

52F05SE0102 30 ROWAN LAKE

010

Diamond Drilling

Area Rowan Lake

Report Nº 30

Work performed by:

Charger Resources Inc.

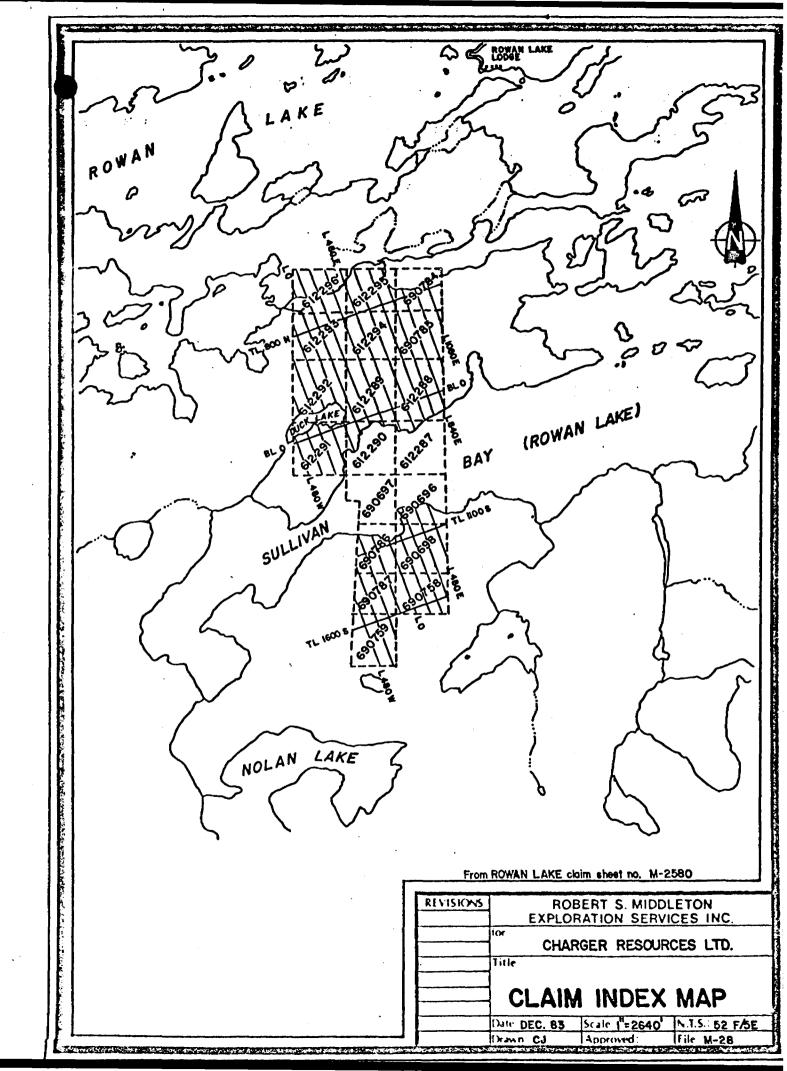
Claim Nº	Hole NQ	Footage	Date	Note
K 690787	CH-1	236.83m	Feb/84	(1)(2)(3)
	CH-2	206.35m	Feb/84	(1)(2)(3)
	CH-3	187.76m	Mar/84	(1)(2)(3)
	CH-4	130.15m	Mar/84	(1)(2)(3)

92 J.

Notes:

(1) #119-84

- (2) Logs and Location Plan submitted under OMEP report # OMB4-5-P-329.
- (3) Drill Hole Sections, Holes CH-1 to CH-4, submitted under OMEP report #01184-5-P-329 - added to file dec./88.



ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

DIAMOND DRILL HOLE LOG

PROJECT:	Charger Resources Ltd., M-28	HOLE NUMBER:	СН-1
AREA:	Rowan Lake, Ontario	LOCATION:	L720E, 2+90N
CLAIM NUMBER:	K 612288	AZIMUTH:	160° AZ
CORE SIZE:	BQ	DIP:	– 50°
DRILLED BY:	Bradley Brothers Ltd.	DATE:	Feb. 19th to 22nd, 1984
LOGGED BY:	Roberta Bald	CASING:	18.9m
CORE STORED AT	: Rowan Lake Lodge	LENGTH:	236.83m
OBJECTIVE:	To test pyrite-bearing carbonate zone coincident with I.P. anomaly.	ACID TESTS:	$\begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

.

.

•

.

Roberta Bald

Ý

ROBERT S. MIDDLETON EXPLORATION SRVICES INC. DIAMOND DRILL HOLE LOG

•

•

Project <u>Charger M-28</u>

Ą

Hole No. <u>1</u> Page <u>1</u> of <u>8</u>

Metres	S	ROCK TYPE AND DESCRIPTION	Core	7.		SAMPLE		
From	То		Angle to Axis	Sul- phides	Number	From	То	Length
0	18.9m	CASING						
18.90	41.90	MAFIC METAVOLCANIC FLOW -dark greenish grey to light grey; fine to locally medium grained; -from 18.90 to 19.35 m; blocky core -foliated @ 50° to core axis -local bands and zones up to approximately 0.1 m wide of pyrite-rich (up to approx. 4% pyrite) as fine to coarse-grained cubes and blebs. -local quartz veins up to approx. 1.5 cm wide; locally cross-cutting foliation but generally parallel to foliation; quartz is milky white to translucent, locally with dark green chlorite along vein margins; pyrite is concentrated in host rock along vein margins; rarely pyrite in quartz; about 5% quartz veins; -carbonate veins less than 1% rock; reacts to HCl; less than lcm wide; local zones of carbonatized mafic volcanic	50*	47				
		 -local zones of coarse-grained grey mottled- textured rock with dark to light green equant mafic minerals randomly oriented; possible mafic tuff? or gabbro? @ 24.85: 0.36m lost core @ 22.51 to 23.11: bleached zone, buff coloured, sericitic; with up to approx. 3-5% pyrite in bands as fine-to coarse-grained cubes and blebs; bands of pyrite-rich zones in dark metavolcanic from 20.51 to 25.57 with local, up to approximately 1.5 cm quartz veins (@ 24.20) 	0.36m lo core	3-5% st	41001 41002 41003 41004 41005 41006	20.51 21.53 22.56 23.06 23.70 24.21	21.53 22.56 23.06 23.70 24.21 25.57	1.0 1.0 0.5 0.6 0.5 1.0
		@ 35.46 to 36.78: locally finely laminated buff-light greenish carbonate-and sericite-rich zones with up to approximately 2% very fine-		2%	41007 41008 41009	34.42 35.46 36.78	35.46 36.78 37.63	1.0

SRVICES INC.

•

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. <u>1</u> Page <u>2</u> of <u>8</u>

ę

ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE		
	Angle to Axis	Sul- phides	Number	From	То	Length (meters
core axis; blocky broken core.	55*					
gabbro?	10"					
MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90m						
GABBRO: -similar to 41.90 to 43.94, slightly lighter green; with local coarse-grained patches with dark pink feldspar and green epidote; upper contact sharp at approximately 15° to core axis; cuts off a lcm pyrite- bearing quartz vein in mafic metavolcanics: lower contact at 15° to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.	15° 15°					
MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 -amygdaloidal zones: @ 50.53 to 50.68; 50.96 to 51.12 -amygdules filled with white carb + Quartz -with up to approximately 10% Quartz + Carb. veins and veinlets up to 3 cm wide, containing up to approx- imately 3% fine to coarse-grained pyrite, especially along vein margins; mainly parallel to foliation (@ approximately 55° to core axis) but some cross-cutting.	55*	37				
	<pre>grained disseminated pyrite; foliated @ 55' to core axis; blocky broken core. @ 38.94 to 39.56: carbonatized medium-grained gabbro? GABBRO: medium-grained, grey, massive gabbro; upper contact at 10' to core axis, very sharp; gabbro slightly chilled against mafic volcanic; lower contact not seen (small piece of core missing); MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90m GABBRO: -similar to 18.90 to 41.90m GABBRO: -similar to 18.90 to 43.94, slightly lighter green; with local coarse-grained patches with dark pink feldspar and green epidote; upper contact sharp at approximately 15' to core axis; cuts off a lcm pyrite- bearing quartz vein in mafic metavolcanics: lower contact at 15' to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V. MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 -amygdulos filled with white carb + Quartz -with up to approximately 10% Quartz + Carb. veins and veinlets up to 3 cm wide, containing up to approx- imately 3% fine to coarse-grained pyrite, especially along vein margins; mainly parallel to foliation (@ approximately 55' to core axis) but some</pre>	Angle to Axisgrained disseminated pyrite; foliated @ 55' to core axis; blocky broken core. @ 38.94 to 39.56: carbonatized medium-grained gabbro? GABBRO: medium-grained, grey, massive gabbro; upper contact at 10' to core axis, very sharp; gabbro slightly chilled against mafic volcanic; lower contact not seen (small piece of core missing);10'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90m10'GABBRO: mercent at 15' to core axis; cuts off a lcm pyrite- bearing quartz vein in mafic metavolcanics: lower contact at 15' to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 magdaloidal zones: @ 50.53 to 50.68; 50.96 to 51.12 -amygdules filled with white carb + Quartz with up to approximately 10% Quartz + Carb. veins and veinlets up to 3 cm wide, containing up to approx- imately 3% fine to coarse-grained pyrite, especially along vein margins; mainly parallel to foliation (@ approximately 55' to core axis) but some55'	Angle to AxisSul- to Axisgrained disseminated pyrite; foliated @ 55' to core axis; blocky broken core. @ 38.94 to 39.56: carbonatized medium-grained gabbro? GABBRO: medium-grained, grey, massive gabbro; upper contact at 10° to core axis, very sharp; gabbro slightly chilled against mafic volcanic; lower contact not seen (small piece of core missing);10°MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90m10°GABBRO: metric quartz vein in mafic metavolcanics: lower contact at 15° to core axis; tit too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15°MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 contact at 15° to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15°MAFIC METAVOLCANIC FLOW -amygdaloidal zones: @ 50.53 to 50.68; 50.96 to 51.12 -amygdules filled with white carb + Quartz -with up to approximately 10% Quartz + Carb. veins and veinlets up to 3 cm wide, containing up to approx- imately 3% fine to coarse-grained pyrite, especially along vein margins; mainly parallel to foliation (@ approximately 55° to core axis) but some3%	Angle to AxisSul- phidesgrained disseminated pyrite; foliated @ 55' to core axis; blocky broken core. 	Angle to Axis phidesSul- to Axis phidesNumberFromgrained disseminated pyrite; foliated @ 55' to core axis; blocky broken core. @ 38.94 to 39.56: carbonatized medium-grained gabbro? GABBRO: medium-grained, grey, massive gabbro; upper contact at 10' to core axis, very sharp; gabbro slightly chilled against mafic volcanic; lower contact not seen (small piece of core missing);10'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 43.94, slightly lighter green; with local coarse-grained patches with dark pink feldspar and green epidote; upper contact sharp at approximately 15' to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 contact at 15' to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15'MAFIC METAVOLCANIC FLOW -amygdaloidal zones: @ 50.53 to 50.68; 50.96 to 51.12 -amygdaloidal zones: @ 50.53 to 50.68; 50.95 to 51.12 -amygdaloidal zones: @ 50.53 to 50.68; 50.95 to 51.12 -a	Angle to AxisSul- phidesNumberFromTograined disseminated pyrite; foliated @ 55' to core axis; blocky broken core. @ 38.94 to 39.56: carbonatized medium-grained gabbro? GABBRO: medium-grained, grey, massive gabbro; upper contact at 10' to core axis, very sharp; gabbro slightly chilled against mafic volcanic; lower contact not seen (small piece of core missing);10'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90m10'GABBRO: meren yunt local coarse-grained patches with dark pink feldspar and green epidote; upper contact sharp at approximately 15' to core axis; it too cuts off a quartz vein (pyrite-bearing) in M.V.; gabbro slightly chilled against M.V.15'MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90 mangdaloidal zones: @ 50.53 to 50.68; 50.96 to 51.12 -amygdules filled with white carb + Quartz -with up to approximately 10' Quartz + Carb. veins and veinlets up to 3 cm wide, containing up to approx- imately 3% fine to coarse-grained pyrite, especially along vein margins; mainly parallel to foliation (@ approximately 55' to core axis) but some3%

