42G05SE0102 15 SCHOLFIELD

010

DIAMOND DRILLING

TOWNSHIP: SCHOLFIELD TWP. REPORT NO: 15

WORK PERFORMED FOR: Can-Mac Exploration Ltd.

RECORDED HOLDER: Same as Above [xx]
: Other [ ]

Claim No.	Hole No.	Footage	Date	Note
P 906040	ST-88-1	82.0m 269'	Dec/88	(1)(2)
P 906044	ST-88-2	142.3m 466.5'	Dec/88	(1)(2)
P 906080	ST-88-3	517 '	Dec/88	(1)(2)
P 906086/ P 906079	ST-88-4	707.0'	Dec/88	(1)(2)
		1959.5'		

(1) W8906.285, date filed June/89
(2) comparable to OMEP submission OM88-5-L-226 filed June 13/91

DIAMOND DRILL RECORD

FOR CAN-MAC EXPLORATION LTD.

BY GEOLOGICAL ENGINEERING SERVICES, NORTH BAY, ONTARIO.

SCHOLFIELD TOWNSHIP PROPERTY, KAPUSCASING-HEARST AREA, ONTARIO

HOLE NUMBER: S.T.-88-1

LOCATION: 6+10 E / 0+00 – Claim -906040

LENGTH OF HOLE: 82.0 METRES (269 FEET)

AZIMUTH: 160 DEGREES

DIP: - 45 DEGREES

STARTED: December 3/88

FINISHED: December 4/88

LOGGED BY: ROBIN E. GOAD

CONTRACTOR: WILL DRILL 6..... ONTARIO LTD.

CORE SIZE: BQ

DIP TESTS: NONE

TARGET: "VERY STRONG MAX-MIN CONDUCTOR WITH COINCIDENT MAGNETICS @ L 6+00 E / 0+50 S

GEOLOGICAL ASSOCIATION OF CANADA
ROBIN E. GOAD
FELLOW

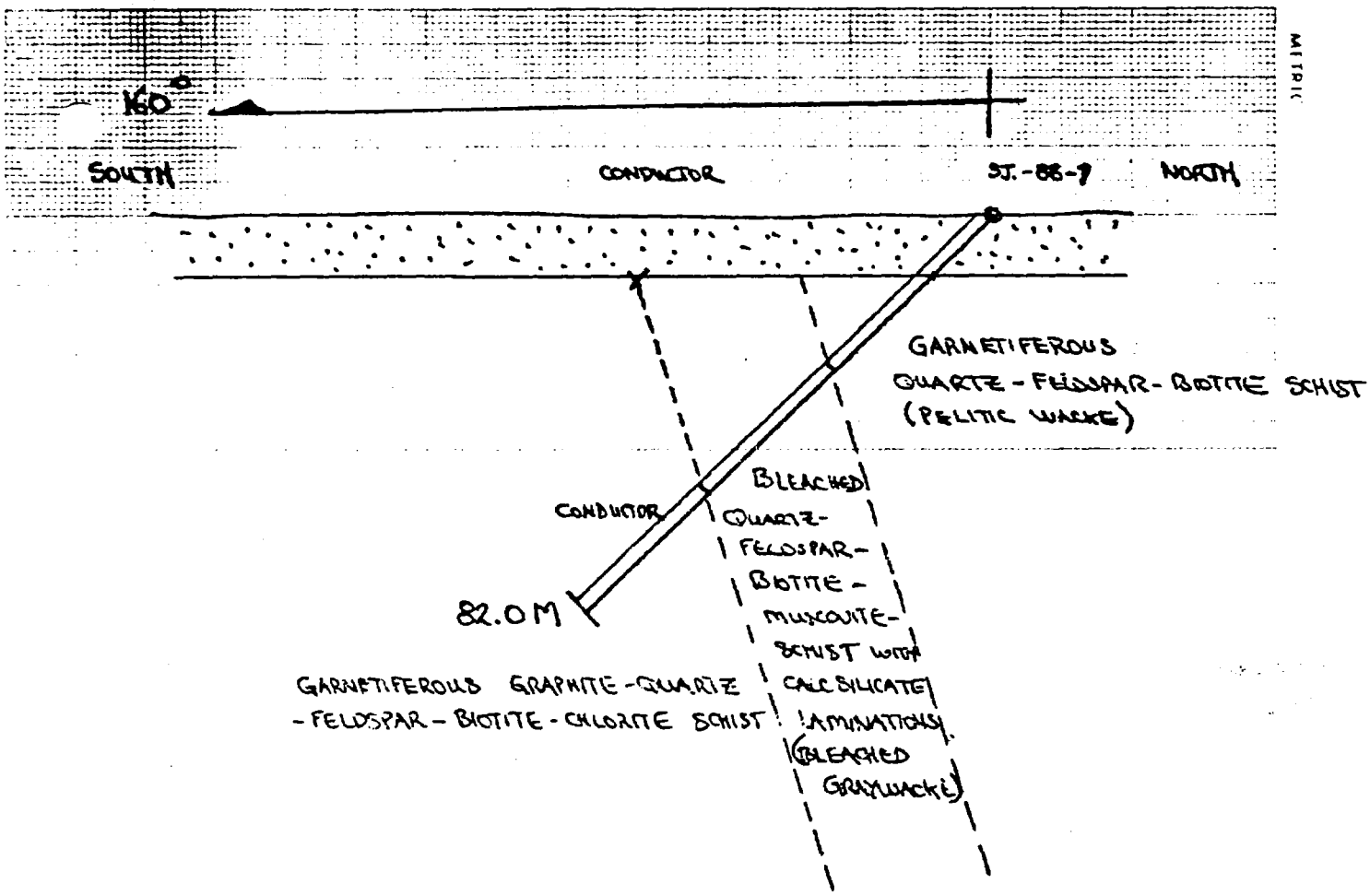
METERAGE	DESCRIPTION
0-12.2 M	CASING
12.2-82.0 M	METASDEDIMENTARY ROCKS
12.2-31.2 M	GARNETIFEROUS QUARTZ-FELDSPAR-BIOTITE SCHIST (ARGILLACEOUS WACKE) Dark gray, foliated to massive, fine- to medium-grained quartz-feldspar-biotite schist. Contains < 1 %, fine, 1 mm, pink garnet. Occasional fine carbonate and chlorite filled fractures. The latter are locally weakly pyritic. Occasional (<< 1 %) quartz (qtz)-carbonate (carb) veinlets up to 5 cm wide and parallel to sub-parallel to the core axis (C.A.). Rock contains calcsilicate laminations (2 %) up to 9 cm wide. They are commonly associated with qtz-carb veinlets. Calcsilicates are composed of chlorite, actinolite and carbonate +/- garnet and have sharp contacts parallel to to the foliation. Local graphite laminations up to 5 cm wide with 2 to 3 % disseminated (diss) and fracture filling pyrite (py). 12.5 M Foliation @ 80 degrees to the C.A. and a 4 cm wide qtz > carb veinlet parallel to the foliation. 19.8 M Foliation @ 80 degrees to the C.A. 24.3 M 7 cm wide zone of interlaminated and brecciated calcsilicate and qtz > carb veinlets. 26.8 M 5 cm wide graphitic lamination with 2 to 3 % diss and fracture filling py. Upper contact is parallel to the foliation, wheras the lower contact is defined by an irregular carb > qtz veinlet up to 2 cm thick. 27.3 M 9 cm microbrecciated calcsilicate lamination with irregular qtz > carb veinlets. 31.5 M Local fracture filling py.
31.2-57.0 M	BLEACHED QUARTZ-FELDSPAR-BIOTITE-MUSCOVITE SCHIST WITH CALCSILICATE LAMINATIONS (BLEACHED GRAYWACKE WITH CALCSILICATE LAMINATIONS) Light to medium gray qtz-feldspar-biotite-muscovite schist similar to before but contains no garnets and bleached because of silicification, sericitization and carbonatization. Numerous qtz and/or carb veinlets (5 %) up to 15 cm wide. They are parallel to sub-parallel to the foliation. Local silicification marginal to the veinlets with a chert-like appearance. The cherty laminations are commonly interlaminated with graphitic layers 1 mm to 1 cm thick. Graphite also occurs interstitially. Garnetiferous calcsilicate layers up to 15 cm wide are the same as those previously described. However, garnets are rarely observed in

the wall rock. Local trace (tr), finely diss py.
31.8 M 10 cm wide matrix supported breccia comprised of siliceous clasts up to 1 cm in a pyritic (75 %) groundmass. Sharp graphitic contacts parallel to the foliation @ 75 degrees to the C.A.
34.8 M 20 cm of intense silicification and qtz veinlets.
34.9 M 10 cm same as above.
36.5-41.1 M Qtz-feldspar-biotite schist as previouslY described with 1 cm siliceous laminations and locally 0.5 % py.
41.8 M Foliation @ 80 degrees to the C.A.
47.8 M Foliation @ 85 degrees to the C.A.
48.5 M 5 cm qtz veinlet @ 80 degrees to the C.A.
50.7 M 5 cm qtz veinlet with irregular contacts normal to the C.A.
50.9 M 10 cm qtz veinlet whose upper and lower contacts are 90 and 75 degrees to the C.A.
52.4 M and 52.9 M 5 and 12 cm wide zones of silicification marginal to qtz veinlets.

