.1.1. Tonnage, grade and average thickness of polygonal ore blocks in the Intermediate ore shoot.

POLYGON #	TONNAGE	OZ. AU PER TON	OZ. AU IN BLOCK	AVERAGE THICKNESS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	2401.38 2246.65 4601.40 5121.70 2867.86 2430.12 3704.00 6311.54 6680.85 8905.55 7391.32 5005.78 940.91 310.05 4417.69 3212.96 2364.16 6161.15 3541.06 3738.74 6091.88	0.158 0.130 0.407 0.300 0.211 0.090 0.626 0.493 0.280 0.338 0.250 0.138 0.158 0.162 0.166 0.138 0.107 0.271 0.129	379.42 310.04 598.18 2084.50 860.36 512.76 781.55 568.04 4182.21 4390.43 2069.57 1691.95 235.23 42.79 697.99 520.50 392.45 850.24 378.89 1013.20 785.85	8.5 m 13.3 m 17.3 m 19.5 m 9.5 m 5.9 m 5.3 m 11.2 m 11.0 m 13.0 m 14.0 m 16.5 m 14.7 m 3.7 m 7.0 m 5.0 m 2.2 m 15.5 m 15.5 m 12.0 m
A B C D E F G H I J K L M N O P Q R S	423.00 318.60 220.19 472.00 526.02 301.28 531.69 467.36 61.08 270.38 563.27 422.00 174.81 963.38 227.25 661.78 254.12 401.70 368.48	0.158 0.138 0.130 0.407 0.300 0.493 0.280 0.338 0.250 0.338 0.271 0.107 0.107 0.138 0.166 0.162 0.129 0.158 0.211	66.86 43.97 28.63 192.00 157.81 148.53 148.87 157.97 15.27 67.59 190.38 114.36 18.70 132.95 37.72 107.21 254.12 63.47 77.75	4.2 m 6.7 m 8.6 m 9.75m 4.75m 6.5 m 7.0 m 8.25m 7.35m 7.35m 7.35m 7.35m 1.35m 7.75m 1.10m 2.50m 7.85m 7.85m 2.50m

The South Tone

Early drilling in the Watt program indicated a small ore shoot on section 1+32 NW. DDH. N-35 intercepted four individual ore lenses separated by subeconomic to barren quartzite. The combined average, including the waste, showed a grade of 0.196 oz. Au/ton over 19.2 meters. N-54 was drilled so as to intercept this ore closer to surface. The hole cut three small lenses of ore grade material. The uppermost of these averaged 0.340 oz. Au/ton over 0.91 meters and appear to be in contiguity with the lowermost ore lense in DDH. 1-35. The remaining two ore shoots are isolated and discontinuous. continuity, two holes were drilled on section 1+43 NW. N-55 intercepted three ore lenses of narrow width. uppermost of these averaged 0.418 oz. Au/ton over 0.76 meters To test for lateral and shows contiguity with the upper ore lense intercepted in hole W-35. with the lower two lenses intercepted in DDH. N-54. Hole number N-56 was drilled at a steeper angle from the same set up as N-55, but did not intercept any ore grade material.

A few of the small ore lenses may reach surface. would not be of sufficient strike length or width, to warrant attempts at mining these from surface. Drilling to the NW and SE of the south zone ore shoot clearly defines its limited extend. With this evidence, the author recommends the zone be dropped from the ore reserve inventory, but retained as an identified-subeconomic resource, containing a possible 15,000 tons grading 0.20 oz. Au/ton or better.

Further drilling is not indicated at this time.

The North Zone

The rapid lensing out of the two ore shoots in the north zone. leaves only a block centered on section 4+54NW, extending seven meters NE and SW of this, and measuring 105 meters down dip at an angle of 40°. The ore block is composed of two ore shoots, lying respectively in the upper and lower chlorite breccia zones. The waste and lowgrade mineralization separating the two ore lenses were included in the reserve

4.3.1. Method of Calculating Ore Reserves

The blocked out zone of mineralization on Section 4+54 NW was divided into four small segments, governed by drill hole and weighted based on drill hole intercepts. The average width The average grade for each segment was calculated of each block was established and reduced by 50% at points seven meters NE and SW of the section. The volume was calculated and reduced to short tons by using a factor of 0.339804 (metric

equivalent of 12 cubic feet per ton).

4.3.2 Tonnage and Grade

The total calculated tonnage is 66,217 tons grading 0.096 Oz. Au/ton. This does not include the uppermost 25 meters of the ore shoot in the lower chlorite breccia zone. This ore shoot falls under the category of "Inferred" ore, and requires additional drilling to confirm its presence. Surface stripping may be a possible alternative to drilling as the ore shoot may reach surface.

4.4 The East-West Zone

Assay results from NQ holes N-18 and N-19, as well as AQ hole N-44, has not yet been received. Additional sampling by trenching is required to clarify the ore outlines. Ore reserves will be calculated when Assay results are received a from both trenching and diamond drill holes.

SCADDING TOWNSHIP DRILLING

# 11 <u>00</u>	NORTH	LOCATI EAST	ON ELEV.	DIP	BEAR.	DEPTH	METRIC SECTION	DATE STARTED	DATE COMPLETED
N-15	*4995.00	9821.00	301.45	. 0°	0 0	25.0m	9821	Jan 6/81	Jan 8/81 °
N-16	*4991.80	9806.00	300.26	-10°	0 0	17.7	9806	Jan11/81	Jan13/81
N-17	*4991.80	9791.70	300.68	- 8°	0 0	23.2m	9791	Jan14/81	Jan16/81
N-18	*4997.60	9776.60	303.30	0 0	0 0	17.4m	9776	Jan17/81	Jan18/81
N-19	*4999.35	9762.30	304.23	-5°	0 0	17.1m	9761	Jan19/81	Jan20/81
N-39	5005.48	9458.95	320.04	-90°	S65° W	56.4m	240	Jan21/81	Jan23/81
N-40	5013.82	9500.97	317.15	-70°	565°W	73.8m	232	Jan14/81	Jan17/81
N-41	5013.39	9500.12	317.20	-45°	S65°W	70.1m	232	Jan11/81	Jan19/81
N-12	5062.08	9477.13	320.55	-80°	S65°W	109.1m	288	Jan26/81	Jan30/81
N-43	5015.34	9746.41	307.37	-39°	00	50.0m	9746	Jan20/81	Jan 24/81
N-11	5013.40	9746,31	307.28	-900	. 0°	93.6m	9746	Jan24/81	Jan27/81
N-45	5013.94	9746.31	307.25	-700	0 °	64.6m	9746	Jan27/81	Jan30/81
N-46	5010.90	9738.19	307.45	-55°	. 00	38.7m	9738.5	Jan28/81	Feb 1/81
N-47	4990.17	9745,91	306.41	-70°	00	61.6m	9746	Feb 3/81	Feb 4/81
N-48	4981.22	9843.60	298.71	-35°	00	49.1m	9844	Feb 5/81	Feb 7/81
N-49	4986.25	9791.00	299.48	-40°	00	51.8m	9791	Feb 8/81	Feb10/81
N-50	5137.18	9459.44	316.86	-90°	. S65°W	91.7m	362	Feb 1/81	Feb 3/81

DDH #	Monmu	Loc	ATION						
N-51 N-52 N-53 N-54	NORTH 5161.80 5177.06 4902.29 4897.79	9512.76 74.99 9490.82	314.06 304.23	DIP -90° -90° -35°	BEAR. S65°W S65°W S65°W	DEPTH 121.9m 98.5m 9.1m	METRIC SECTION 362 393	Feb 5/81 Feb 9/81	DATE COMPLETED Feb 7/81 Feb12/81
N-55 N-56 * Denote	1909.22 4909.92 es NQ Holes	9481.44 9488.17 9489.50	303.68 304.50 304.77	-55° -35° -60°	S65°W S65°W S65°W	59.7m 66.1m 63.7m	137 137 144.5 144.5	Enh 22/0-	IN OB. Peb19/81 Feb22/81 Feb24/81

^{*} Denotes NQ Holes, all others are drilled AQ.

Scadding Twp. - Ore Intersections

DDH #	Interse	Ction Fro	ore Foots	gc	·	
N-15	1	110.	$\frac{m}{\cdot}$ \cdot T	o Len	gth 02/	Au ton Gm/ton
		15.0		_	.01 0 46	
	2	48.4		. '	.Um	14.37
		14.8	m 18.1n		0' 0.16	0 4.98
•	. 3	15.0 4.6	~~.7			
N-16	. 1		- V · Z III	13.	4' 0.29; 53m	9.05
	_	23.7 7.2	33.0' n 10.1m	9.		2.24
	la	28.2		2,		24
		8.6m	10.1m	4.8	$\frac{3}{5}$ 0.103	3.20
•	2	45.91	20.0	4.1		
N-17	1	14.0m	15,2m	1.2		. 3.55
		20.0' 6.1m	36.0' 11.0m	16.0		77 76
	la	20.0	31.0'	4.9	m ·	22.36
		6.1m	9.4m	11.0 3.4m	1.010	31.41
	16	20.01	26.41	6.4	•	
N-18	NOT AV	6.1m	8.0m	. J V	1.622	50.45
	1101 7(1)	AILABLE (A	ssays pen	ding)	•	
				٠,		
N-19	AVA TOM	ILABLE (A	55000			
			ssays pen	ding)		
N-39	1	6.00		•		
		6.0' 1.8m	7.5' 2.3m	1.5	0.26	9 00
	la	6.0'	10.5	0.46m	•	8.09
	2	1.8m	3.2m	4.5' 1.4m	0.090	2.80
	2	18.71	20.0	1.3'	0 0-	! !
	2a	5.7m	6.1m	0.40m	0.25	7.78
	- 	18.7' 5.7m	23.0' 7.0m	4.3'	0.077	
		-	· • UIII	1.3m	,	2.39

DDH	* Interse	ection r	Core Tool	- Geo			-2 -
N- 40	1		To To	1.0	neth	Oz/ton	Au <u>Gm/ton</u>
	1.	60	. 2m 60	.5' .Sm . (2.1' 2.64m	0.160	4.98
N-41	la 1	•	. 2m 61	· · · · · · · · · · · · · · · · · · ·	.6'	0.095	2.95
•		77. 23.	0 ' 80 5m 24	1_	.0' .91m	0.10	3.11
	la	77. 23.	0 83. 5m 25.	01 6		0.090	2.80
	2	89. 27.	0' 90. lm 27.	5' 1.		0.310	9.64
	2a	86.0 26.2		4.	_	0.106	3.30
	3	122.0 37.2	1 123.5 m 37.6	1.		.100	3.11
·	4	155.0 47.2	156.9 n 47.8	' 7 ()	.150	4.67
N	4a	155.0 47.2m	, 150 v	. 4.0	, 0	.092	2.86
N-42	NO ORI	E INTERSEC	TIONS	n 1.2	m		2.00
N-43		INTERSEC				• • •	,
N-44		AILABLE		ending)			
N-45		INTERSECT					•
N-46	1	48.6' 14.8m	51.5' 15.7m	2.9' 0.88	0.2	21	6.53
	2	68.0' 20.7m	69.0' 21.0m	1.0° 0.30n	0.1	70.	.04
	3.	74.0' 22.6m	77.5' 23.6m	3.5° 1.1m	0.1	²⁰ 3	.73
N-47	3a	71.0' 21.6m	77.5' 23.6m	3.5° 2.0m	0.09	91 2	.83
	1	145.5' 44.3m	164.8' 50.2m	19.3' 5.9m	0.18	6 s.	. 79
N-48	la	147.5' 45.0m	155.0' 47.2m	7.5' 2.3m	0.39	3 12.	22
0 70	NO ORE IN	NTERSECTIO	NS				.•

DDH £	Intersect	Core ion From	Footage To	Length	Oz./12
N-49	NO ORE IN	TERSECTION:	S		Oz/ton Gm/to:
N-50		ERSECTIONS		•	
N-51	NO ORE INT				
N-52	1	121.0' 36.9m	122 01	1.0'	0.53 16.48
N-53	HOLE ABORT			0.30m	10.48
N-54	1.	104.01		EDROCK	
		41.7m	107.0' 32.6m	3.0' 0.91m	0.340 10.58
	2	135.0' 41.1m	137.3' 41.8m	2.3 · 0.70m	0.390 12.13
N-55	3	143.5' 43.7m	147.0° 44.8m	2.5¹ 0.76m	0.220 6.84
W-22	1	88.0° 26.8m	89.0° 27.1m	1.0' 0.30m	0.97 30.17
	la	86.5' 26.4m	89.0' 27.1m	2.5' 0.76m	0.418 13.01
	2.	172.0' 52.4m	175.0 · 53.3m	3.0' 0.91m	0.135 4.20
N-56	3	194.5° 59.3m	202.0' 61.6m	7.5' 2.3m	0.174 5.41
11-20	NO ORE INTER	RSECTIONS		•	

STRATIGRAPHIC SEQUENCE - ASHIGAMI PROPERTY*

FORMATION		UNIT	LITHOLOGY
Caunaut Pa			
Serpent Fm.	1	Diabase Dykes	
	2	Upper Qtzite Unit	A relatively clean quartzite, gradational from 4. Locally fractured and carbonated in lower parts.
	3	Upper Chlorite Zone	30 - 4-m thick, a zone of tectonic brecci- ation and fracturing, intensely to moderately chloritized and locally mineralized Au, Cp, Py, AsPy and Pc. Pink to orange hematitic alteration extends into wall rock above and below this zone for five to 30 meters.
	4	Intermediate Qtzite Unit	30-6-m thick, gradational from 5. A relatively clean quartzite with occational metagreyvacke beds. No evidence of facies changes. Lower parts may be tectonically disrupted and brecciated close to 7 and strongly bleached.
	5	Lower Qtzite Unit	25-50-m thick, gradationl from 5. Some metagreyvacke and siltstone beds, minor chart and rare narrow chloritic zones. Frequently fractured and carbonated with much bleaching and minor py, po, aspy and cp mineralization.
	6	Lower Chloritic Zone	0 - 20 thick. Abundant facies changes. Dirty quartzite with some argillaceous beds prominent tectonic brecciation and fracturing with moderate to intense chloritization. Locally nimeralized Au, Cp, Py, Po, Aspy.