SRVICES INC.

· -

· DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. 1 Page 3 of 8

Metres	ROCK TYPE AND DESCRIPTION	Core	1 %		SAMPLE		
From To		Angle to Axis	Sul- phides	Number	From	То	Length (meters
49.58 60.89 (continued) 60.89 61.16	<pre>siliceous, slightly sericitic zones; light buff to slightly purplish to greenish tinged; with up to approximately 25% milky white to translucent quartz veins, randomly oriented; up to approximately 5 cm wide; with up to 4-5% dusty fine-grained pyrite in host rock and locally in quartz veins. FELDSPAR PORPHYRY: (rare Quartz phenocrysts) -medium-grained, massive, with feldspar crystals up to lmm; no sulphides; dark greenish grey colour; sharp contacts at 40° to 50° to core axis; porphyry chilled</pre>	40-50°	4–5%	41010 41011 41012 41013 41014 41015	54.43 55.43 55.78 56.76 58.00 59.09	55.43 55.78 56.76 58.00 59.09 60.05	1.0 0.35 0.98 1.24 1.09 0.96
61.16 61.59 61.59 61.74	against volcanic MAFIC METAVOLCANIC FLOW -similar to 18.9 to 41.90 FELDSPAR PORPHYRY:			-			
61.74 82.60	-similar to 60.89 to 61.16 MAFIC METAVOLCANIC FLOW -similar to 18.9 to 41.90 -with local bleached/silicified zones (locally associated with quartz veining) from approximately 63.50 to 82.60: bleaching gives a pseudofragmental texture with "fragments" of lighter colour than "matrix"; rock appears very inhomogeneous with different colours from dark grey to light green to light buff; and from aphanitic to medium-grained -local pyrite concentrations up to approximately 3% as fine-to medium-grained crystals -local amygdaloidal sections		37				

.

Project <u>Charger M-28</u>

SRVICES INC.

•

DIAMOND DRILL HOLE LOG

Hole No. 1 Page 4 of 8

.

Metres	s	ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE			
		-	Angle	Sul-				Length	
From	To	·····	to Axis	phides	Number	From	To	(meters	
82.60	82.81	FINELY LAMINATED TUFF (CHERTY) -dark green mafic bands alternating with hard cherty siliceous bands up to approximately 4mm wide; banded at 50° to core axis with up to approximately 2% pyrite either as dusty fine-grained disseminations or as fine-to medium-grained bands (less than 1 mm wide) parallel to banding.	50*	27	41023	82.60	82.81	0.2	
82.81	83.15	MAFIC METAVOLCANIC -similar to 63.50 to 82.60			41024	82.81	83.15	0.34	
83.15	84.24	FINELY LAMINATED TUFF (CHERTY) -similar to 82.60 to 82.81 except bands are locally folded and contorted; small scale kink folding near 83.15			41025	83.15	84.24	1.09	
84.24	86.18	MAFIC METAVOLCANIC FLOWS -similar to 63.50 to 82.60 -with amygdaloidal sections from 84.31 to 84.85; 85.38 to 86.18 (probably flow contacts) ; amygdules up to 6 mm long (flattened parallel to foliation).							
86.18	86.88	GABBRO: -similar to 41.90 to 43.94 -lower contact sharp at approximately 22° to core axis; cross-cuts laminations.	22*						

SRVICES INC.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 1 Page 5 of 8

ę

Metre	S	ROCK TYPE AND DESCRIPTION			SAMPLE				
From	То		Angle to Axis	Sul- phides	Number	From	To	Length	
86.88	87.48	FINELY LAMINATED TUFF (CHERTY) -similar to 82.60 to 82.81 -small scale faulting of bands and folding and deformation of bands.			41026	86.88	87.48	0.6	
87.48	88.71	MAFIC METAVOLCANIC FLOW: -similar to 63.50 to 82.60; deformed							
88.71	93.70	MAFIC TUFF: -locally with up to approximately 3% coarse- grained disseminated pyrite cubes (up to 4mm diameter) -medium-to coarse-grained; variable colour and texture; inhomogeneous with local siliceous to mafic fragments flattened parallel to core axis; 2 dark grey mafic, fine-grained dikes @ approximately 22° to core axis, cross-cutting foliation -tuff is foliated @ approximately 50° to core axis; bleached zone from 93.05 to 93.39, light greenish buff, hard, siliceous; sharp contacts at 50° to core axis parallel to foliation with approximately 2% Fx disseminated pyrite	22* 50* 50*	37	41016 41017 41018	92.05 93.05 93.39	93.05 93.39 94.39	1.0 0.34 1.0	
93.70	94.49	MAFIC METAVOLCANIC FLOW -similar to 18.90 to 41.90							
94.49	111.37	MAFIC TUFF? OR MAFIC METAVOLCANIC? -dark grey to dark greenish grey massive; with white feldspar and quartz fragments, some fine- grained mafic fragments?; -homogeneous compared to 88.71 to 93.70 -up to approximately 5% randomly oriented quartz- carbonate veins and veinlets; no sulphides seen. -with local well-developed amygdules filled with quartz and/or carbonate (reacts to HCl); amygdules							

SRVICES INC.

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. 1 Page 6 of 8

Metres	ROCK TYPE AND DESCRIPTION	Core	7.		SAMPLE		
7		Angle	Sul-		Deite		Length
From To		LO AX1S	phides	Number	From	To	(meters)
94.49 111.3 (continued)	are flattened parallel to foliation; up to 15 mm long. -foliated @ approximately 52° to core axis -local carbonate + quartz veinlets mostly paralle or subparallel to foliation (up to approximately 10% of rock) @ 117.56 to 117.65: 0.09m ground core	52™					
11.37 218.8	MAFIC METAVOLCANIC FLOWS: -similar to 18.90 to 41.90 -with local, large (up to 17 mm long, flattened parallel to foliation), amygdules, filled with milky					1	
	white carbonate, (reacts with HCl); up to 3-5% amygdules; locally zoned. -foliated @ 55° to 65° to core axis -possible very thin, chlorite-rich pillow	55-65°					
	<pre>selvages? (rare). -patches of quartz + carbonate -less than 1% pyrite with local patches of up to 2% - 3% pyrite with carbonate veinlets</pre>		2-3%				
	-generally soft, scratched by knife -dark greenish grey. @ 178.0 = foliation @ 50° to core axis	50°		41019	172.24	173.24	1.0
	@ 173.24 to 175.26: up to approximately 3% very fine-grained to coarse-grained disseminated pyrite.			41020 41021 41022	173.24 174.24 175.26	174.24 175.26 176.26	1.0 1.02 1.0
	<pre>@ 188.0 = foliation @ 50° to core axis -possible pillows from approximately 188.00m to approx. 194m with local zones of small (approx.3mm) flattened carbonate filled amygdules</pre>	50*					
	-@ 197.21 foliation is @ approximately 60° to core axis -@ 204.94 to approx. 214.69: slightly to locally	60*		41027 41028	203.94 204.94	204.94 205.94	

SRVICES INC.

.