57.0-82.0 M GARNETIFEROUS GRAPHITE-QUARTZ-FELDSPAR-BIOTITE-CHLORITE SCHIST (CARBONACEOUS AND PELITIC WACKE)
Dark gray to black, finely laminated and foliated, garnetiferous and graphitic schist. Garnets are 1 cm in size and comprise approximately 3 % of the rock. They have irregular grain boundaries and are commonly rimmed by chlorite suggesting that amphibolite facies metamorphism occurred followed by retrograde greenschist facies conditions. Graphite content ranges between 5 % and massive (75 %) and typically occurs in lamminations up to 3 cm wide or as interstitial flakes. The rock also contains numerous 1 to 3 mm wide, micaceous laminations of crenulated biotite/phlogopite. Local tr finely diss and fracture filling py. Approximately 1 % garnetiferous calcsilicate laminations as previously described but typically more chlorite and epidote as opposed to the actinolite in previous units. The schist host rock is also much more chloritic than biotitic as in previous units. This may indicate even greater retrograde or hydrous conditions in this rock possibly attributed to hydrothermal alteration. The rock contains 2 to 3 % qtz and/or carb veins and veinlets between 1 mm and 50 cm thick. They are typically parallel to sub-parallel to the C.A. and locally contain pyrrhotite (po).
57.3 M Foliation is 90 degrees to the C.A.
60 2 M Irregular, 30 cm wide qtz > carb veinlet with a sharp upper contact @ 75 degrees to the C.A. with abundant po (10 % over 5 cm. The lower contact is irregular and sub-parallel to the C.A.

61.6 M Foliation @ 85 degrees to the C.A.
67.4 M 50 cm, white qtz > carb veinlet with contacts @ 60 degrees to the C.A.
68.6 M Abundant graphite (50 %) over 30 cm.
70.4-71.9 M 5 %, coarse, irregular garnet.
70.6 M 10 cm carb > qtz veinlet @ 70 degrees to the C.A.
72.2-73.5 M Locally abundant graphite (30 %), foliation @ 80 degrees to the C.A.
73.9 M 5 cm wide, milky-white qtz veinlet @ 90 degrees to the C.A.
74.4 M 10 cm of locally abundant graphite (50 %).
76.7 M 30 cm bleached, light green chloritic and carbonatized schist.
79.2 M 7 cm milky-white qtz veinlet with upper and lower contacts @ 90 and 60 degrees to the C.A.
79.5-80.5 M Locally 5 %, 1 mm to 5 mm, coarse irregular, pink, xenoblastic garnet porphyroblasts. Local fracture filling po. Abundant (30 %) graphite locally.
81.5-82.0 M Abundant graphite defining the foliation @ 85 degrees to the C.A. with up to 1 % finely diss py.

82.0 METRES (269 FEET) END OF HOLE



CAN-MAC EXPLORATION LTD.
SCHOLFIELD TOWNSHIP PROPERTY
SECTION LOOKING WEST OF DDH # S.T.-88-1, SCALE 1:1000
BY ROBIN E. GOAD, M.Sc., F.G.A.C GEOLOGICAL ENGINEERING SERVICES NORTH BAY, ONTARIO.

DIAMOND DRILL RECORD

FOR CAN-MAC EXPLORATION LTD.

BY GEOLOGICAL ENGINEERING SERVICES, NORTH BAY, ONTARIO.

SCHOLFIELD TOWNSHIP PROPERTY, KAPUSCASING-HEARST AREA, ONTARIO

HOLE NUMBER: S.T.-88-2

LOCATION: 7+00 E / 7+15 N - Claim - 906044

LENGTH OF HOLE: 142.3 METRES (467 FEET)

AZIMUTH: 160 DEGREES

DIP: - 45 DEGREES

STARTED: December 5/88

FINISHED: December 7/88

LOGGED BY: ROBIN E. GOAD

CONTRACTOR: WILL DRILL 6..... ONTARIO LTD.

CORE SIZE: BQ

DIP TESTS: NONE

TARGET: "STRONG" AND "VERY STRONG" MAX-MIN CONDUCTOR WITH COINCIDENT MAGNETICS @ L 7+00 E / 6+70 N AND 5+90 N.

GEOLOGICAL ASSOCIATION OF CANADA
ROBIN E. GOAD
FELLOW

			Au PPB
SAMPLES:	ST-88-2-1	91.7-92.3 M = 0.6 M	NIL
	ST-88-2-2	92.3-93.3 M = 1.0 M	NIL
	ST-88-2-3	93.3-94.3 M = 1.0 M	NIL
	ST-88-2-4	94.3-95.3 M = 1.0 M	NIL
	ST-88-2-5	95.3-96.3 M = 1.0 M	NIL
	ST-88-2-6	96.3-97.3 M = 1.0 M	NIL
	ST-88-2-7	97.3-98.3 M = 1.0 M	NIL
	ST-88-2-8	98.3-99.3 M = 1.0 M	NIL
	ST-88-2-9	108.7-109.7 M = 1.0 M	NIL
	ST-88-2-10	109.7-110.7 M = 1.0 M	NIL
	ST-88-2-11	110.7-111.7 M = 1.0 M	NIL
	ST-88-2-12	111.7-112.7 M = 1.0 M	NIL
	ST-88-2-13	112.7-113.7 M = 1.0 M	NIL
	ST-88-2-14	113.7-114.7 M = 1.0 M	NIL
	ST-88-2-15	114.7-115.7 M = 1.0 M	NIL
	ST-88-2-16	115.7-116.7 M = 1.0 M	NIL
	ST-88-2-17	116.7-117.7 M = 1.0 M	NIL
	ST-88-2-18	117.7-118.7 M = 1.0 M	NIL
	ST-88-2-19	118.7-119.7 M = 1.0 M	NIL

SAMPLES CONTINUED:

		AuPPB
ST-88-2-20	119.7-120.7 M = 1.0 M	NIL
ST-88-2-21	120.7-121.7 M = 1.0 M	NIL
ST-88-2-22	121.7-122.7 M = 1.0 M	NIL
ST-88-2-23	122.7-123.7 M = 1.0 M	NIL
ST-88-2-24	123.7-124.7 M = 1.0 M	NIL

	Ag PPM	Cu PPM	Pb PPM	Zn PPM
ST-88-2-6	0.3	226	16	1,480
ST-88-2-10	0.4	320	73	2,240
ST-88-2-11	0.5	394	78	2,320
ST-88-2-12	NIL	172	24	67