	•		
FORMATION		TINU	LITHOLOGY
	7	Transition Zone	5 - 30-m thick, gradational from 8, facies changes. Dirty quartzite greyvacke, argillite, limestone and conglomerate. Six may be located in upper parts of this zone. Unit is thickening to the north.
Espanola Fm	8	Limestone Unit	A coherent unit of limestone, limestone breccia and minor interbedded siltstone lenses in excess of 20m. thick.
·		·.	

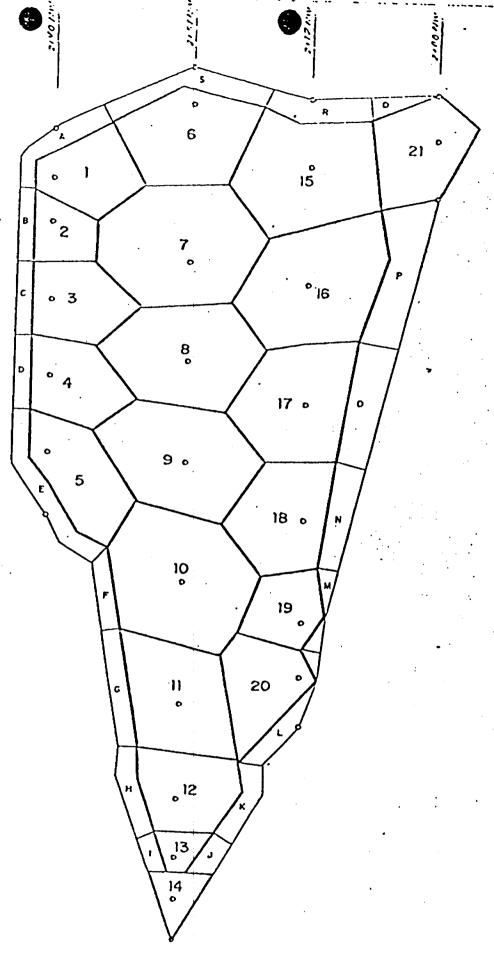
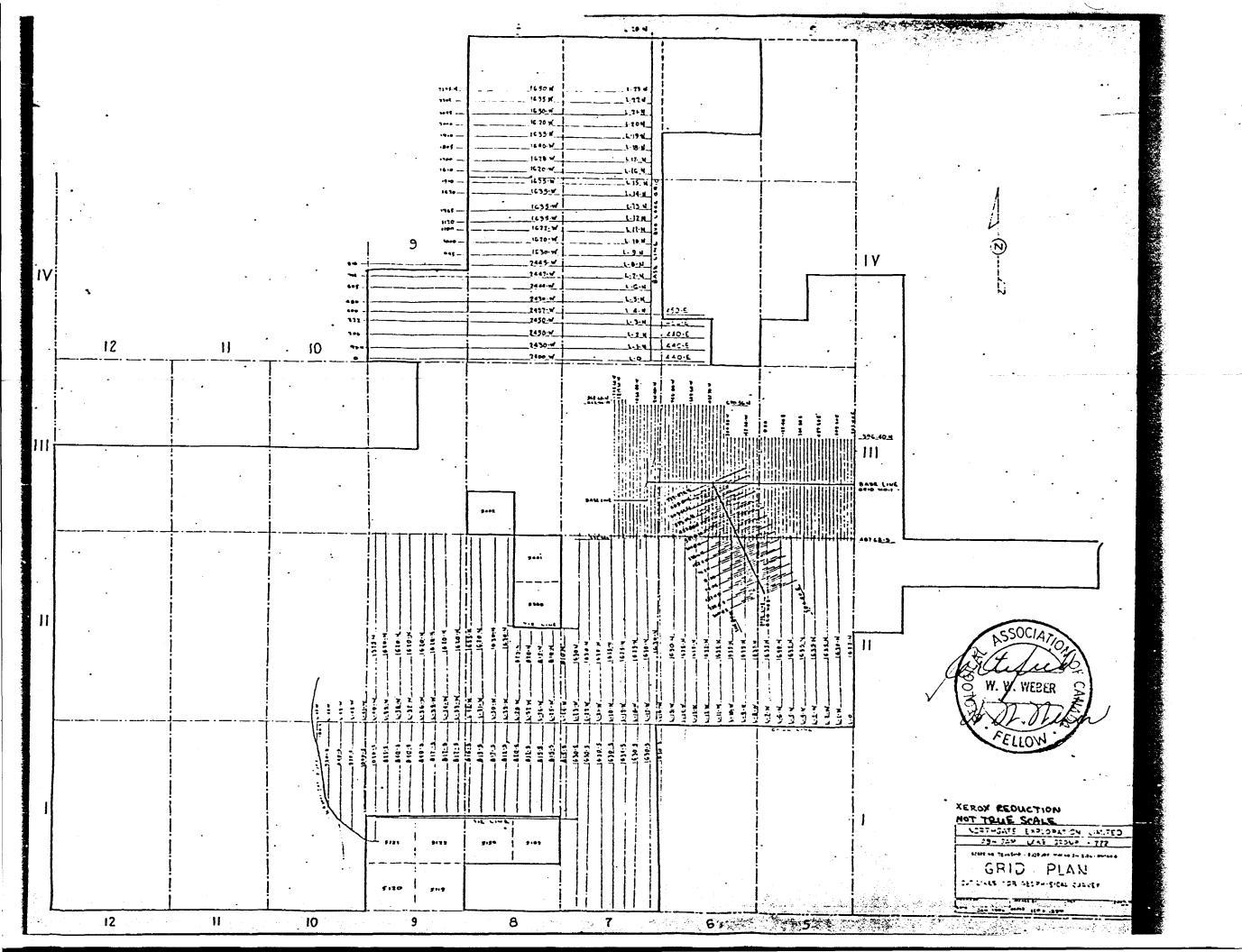
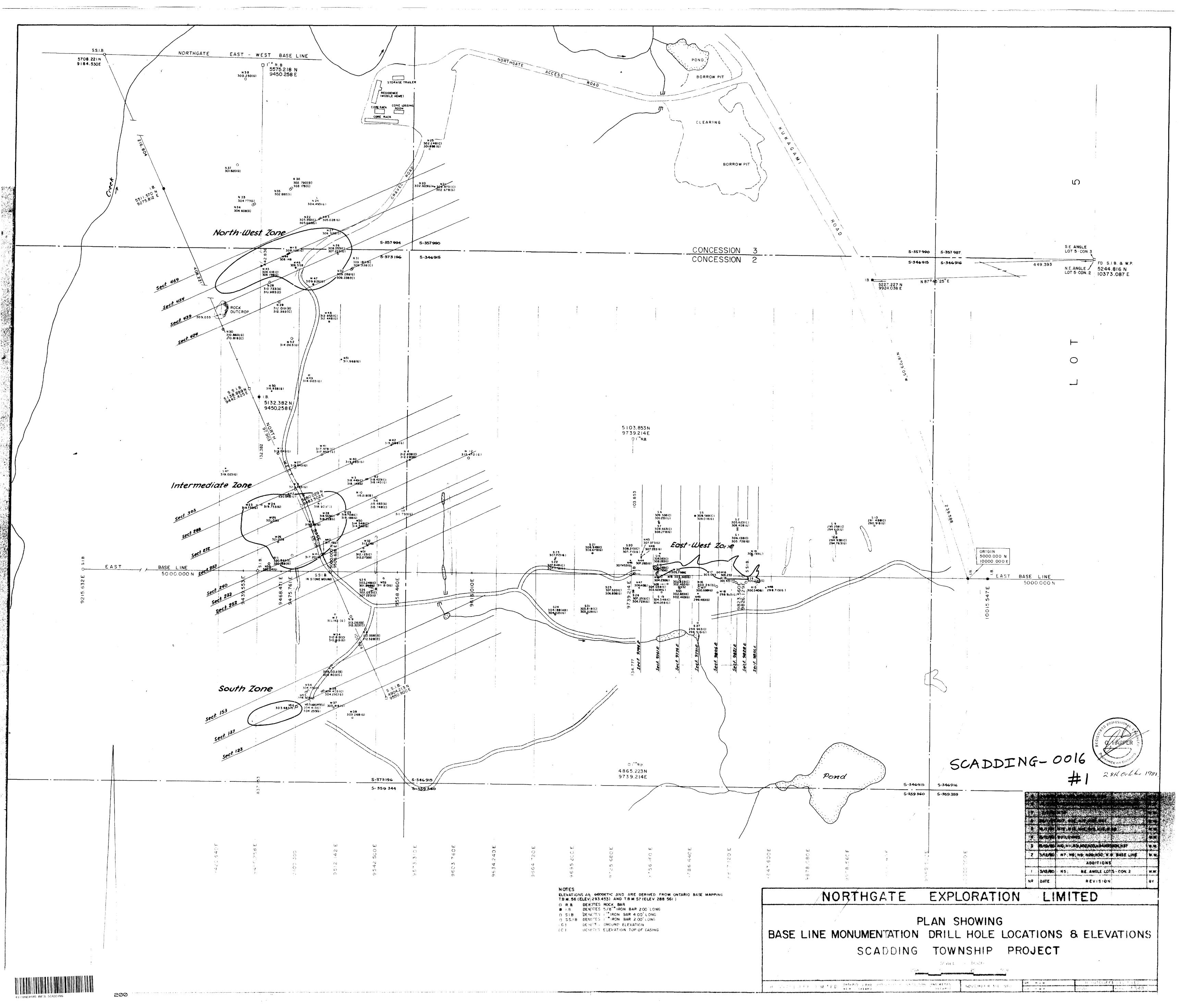
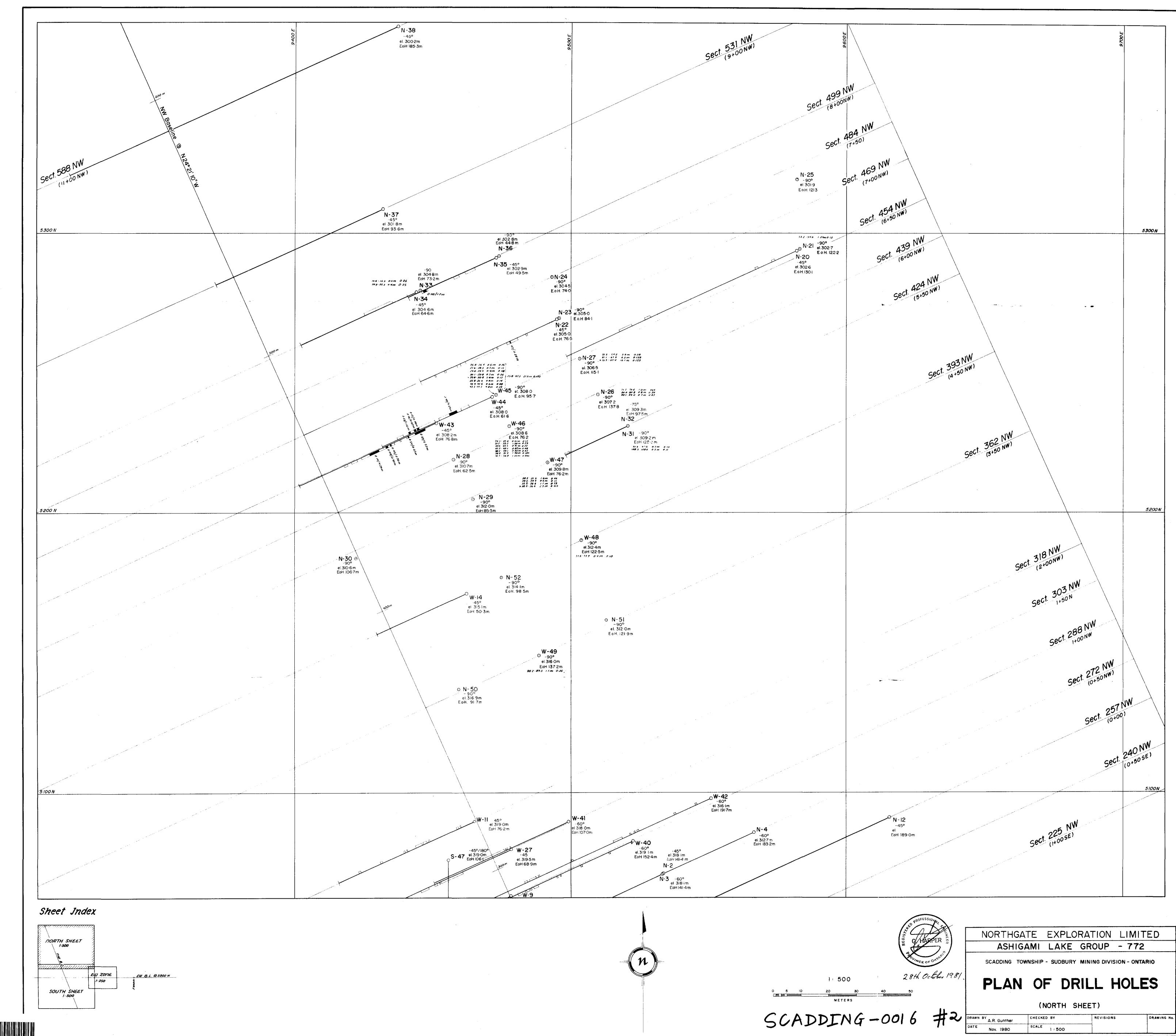