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. <u>1</u> Page <u>7</u> of <u>8</u>

Metre	s	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
I		second	Angle	Sul-				Length
From	То		to Axis	phides	Number	From	То	(meters
111.37 (conti	218.80	strongly silicified, locally purplish-tinged with increase of Fx pyrite (up to approx. 4% along quartz		4%	41029 41030	205.94 206.94	206.94 207.94	1
(conc	indea)	and or carbonate veinlet margins) up to approx. 5% quartz veinlets locally with purplish-brown			41031 41032	207.94 208.94	208.94 209.94	1.0
		alteration (silicification) along margin of veinlet (up to 1 cm wide, randomly oriented)			41033 41034	209.94 210.94	210.94 211.94	1.0
					41035 41036	211.94 212.94	212.94 213.94	1.0
					41037 41038 41039	213.94 214.69 217.80	214.69 215.69 218.80	1.0
218.80	225.32	INTERMEDIATE FRAGMENTAL: (AGGLOMERATE?) -inhomogeneous, coarse-grained felsic fragmental;			41040 41041	218.80 219.80	219.80 220.68	1
		colours from dark green (matrix) to pink-light green- buff (siliceous fragments); fragments are wispy to sub-			41042 41043 41044	220.68 221.68	221.68 222.65 223.63	1.0 0.97
		angular, dark green mafic volcanic and pink-light green- ish buff rhyolitic; ubiquitous pyrite between fragments from approx. 1% up to approx. 10% pyrite occurs as rounded patches of crystal aggregates or as fine-to		1-10%	41045	222.65 223.63 224.64	223.63 224.64 225.32	1.01
		coarse-grained disseminations; no uniform foliation direction although some fragments appear flattened. @ 221.68 to 225.32: pyrite-rich section.						
225.32	226.62	-lower contact sharp at 55° to core axis MAFIC METAVOLCANIC FLOW:	55*		41047	225.32	226.28	0.9
	220002	-similar to 18.90 to 41.90 -foliated @ 60° to core axis	60"					

.

-

SRVICES INC. DIAMOND DRILL HOLE LOG Project <u>Charger M-28</u>

.

Hole No. 1 Page 8 of 8

Ą

Metre	es	ROCK TYPE AND DESCRIPTION	Core	%	SAMPLE				
From	То		Angle to Axis	Sul- phides	Number	From	To	Length (meters)	
226.62	236.83	GABBRO: -similar to 41.90 to 43.94 -dark green-grey -upper contact parallel to foliation of M.V. (approximately 60° to core axis)	60°						
	236.83	END OF HOLE 62' of BW CASING LEFT IN HOLE							
		62 OI DW CASING LEFT IN HOLE							
	-		_						
	х. Эс.			-					
-					-				
-									

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

DIAMOND DRILL HOLE LOG

PROJECT:	Charger Resources Ltd., M-28	HOLE NUMBER:	СН-2
AREA:	Rowan Lake, Ontario	LOCATION:	810E, 2+90N
CLAIM NUMBER:	K 612288	AZIMUTH:	160° AZ
CORE SIZE:	BQ	DIP:	- 50 *
DRILLED BY:	Bradley Brothers Ltd.	DATE:	Feb. 23 to March 1, 1984
LOGGED BY:	Roberta Bald	CASING:	1.83m
CORE STORED AT	: Rowan Lake Lodge	LENGTH:	206.35m
OBJECTIVE:	To test auriferous pyrite-bearing carbonate zone coincident with I.P. anomaly.	ACID TESTS:	$\begin{array}{rcl} 0 & 1.83m = -48.5^{\circ} \\ 0 & 63.09m = -47.5^{\circ} \\ 0 & 124.05m = -44^{\circ} \\ 0 & 185.01m = -42^{\circ} \end{array}$

.

.

• •

4

Roberta Bald

SRVICES INC.

٠

•

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. 2 Page 1 of 6

ę

Metre	2S	ROCK TYPE AND DESCRIPTION	Core			SAMPLE			
			Angle	Sul-				Length	
From	To		to Axis	phides	Number	<u>From</u>	То	<u>(meters</u>)	
0	1.83	CASING							
1.83	10.76	MAFIC METAVOLCANIC FLOW -fine-to medium-grained; dark greenish grey; locally carbonatized with up to ~ 3% carbonate veinlets (usually parallel to foliation at 50° to core axis); possible dark green chlorite-rich <u>+</u> carbonate <u>+</u> quartz pillow margin -local bleached zones, silicified, purplish- tinged; locally with pink to white quartz veins and veinlets, randomly oriented; quartz veins up to 18 cm wide but usually less than 1 cm wide; up to ~ 3% pyrite disseminated fine-to coarse-grained -bleached zones: @ 3.08 to 3.63; 7.36 to 9.20; 10.37 to 10.76 -18 cm quartz vein from 7.72 to 7.90; coarse- grained with pink feldspar, ~ 2% coarse-grained pyrite.	50"	3%	41048 41049 41050 41051	3.08 6.36 7.36 8.00	3.63 7.36 8.00 9.20	0.55 1.0 0.64 1.20	
10.76	11.88	DIORITE -very coarse-grained, grey with pink spots (feldspar); massive; with acicular amphibole crystals (randomly oriented) up to ~ 3mm			41052 41053	9.20 10.37	10.37 10.76	1.1	
		long; upper contact sharp at "90" to core axis; lower contact sharp but irregular at "20" to core axis; no sulphides seen	90° 20°						
11.88	40.45	MAFIC METAVOLCANIC FLOW: -similar to 1.83 to 10.76 -bleached zones at 11.88 to 12.18; 18.26 to 21.42; 22.55 to 22.77			41054 41055 - 41056 41057 41058	11.88 18.26 19.29 20.29 20.80	12.18 19.29 20.29 20.80 21.42	1.0 1.0 1.0 0.5 0.6	
1									

ROBERT S. MIDDLETON EXPLORATION SRVICES INC.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 2 Page 2 of 6

ę

Metre	s	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
			Angle	Sul-				Length
From	То		to Axis	phides	Number	From	То	(meter:
11.88	40.45				41059	21.42	22.55	1.
(conti	nued)		}	}	41060	22.55	22.77	0.
		-bleached, carbonatized zone at 32.82 to			41061	32.80	33.80	1.
		37.56 with patches and veins of coarse-grained quartz	}		41062	33.80	34.80] 1.
		from 32.82 to 33.23; bleached zone contains	1		41063	34.80	35.80	1 1.
5		fine-grained disseminated pyrite, up to $~~$ 3-5% locally	}	}	41064	35.80	36.80] 1.
1		concentrated along margins of carbonate veinlets	ł	3-5%	41065	36.80	37.56	0.
		(randomly oriented)	1					1
		-foliated @ 50° to core axis (near 33.50 m)	50°					
			}		41066	40.00	40.45	0.
40.45	41.05	FINELY LAMINATED CHERTY TUFF	1		41067	40.45	41.05	0
5		-similar to tuff in hole CH-1;	}]		}		5
		-hard, siliceous, light grey to light greenish	1]
		buff; with up to \sim 2-3% pyrite fine-grained as dis-]	2-3%				}
		seminations and as local medium-grained bands up to						
		~ 2 mm wide.	})
·		-banding @ ~ 55° to core axis	55°					
41.05	41.53	MAFIC METAVOLCANIC FLOW	{	{	41068	41.05	41.53	0.
		-similar to 32.82 to 37.56						1
41.53	41.64	FINELY LAMINATED CHERTY TUFF			41069	41.53	41.64	0.
(-similar to 40.45 to 41.05	1	[
41.64	43.90	MAFIC METAVOLCANIC FLOW:	}					
		-similar to 32.82 to 37.56 with silicified and	1	1				1
		sericitized zones, buff to pale yellowish-greenish, hard	{:	{				1
		with up to 5% fine-to medium-grained pyrite as		5%				
		disseminations and veinlets (randomly oriented); zones	(41070	41.64	42.53	0
		are up to " 1m wide, with grey to light grey carbon-		}	41071	42.53	42.85	0
		atized mafic volcanic between.	{	{	41072	42.85	43.85	1
			1					1
			1	[
			}	}	1			1
			1	[1
			})				1
			1					
			1					1

Project Charger M-28

SRVICES INC.

đ

DIAMOND DRILL HOLE LOG

Hole No. 2 Page 3 of 6

% Sul- phides	Number 41073	SAMPLE From 43.85	То	Length (meters)
phides				
		43.85		1
			44.81	0.96
	41074 41075 41076 41077 41078 41079 41080 41081 41082 41083	44.81 45.83 46.83 47.85 48.85 49.85 50.90 51.90 52.90 53.95	45.83 46.83 47.85 48.85 49.85 50.90 51.90 52.90 53.95 54.77	1.02 1.0 1.02 1.0 1.0 1.05 1.0 1.05 0.82
4% 2-3% 3% 1% 2%	41083 41084 41085 41086 41087 41088 41089 41090 41091 41092	53.95 54.77 55.77 56.02 56.85 57.88 58.86 67.93 68.93 69.26	54.77 55.77 56.02 56.85 57.88 58.86 60.05 68.93 69.26 70.26	0.82 1.0 0.25 0.83 1.03 0.98 1.19 1.0 0.33 1.0
	2-37 37 17	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$

Project <u>Charger M-28</u>

SRVICES INC.