METERAGE	DESCRIPTION
0-9.1 M	CASING
9.1-122.6 M	METASDEDIMENTARY ROCKS
9.1-34.4 M	QUARTZ-FELDSPAR-BIOTITE SCHIST (GRAYWACKE) Massive to weakly laminated, foliated, light to medium gray, fine- to medium-grained quartz-feldspar-biotite schist or graywacke. The grainsize of the quartz (qtz) and feldspar is typically < 1 mm while biotite is coarser-grained (up to 3 mm) and defines a foliation typically 65 to 75 degrees to the core axis (C.A.). The colour and the intensity of the foliation is controlled by the biotite concentration between 10 and 60 %, averaging 20 %. White qtz and/or carbonate (carb) veins and veinlets comprise approximately 2 % of the rock and are < 1 mm to 30 cm wide. Most are concordant to the foliation. The veins are commonly bordered by a fine rim of sericite and/or chlorite. Local 1 to 2 cm wide calcsilicate laminations with sharp contacts parallel to to the foliation. They are comprised of carbonate, chlorite and actinolite. 9.7 M Foliation @ 70 degrees to the C.A. 14.0 M 20 cm, irregular qtz veinlet with 2 % pyritic biotite inclusions. 15.2 M Locally chloritic for 30 cm marginal to a 20 cm, irregular qtz vein with upper and lower contacts @ 75 and 85 degrees to the C.A. 20.4 M Foliation @ 70 degrees to the C.A. 27.7 M 10 cm qtz > carb veinlet @ 50 degrees to the C.A. 32.6 M Foliation @ 50 degrees to the C.A. 33.5 M 10 cm qtz > carb veinlet with biotite and chlorite inclusions @ 55 degrees to the C.A. 33.8 M Qtz > carb veinlets and irregular masses for 30 cm, commonly @ 30 to 50 degrees to the C.A. They contain phlogopite/biotite and garnet inclusions. 34.0 M Foliation @ 45 degrees to the C.A. 34.4 M Foliation steepens to 70 degrees to the C.A.
34.4-41.4 M	GARNETIFEROUS QUARTZ-FELDSPAR-BIOTITE SCHIST (ARGILLACEOUS WACKE) Dark gray, massive to weakly laminated, foliated garnetiferous qtz-feldspar-biotite schist. Similar rock to before but quite massive, biotitic (ie 30 %) and contains approximately 1 to 2 %, 1 to 2 mm pink garnet. Contains occasional fine, 1 mm carb veinlets up to 5 cm wide. 40.8 M Foliation @ 55 degrees to the C.A. 41.3 M Foliation @ 40 degrees to the C.A.

41.4-68.6 M QUARTZ-FELDSPAR-BIOTITE SCHIST (GRAYWACKE)

Same rock as previously described but more biotitic, ie averages approximately 25 %, and contains numerous (5 %) qtz and carb veins and veinlets between 1 mm and 70 cm thick. Numerous changes in the orientation of the foliation, sigmoidal shapes and small folds up to 1 M in amplitude indicate that the rock is complexely folded.

41.7 M Fine chloritic and biotitic shear with 2 mm wide qtz > carb veinlets 50 degrees to the C.A.

42.5 M Folded foliations over a 1 M core length with 2 and 10 cm wide, irregular qtz > carb veinlets at the upper contact the centre of the folded interval respectively.

43.3-44.2 M Lamination with 2, 1 mm qtz veinlets forming a low amplitude sin wave-like pattern sub-parallel to the C.A.

45.1-45.7 M Irregular masses and veinlets of qtz > carb and chlorite @ various angles to the C.A.

49.4-49.8 M Same as above.

50.0 M Foliation normal to the C.A.

50.2-51.5 M qtz > carb veins, veinlets and irregular masses with sharp irregular and sigmoidal contacts @ various angles to the C.A.

52.5-53.2 M Sigmoidal and folded foliations, numerous qtz veinlets along foliation, silicified and biotitic fine laminations.

53.0-53.4 M qtz +/- carb +/- chlorite vein @ 50 degrees to the C.A.

53.2 M Foliation @ 60 degrees to the C.A.

53.8 M Folded foliation and a sigmoidal carb veinlet over a 30 cm core length.

54.9 M 15 cm wide, milky-white qtz veinlet @ 40 degrees to the C.A.

55.4-56.7 M Zone with biotite/phlogopite shears @ 40 degrees to the C.A. and 4, milky-white, irregular qtz veinlets 20, 20, 20 and 2 cm wide, respectively.

57.2-57.5 M As above but 2, 2 cm thick veinlets.

57.5 M 70 cm milky-white barren qtz vein.

58.6 M 10 cm qtz > carb +/- chlorite veinlet @ 45 degrees to the C.A. Rock marginal to the veinlet contains biotite/phlogopite shears and the foliation is locally crenulated sub-parallel to the C.A.

58.9-59.8 M Zone of irregular masses and veins of qtz > carb including a 70 cm barren, milky-white qtz vein. A smaller 15 cm veinlet @ the end of the zone contains approximately 1 % diss pyrrhotite (po).

60.3 M Foliation @ 50 degrees to the C.A.

66.1 M Foliation @ 70 degrees to the C.A.

67.8-76.3 M GARNETIFEROUS QUARTZ-FELDSPAR-BIOTITE SCHIST (ARGILLACEOUS WACKE)

Medium to dark gray, laminated, fine- to medium-grained garnetiferous qtz-feldspar-biotite schist. Rock is composed of 2 mm to 5 cm compositional and graded laminations with numerous concordant to sub-concordant qtz and/or carb veinlets (1 mm to 1 cm) thick). Occasional larger qtz veins up to 15 cm thick. Rock contains up to 2 to 3 %, 1 to 2 mm pink garnet porphyroblasts.

72.2 M Foliation @ 80 degrees to the C.A.

73.2 M 15 cm qtz veinlet @ 70 degrees to the C.A.

74.8 M 3 cm wide, massive graphite lamination with approximately 5 % fracture filling po @ 85 degrees to the C.A.

76.3-92.3 M QUARTZ-FELDSPAR-BIOTITE SCHIST (GRAYWACKE)

Dark gray qtz-feldspar-biotite schist as previously described but contains local garnetiferous laminations up to 25 cm wide.

76.9 M 10 cm, irregular qtz veinlet with patchy carb and chlorite.

79.3 M Locally garnetiferous for 2 cm and folded foliation.

79.9 M Foliation normal to the C.A. but flattens to sub-parallel to the C.A. in the following 10 cm along the core axis.

83.6-84.1 M Locally 1 %, 1 to 2 mm garnet.

84.4 15 cm as above.

87.9-88.5 M 1 % diss and fracture filling po and minor graphite along the schistosity.

89.9 M Foliation @ 90 degrees to the C.A.

91.7-92.3 M Diss and fracture filling py approximately 1 to 2 %.

92.3-97.3 M GRAPHITE SCHIST (CARBONACEOUS WACKE)

Black, massive to laminated graphite schist comprised of 10 to 80 % graphite and < 1 to 70 % massive, fracture filling and disseminated sulphides. The sulphide content averages 2 to 3 % and is comprised of equal proportions of py and po. Approximately 3 % qtz < carb veinlets, < 1 mm to 1 cm wide and predominantly parallel to sub-parallel to the schistosity.

92.3 M Schistosity @ 87 degrees to the C.A.

92.7-93.4 M Massive graphite averaging 50 % but locally 100 %.

93.6-93.9 M More siliceous interval with 1 to 5 % graphite and 2 % fracture filling py and po.

94.2-94.6 M Approximately 50 % graphite and 5 to 10 % fracture filling py and po.

94.6-95.9 M Siliceous, less graphitic (< 5 %) interval with 1 to 2 % finely diss py and po.

95.9-96.5 M 50 % graphite with 10 % sulphide.

96.5-96.6 M Siliceous interval with numerous fine qtz and carb veinlets concordant to the foliation @ 80 degrees to the C.A. Graphite < 5 %.
96.6-97.1 M Abundant (30 %) graphite and 10 % fracture filling sulphides.
97.1-97.3 M 70 % massive sulphides.

97.3-102.8 M ALTERED FELDSPAR PORPHYRY DYKE
Medium gray feldspar porphyry dyke composed of 20 %, 1 to 2 mm, subhedral and locally euhedral plagioclase phenocrysts in a fine-grained siliceous groundmass.
97.3-99.0 M Silicified, light gray to beige in colour. Numerous carb filled irregular, hairline fractures. Averages 3 % diss and fracture filling py. Locally blocky core.
99.9-101.1 M Patchy siliceous bleaching and the plagioclase phenocrysts define a foliation @ 70 degrees to the C.A.