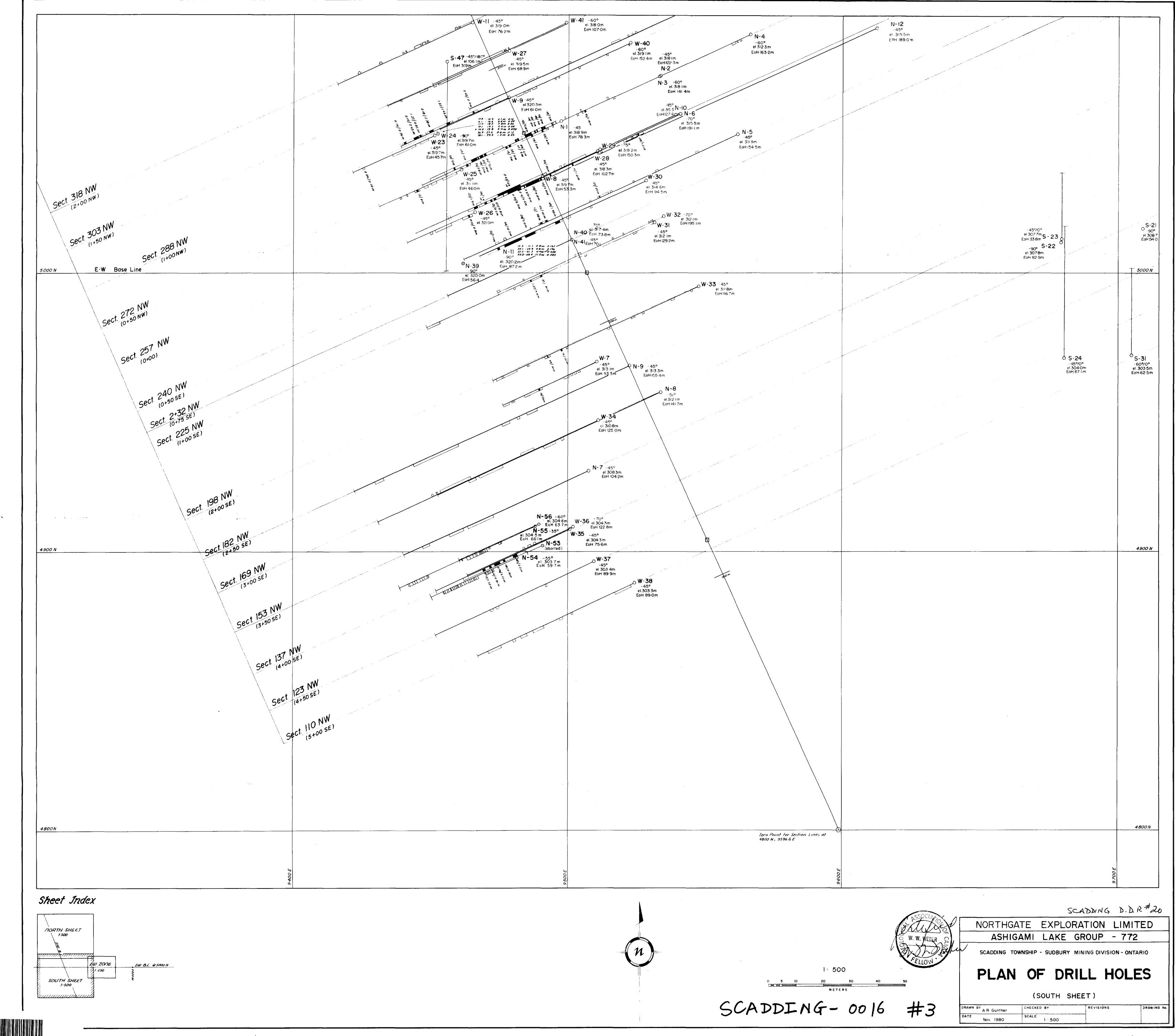
FIGURE 1 Scole 1:500



FOR ADDITIONAL INFORMATION SEE MAPS: SCADDING - 0016 # 1-40

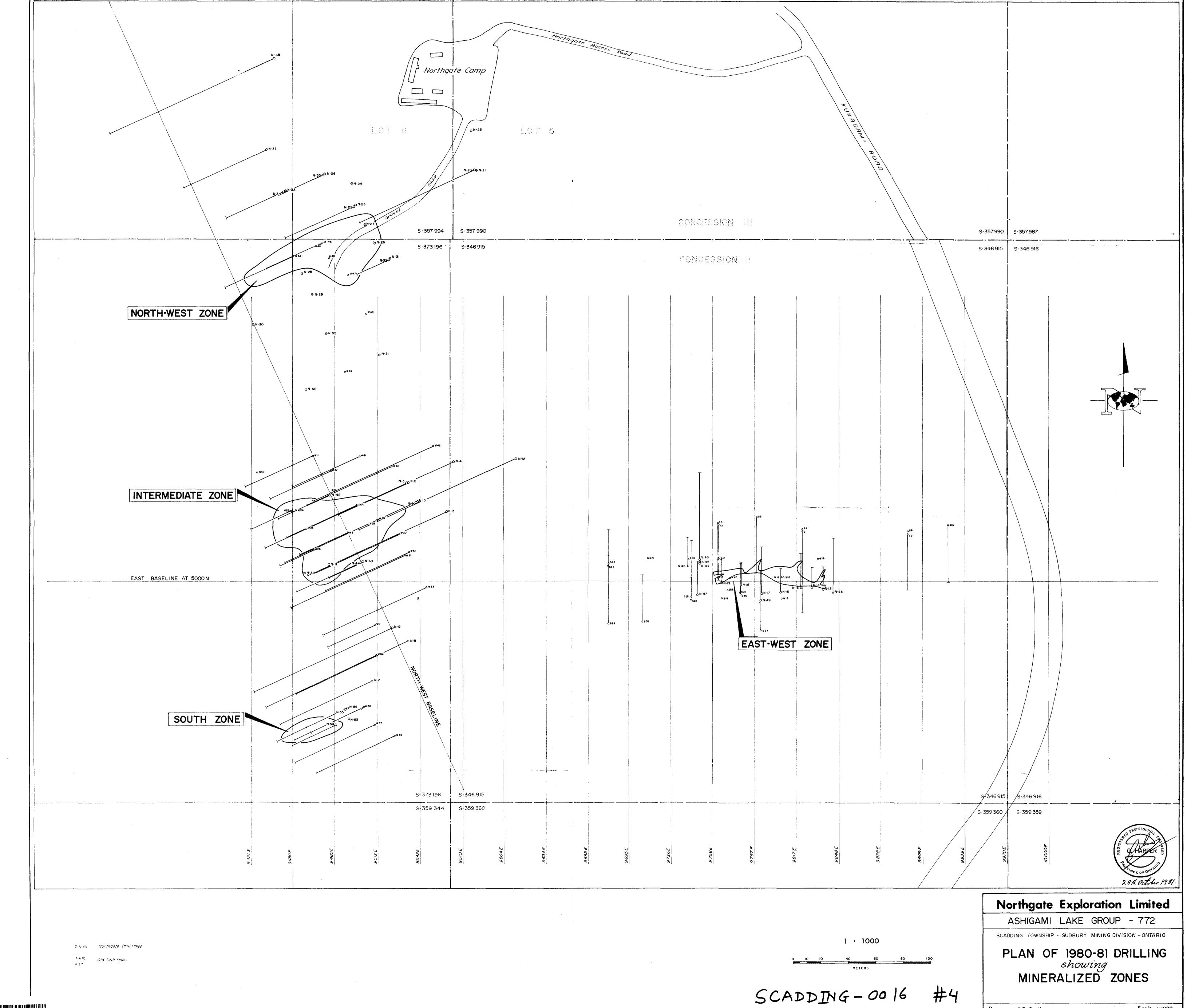






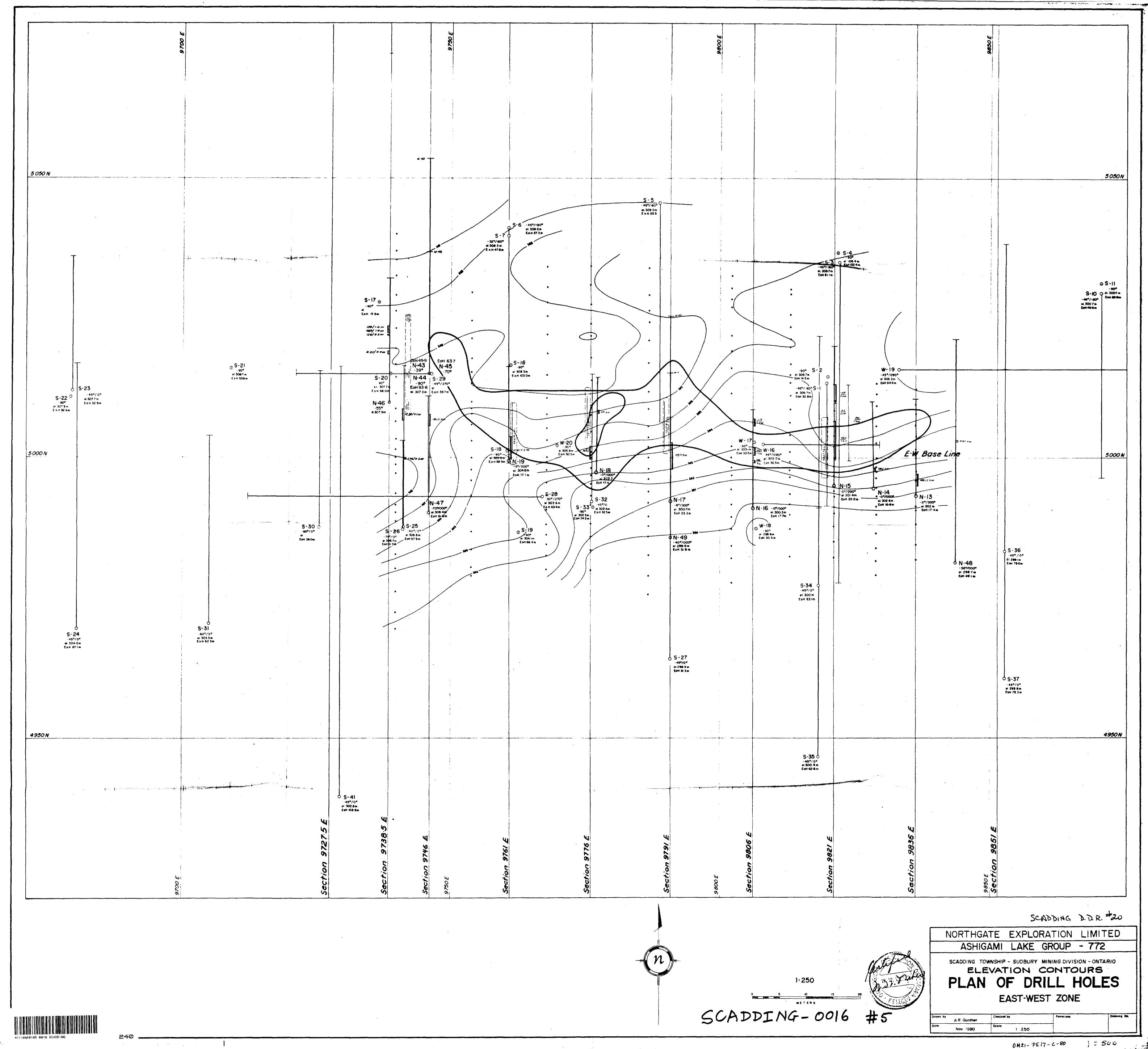
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Drawn A.R. Gunther Date April 1981

Scale 1:1000

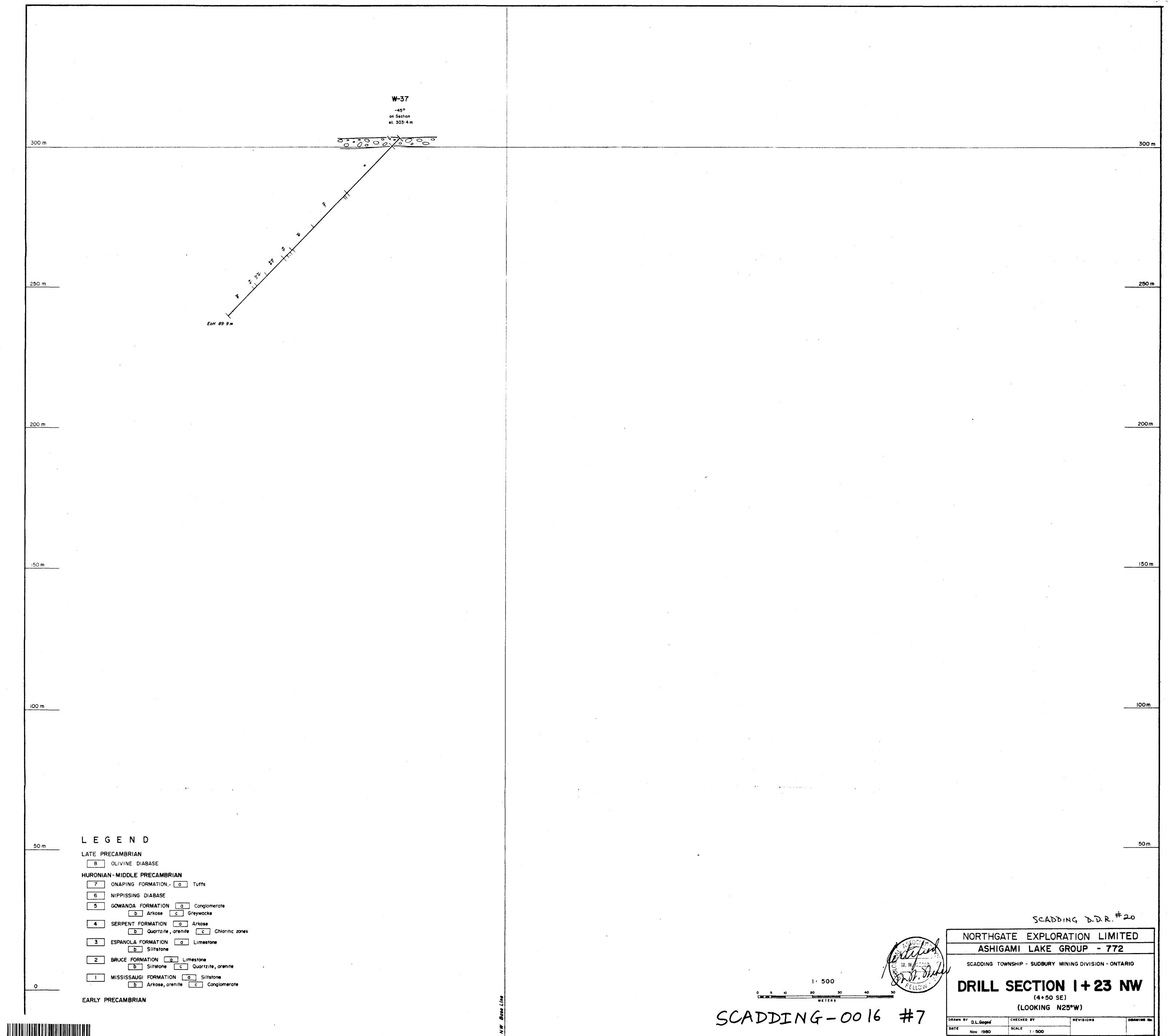


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8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING D.D.R. #20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone
b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone

b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone

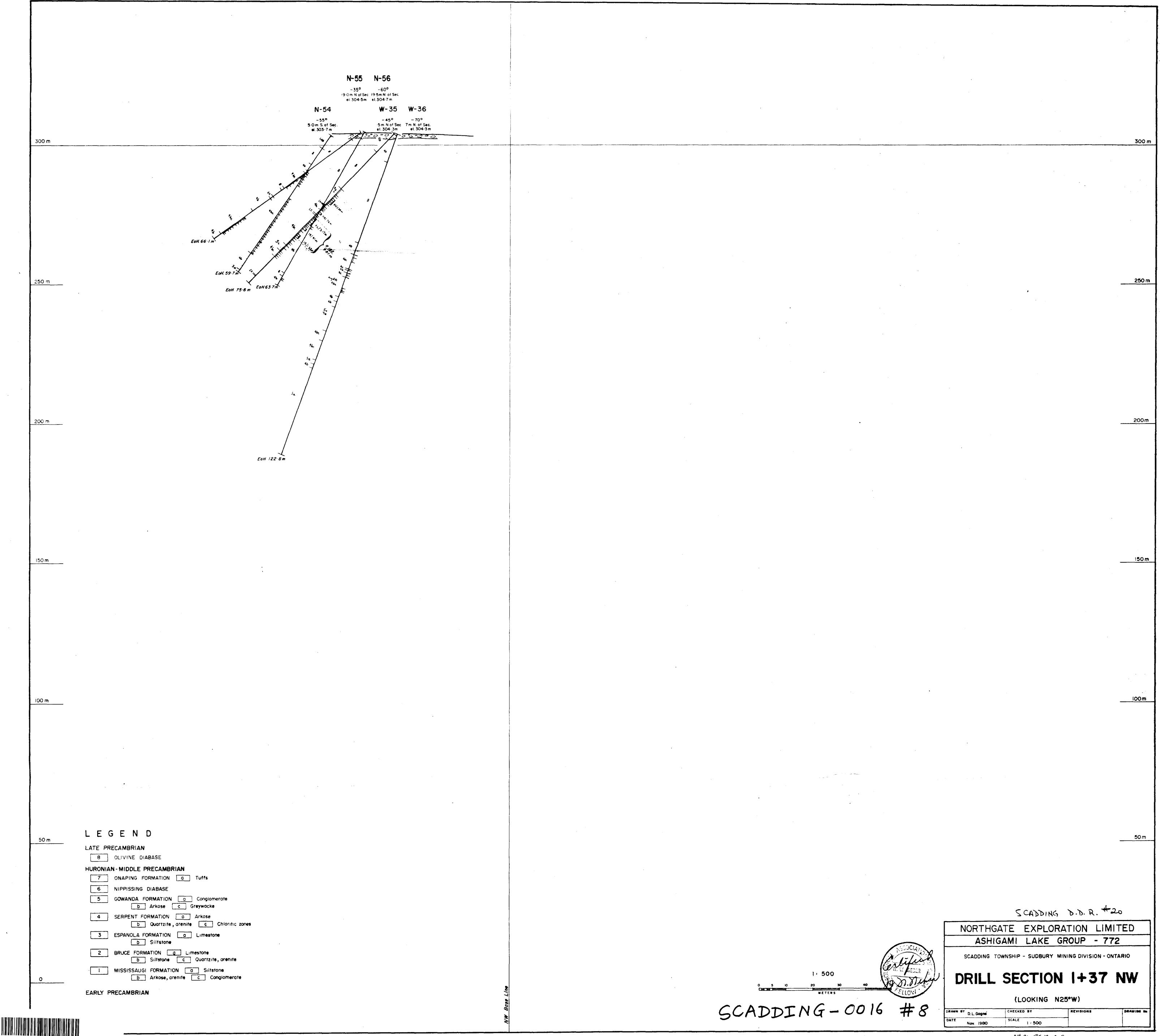
b Arkose, arenite c Conglomerate 1: 500 (5+00 SE) EARLY PRECAMBRIAN (LOOKING N25°W) SCADDING-0016 # 6 DRAWN BY D.L.Gogne SCALE 1:500 Nov. 1980 0M21-PE17-C-80



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200 m 8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING CIVISION - ONTARIO MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 1+53 NW SCADDING-0016 #9 EARLY PRECAMBRIAN (LOOKING N25°W) CHECKED BY REVISIONS

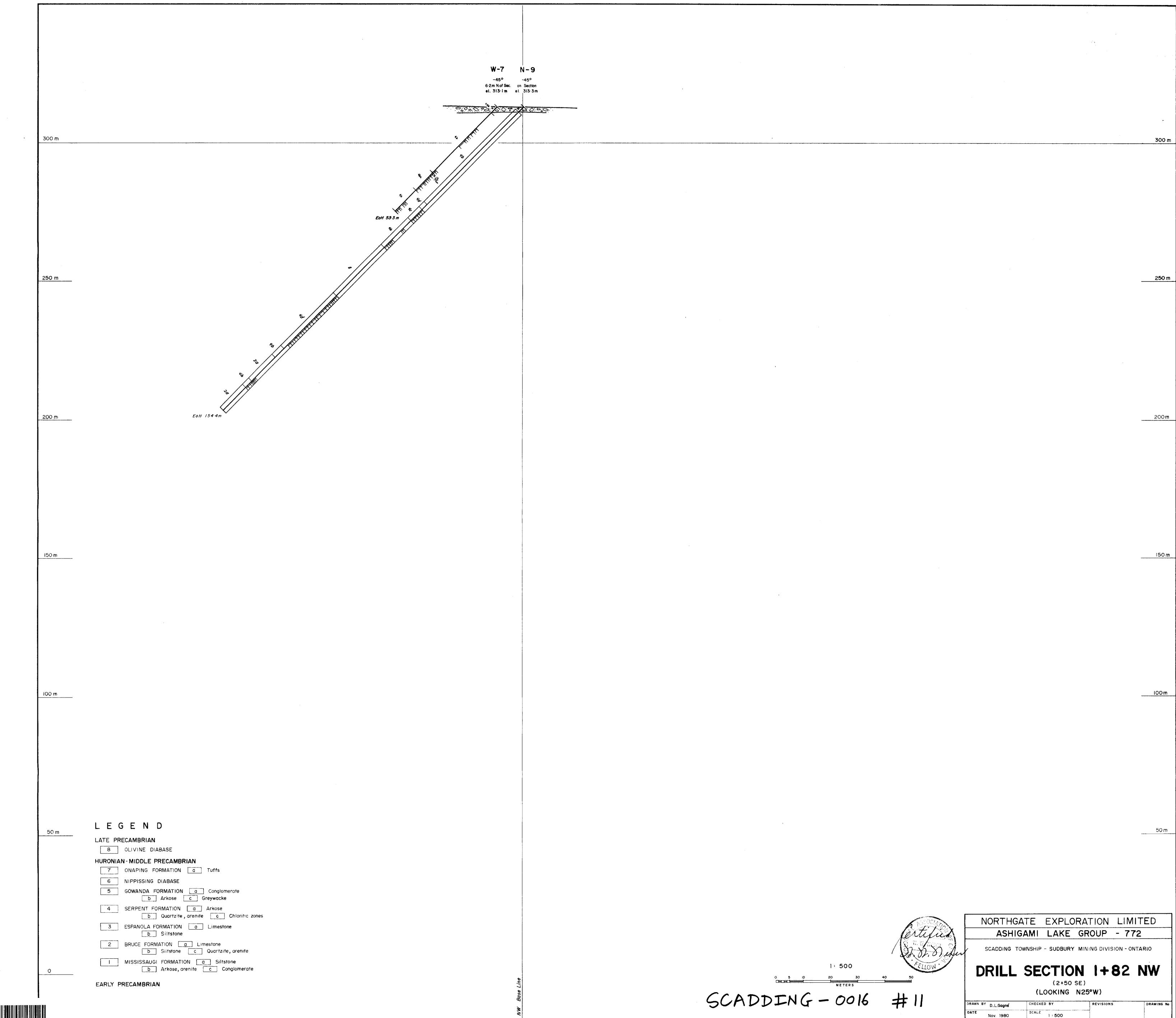
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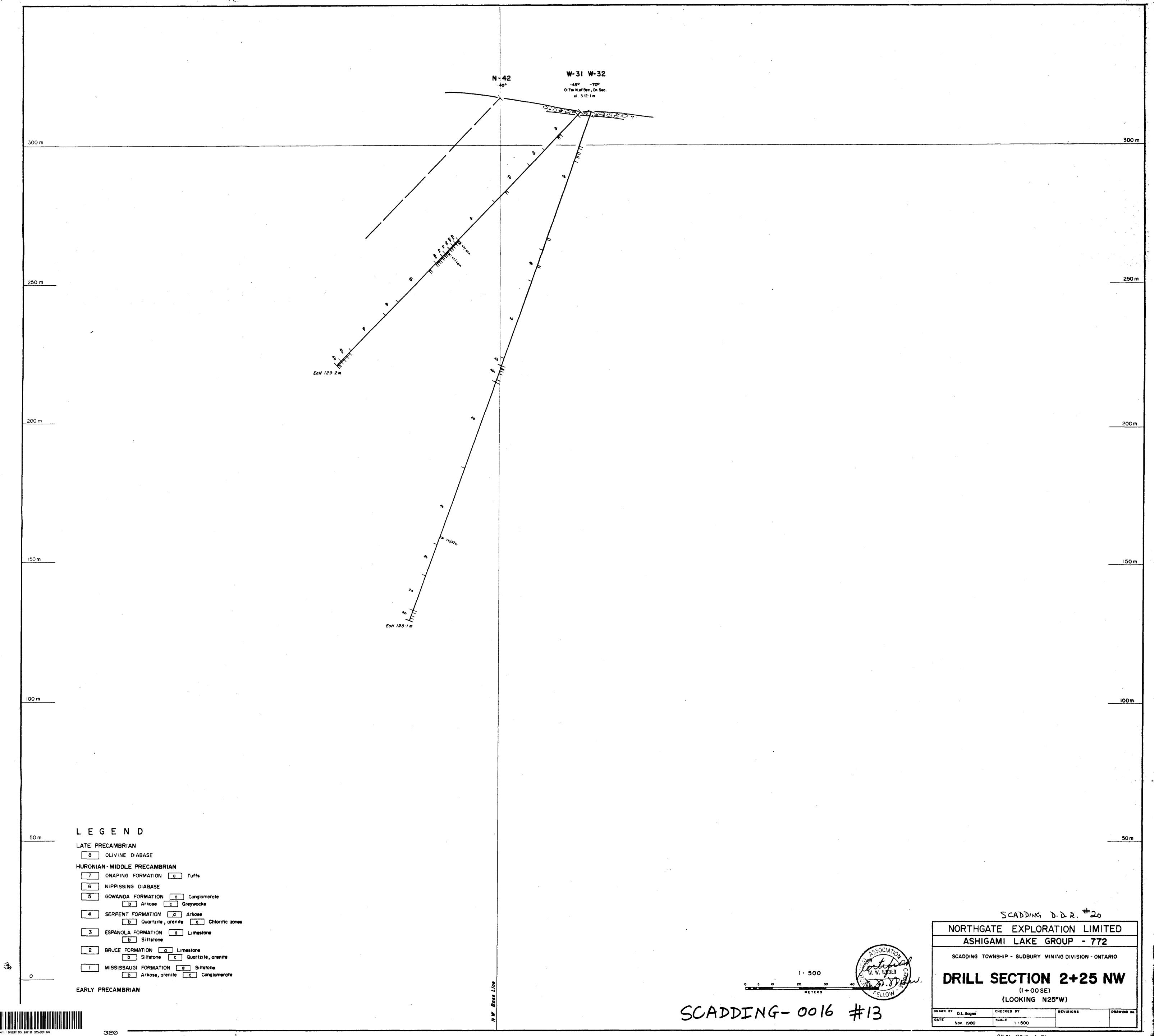
8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO 1: 500 DRILL SECTION 1+69 NW (3+00 SE) EARLY PRECAMBRIAN (LOOKING N25°W) SCADDING-0016 #10 DRAWING No SCALE 1 : 500

Nov. 1980



8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING D.D.R. +20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone
b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1 - 500 DRILL SECTION 1+98 NW 0____ EARLY PRECAMBRIAN (2+00 SE) (LOOKING N25°W) SCADDING - 00 16 DRAWN BY D.L. Gagne SCALE 1 - 500