DIAMOND DRILL HOLE LOG

Hole No. 2 Page 4 of 6

Ą

Metre	es	ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE		
			Angle	Sul-		-		Length
From	To		to Axis	phides	Number	From	То	(meters)
44.0	191.21	(epidote?) to buff coloured.			41093	81.05	82.05	1.0
(cont	inued)	-from 82.05 to 86.08: bleached sericitized,		5%	41094	82.05	83.05	1.0
		silicified zone carrying up to ~ 5% pyrite as dissemin-	0.91	n ground	41095	83.05	84.43	0.47
		minated fine to coarse-grained crystals and as veinlets	1	re	41096	84.43	85.43	1.0
		(randomly oriented)	}		41097	85.43	86.08	0.6
					41098	86.08	87.08	1.0
		-from 86.08 to 90.11: similar to 71.34 to	1					
		82.05	1		41099	89.11	90.11	1.0
		-from 90.11 to 98.15; and 99.85 to 105.90:]		41100	90.11	91.11	1.0
		carbonatized zones, light grey with milky white to]		41101	91.11	92.11	1.0
		grey carbonate veinlets & wispy patches with	}		41102	92.11	93.11	1.0
		with alteration envelopes along veinlets; with up			41103	93.11	94.11	1.0
		to ~ 7% pyrite as patches, disseminations and	}	7%	41103	94.11	95.11	1.0
		veinlets		170	41104	95.11	96.19	1.0
		VCINICLB	}		41105	96.19	97.19	1.0
			1		41100	97.19	98.15	0.9
		-from 98.15 to 99.85: fine-grained, green			41107	98.15	99.13	0.9
-		amygdaloidal mafic metavolcanic flow; amygdules up to	{	{	41108	99.13		1
i			1				99.85	0.7
		5mm in diameter filled with quartz + carbonate.	1	1	41110	99.85	100.85	1.0
				Į į	41111	100.85	101.80	0.9
1			((41112	101.80	102.80	1.0
			4		41113	102.80	103.80	1.0
1		х.	1	1	41114	103.80	104.85	1.0
			ł		41115	104.85	105.90	1.0
			1	1 1				1
			1			ł		
		-from 105.90 to 117.96: mafic metavolcanic, dark	1			1	}	
		greenish grey with up to $$ 2% carbonate veinlets and						
		patches, with patches of up to ~5-7% medium-to	}	57%				
		coarse-grained pyrite as disseminations and along bands;						
		local quartz + carbonate filled amygdules up to 1 cm	}				}	}
		long (slightly flattened)			1			
))	1
			1					
]	1)]	1
					1			1
	5		1	}		1	}	1
			1	Į I		1	1	1

Project Charger M-28

SRVICES INC.

.

.

-

.

DIAMOND DRILL HOLE LOG

Hole No. 2 Page 5 of 6

Metre	es	ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE	7	Ţ
From	То		Angle to Axis	Sul- phides	Number	From	То	Length (meters)
44.0	10 191.21 inued)	-from 117.96 to 167.32: similar to 1.83: to 10.76 with zones of amygdules up to 1.5 cm long, flattened, filled with quartz <u>+</u> carbonate @155.97 to 156.07: quartz vein, coarse-grained milky white to translucent, with up to ~ 10% chloritic host rock inclusions, ~30° to core axis, irregular; dark grey, silicified host rock along margins from 155.78 to 156.18 with ~ 1% fine-grained disseminated pyrite; from 156.18 to 157.30: yellowish silicified zones along	30°	1%	A1116 41117 41118 41119 41120 41121	153.78 154.78 155.78 156.18 156.65 157.30	154.78 155.78 156.18 156.65 157.30 158.30	(meters) 1.0 1.0 0.40 0.47 0.65 1.0
		carbonate and quartz veinlets. @ 163.68 foliation @ 50° to core axis; from 167.32 to 168.90 and 169.22 to 177.07: medium-grained, greenish grey massive, to slightly foliated @ 50° to core axis granular texture, up to ~ 3% carbonate + quartz + epidote veinlets, locally parallel to foliation and also randomly oriented; no sulphides seen. -probably medium-grained mafic metavolcanic flow with sharp upper contact parallel to foliation: local zones of amygdules up to ~ 3mm long, slightly flattened parallel to foliation.	50 - 50-					
		-from ~ 176.0 to 181.53: up to ~ 10% quartz <u>+</u> carbonate filled amygdules rounded to flattened parallel to foliation at ~ 50° to core axis -amygdaloidal zones in core to 191.21m.	50*					

SRVICES INC.

, .

7

•

.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 2 Page 6 of 6

Ŷ

Metre	s	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE	•••••	,
		-	Angle	Sul-				Length
From	То		to Axis	phides	Number	From	To	(meters)
191.21	195.46	INTERMEDIATE FRAGMENTAL (AGGLOMERATE) -upper contact at 60° to core axis, parallel to foliation, -similar to DDH-CH-1: green to dark grey to buff to purplish tinged colour, inhomogeneous, with rhyolitic buff to brownish-reddish to light green fragments up to 8cm in diameter, locally quartz and/or feldspar (white) phyric; phenocrysts up to ~ 4mm long in a dark green chloritic matrix, fine-grained, foliated at 55-60° to core axis; also some dark greenish grey mafic clasts,	60° 55-60'					
195.46	206.35	fine-grained massive; both types of clasts are rounded to subangular; trace medium-to coarse-grained disseminated pyrite. -lower contact gradational -locally strongly magnetic matrix GABBRO						
195.40		<pre>GABBRO</pre>						
-	206.35	END OF HOLE						
		62 FEET OF B.W. CASING LEFT IN HOLE.						

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

DIAMOND DRILL HOLE LOG

PROJECT:	Charger Resources Ltd., M-28	HOLE NUMBER:	CH-3
AREA:	Rowan Lake, Ontario	LOCATION:	L600E, 2+70N
CLAIM NUMBER:	K 612288	AZIMUTH:	160° AZ
CORE SIZE:	BQ	DIP:	- 50°
DRILLED BY:	Bradley Brothers Ltd.	DATE:	March 10, to March 11, 1984
LOGGED BY:	Roberta Bald	CASING:	3.74m
CORE STORED AT:	Rowan Lake Lodge	LENGTH:	187.76m
OBJECTIVE:	To test carbonate zone coincident with I.P. anomaly	ACID TESTS:	$\begin{array}{rcl} @ & 3.66m = & -50"\\ @ & 66.17m = & -43"\\ @ & 125.58m = & -41.5"\\ @ & 187.76m = & -40.5" \end{array}$

.

•

.

.

.

Roberta Bald

Ą

SRVICES INC.

.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 3 Page 1 of 7

Metre	S.	ROCK TYPE AND DESCRIPTION	Core	7 7		SAMPLE		
From	То		Angle to Axis	Sul-	Number	From	То	Length
·rrom	10		LU AXIS	plitdes	Number	TIOM	10	
0	3.74	CASING						
3.74	41.83	MAFIC METAVOLCANIC FLOWS -greenish grey to green, fine-grained, slightly foliated @ 40-45° to core axis; local dark green chlorite bands (possible pillow selvages?); generally contains up to ~ 2% quartz + carbonate + minor epidote? veins and veinlets, generally subparallel to foliation but locally cross-cutting;	40-45*					
		@ 3.74 to 7.39: strongly foliated to schistose carbon- atized and (greenish) sericitized, bleached zone; light greenish to light grey to buff colour; contains local silicified sections; contains up to 3-4% pyrite as fine-grained disseminations and as medium-to coarse- grained aggregates locally forming bands parallel to the foliation; as cubes and blebs.		3-4%	41348 41349 41350 41351 41352 41353 41354 41355 41356	3.74 4.29 4.70 5.23 5.73 6.23 6.89 7.39 24.67	4.29 4.70 5.23 5.73 6.23 6.89 7.39 8.23 25.67	0.5 0.4 0.5 0.5 0.5 0.6 0.5 0.8 1.0
		@ 25.67 to 41.83: massive to schistose, bleached, silicified-sericitized zone, locally carbonatized; light grey to grey, locally finely banded with alter- nating quartz and carbonate veinlets usually parallel to foliation/schistocity but locally cross-cutting; con- taining up to ~ 3% fine-grained disseminated pyrite and medium-to-coarse-grained pyrite crystal aggregates, locally along zones parallel to foliation; some sections appear cherty, locally along zones parallel to foli- iation; some sections appear cherty, locally as well-		37	41357 41358 41359 41360 41361 41362 41363 41364 41365 41366 41367	25.67 26.14 26.70 27.23 27.83 28.50 29.04 29.57 30.10 30.67 31.17	26.14 26.70 27.23 27.83 28.50 29.04 29.57 30.10 30.67 31.17 31.68	0.4 0.5 0.6 0.6 0.5 0.5 0.5 0.5 0.5
		defined cream-coloured bands; local deformation (small scale folding) of banded material			41368 41369 41370	31.68 32.22 32.77	32.22 32.77 33.30	0.5

SRVICES INC.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No.____3 ___ Page _____ of __7

Metres		ROCK TYPE AND DESCRIPTION	Core	~ ~		SAMPLE		
			Angle	Sul-				Length
From	То		to Axis	phides	Number	From	То	(meters
	(1.00)							}
3.74	41.83				41371	33.30	33.85	0.55
(conti	nuea)			{ {	41372 41373	33.85	34.41 34.84	0.56
					41373	34.41 34.84	35.26	0.43
1	ſ	@35.48: 3cm wide milky white to translucent quartz			41374	35.26	35.66	0.42
		vein at ~ 30° to core axis cross-cutting foliation at	30"		41375	35.66	36.13	0.40
({	55' to core axis; contains trace fine-grained to coarse-	55°	{ {	41377	36.13	36.66	0.53
		grained pyrite, with up to 2-3% pyrite in host rock as		2-3%	41378	36.66	37.17	0.51
		elongated blebs and aggregates parallel to foliation.	f	2 5/2	41379	37.17	37.70	0.53
[((41380	37.70	38.21	0.51
				}	41381	38.21	38.71	0.50
		@ 39.01 to 41.79: up to 10% milky white to translucent			41382	38.71	39.22	0.51
5]	randomly oriented quartz veins up to "7cm wide; with)))	41383	39.22	39.71	0.49
		irregular and parallel margins; quartz veins generally			41384	39.71	40.18	0.47
j	}	contain up to 2% fine-to medium-grained disseminated	1	2%	41385	40.18	40.73	0.5
		fine-to coarse-grained pyrite in grey to buff bleached			41386	40.73	41.34	0.61
		silicified host rock			41387	41.34	41.83	0.49
41.83	42.00	FINELY LAMINATED CHERT: -hard, aphanitic, light grey-buff, laminations ~ 1	30°		41388	41.83	42.00	0.17
		to 3mm wide, at ~ 30° to core axis, contains up to ~ 2% pyrite as fine-grained bands parallel to lamin- ations; generally this unit looks much the same as bleached-silicified zone except for distinct laminations.		2%				
42.00	53.66	MAFIC METAVOLCANIC FLOWS:			41389	42.00	42.50	0.50
		from 42.00 to 43.04: similar to 25.67 to 41.83			41390	42.50	43.04	0.54
		-from 43.04 to 53.66: similar to 7.39 to 25.67			41391	43.04	44.10	1.00
(-local quartz + carbonate veins and zones contain- ing possible tourmaline (up to ~ 3%) hard, black blebs and lenses-veinlets parallel to foliation and some			41392	44.10	44.81	0.7
		acicular crystals; with up to ~ 1% fine-to coarse- grained pyrite.		17	41393	53.15	53.66	0.5

SRVICES INC.