102.8-108.7 M QUARTZ-FELDSPAR-BIOTITE SCHIST (GRAYWACKE)
Medium to dark gray, massive qtz-feldspar-biotite schist as previoslly described with local concentrations of fracture filling and diss py and po up to 20 % over 10 cm core lengths.
103.8 M 20 % fracture filling and py and po (equal proportions) over 10 cm.
108.6 M 2, 1 cm graphitic laminations with 3 % py and po @ 40 degrees to the C.A.

108.7-122.6 M GRAPHITE SCHIST (CARBONACEOUS WACKE)
Sharp contact @ 60 degrees to the C.A. to well foliated and laminated, medium gray to black graphitic schist. Graphite content varies between 5 and 90 % but averages 30 to 40 %. Rock contains abundant (0 to 60 %) fracture filling and disseminated py and po and local specks of chalcopyrite (cpy). Rock averages approximately 15 % sulphide of which 12 % is po, 3 % is py, and cpy is only tr. Local laminations of massive graphite with < 2 % sulphide. Numerous sigmoidal features and po is concentrated in worm-like, lozenge-shaped clasts. Abundant concordant and irregular-shaped masses, veins and veinlets of qtz and carb, < 1 mm to 10 cm wide, averaging 5 %. The graphite, and veins and veinlets define a variable foliation between 35 and 90 degrees to the C.A. The foliation locally defines irregular shapes, crenulations, folds and sigmoidal features. The rock is quite consistent as described throughout the interval except for sections of qtz-feldspar-biotite schist (graywacke) up to 30 cm wide along the core axis.
109.1 M 15 cm of graywacke with < 5 % graphite and

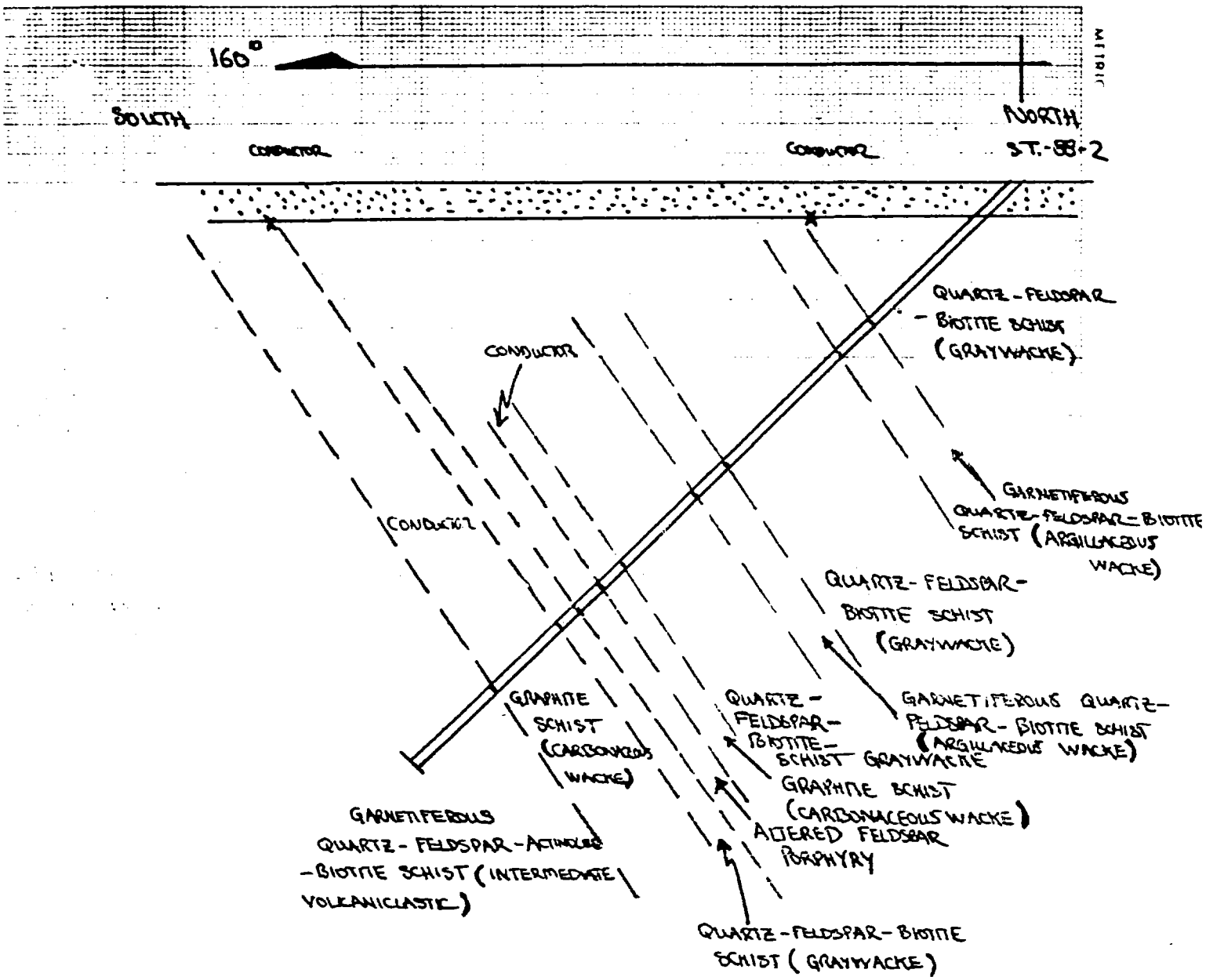
tr sulphides.
109.4 M 20 cm of graywacke as above.
109.8 M Foliation @ 85 degrees to the C.A.
110.0 M 20 cm of graywacke as previously described.
110.5-111.0 M 40 % sulphides, predominantly po.
110.7 M Minor diss cpy.
112.3 M 2, 20 cm graywacke intervals as previously described.
112.85 M Massive graphite lamination 5 cm thick @ 80 degrees to the C.A.
113.3-113.8 M Predominantly graywacke with < 5 % graphite and tr sulphides.
114.9 M Foliation @ 45 degrees to the C.A.
115.6 M Crenulation cleavage for 10 cm and foliation @ 45 degrees to the C.A.
116.3 M 2, 12 and 7 cm wide, smokey blue qtz veinlets @ 90 and 70 degrees to the C.A.
122.4 M Foliation @ 75 degrees to the C.A.

122.6-142.3 M INTERMEDIATE VOLCANICLASTIC ROCKS

122.6-142.3 M GARNETIFEROUS QUARTZ-FELDSPAR-ACTINOLITE-BIOTITE SCHIST (INTERMEDIATE VOLCANICLASTIC)

Well foliated, laminated and compositionally banded rock composed of alternating green and gray layers. The layers are between 0.5 and 50 cm wide except for one gray layer 2.3 metres wide as measured along the core axis. The green layers are composed of 20 %, pink, irregular, xenoblastic, locally foliated garnet porphyroblasts, 1 mm to 2 cm in diameter in a matrix of actinolite, chlorite, biotite and intersticial carbonate. The green layers contain tr coarse blebs of po. The gray layers are composed of qtz-feldspar-biotite schist as previously described. Numerous, fine, < 1 mm to 1 cm wide carb > qtz veinlets predominantly parallel to the schistosity and occasional wider qtz veins up to 20 cm wide near the upper contact of the interval. The uppermost 2 metres of the interval is silicified and contains 1 to 5 % (3 % average) diss and fracture filling py < po.
124.6 M 20 cm, milky-white qtz veinlet with chlorite inclusions and < 1 % diss po @ 45 degrees to the C.A.
126.2-128.5 M Massive to weakly foliated and laminated qtz-feldspar-biotite schist (graywacke).
133.2 M Foliation @ 70 degrees to the C.A.
142.2 M Foliation @ 65 degrees to the C.A.

142.3 METRES (457 FEET) END OF HOLE



CAN-MAC EXPLORATION LTD.
SCHOLFIELD TOWNSHIP PROPERTY
SECTION LOOKING WEST OF DDH # S.T.-88-2 SCALE 1:1000
BY ROBIN E. GOAD, M.Sc, F.G.A.C. GEOLOGICAL ENGINEERING SERVICES NORTH BAY, ONTARIO

DIAMOND DRILL RECORD

LOGGED BY Wayne L. E. Penno, P. Eng.