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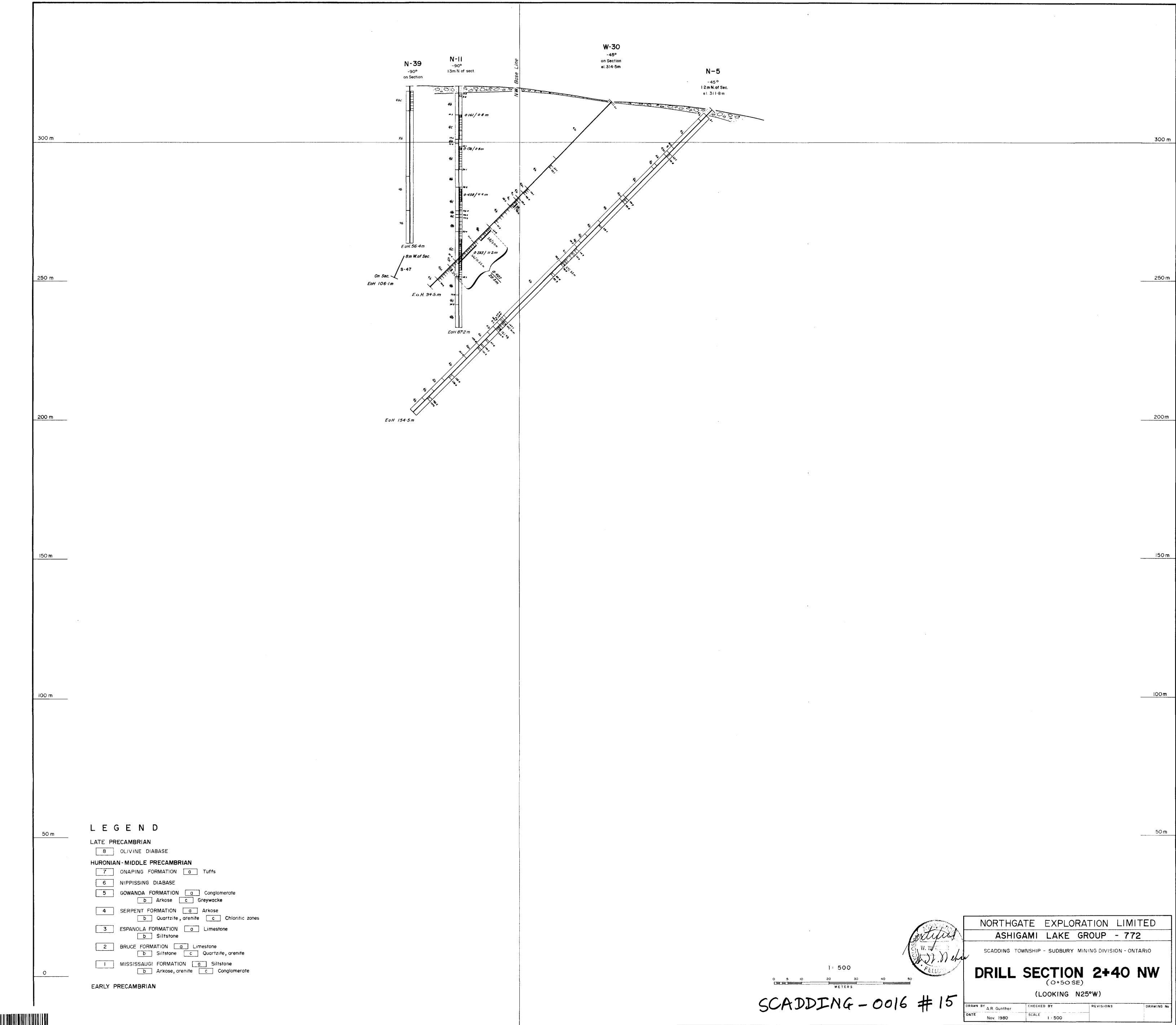
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300 m 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING D.D.R. #20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone ASHIGAMI LAKE GROUP - 772 b Siltstone 2 BRUCE FORMATION a Limestone

b Siltstone c Quartzite, grenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 2+32 NW EARLY PRECAMBRIAN (LOOKING N25°W) SCADDING-0016 # 14 SRAWN BY AR Gunther DRAWING No

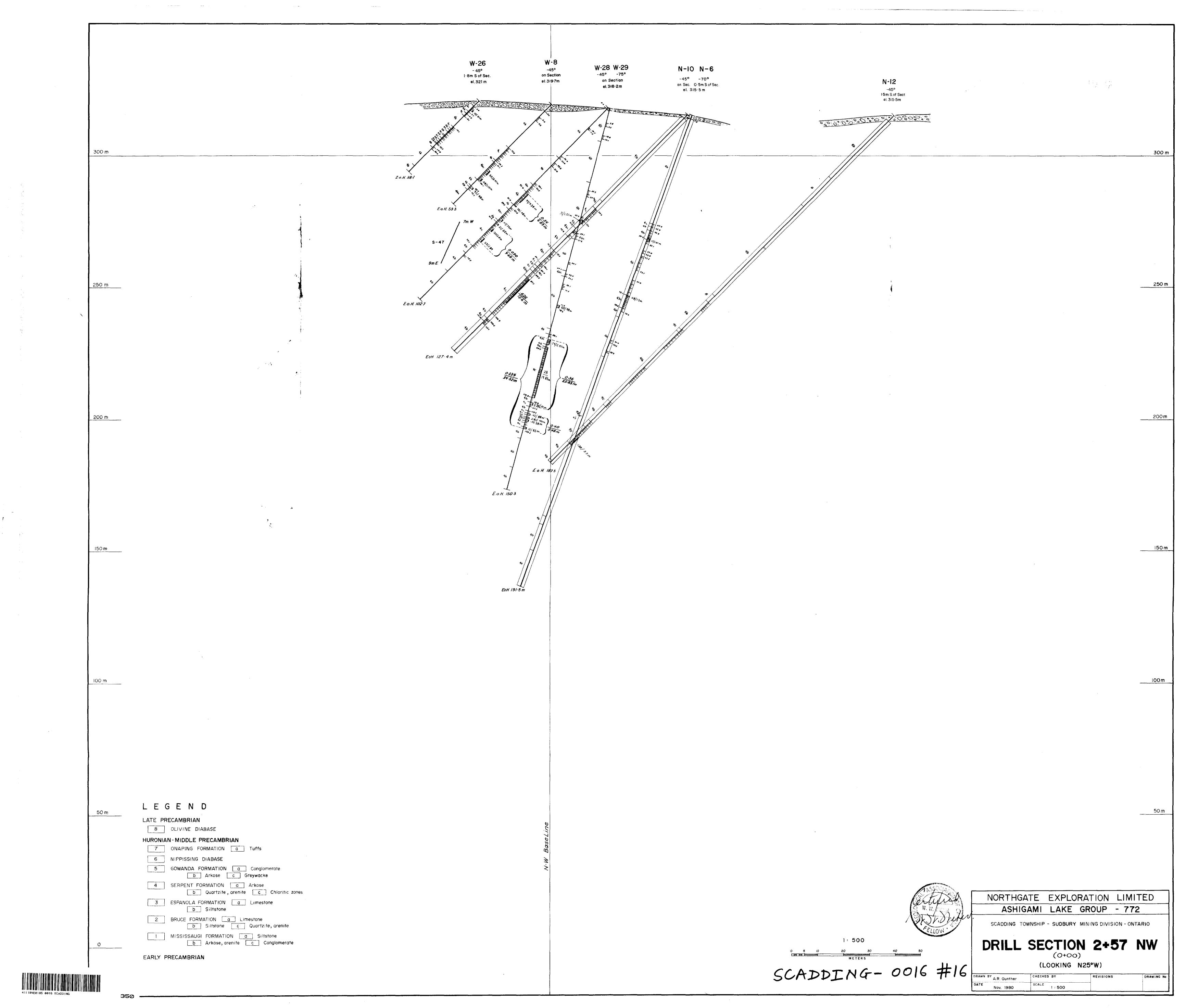
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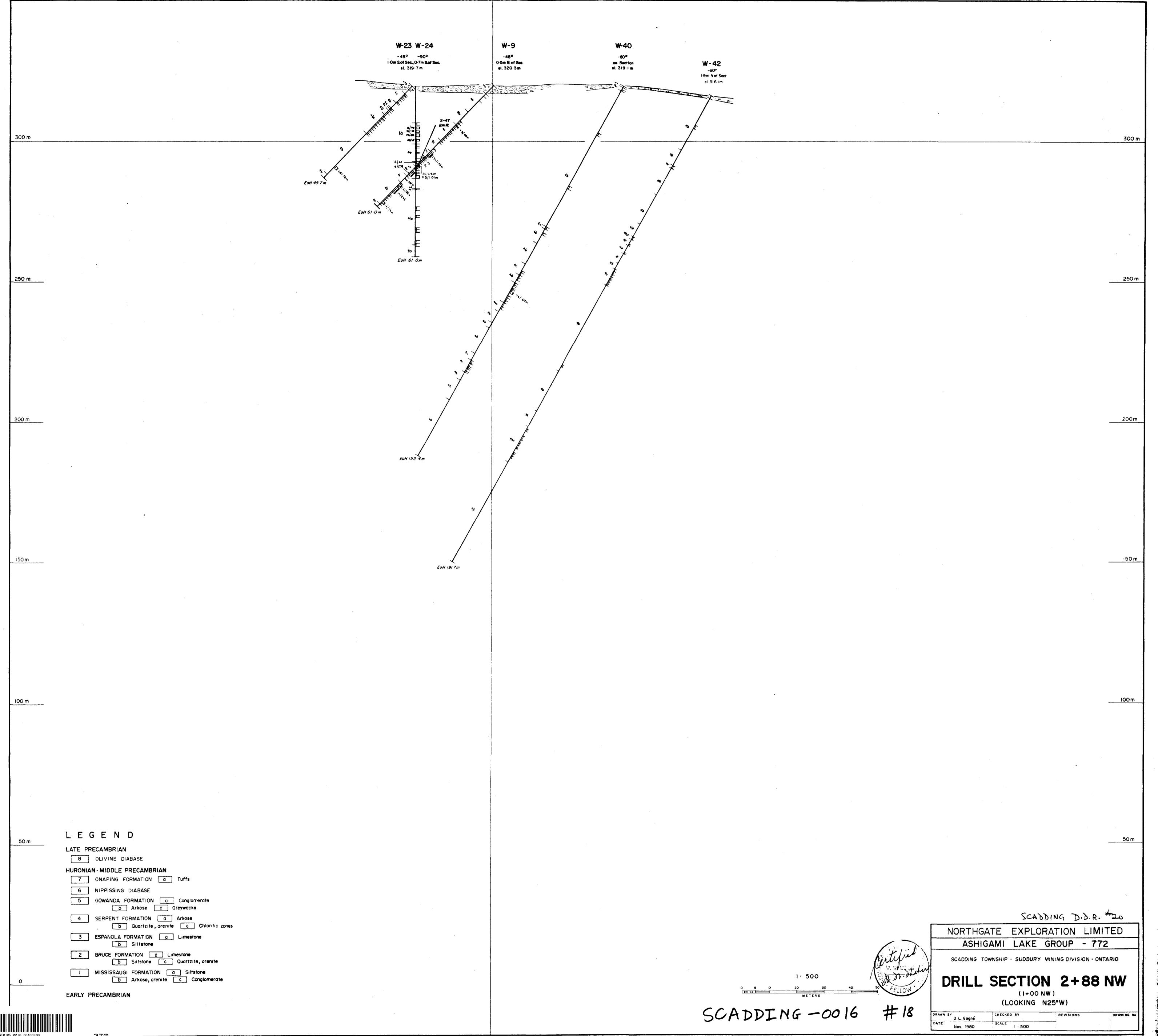
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LATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN [7] ONAPING FORMATION [a] Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION [a] Conglomorate

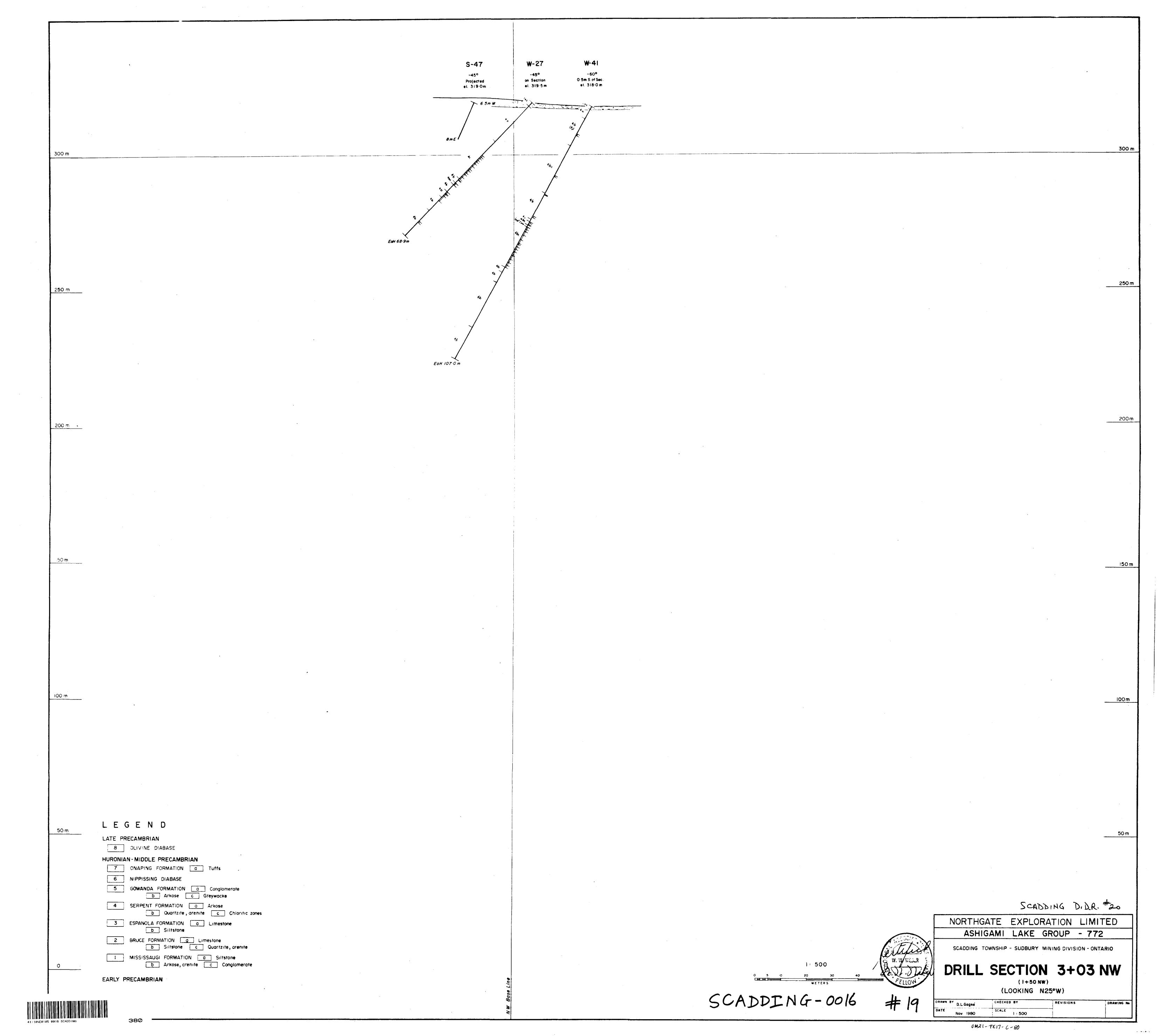
[b] Arkose [c] Greywacke 4 SERPENT FORMATION [a] Arkose