•

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No.___3 ___ Page __3 of _7

Metres	ROCK TYPE AND DESCRIPTION	Core	7.		SAMPLE		
From To		Angle to Axis	Sul- phides	Number	From	То	Length
			pintes	Number	110		
53.66 54.39	GABBRO -grey, massive, diabasic texture (feldspar betweem green amphibole and chlorite laths); upper contact sharp at 40° to core axis; subparallel to foliation of mafic metavolcanic; lower contact sharp @ 40° to core	40* 40*		41394	53.66	54.39	0.73
	axis, parallel to foliation; slightly carbonatized; containing up to 2% fine-grained disseminated pyrite; lower contact chilled and bleached.		2%				
54 . 39 90 . 55	MAFIC METAVOLCANIC FLOWS -from 54.39 to 54.63: up to 40° carbonate + quartz veinlets parallel to foliation @ 40% to core axis in aphanitic, locally cherty dark grey to black host rock; contains up to 3% fine-to coarse-grained pyrite cubes and blebs, disseminated.	40*	37	41395	54.39	54.63	0.24
	-from 54.63 to 63.83: similar to 25.67 to 41.83 including two silicified, quartz vein bearing zones similar to 39.01 to 41.79 @ 57.32 to 58.62 and 59.76 to 61.21			41396 41397 41398 41399 41400 41401 41402 41403 41404 41405 41406 41405 41406 41407 41408 41409 41410 41411 41412	54.63 55.20 55.70 56.25 56.75 57.32 57.87 58.30 58.62 59.22 59.76 60.26 60.81 61.21 61.74 62.28 62.83	55.20 55.70 56.25 56.75 57.32 57.87 58.30 58.62 59.22 59.76 60.26 60.81 61.21 61.74 62.28 62.83 63.42	0.57 0.50 0.59 0.59 0.59 0.42 0.60 0.54 0.59 0.59 0.59 0.59

SRVICES INC.

•

•

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. 3 Page 4 of 7

Metre	25	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
			Angle	Sul-		-		Length
From	To		to Axis	phides	Number	From	To	(meters)
54.39	90.55			{	41413	63.42	63.82	0.40
	nued)	-from 63.83 to 66.07: similar to 7.39 to 25.67			41414	63.82	64.68	0.86
(with a quartz + carbonate zone from 64.81 to 64.94	ł		41415	64.68	65.08	0.40
		(no sulphides seen).			41416	65.08	66.07	0.99
		-from 66.07 to 67.97: mafic metavolcanic contains		}	41417	66.07	67.08	1.01
		up to ~20% equant to tabular white feldspar crystals up			41418	67.08	67.97	0.89
		to 2mm long, randomly oriented or possible mafic feldspar porphyry?; margins are finer-grained and are						
:		gradational into mafic metavolcanic.						
ł		B						{
]	-from 67.97 to 68.56: grey to light grey to buff,		}	41419	67.97	68.56	0.59
		slightly bleached to strongly silicified zone; trace						
		pyrite.		}				}
		-from 68.56 to 69.15: similar to 7.39 to 25.67,			41420	68.56	69.15	0.59
•	ł i	slightly carbonatized	1	{	41420	00.50		
:		· · · · · · · · · · · · · · · · · · ·						
	[-from 69.15 to 70.07; 72.46 to 73.12; and 73.67	{	(41421	69.15	69.55	0.40
	}	to 73.91: local altered-bleached zones containing	}	}	41422	69.55	70.07	0.62
		up to 20% coarse-grained milky white to translucent			41423	70.07	71.07	1.0
		quartz + carbonate veins, randomly oriented, with up to	1		41424	71.07	71.93	0.86
		2% fine-to coarse-grained disseminated pyrite in	1	2%	41425	71.93	72.46	0.53
		variously bleached (silicified to carbonatized) host	1		41426	72.46	73.12	0.66
		rock; these zones occur in foliated, dark greenish grey			41427 41428	73.12 73.67	73.67 73.91	0.55
		fine-grained mafic metavolcanic flows similar to 7.39 to 25.67			41420	/3.0/	/3.91	0.24
1	(-from 73.91 to 86.02: mafic metavolcanic flows		{	41429	73.91	74.56	0.65
]	similar to 7.39 to 25.67, localy containing carbonate	}	5				} .
		filled amygdule up to 8mm long, flattened parallel to						
)	foliation @ 45° to core axis (@ 75.29m)	45"		41430	85.02	86.02	1.0
i		-from 86.02 to 87.84: local zones of slightly			41431 41432	86.02 86.69	86.69	0.67
1	}	bleached (silicified) host rock (takes on a purplish	1		41432	00.09	87.25	0.56
I	{ (f -				{
			1		•			1

SRVICES INC.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 3 Page 5 of 7

Metres	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
		Angle	Sul-				Length
From To		to Axis	phides	Number	From	To	(meters
54.39 90.5 (continued)	tinge) between and along margins of milky white to translucent to pinkish to greenish quartz veins up to ~ 14m wide, randomly oriented; bleached host rock carries up to 2% fine-to medium-graied disseminated pyrite cubes and blebs.		2%	41433 41434 41435 41436	87.25 87.84 88.84 89.87	87.84 88.84 89.87 90.55	0.59 1.0 1.03 0.68
90.55 90.93	FINELY LAMINATED CHERTY TUFF -similar to 41.83 to 42.00; @ ~ 42° to core axis; contains up to 2% fine-to medium-grained disseminated pyrite, locally associated with cross-cutting carbonat thread-like veinlets (less than 1%); upper and lower contacts sharp and parallel to foliation of mafic meta volcanic flows.	e	2%	41437	90.55	90.93	0.38
90.93 91.85	MAFIC TUFF -medium-to coarse-grained, foliated @ ~50° to cor axis; with subangular light grey siliceous fragments (~ 15%) in dark grey chloritic matrix -contains ~ 10% milky white, randomly oriented quartz (<u>+</u> carbonate) veins -up to ~ 2% fine-grained disseminated pyrite in host rock.	re 50*	2%	41438	90.93	91.85	0.93
91.85 92.48	FINELY LAMINATED CHERTY TUFF -similar to 41.83 to 42.00; laminations @ 45° to core axis -local zones of mafic tuff similar to 90.93 to 91.85	45"		41439	91.85	92.48	0.6
92.48 94.02	MAFIC TUFF -similar to 90.93 to 91.85 with local zones of ve fine-grained dark grey massive material and local smal zones of finely laminated cherty tuff; containing up t 1% medium-to coarse-grained disseminated pyrite	.1	17	41440 41441 41442	92.48 92.99 93.49	92.99 93.49 94.02	0.5 0.5 0.5

.

SRVICES INC.

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. 3 Page 6 of 7

Ý

Metre	es	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
			Angle	Sul-				Length
From	То		to Axis	phides	Number	From	To	(meters)
94.02	95.74	FINELY LAMINATED CHERTY TUFF -similar to 41.83 to 42.00 with local zones of medium-grained mafic metavolcanic? or mafic tuff? -from 94.83 to 95.40: greenish buff coloured sericitic schist with parallel thin bands of pyrite and local cherty bands.			41443 41444	94.02 94.57	94.57 95.74	0.55
95.74	96.66	MAFIC TUFF: -similar to 90.93 to 91.85, carbonatized; with local very large (up to 7mm diameter) pyrite cubes			41445	95.74	96.66	0.92
96.66	98.09	FINELY LAMINATED CHERTY TUFF: -similar to 41.83 to 42.00 with local sericitized zones, and with local mafic, dark grey, very fine- grained zones.			41446 41447 41448	96.66 96.99 97.46	96.99 97.46 98.09	0.33 0.47 0.55
98.09	99.51	MAFIC TUFF -similar to 90.93 to 91.85 with rare very fine- grained grey, slightly cherty bands -lower contact gradational over ~ 30cm; becomes finer-grained down hole			41449	98.09	99.00	0.91
99.51	102.12	MAFIC METAVOLCANIC FLOWS: -similar to 7.39 to 25.67, with carbonate filled amygdules up to "7mm long, slightly flattened parallel to foliation; local zones of slight bleaching; -fine-to locally medium-grained -local zones containing up to 2% fine-to medium- grained disseminated pyrite		2%				
102.12	107.97	MAFIC TUFF: (LAPILLI) -medium-to coarse-grained fragmental unit; greenish grey to dark green matrix with up to 15-20% clasts up to					1	

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

DIAMOND DRILL HOLE LOG

PROJECT:	Charger Resources Ltd., M-28	HOLE NUMBER:	СН-4
AREA:	Rowan Lake, Ontario	LOCATION:	L240W, 11+20S
CLAIM NUMBER:	К 690787	AZIMUTH:	160° AZ
CORE SIZE:	BQ	DIP:	– 50°
DRILLED BY:	Bradley Brothers Ltd.	DATE:	March 8 to March 9, 1984
LOGGED BY:	Roberta Bald	CASING:	2.90m
CORE STORED AT:	Rowan Lake Lodge	LENGTH:	130.15m
OBJECTIVE:	To test I.P. anomaly along strike from altered mafic metavolcanic flows.	ACID TESTS:	(2.90m = -50") (63.09m = -48") (124.05m = -49")

.