PROPERTY CAN MAC EXPLORATION LTD., Scholfield Property, Kapheart Project

D.D.H. No. ST-88-03 PAGE 1

LATITUDE L 5+00N BEARING OF HOLE Az 160° STARTED December 8/88

CLAIM No. 906080

DEPARTURE 4 +90 N DIP OF HOLE -45 COMPLETED December 9/88

N

DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION Swamp Level DIP TESTS DEPTH 517'

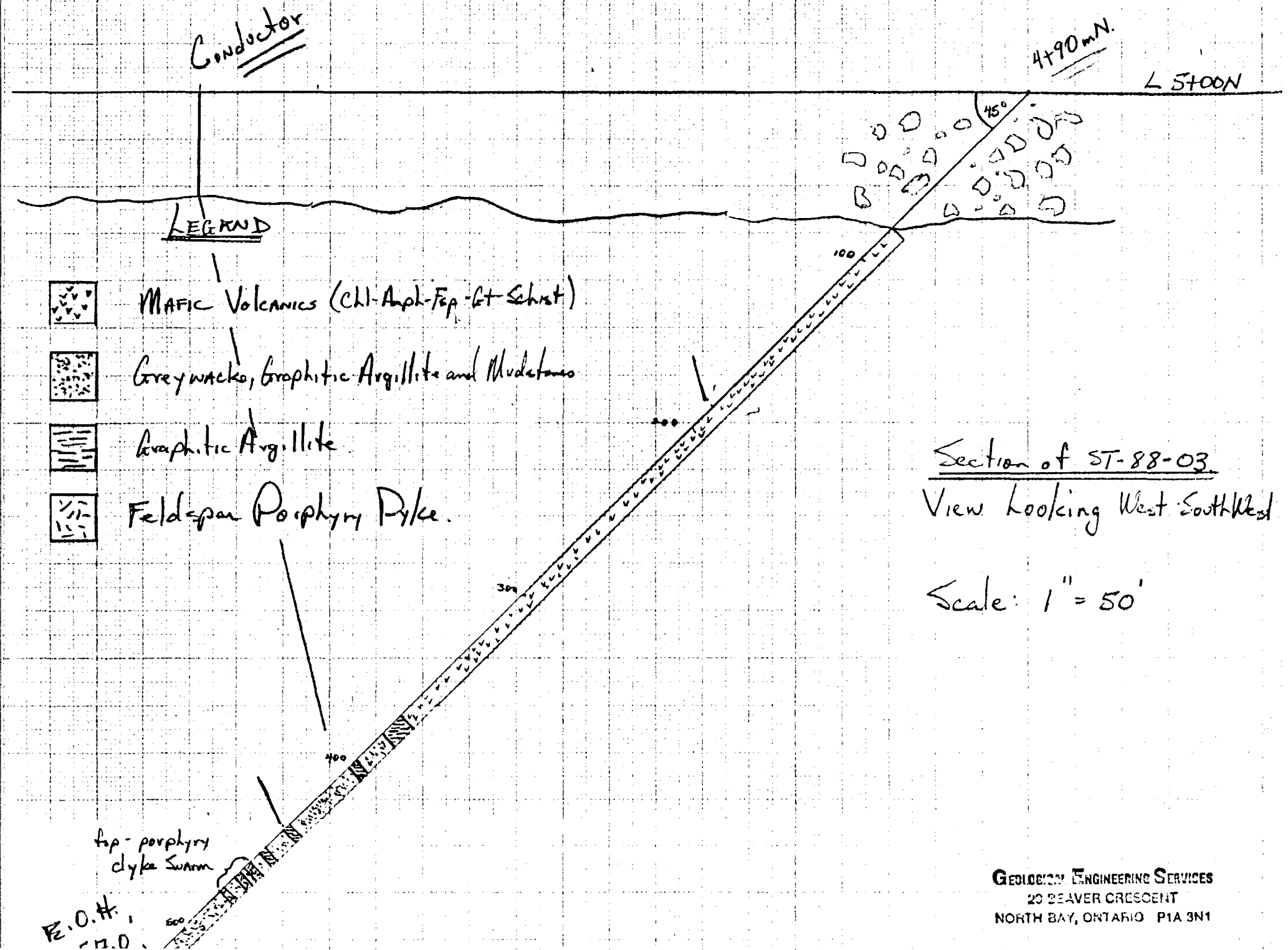
CORE SIZE BQ DIAMOND DRILL CONTRACTOR Wil-Drill 671640 Ontario Inc.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Objective:	To Test a magnetic anomaly and strong EM conductor.					
0	80.5	CASING						
80.5	372.0	MAFIC VOLCANICS, Chlorite Amphibole Feldspar Garnet Schist						
			Dark green, light to medium grey, strongly foliated to well banded. 4 ml composed of alternating bands of mafic (chlorite-amphibole-garnet) and felsic (quartz-feldspar) minerals. Banding varies from <¼" to 3", but averages 1/2 to 1" in width. Unit is variably magnetic throughout, locally containing minor (1-2%) concentrations of pyrite and pyrrhotite. Chlorite and amphibole rich bands after contain 5 to 25% fine to coarse grained garnet porphyroblasts. Banding/foliation at 65° to C.A.					
		120.5 - 125.5	Section containing 60-80% light to medium grey felsic bands. Banding possibly due to accumulation of felsic volcaniclastic fragments.					
		151.0	3" quartz vein, no sulphides.					
		154 - 158.5	Section containing 60 - 75% felsic bands, similar to 120.0 - 125.5.					
		170.5 - 172	Section of strongly foliated, highly					

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
80.5	372.0	MAFIC VOLCANICS,	Chlorite Amphibole Feldspar Garnet Schist Cont'd									
		170.5 - 172	chloritic and badly broken core. Possible									
		Cont'd	fault?									
		176	4" Barren quartz vein @ 80° to C.A.									
		178	2" Barren quartz vein									
		186	4" wide feldspar porphyry dike, Contacts @ 80° to C.A.									
		210 - 214	Strongly foliated and banded mafic volcanics									
			cut by a series of quartz-carbonate hairline fractures subparallel to the C.A.									
		217.6 - 218.6	Quartz carbonate vein @ 10° - 30° to C.A.									
			Locally banded with a trace of pyrite.									
372	517	GREYWACKE, GRAPHITIC, ARGILLITE AND MUDSTONES										
			Light to medium grey massive to well									
			foliated and banded greywacke interbedded with dark grey to black sections of									
			graphitic argillite and mudstones. Argillaceous section, which vary in width from less than									
			1/2" to 2 feet, averaging 3 to 6", containing 1% to 30% fine to coarse grained pyrite and									
			pyrrhotite. Argillaceous sections typically grade into graphic greywackes and siltstones.									
			Foliation and banding (bedding?) is at 70 - 72° to C.A.									
		372 - 382	Secion containing 55 - 60% of graphitic									
			argillite and mudstones. Graphitic section average 10 - 20% pyrite and									
			pyrrhotite as stringers and disseminations.									
		299 - 405.5	Fine to medium grained, massive massive dike.									
		408 - 408.5	Badly broken section of massive to strongly									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
372	517	GREYWACKE, GRAPHITIC, ARGILLITE AND MUDSTONES Cont'd										
	Cont'd	408 - 408.5	foliated graphitic argillite.									
		431 - 432.5	Section containing 20 - 30% 1/2 - 1" wide									
			quartz veins subparallel to foliation.									
			1 - 3% of fine to medium grain disseminated									
			pyrite and pyrrhotite associated with veining.									
		437.5 - 440.5	Section containing 60 - 90% graphitic									
			argillite and mudstones. Argillaceous sections average 4.8% pyrite & pyrrhotite.									
		443 - 444.5	Graphitic argillite with 5 - 7% pyrite.									
			Trace of pyrrhotite.									
		452 - 455.5	Mixed section of graphitic argillite, mudstones and porphitic greywacke.									
			Section containing 2 - 4% pyrite.									
		460.5	3" wide band bed of graphitic argillite.									
		461 - 464.5	Feldspar porphyry dike. Phenocrysts weakly flattened parellel to foliation.									
		466 - 469.5	Feldspar porphyry dike, similar to									
			461 - 464.5.									
		477.5 - 478	Feldspar porphyry dike.									
		482	2" wide feldspar porphyry dike.									
		487.5 - 489	Graphitic argillite/mudstone; 1 - 3% pyrite.									
	517	END OF HOLE	23 core boxes used									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppb Au				
			SAMPLING AND ASSAYING									
				ST8803-1	372	377		Nil				
				2		382		20				
				3	389	392.5		Nil				
				4	397	399		Nil				
				5	405.6	410.5		Nil				
				6	431	432.5		Nil				
				7	437	440.5		Nil				
				8	443	444.5		Nil				
				9	452	455.5		Nil				
				10	487.5	489		Nil				



GEOLOGICAL ENGINEERING SERVICES
20 BEAVER CRESCENT
NORTH BAY, ONTARIO P1A 3N1

DIAMOND DRILL RECORD

LOGGED BY Wayne L. E. Penno, P. Eng.