[b] Quartzite, arenite [c] Chloritic zones NORTHGATE EXPLORATION LIMITED [3] ESPANOLA FORMATION [a] Limestone [b] Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION [a] Limestone
[b] Sutstone [c] Quartzite, prenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO MISSISSAUGI FORMATION [a] Siltstone
[b] Arkose, arenite [c] Conglomerate 1 500 DRILL SECTION 2+72 NW EARLY PRECAMBRIAN (LOOKING N25°W) SCADDING-0016 #17



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	W-11	
	on Section el. 319·0m	
300 m	**************************************	300 m
	7 ₁₆	
	EOH 76 2 m	
250 m		250 m
200 m		
50 m		
	;	
100 m		<u>100m</u>
LEGEND 50 m LATE PRECAMBRIAN		50 m
8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs		
6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate b Arkose c Greywacke		
4 SERPENT FORMATION a Arkose b Quartzite, arenite c Chloritic zones 3 ESPANOLA FORMATION a Limestone b Siltstone		SCADDING D.D.R. #20 NORTHGATE EXPLORATION LIMITED ASHIGAMI LAKE GROUP - 772
2 BRUCE FORMATION a Limestone b Siltstone c Quartzite, arenite I MISSISSAUGI FORMATION a Siltstone D Arkose, arenite c Conglomerate		SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO
D Arkose, arenite C Conglomerate EARLY PRECAMBRIAN	eu 7 es	DRILL SECTION 3+18 NW (2+00 NW) (LOOKING N25°W)
41110NE0185 0016 SCADDING 390	N.W. Bas	SCADDING-0016 #20 DRAWN BY D L Gagné CHECKED BY REVISIONS DRAWING No. 1980 1980 1980 1950 1950

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	N-50 W-49 N-51		
	-90° Im North of Sec. et. 316-9 m et. 316-0 m -90° In North of Sec. et. 316-0 m et. 312-0 m 4b		
300 m	46	•	300 m
	4be		
250 m	440		250 m
	4b. 32/107m. 4bc. 4b. 4b.		
200 m	8 EOH 121 9m		200 m
	EOH 137 2 m		
			150 m
100 m			
LEGEND LATE PRECAMBRIAN B OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs			50 m
6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate b Arkose c Greywocke 4 SERPENT FORMATION a Arkose b Quartzite, arenite c Chloritic zones 5 ESPANOLA FORMATION a Limestone b Sittstone			SCADDING DDR #20 NORTHGATE EXPLORATION LIMITED ASHIGAMI LAKE GROUP - 772
BRUCE FORMATION a Limestone b Siltstone c Quartzite, arenite I MISSISSAUGI FORMATION a Siltstone D Arkose, arenite c Congiomerate EARLY PRECAMBRIAN		METERS FELLOW.	DRILL SECTION 3+62 NW (3+50 NW) (LOOKING N25°W)
41110NE0185 0016 SCADDING 400	SCADDI	NG-0016 #21	DRAWN SY D.L.Gogne CHECKED SY REVISIONS DRAWING No.

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e final and the second

		W-14 N-52 -45° -90° on Section on Section el 315 'm el. 314 im	W-48 -90° on Section et. 312:4m		
300 m		16 16 16 16 16 16 16 16 16 16 16 16 16 1			300 m
		46	8		
	EoH 503m		40		
250 m		46	46		250 m
		4b	4 D		
		EOH 985m	40 =		
200 m			EOH 1225 m		
-50 m					150 m
		-			
100 m					
LEGEND					50 m
EATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE					
5 GOWANDA FORMATION a Conglomerate b Arkose c Greywacke 4 SERPENT FORMATION a Arkose b Quartzite, arenite c Chloritic zones 3 ESPANOLA FORMATION a Limestone b Siltstone				· N	SCADDING D.D.D. #20 DRTHGATE EXPLORATION LIMITED ASHIGAMI LAKE GROUP - 772
2 BRUCE FORMATION a Limestone D Siltstone C Quartzite, arenite 1 MISSISSAUGI FORMATION a Siltstone D Arkose, arenite C Conglomerate EARLY PRECAMBRIAN	-/ue		1:500 0 5 10 20 3 CHHI 1 1 METERS	DI NIEBER ELW	CADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO RILL SECTION 3+93 NW (4+50 NW) (LOOKING N25°W)
411 ONE 0185 0016 SCADDING 410	N W Base		SCADDING-		D.L.Gagne CHECKED BY REVISIONS DRAWING No

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4b 123 4b 123 EOH 76.2m 50 m LATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCANDING D.D.R. #20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone
b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone

b Silfstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone

b Arkose, arenite c Conglomerate DRILL SECTION 4+24 NW (5+50 NW) EARLY PRECAMBRIAN SCADDING-00.16-#23
RAWN BY D.L.Gagné (LOOKING N25°W)

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OM 21 - PE 17 - C-80

LEGEND 50 m LATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Congiomerate
b Arkose c Greywacke SCADDING DDR #20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone
b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 SCADDING-0016 (6+00 NW) EARLY PRECAMBRIAN (LOOKING N25°W) #24 DRAWING No Nov 1980

OM21- PE17- C-80

41110NE0185 0016 SCADDING

N-27 N-20 N-21 -90° 0·7m S of Sec, el. 306·5m 0.5m S.of Sec. el. 308-2m on Section el. 308-0m -45° -90° 2·3m N of Sec. EoH 76-8m 250 m 200 m EoH 115-1 m **LL** EoH 122 2 m 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION G Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate

b Arkose c Greywacke 4 SERPENT FORMATION a Arkose

b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO 1: 500 DRILL SECTION 4+54 NW SCADDING - 0016 (6+50 NW) EARLY PRECAMBRIAN (LOOKING N25°W) DRAWN BY D.L.Gagne SCALE 1:500 Nov. 1980

41110NE0185 0016 SCADDING

N-22 N-23 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate

b Arkose c Greywacke SCADDING DDR #20 SERPENT FORMATION a Arkose

b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 4+69 NW (7 + 00 NW) (LOOKING N25°W) EARLY PRECAMBRIAN SCADDING - 0016 #26 DRAWN BY D.L.Gagné DRAWING No. SCALE 1:500 Nov. 1980

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OM21- PE17- C-80

N-25 on Section 4 7m S. of Sec. el. 302·2 m 8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING DDR +20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 4+84 NW (7+50 NW) EARLY PRECAMBRIAN (LOOKING N25°W) SCALE 1 : 500 Nov. 1980

41110NE0185 0016 SCADDING

460

OM21-PE17-C-80

LATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN - MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING DDR #20 4 SERPENT FORMATION a Arkose

b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO I MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 4+99 NW EARLY PRECAMBRIAN SCADDING-0016 (LOOKING N25°W) #28 DRAWN BY A.R Gunther

Nov 1980

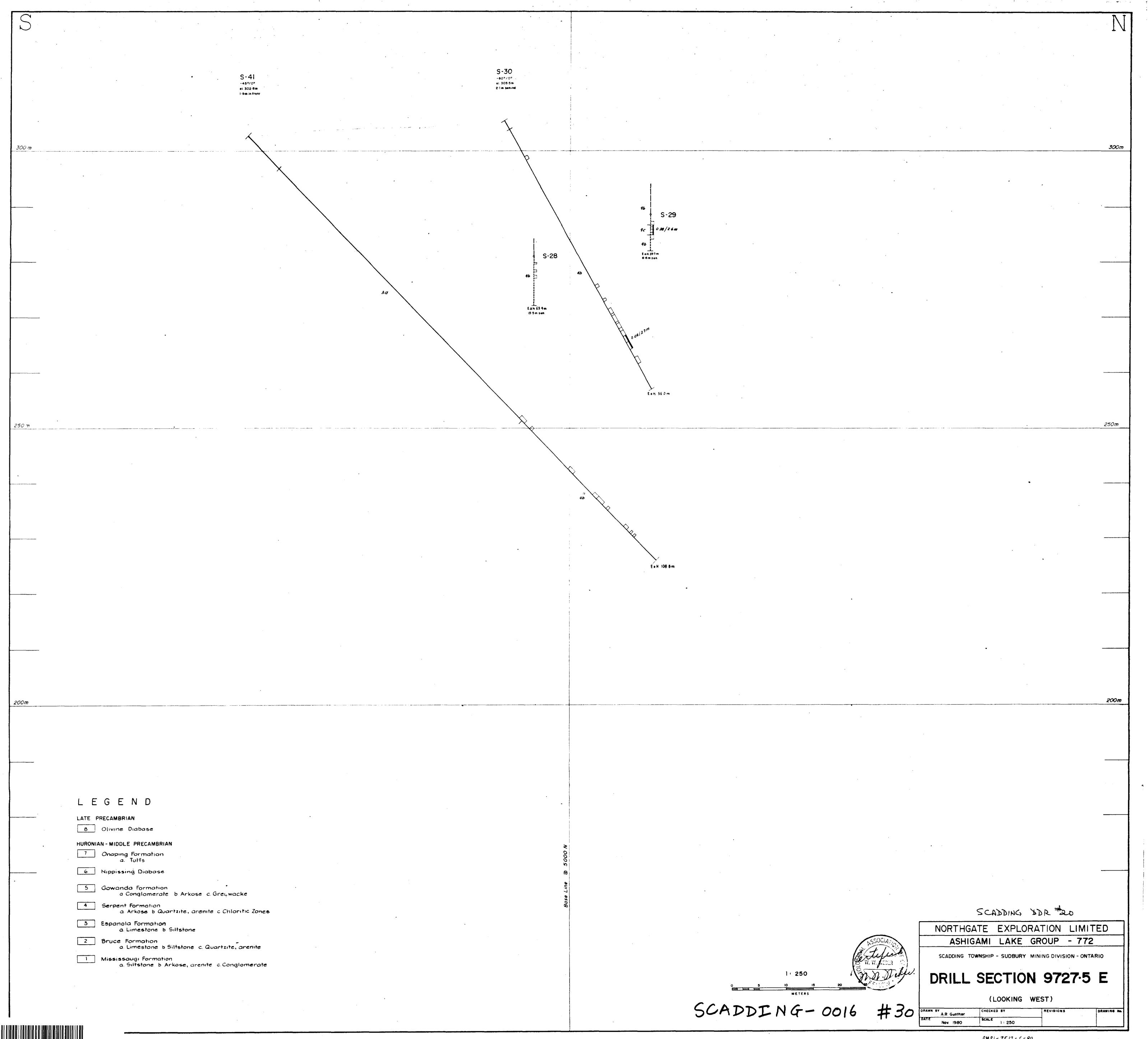
OM21- PE 17- C-80

41110NE0185 0016 SCADDING

N - 37 -45° on Section el. 301-8 m LATE PRECAMBRIAN 8 OLIVINE DIABASE HURONIAN-MIDDLE PRECAMBRIAN 7 ONAPING FORMATION a Tuffs 6 NIPPISSING DIABASE 5 GOWANDA FORMATION a Conglomerate
b Arkose c Greywacke SCADDING DDR #20 4 SERPENT FORMATION a Arkose
b Quartzite, arenite c Chloritic zones NORTHGATE EXPLORATION LIMITED 3 ESPANOLA FORMATION a Limestone b Siltstone ASHIGAMI LAKE GROUP - 772 2 BRUCE FORMATION a Limestone
b Siltstone c Quartzite, arenite SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO MISSISSAUGI FORMATION a Siltstone
b Arkose, arenite c Conglomerate 1: 500 DRILL SECTION 5+31 NW SCADDING-0016 #29 EARLY PRECAMBRIAN (LOOKING N25°W) DRAWN BY A.R. Gunther DRAWING No SCALE 1 : 500