•

-

Roberta Bald

•

Project <u>Charger M-28</u>

SRVICES INC.

-

T

٠

.

2

DIAMOND DRILL HOLE LOG

Hole No. 4 Page 1 of 4

Metro	es	ROCK TYPE AND DESCRIPTION Core % SAMPLE						
			Angle	Sul-				Length
From	То		to Axis	phides	Number	From	То	(meters)
<u>Metro</u> 0 2.90		ROCK TYPE AND DESCRIPTION CASING MAFIC METAVOLCANIC FLOWS -fine-grained, dark grey to medium-grey; blocky core; locally hard to medium-hard; with up to ~5% milky white carbonate veins up to 5mm wide, randomly oriented; trace pyrite, fine-grained, disseminated, locally asso- coatized zones. -local carbonate-filled amygdules up to 8mm long, slightly flattened parallel to foliation; volcanic rocks foliated (50° to core axis (21.86 to 22.45; 22.81 to 23.55; 24.00 to 25.13; 27.70 to 28.09; 28.80 to 37.27: bleached-carbonatized zones containing up to 10% pyrite <u>+</u> 3% pyrhotite, from fine-to coarse-grained disseminations and veinlets; carbonatized-pyrite zones are usually roughly parallel to foliation (45-50° to core axis; local smaller similar zones in between wide zones mentioned above.	Angle	Sul- phides	Number 41122 41123 41124 41125 41126 41127 41128 41129 41130 41131 41132 41133 41134 41135 41136 41137 41138 41139 41140 41141 41142 41143		To 21.86 22.45 22.81 23.55 24.00 24.50 25.13 26.13 26.70 27.70 28.09 28.80 29.80 30.80 31.80 32.80 33.80 34.80 35.80 36.30 37.27 38.29	
		-from 45.06 to 49.96: alternate zones of carbon-			41144 41145	44.06 45.06	45.06	1.0

SRVICES INC.

-

•

•

DIAMOND DRILL HOLE LOG

Project Charger M-28

Hole No. <u>4</u> Page <u>2</u> of <u>4</u>

ę

Metro	es	ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE	<u></u>	
· · ·		-	Angle	Sul-			* <u></u>	Length
From	То		to Axis	phides	Number	From	То	(meters)
_)							j j
2.90	118.33	atized mafic volcanic and silicified buff to light			41146	46.07	47.24	1.17
(cont	inued)	green, hard zones, with up to $\sim 2\%$ fine-grained pyrite]	2%	41147	47.24	47.85	0.61
		disseminated in silicified zones; carbonate alteration			41148	47.85	48.85	1.0
	j	envelopes along carbonate vein margins.		j	41149	48.85	49.52	0.67
					41150	49.52	49.96	0.44
	j		j		41301	49.96	50 .9 0	0.94
					41302	50.90	51.80	0.90
		-also similar zones (as 45.06 to 49.96m) from 51.80			41303	51.80	52.60	0.80
		to 56.43 including a buff to light grey silicified-	ł		41304	52.60	53.26	0.66
	1	sericitized zone from 53.26 to 56.43, with a milky white			41305	53.26	53.75	0.49
	j j	quartz (+minor carbonate) vein 2.5 cm wide at \sim 50° to	50°		41306	53.75	54.00	0.25
		core axis, subparallel to foliation, @ 53.88m.			41307	54.00	54.64	0.64
	j				41308	54.64	55.32	0.68
					41309	55.32	56.43	1.11
			1		41310	56.43	57.43	1.0
	[[41311	60.58	61.58	1.0
		-@ 61.58 to 71.57: similar zones as 21.86 to 22.45,			41312	61.58	62.54	0.96
	1 A.	etc., foliated @ 50' to core axis;	50 °		41313	62.54	63.50	0.96
			20 cm	lost	41314	63.50	64.62	0.92
,			co	re	41315	64.62	65.62	1.0
			24 cm	lost	41316	65.62	66.14	0.28
	[co	re	41317	66.14	67.00	0.86
					41318	67.00	67.97	0.97
	{ {		(1		41319	67.97	68.88	0.91
					41320	68.88	69.46	0.58
	(•	(41321	69.46	70.57	1.11
					41322	70.57	71.57	1.0
•	í I		1		41323	71.57	72.57	1.0
					41324	76.68	77.68	1.0
	(@77.68 to 77.87: buff silicified, slightly sericit-	{		41325	77.68	77.87	0.19
-		ized zone, fine buff coloured veinlets (threadlike)			41326	77.87	78.87	1.0
	{	parallel to foliation; contains less than 1% fine-to	{	1%				
		medium-grained disseminated pyrite.						
	{	· · · · · · · · · · · · · · · · · · ·	1		41327	95.52	96.52	1.0
		@ 96.62m, 2.5cm wide bleached-sericitized (±quartz			41328	96.52	96.74	0.41
	{		(
	(1	1	ł			1
	1 1		1	1	i	ı I		1 1

.

Project <u>Charger M-28</u>

SRVICES INC.

ڪ

r

.

- 5-

DIAMOND DRILL HOLE LOG

Hole No. 4 Page 3 of 4

Ą

Metre	es	ROCK TYPE AND DESCRIPTION	Core	7%		SAMPLE		
			Angle	Sul-				Length
From	То		to Axis	phides	Number	From	To	(meters)
2.90	: 118.33				41329	96.74	97.72	0.98
	inued)	±carbonate) zone, no sulphides seen.			41330	103.0	104.0	1.0
		@ 105.15 to 105.20: similar zone as 96.62			41331 41332 41333	104.0 105.0 105.35	105.0 105.35 106.33	1.0 0.35 0.98
		@ 112.17 to 113.08 (10cm lost core); 113.53 to			41334 41335	111.17	112.17	1.0
		113.80: bleached zones similar to 96.62m with local	1)	41336	113.08	113.53	0.45
		trace fine-grained disseminated pyrite; randomly oriented bleached-silicified zones, following quartz veinlets.			41337 41338	113.53 113.80	113.80 114.78	0.27 0.98
		foliation @ 50° to core axis @ 119.0m -local green chlorite-rich zones between carbon- atized material.	50*					
118.83	121.00	BIOTITE DIORITE? OR LAMPROPHYRE? -coarse-grained, massive; contains 10-15% biotite						
		phenocrysts up to 10mm long, in a granular fine-grained matrix consisting of carbonatized feldspar and chlorite?; sharp upper contact @ 35-40° to core axis, diorite slightly chilled against mafic metavolcanics; carbonate veinlets cross-cut diorite-metavolcanic con-	35-40*					
		tact; lower contact similar to upper contact; no sulphides seen.						
121.00	 121.00 130.15 MAFIC METAVOLCANIC FLOWS: similar to 2.90 to 118.83, with local patches and zones of green chlorite-rich material @ 122.21 to 122.44: zone of irregular carbonate veins up to 4cm wide, with up to 2% pyrite along veinlets. @ 124.65 to 124.74: bleached zone similar to 96.62 			2%	41339 41340 41341 41342	121.28 122.21 122.44 123.45	122.21 122.44 123.45 124.05	0.93 0.23 1.01 0.60
					41342 41343 41344 41345	124.05 124.54 124.84	124.03 124.54 124.84 125.65	0.49 0.30 0.81
		@ 125.71 to 125.81: quartz + carbonate vein 3cm			41346	125.65	125.81	0.16
				{				

ROBERT S. MIDDLETON EXPLORATION SRVICES INC.

.

DIAMOND DRILL HOLE LOG

Project <u>Charger M-28</u>

Hole No. 4 Page 4 of 4

Metre	25	ROCK TYPE AND DESCRIPTION	Core	%		SAMPLE		
From	То		Angle to Axis	Sul- phides	Number	From	То	Length
				PILLOU				
121.00 (conti	130.15 nued)	wide $@\sim 45^\circ$ to core axis; milky white to translucent quartz, milky white carbonate; no sulphides seen.	45° 55°		41347	125.81	126.80	0.99
		-foliation $@\sim 55$ ° to core axis $@$ 130m						
	130.15	END OF HOLE						
1		6' OF BW CASING LEFT IN HOLE				Í	{	
						}		
						1		
			{					
							}	
1			ł					
)		
						}	}	
)))	
							1	
			1	í i		{	(ſ

Project Charger M-28

SRVICES INC.