PROPERTY CAN MAC EXPLORATION LTD., Scholfield Property, Kapheart Project

D.D.H. No. ST-88-04 **PAGE** 1

LATITUDE L 8+00W **BEARING OF HOLE** Az 160° **STARTED** Dec 10/88

CLAIM No. 906086

DEPARTURE Stn: 1 + 55mN **DIP OF HOLE** -45° **COMPLETED** Dec 12/88

N

DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION Swamp Level **DIP TESTS** At Collar: -45° @ 593': -40.5° **DEPTH** 707.0 feet

CORE SIZE BQ **DIAMOND DRILL CONTRACTOR** Wil-Drill 671640 Ontario Inc.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
0	66.5	CASING	Overburden									
66.5	71.5	TURBIDIC GREYWACKE (?) (Phlogopite, biotite, quartz-chlorite amphibole schist)										
			Light to buff brown, green and white. Well banded to strongly foliated. Banding due to variating in composition of unit. Brown bands consist of fine to medium grained phlogopite biotite and quartz with minor chlorite and amphibole. Dark green bands are generally composed of dark green amphibole and chlorite with minor amounts of quartz, feldspar and garnet. White to light grey bands are composed of quartz and feldspar in approximately equal porportions. Bands vary in width from 1/4" up to 3 inches, but average 1/2" Occasional amphibole rich bands contain rounded garnet porphyroblasts up to 1/4" in diameter, and are probably a metamorphased greywacke. Bands at 65° to C.A.									
71.5	95.5	MAFIC SEDIMENT? (Amphibole, Chlorite, Phlogopite, garnet schist)										
			Dark green, massive to strongly foliated, banded and locally schistose. Unit composed primarily of amphibole, chlorite, phlogopite with interstitial quartz and feldspar. Upper 5 feet of unit contains 5 - 8% fine to coarse porphyroblasts. Garnet conformed to narrow quartz-feldspar-amphibole bands in the lower									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
71.5	95.5	MAFIC SEDIMENT? (Amphibole, Chlorite, Phlogopite, garnet, schist)										
			part of the unit. Unit is weakly to strongly									
			magnetic due to disseminated po±									
			magnetite. Upper part of 5 feet contains									
			5 to 15% py-po locally as coarse disseminations									
			and stringers. Unit averages 1 - 4% combined									
			py & po.									
		74.5	3" wide band of 25 - 35% phlogopite,									
			25 - 30% amphibole, 5 - 10% quartz									
			feldspar and garnets and 20 - 30% py and po.									
		85	4" wide quartz feldspar band. Possibly									
			recrystallized chert bed?									
		86.5	3" wide quartz feldspar band similar to 85									
95.5	180.5	TURBIDIC GREYWACKE (?) (Chlorite, Amphibolite, Phlogopite, quartz)										
			Light to dark grey, brown, green and white,									
			strongly foliated and banded. Colour variations									
			due to vanalios in composition. Dark green									
			bands composed of amphibole and chlorite,									
			are often magnetic due to the presence of									
			1 - 3% disseminated pyrrhotite. Unit is									
			similar to 66.5 - 71.5. Banding/foliation									
			at 65° - 70° to core axis.									
		97.5	1" wide, felsic dike/vein cutting unit									
			at 30° to C.A. Minor brecciation and weak									
			bleaching of fragments adjacent to vein.									
		117 - 127	Ground core in upper 2 feet of interval.									
			Approximately one foot of lost core.									
		165 - 168	Dark grey to green, fine grained section cut									
			by a network of hairline fractures. Weak									
			bleaching and alteration (silicification?)									
			associated with fractures.									
		179.5 - 180.5	Moderately well banded light to medium grey,									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
95.5	180.5	TURBIDIC GREYWACKE (?) (Chlorite, Amphibolite, Phlogopite, quartz)										
		179.5 - 180.5	felsic to intermediate section. Composed									
			of quartz, feldspar and sericite with									
			3.5% pyrite occuring as stringers and									
			disseminations.									
180.5	219.5	MASSIVE GREYWACKES AND SILTSTONES										
			Medium to dark grey, massive to moderately									
			banded, and foliated sequence of metamorphased									
			greywackes and siltstones(?) Composed of									
			fine grained biotite , muscovite,									
			quartz and feldspar.									
			Amount contains occasional more felsic and									
			coarser grained bands containing abundant									
			biolite, chlorite and quartz.									
		188 - 190	Massive to banded greywacke containing two									
			1 - 1½" mudstone seams. Seams contain up									
			to 15% pyrite stringers with less than									
			1% pyrrhotite. Banding/foliation locally									
			contorted near the mudstone seams.									
		206.5 - 207.5	Slightly more felsic band containing medium									
			grained biotite-phlogopite-moscovite									
			quartz and feldspar.									
		208.5	6" wide felsic band similar to 206.5 - 207.5									
			Includes a 2" b quartz vein									
219.5	247.5	PEGMATITE DIKE										
			Light to dark grey, white and green									
			mottled in appearance. Dike is composed									
			of fine to coarse grained, interlocking									
			crystals of feldspar (probably plagioclase,									
			possibly oligoclase and labradorite)									
			albite and possibly potassium feldspar) with									
			grey clear quartz interstitial to the feldspar									
			crystals. Green to silver, fine to coarse									