Nov 1980

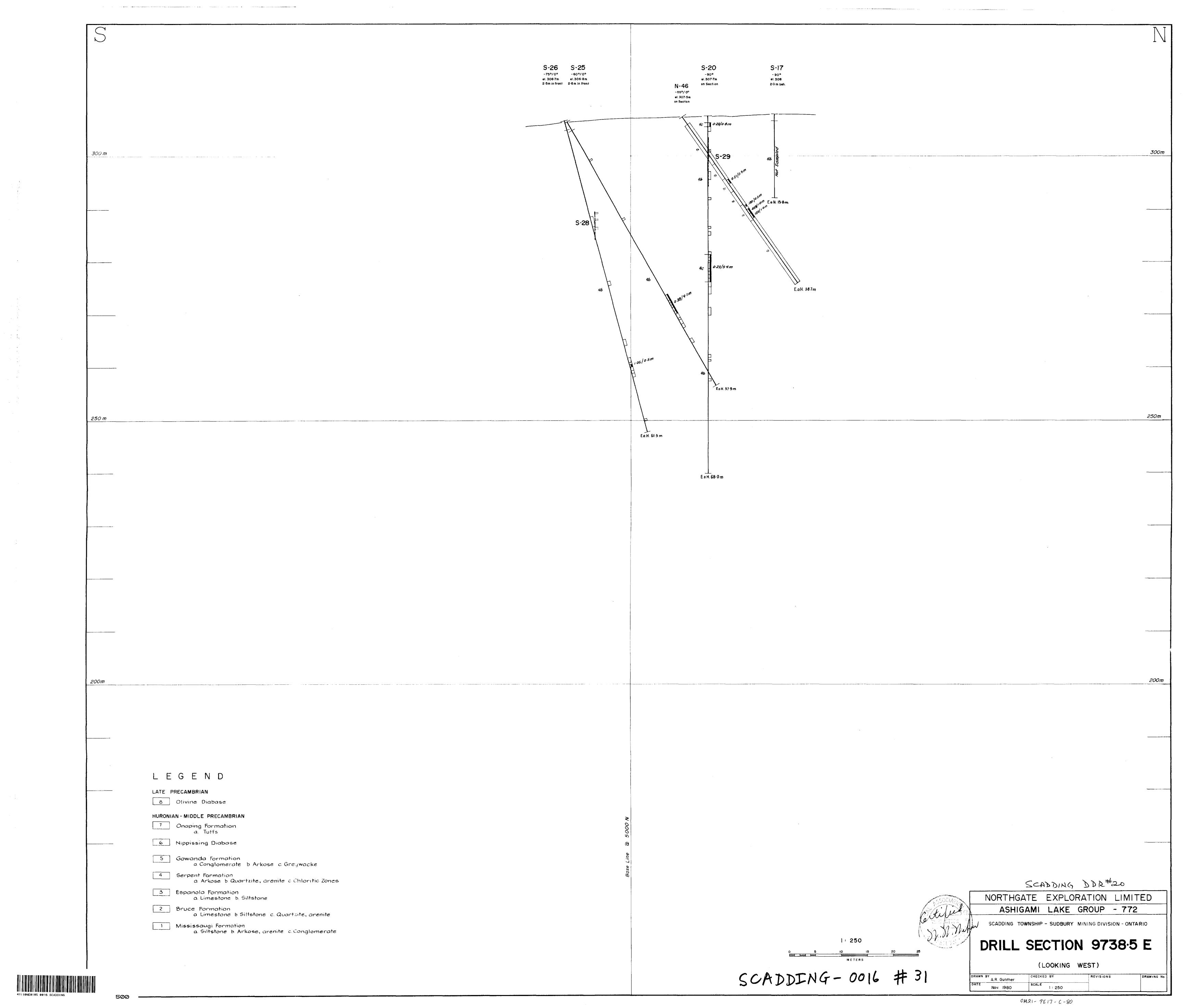
OM21- PE17- C-80

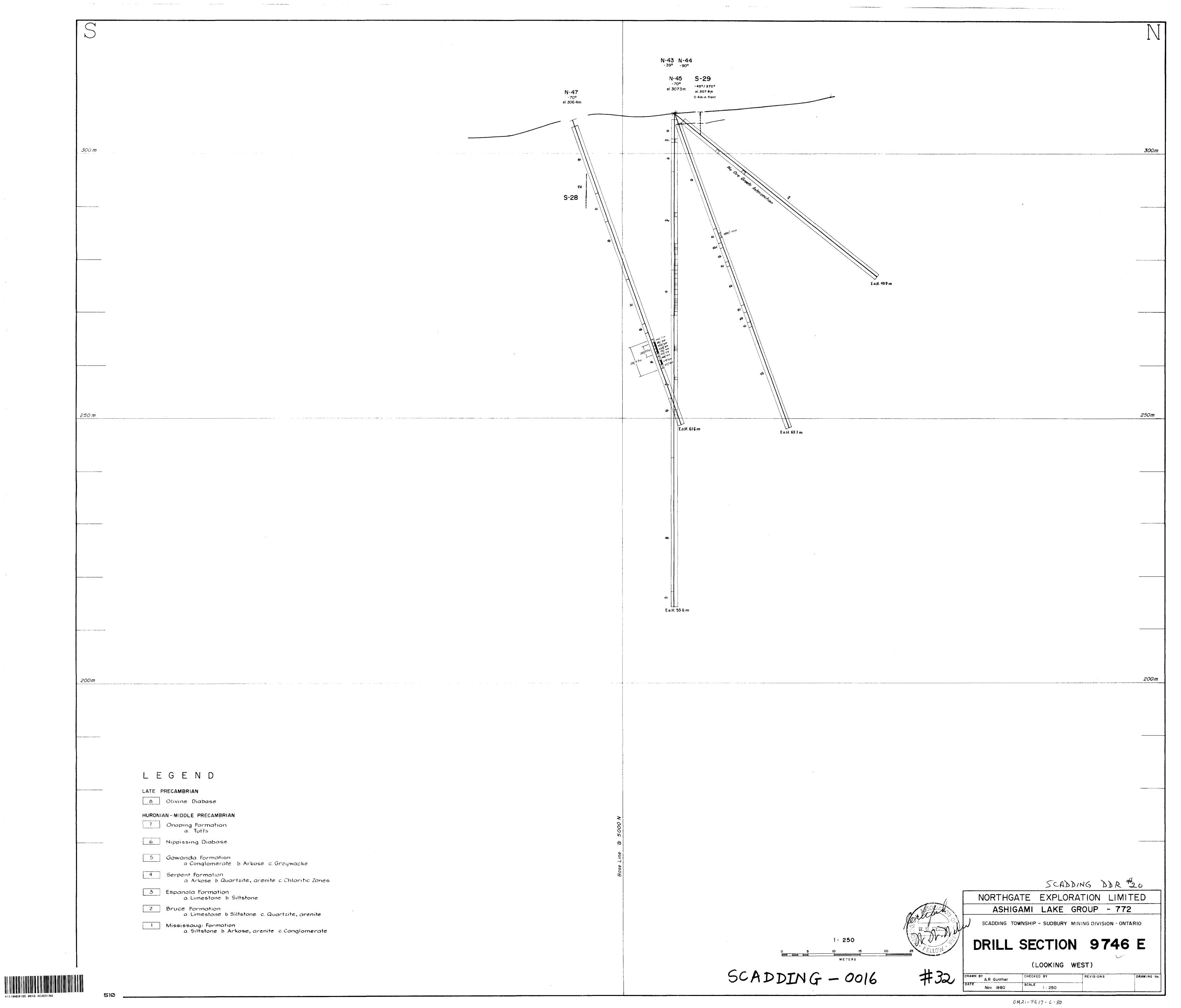


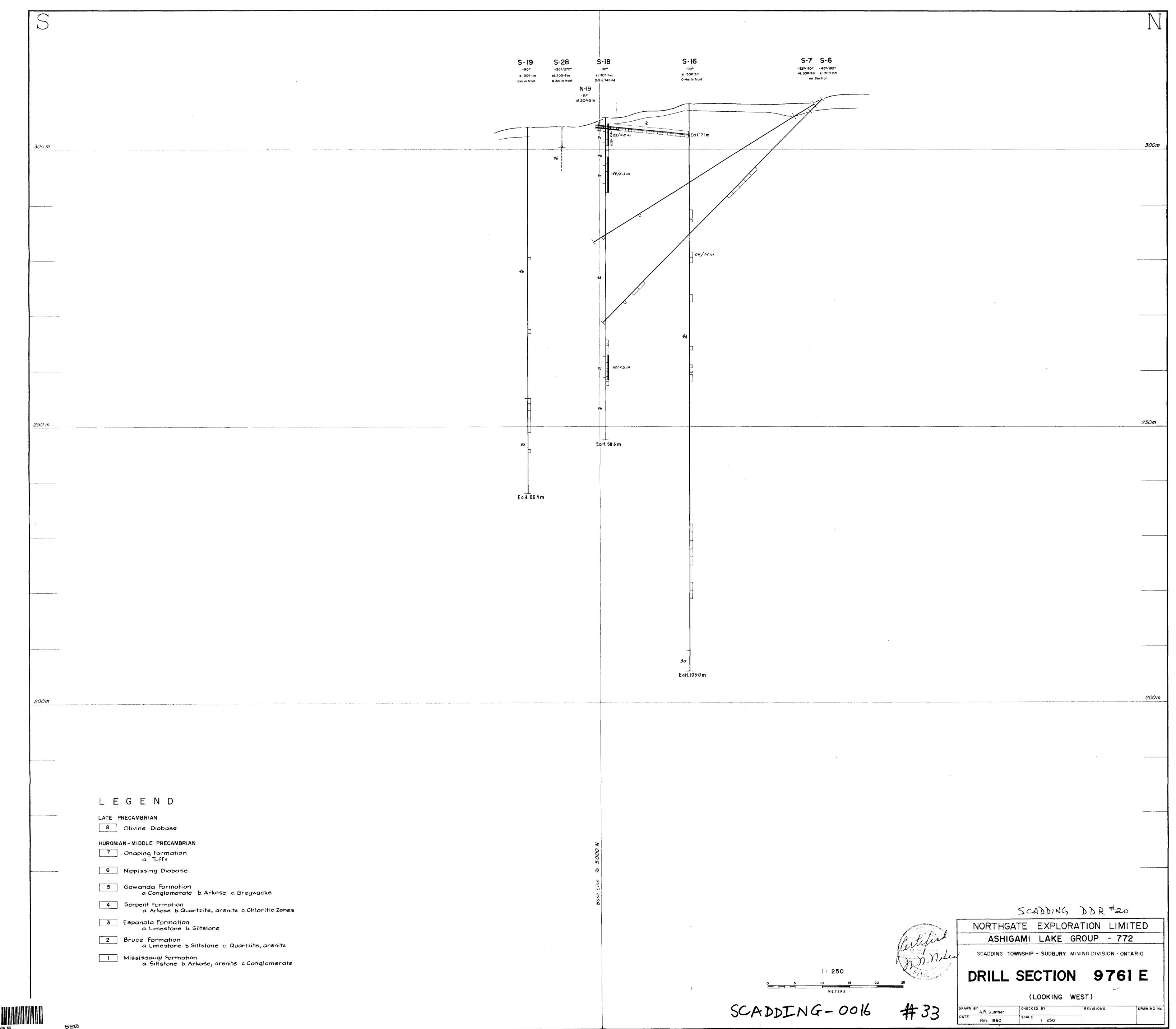
16 SCADDING

490

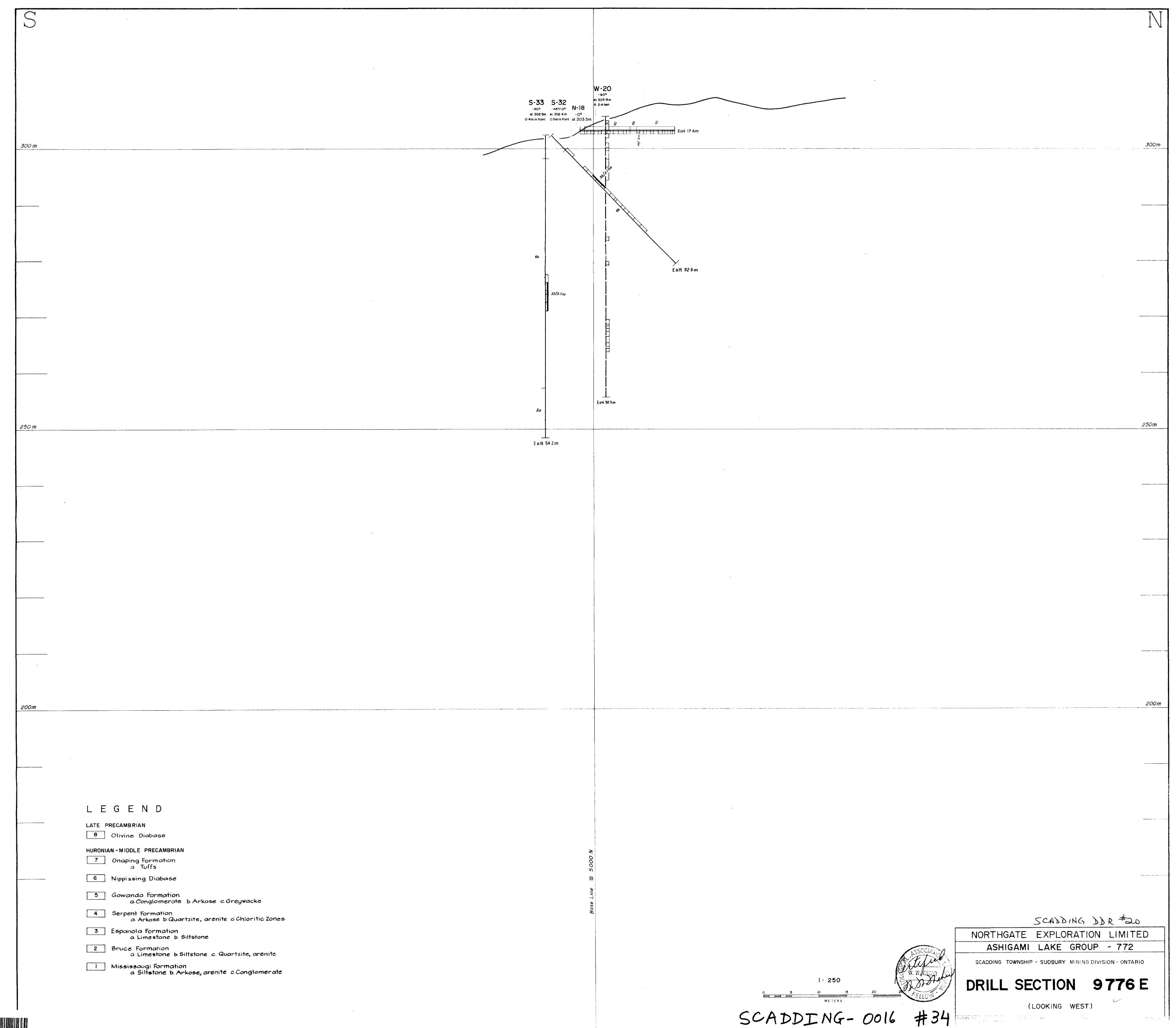
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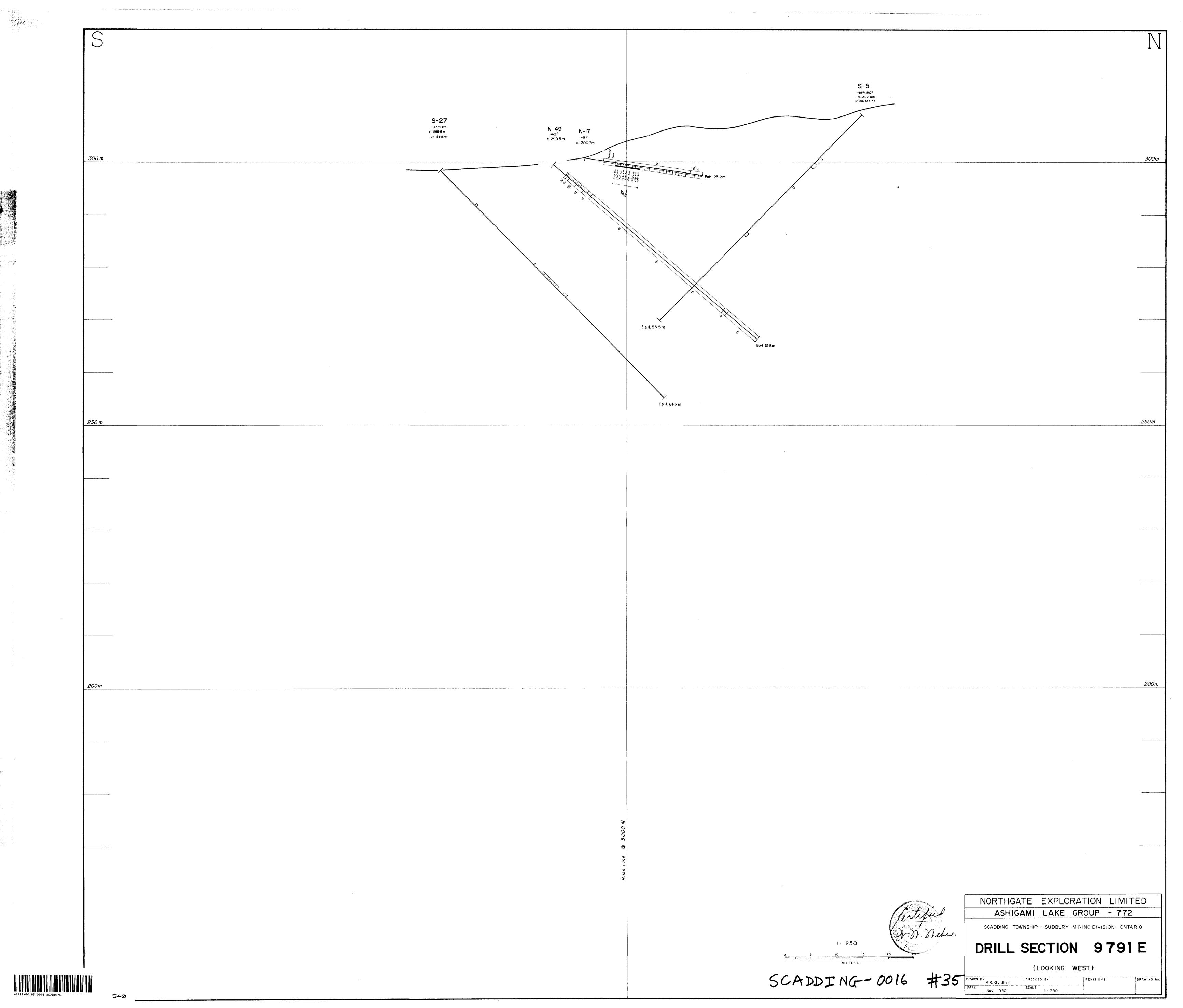
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41110NE0185 0016 SCADDING

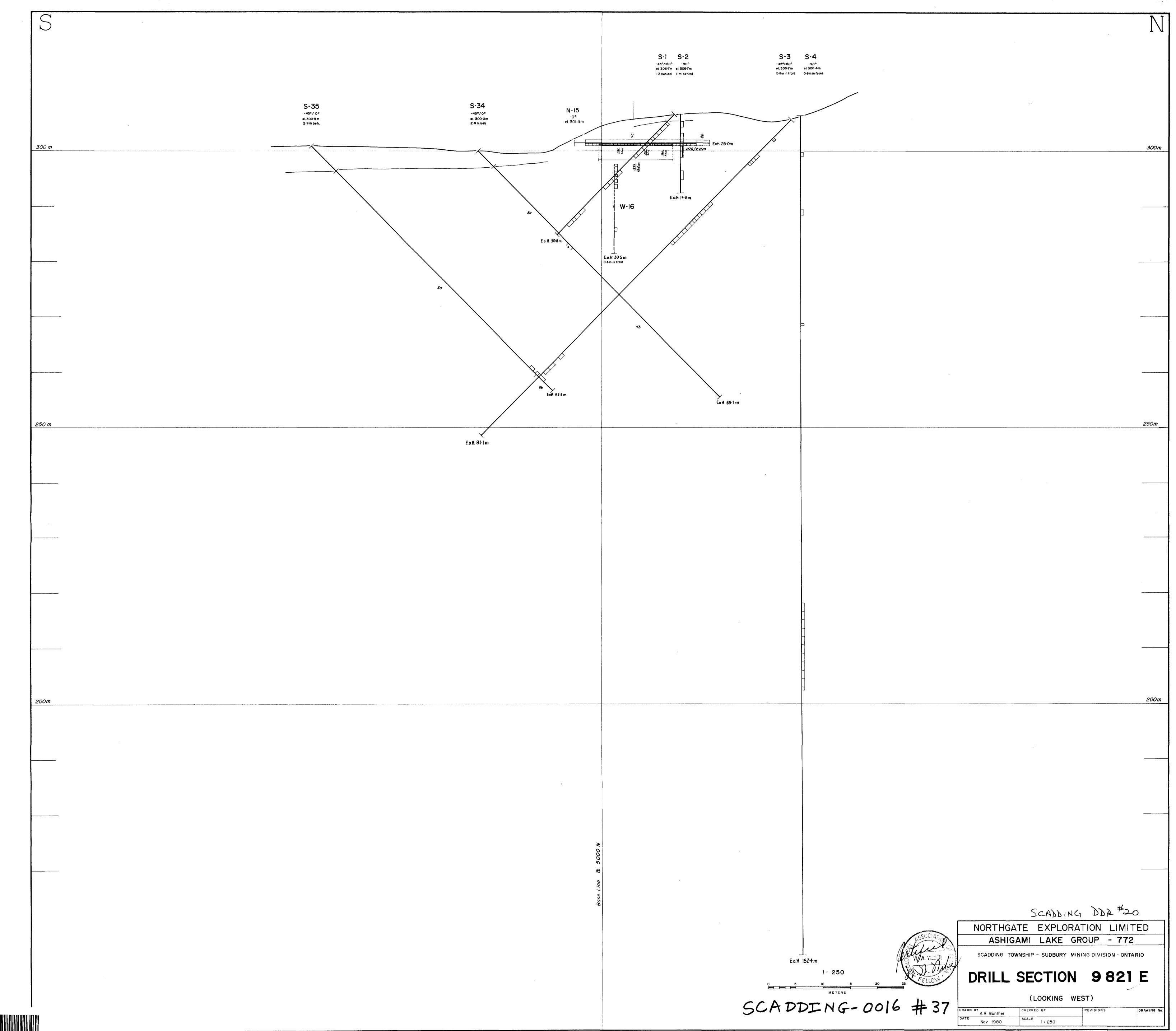
1222119 0010 9101

OM21-PE17-C-80



E.o.H. 30:5 m E.o.H. 30-5 m SCADDING DDR #20 NORTHGATE EXPLORATION LIMITED ASHIGAMI LAKE GROUP - 772 SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO 1: 250 DRILL SECTION 9806 E SCADDING-0016 #36 (LOOKING WEST)

0M21-PE17-C-80



41110NE0185 0016 SCADDING

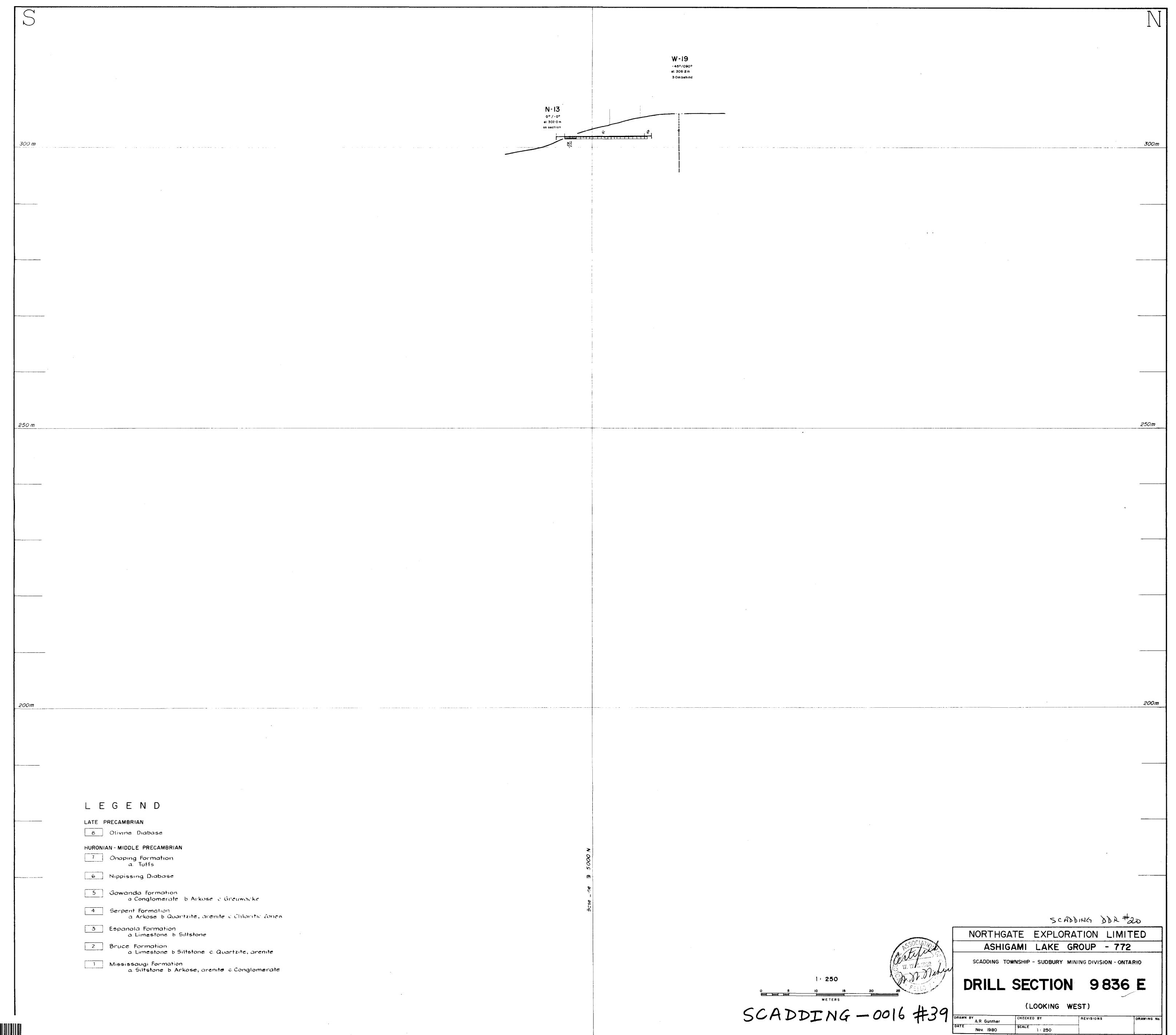
0M21-PE17-C-80

LEGEND LATE PRECAMBRIAN 8 Olivine Diabase HURONIAN - MIDDLE PRECAMBRIAN 7 Onaping Formation a. Tuffs 6 Nippissing Diabase 5 Gowanda Formation a Conglomerate b Arkose c. Greywacke 4 Serpent formation a Arkose b Quartzite, arenite c Chloritic Zones SCADDING DDRto 3 Espanola Formation