•

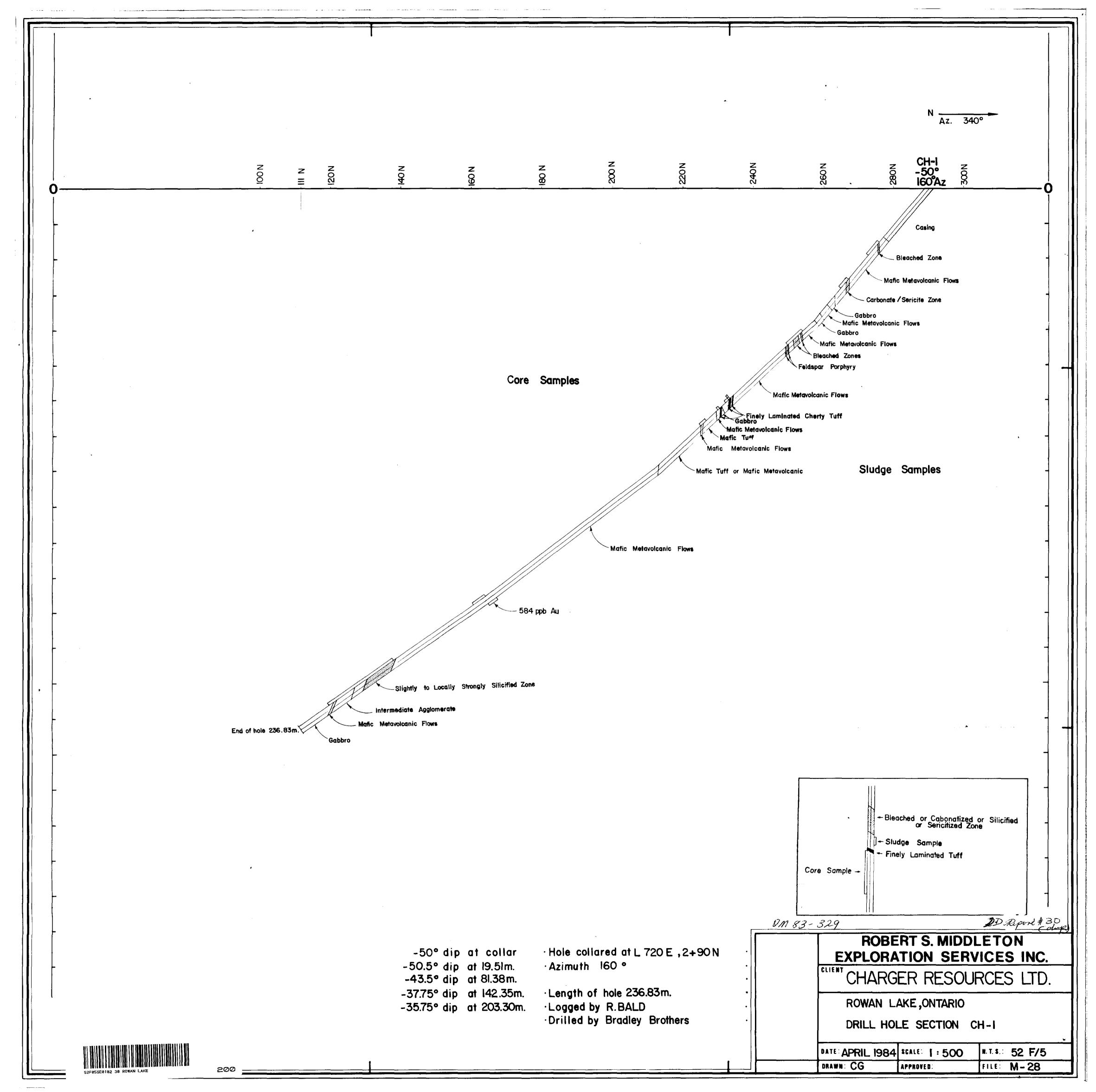
DIAMOND DRILL HOLE LOG

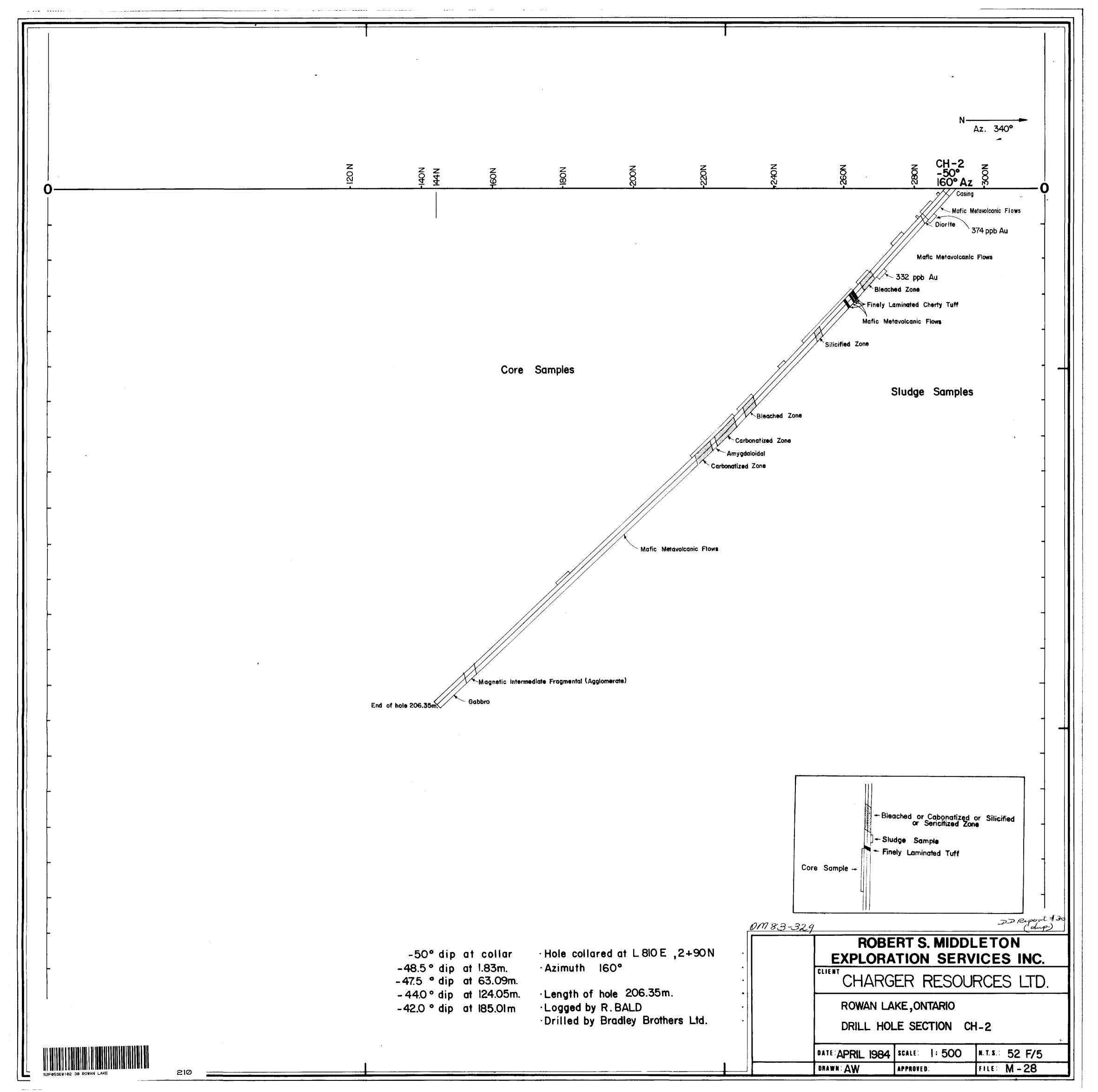
Hole No. 3 Page 7 of 7

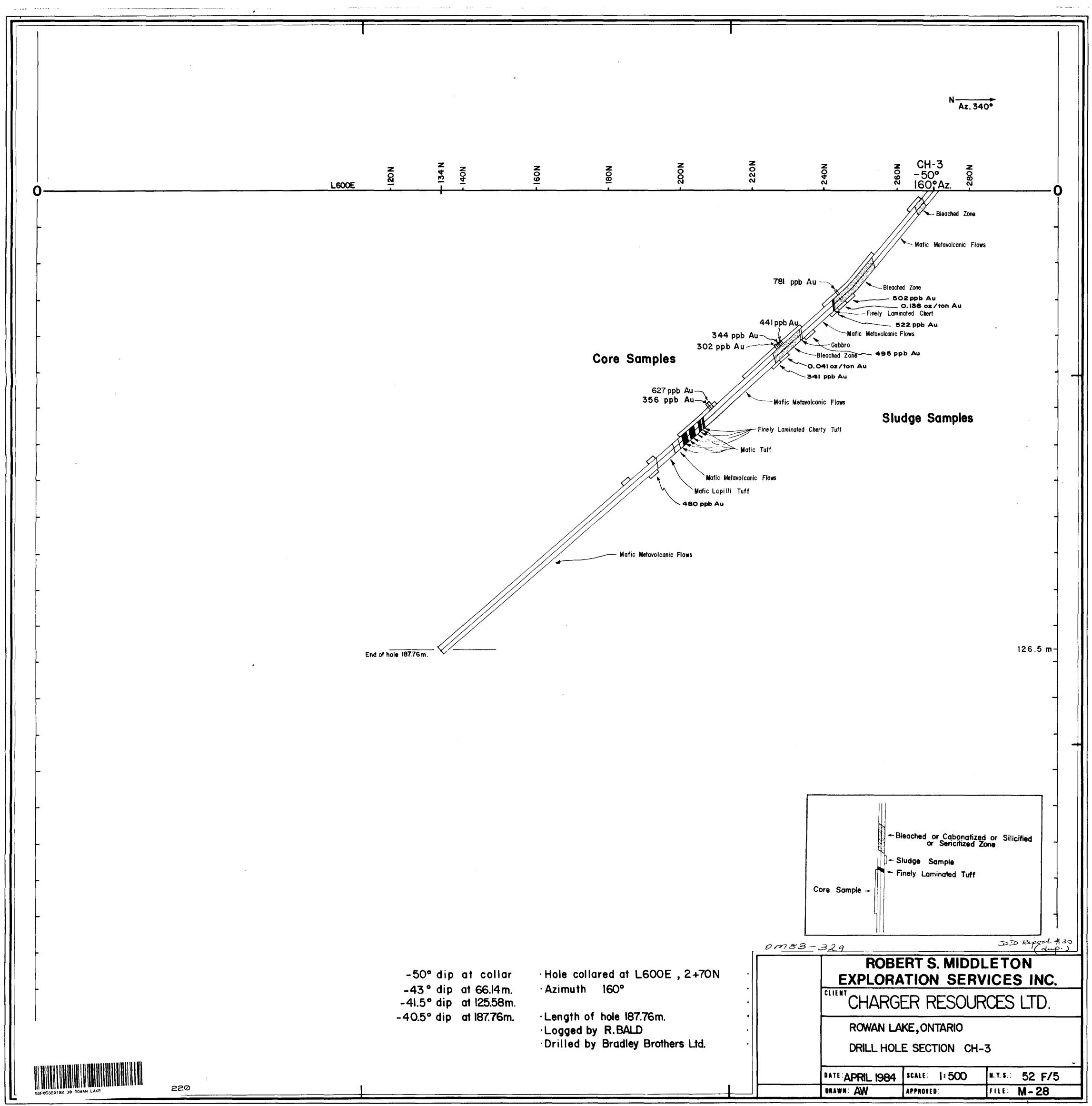
Ý

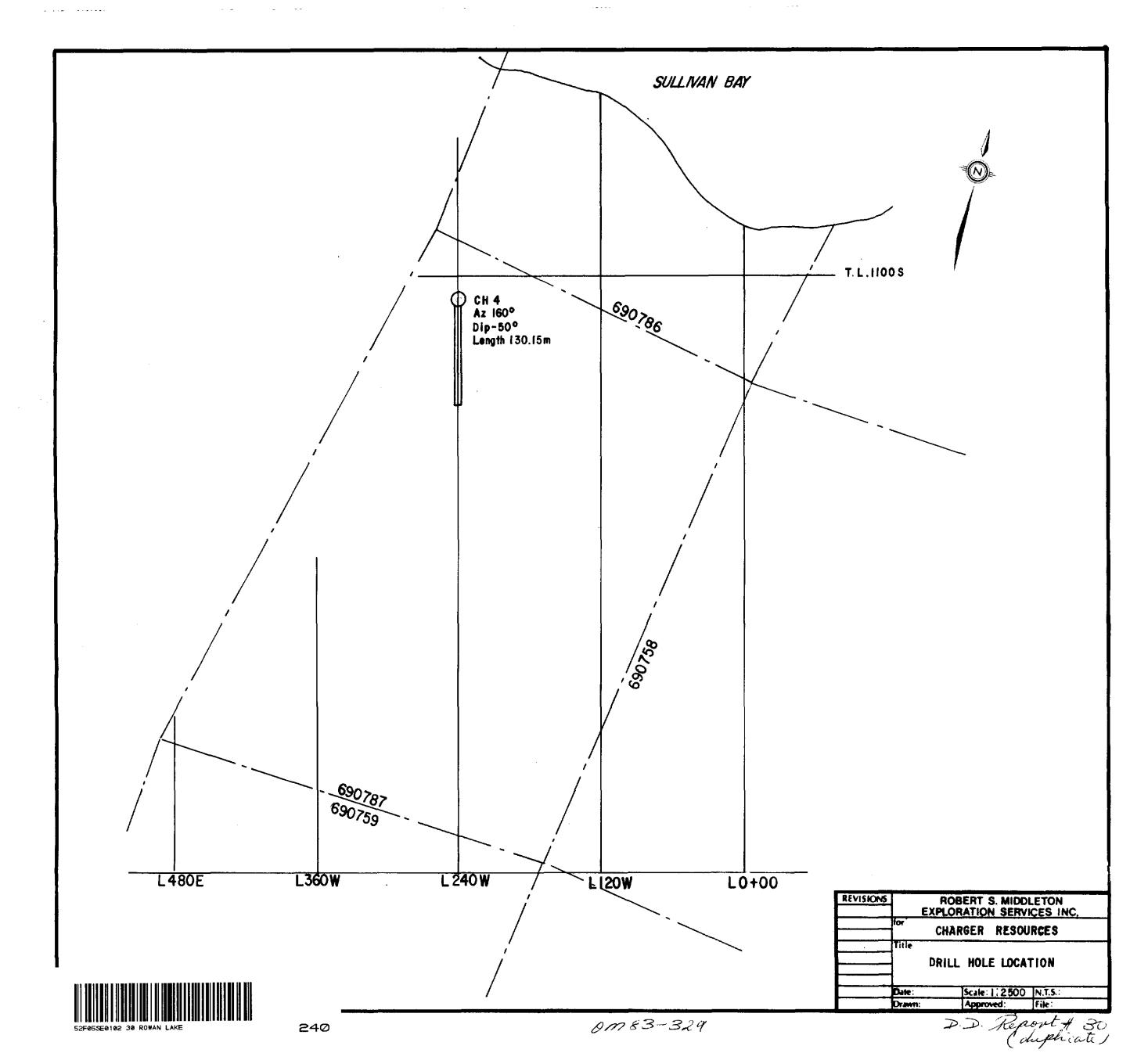
Metres		ROCK TYPE AND DESCRIPTION	Core	72		SAMPLE		
From	То		Angle to Axis	Sul- phides	Number	From	То	Length (meters
102.12	107.97 Inued)	3cm long, slightly flattened parallel to foliation; clasts are fine-grained, chlorite-rich mafic (meta-						
		<pre>volcanic?) and hard buff-coloured siliceous (rare) up to</pre>	60° 50°	1%				
107.97	187.76	MAFIC METAVOLCANIC FLOWS: -similar to 7.39 to 25.67, with zones of carbonate- filled amygdules -locally up to ~ 3% barren milky white coarse- grained quartz veins. -from 108.79 to 109.17: slightly bleached, carbon- atized zone with up to ~ 2% fine-grained disseminated pyrite and coarse -grained pyrite aggregates as lenses parallel to foliation		3%	41450 41451 41452	107.79 108.79 109.17	108.79 109.17 110.17	1.0 0.38 1.0
		-@ 117.87 to 118.20: ~ 13 cm wide milky white to translucent quartz vein, with ~ 1% chlorite-rich inclusions; quartz vein is barren but host rock within ~ 5 cm of lower margin is bleached and contains ~ 2% fine-grained dusty pyrite disseminated; at 40° to core axis	40*	2%	41453 41454 41455	116.87 117.87 118.23	118.23	0.3
	187.76	END OF HOLE 12' OF BW CASING LEFT IN HOLE						

Ministryof Report '19-84 Natural A of Work Resources Ontario The M Nan 900 URG BAULT रुपण PANTWO OHT. % m259 our Summary of Work Performance and Distribution of Credits Total Work Days Cr. claimed Mining Claim Mining Claim Work Days Cr Work Days Cr. Mining Claim Work Days Cr. <u>7230</u>* Prefix Prefix Number Number Prefix Number for Performance of the following work. (Check one only) 45.5 125.5 2288 62296 119.8 690787 80 2245 125.5 Manual Work 140 140 Shaft Sinking Drifting or other Lateral Work. Compressed Air, other 125.5 ower driven or mechanical equip. KENORA 125.5 Izo MINING DIV. Power Stripping 140 Diamond or other Core drilling GIVI 80 120.3 Land Survey 86 8 1984 114.8 7,8,9,10,11,12,1,2,3 later Nh All the work was performed on Mining Claim(s): 12 69078 61 88 Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below) * Norz: 2676 