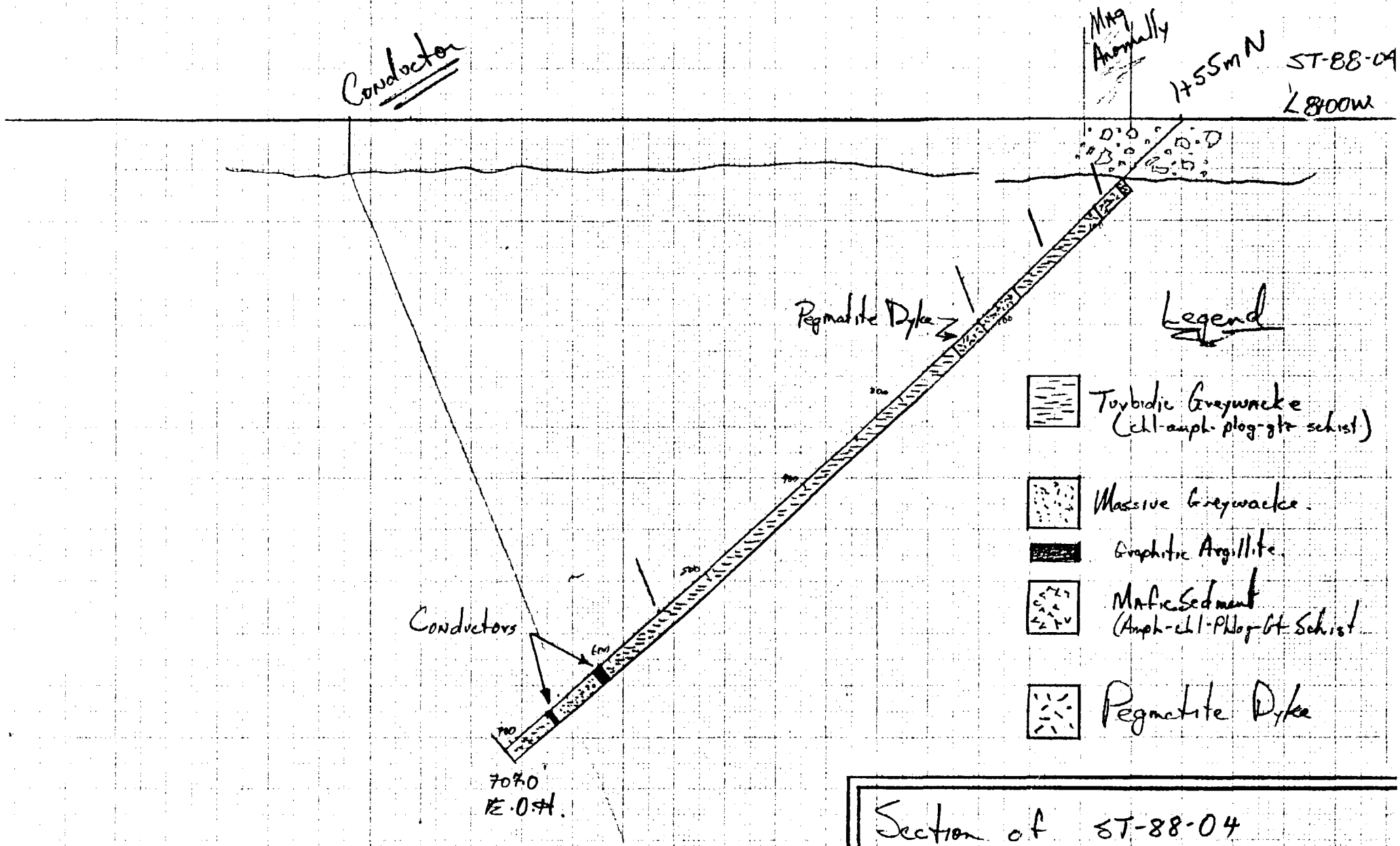
FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
219.5	247.5	PEGMATITE DIKE	Cont'd									
			grained muscovite forms distinct "books"									
			up to 1/4" in size as well as occuring									
			along irregular fractures. Unit is primarily									
			coarse grained to pegmatitic, and appears									
			almost cataclastic Trace amounts of pyrite									
			occur along fractures. Contacts slips at									
			70° to C.A.									
247.5	607	TURBIDIC GREYWACKE										
			Medium to dark grey, green and brown strongly									
			foliated to band series of turbiditic									
			sediments (greywackes & siltstones) similar									
			to 66.5 - 71.5 and 95.5 - 180.5. Bands vary									
			in width from less than 1/4" to 3", but									
			average 1/2 - 1". Unit contains distinct									
			greenish white bands which appear to be									
			highly strained felsic volcanic fragments.									
			The fragments, which vary up to 2" in									
			width, typically contain flattened dark grey									
			quartz eyes are amygdules. Banding becomes									
			more distinct, lower in unit possibly due to									
			an increase in larger volcanic/sedimentary?)									
			fragments.									
		282	2" wide irregular quartz vein with coarse									
			grained subhedral pyrrotite and pyrite									
			along the lower contact.									
		321.5 - 322	Section with several thin (less than 1/16")									
			pyrrhotite pyrite bands.									
		367 - 368.5	Quartz vein with irregular inclusions of									
			chloritic amphibole rick wallrock.									
		373.5	4" quartz vein									
		418.5 - 420.5	Secion of badly broken core; highly									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
247.5	607	TURBIDIC GREYWACKE Cont'd										
		418.5 - 420.5	choritic in upper part. Possible fault at a low angle to the core axis.									
		453 - 455.5	Brittle deformation zone (fault?) at 5 - 10! to C.A. Section contains a series of carbonate filled fractures parallel to the fault and core axis. Trace of pyrite.									
		580	Several thin chloritic bands containing 1 - 5% fine grained disseminated pyrite.									
		588.5 - 590	Section with several bands, generally less than 1/2" in width containing up to 10% pyrite.									
607	707	MASSIVE GREYWACKE AND SILTSTONE										
			Similar to 180.5 - 219.5. Composed of medium to dark grey and green, fine to medium grained massive to moderately banded and foliated series of clastic sediments. Unit lacks the prominant banded associated with the turbiditic sediments.									
			Unit includes distinct sections of graphitic argillite, generally surrounded by sediments with a graphitic matrix. Argillaceous sections are typically black, massive to well laminated containing from 5 - 25% pyrite and pyrrhotite. Banding/foliation at 73° to C.A.									
		607 - 611.5	Section containing distinct bands (beds?) of graphitic argillite and mudstones. Individual graphitic bands vary from ¼" - 8" in width and contain up to 20% pyrite and pyrrhotite.									
		656.5 - 660	Weakly foliated greywacke with a graphitic matrix.									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
607	707	MASSIVE GREYWACKE AND SILTSTONE (Cont'd)										
		660 - 662	Black, soft, badly broken section of graphitic argillite. But by numerous thin quartz-carbonate stringers. Unit contains 2 - 5% pyrite overall. Approximately 6 - 8" lost core.									
		662 - 667	Same as 656.5 - 660.									
		673.5 - 676	Section of graphitic greywackes with an 8 - 10" wide section of graphitic argillite/ mudstone; 1 - 3% pyrite associated with argillitaceous sections.									
	707	END OF HOLE										
			(35 core boses used)									

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppb Au				
			SAMPLING AND ASSAYING									
				ST8804-1	71.5	74.5		Nil				
				2		75.5		Nil				
				3		80.5		Nil				
				4		85.5		Nil				
				5		90.5		Nil				
				6		95.5		Nil				
				7	165	168		Nil				
				8	179.5	180.5		Nil				
				9	188	190		Nil				
				10	219.5	222		Nil				
				11		227		Nil				
				12		232		Nil				
				13		237		10				
				14		242		Nil				
				15		247		Nil				
				16	367	368.5		Nil				

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION		SAMPLE NO.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppb Au				
			SAMPLING AND ASSAYING (Cont'd)									
			ST8804-17		453	455.5		Nil				
				18	607	611.5		Nil				
				19	656.5	660		Nil				
				20		662		Nil				
				21		667		Nil				
				21	673	673.6		Nil				