a Limestone b Siltstone NORTHGATE EXPLORATION LIMITED 2 Bruce Formation a Limestone b. Siltstone c. Quartzite, arenite ASHIGAMI LAKE GROUP - 772 SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO Mississaugi Formation
a Siltstone b Arkose, arenite c Conglomerate 1: 250 DRILL SECTION 9828 E SCADDING - 0016 #38

DRAWN BY AR. Gunther DATE Nov. 1980 (LOOKING WEST)

SCALE 1: 250

OM21- PE17- C-80



OM21 - PE17 - C-80

HURONIAN - MIDDLE PRECAMBRIAN 7 Onaping Formation a Tuffs 6 Nippissing Diabase 5 Gowanda Formation a Conglomerate b Arkose c Greywacke Serpent formation a Arkose b Quartzite, arenite c Chloritic Zones SCANDING DDR #20 3 Espanola Formation a Limestone b Siltstone NORTHGATE EXPLORATION LIMITED 2 Bruce Formation a Limestone b Siltstone c Quartzite, arenite ASHIGAMI LAKE GROUP - 772 SCADDING TOWNSHIP - SUDBURY MINING DIVISION - ONTARIO 1 Mississaugi Formation
a. Siltstone b Arkose, arenite a Conglomerate 1: 250 SCADDING-0016 # 40

DATE Nov. 1980 (LOOKING WEST) SCALE I: 250

OM 21 - PE 17 - C - 80