days excess held buck in WOOTL cuse, some CUT back. CH-2. DATE FEB 23 - MARCH 1/84 DATE: FED 19-22/84 CH-1 LENGTH 206.35 m LENGTH 236.83 m CORE SIZE BQ CORE SIZE BOR Az 1600 Az 160° DIP -50° DIP -50° DIRILLED BY BRADLEY BRUSS. DIRILLED TIMMINS OHT. TIMMINS PONT. TIMMINS PONT. CONTARIO GEOLOGICALOURYEN DATE MARCH 8-9/84 DIRILLED BY TIMMINS OHT. Dio - 500 Dip -50° CH-3 DATE MARCH 10-11/84 RESEARCH OFFICE LENGTH 187.76 m CORE SIZE: BQ. Az 1600 CORE Size BQ. MAY 1 6 1984 DID -500 AZ. 1600 DRILLED BY BRADLET Bros TIMMINS ONT DIP - 500 DRILLED BY: BRADLEY Bros RECEIVED TIMMINS ONT. Recorded Holder or Agent (Signature) Certification Verifying Report of Work I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true. Name and Postal Address of Person Certifying Certified by (Signature) P.O. Bus 10 LLAN MMUUS Date Certified Table of Information/Attachments Required by the Mining Recorder Other information (Common to 2 or more types) Attachments Type of Work Specific information per type Manual Work Nil Names and addresses of men who performed Shaft Sinking, Drifting or Work Sketch: these other Lateral Work manual work / operated equipment, together are required to show with dates and hours of employment. the location and Compressed air, other power Type of equipment extent of work in driven or mechanical equip. relation to the nearest claim post. Type of equipment and amount expended. Power Stripping Note: Proof of actual cost must be submitted Names and addresses of owner or operator within 30 days of recording. together with dates when drilling/stripping done. Work Sketch (as Signed core log showing; footage, diameter of Diamond or other core bldd above) in duplicate core, number and angles of holes. drilling Nii Nil Land Survey Name and address of Ontario land surveyer. 768 (81/3)









				· · · · · · · · · · · · · · · · · · ·				·
		-						
	3							
	0	` 			·····			
	-							
	,							
	-							
ľ								
								End
	F							Enq
	F							
	F							
	F							
	;							
	:							
	-							
	-							
						-50°	dip at collar	· Ho · Azi
	F					-50° -48°	dip at 2.90m. dip at 63.09m.	
						-49°	dip at 124.05m.	∙Ler ∙Lo∘ ∙Dri
	·							•Dri
					1			
		- 52F05SE0102 30 ROWAN LAKE	230					