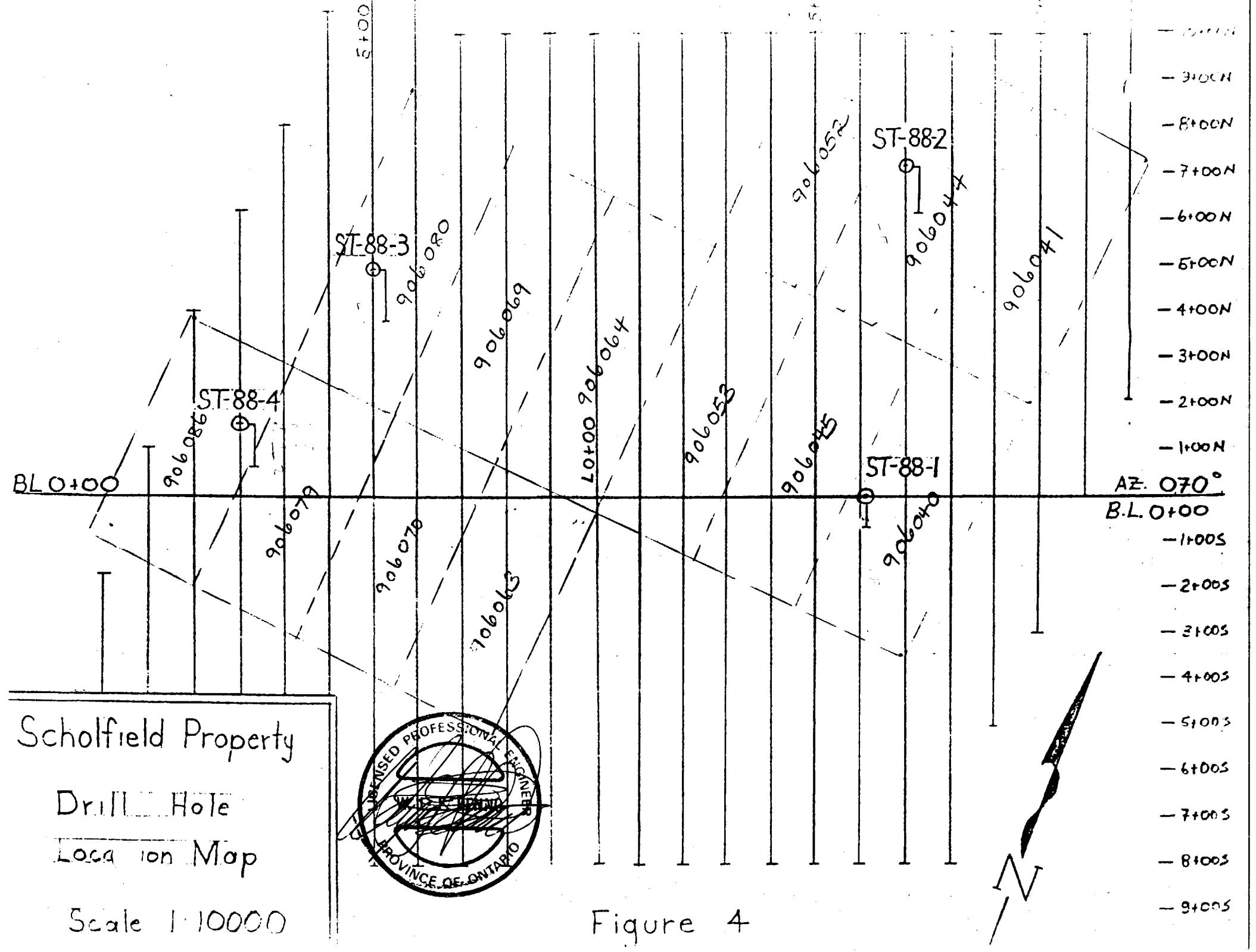


Section of ST-88-04

View Looking West-SouthWest

Scale 1" = 100'

GEOLOGICAL ENGINEERING SERVICES
29 BEAVER CRESCENT
NORTH BAY, ONTARIO P1A 3N1



Scholfield Property

Drill Hole Location Map

Scale 1:10000

Figure 4

Ministry of Northern Development and Mines
Ontario

Report of Work

DOCUMENT No. W 8906•285

Mining Act

42G05SE0102 15 SCHOLFIELD

900

Name and Pr Address of Recorded Holder

CAN-MAC EXPLORATION LTD | 1-515

BOX 1118 - BARRY'S BAY, ONTARIO K0J 1B0

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
1,960									
for Performance of the following work. (Check one only)									
☐ Manual Work									
☐ Shaft Sinking Drifting or other Lateral Work.									
☐ Compressed Air, other Power driven or mechanical equip.		SEE ATTACHED LIST							
☐ Power Stripping									
☒ Diamond or other Core drilling									
☐ Land Survey									

RECORDED MAY 16 1989

All the work was performed on Mining Claim(s): 906086, 906079, 906080, 906040 + 906044 SCHOLFIELD

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

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE JUN 1 1989 RECEIVED

Diamond Drill Contractor:
Wil-Drill 671640 Ontario Inc.,
P.O. Box 216
Earlton, ON
P0J 1E0

DDH # S.T. 88-1: 269 ft - Dec 3-4
DDH # S.T. 88-2: 467 ft. - Dec 5-7
DDH # S.T. 88-3: 517 ft. - Dec 8-9
DDH # S.T. 88-4: 707 ft. - Dec 10-12
1,960 ft.

RECEIVED APR 4 1989 @ 11:15 am

Date of Report	Recorded Holder or Agent (Signature)
MARCH 31/89	

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

JOHN C. HILDEBRANDT, BOX 388
BARRY'S BAY, ON K0J 1B0

Date Certified	Certified by (Signature)
MARCH 31/89	

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core	Signed core log showing; footage, diameter of		Work Sketch (as

SCHOLFIEL
Claim #

P 906031
032
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P 906040
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P 906050
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P 906070
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079
P 906080
081
082
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085
086
087
088
089
P 906090

40 days work - apply to each one of these claims.

CAN-MAC Exploration Ltee.
Exploration Ltd.

RECEIVED
MAY 16 1989
@ 9:45 a.m. L7

May 10, 1989

Mr. Gary White, Mining Recorder
Porcupine Mining Division
Ministry of Northern Development & Mines
60 Wilson Avenue
Timmins, ON
P4N 2S7

Dear Mr. White:

Re: Report of Work - Scholfield/Talbot Townships

As per your letter of April 25, 1989, I have enclosed the following:

1. Original Option Agreement between Kaphearst Resources and CAN-MAC Exploration. You have at your office, our cheque in the amount of $250.00 to cover the cost of filing the agreement with the necessary authorities;

2. 2 copies of location sketches for each project;

3. 2 copies of all core logs for each project which have been signed by the geologist who logged the core. The mining claim that the work was done has been filled in; and

4. 2 Reports of Work for the above mentioned projects.

I have applied for, and been granted, relief from forfeiture for a period up to and including June 7, 1989.

I hope that this fulfils the requirements for the Report of Work to be approved.

Sincerely,

Beth Hildebrandt.

(Mrs) Beth Hildebrandt
Office Manager

/esh
Encls.

Head Office
Suite 3725
1 Place Ville Marie
MONTREAL, PQ H3B 3P4
514-878-9641

Field Office
P.O. Box 1118
BARRY'S BAY, ON
K0J 1B0
613-756-2876

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

April 25, 1989

Can-Mac Exploration Ltd.
Field Office
P.O. BOX 1118
Barry's Bay, Ontario
K0J 1B0

ATTENTION: Beth Hildebrandt
Office Manager

Subject: Reports of Work for Diamond Drilling performed on Mining claims P-875691 et al, situate in Scholfield and Talbott Townships, Porcupine Mining Division

---

The above mentioned reports are unacceptable for recording as submitted, therefore I am returning the reports to have you make the appropriate amendments and additions for re-submission.

Here are the deficiencies that I was able to detect that rendered your report improper for recording:

(1) At the time we received the reports of work, there was no proper documentation registered with this office that indicated that Can-Mac held an option on the mining claims. Proper documentation is an original option agreement or a letter to the Mining Recorder under the Corporate Seal of Kaphearst Resources indicating that Kaphearst Resources has entered into an option agreement with Can-Mac Exploration. The option agreement or notice must indicate on which mining claims the agreement exists. You have been advised of this fact and we are now holding your cheque in the amount of $250.00 until the proper notice is received from the recorded holder.

(2) Location sketches showing the location of drill holes in relation to the nearest claim post must accompany the diamond drill logs. The sketches you provided are cross sections of the drill holes. I have enclosed a Summary of Assessment Work Requirements which shows the basic sketch that accompanies a diamond drill work report.

(3) The core logs must be signed by the person who logged the core. This specific information is indicated on the table of information listed at the bottom of the report of work form.

(4) Indicate on each Diamond Drill core log the mining claim on which each hole was drilled.

As the anniversary date has passed on several of the mining claims, you may wish to apply to the Mining and Lands Commissioner for a relief from forfeiture and extension of time to file a proper report of work. Once the order is granted by the Commissioner on these claims, the assessment work credits can be recorded against the record of each mining claim.

Yours Truly,

Gary White

Gary White
Mining Recorder
Porcupine Mining Division
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

BB/lm
Encl.

c.c. Ron Gashinski
Manager, Mining Lands

CON. XI

WEST ASTRONOMICALLY

CON. X

SCHOLFIELD TWP.

WEST ASTRONOMICAL

NORTH ASTRONOMICAL

WEST ASTRONOMICAL

NORTH ASTRONOMICAL

WEST ASTRONOMICALLY

WHITE SWAN RIVER

lsd. L
lsd. J
lsd. K
lsd. I
lsd. H
lsd. M
lsd. Q
lsd. O
lsd. P