FALCONBRIDGE LIMITED

DRILLING ASSESSMENT REPORT

ON THE

WEST 9, 10, 11 MINERAL CLAIMS

OF THE WEST GROUP

VICTORIA M.D.

NTS 92B/13E, LATITUDE 48 51', LONGITUDE 123 40'

GEOLOGICAL BRANCH ASSESSMENT REPORT

- T. CHANDLER
- S. LEAR

13,853

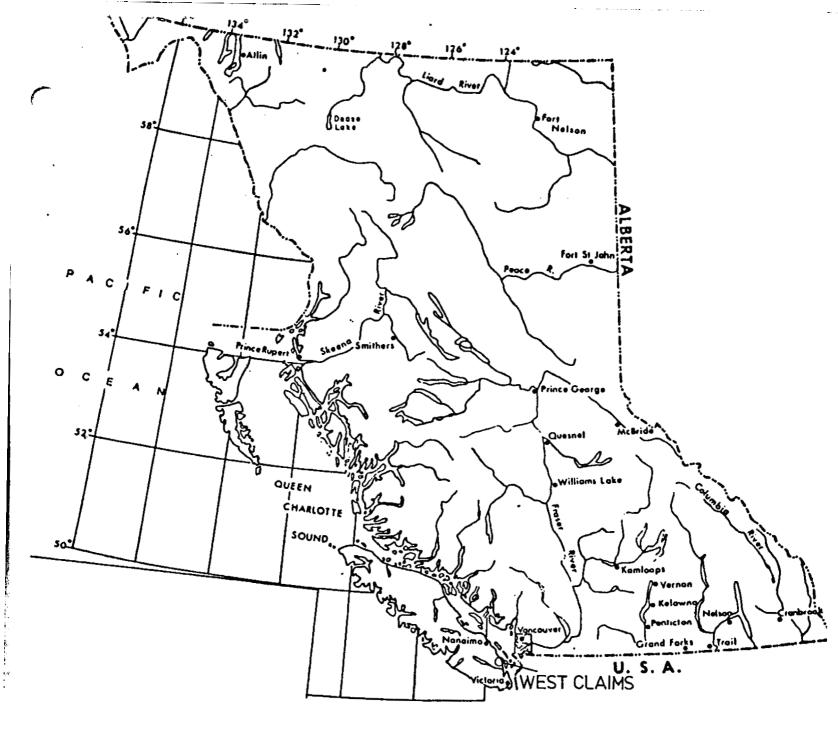
AUGUST, 1985.

TABLE OF CONTENTS

	PAGE
INTRODUCTION	4
GENERAL GEOLOGY	4
DRILL PROGRAMME	5
STATEMENT OF COSTS	6
STATEMENT OF QUALIFICATIONS	8
LIST OF FIGURES	
FIGURE 1. INDEX MAP, 1:7,500,000	1
FIGURE 2. CLAIM LOCATION, 1:50,000	2
FIGURE 3. DRILL HOLE LOCATION MAP, 1:20,000	3
FIGURE 4. DRILL SECTION DDH 1, 2, 1:500	in pocket

APPENDICES

APPENDIX A - Diamond Drill Logs, DDH W84-1, W84-2



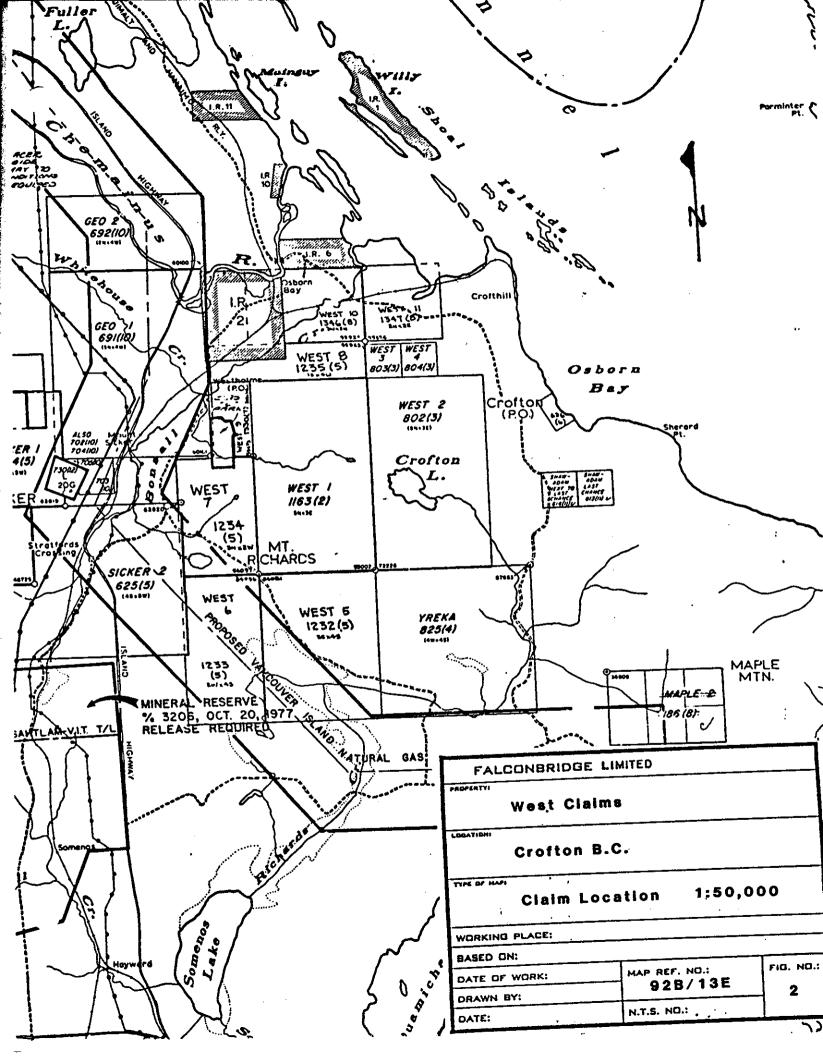
INDEX

COLUMBIA BRITISH

450 Km. 300

SCALE 1: 7.500,000

location map



INTRODUCTION

The West 9, 10, 11 mineral claims total 12 claim units and are located within the West Group. The claim area is 2 km west of the town of Crofton, B.C. (NTS 92B/13E) and is readily accessible by road from Crofton. Access within the claim block is by 4-wheel drive roads.

A total of 327.66m (1075 ft) of diamond drilling (2 holes) was completed in the period August 23 - September 1, 1984. Total drill related costs are \$32,108.40 or \$98/m (\$30/ft). Falconbridge requests that the total cost of the drilling be credited to West 9, 10, 11 mineral claims as outlined on the accompanying "Statement of Exploration and Development".

GENERAL GEOLOGY

The West Group is underlain by Paleozoic volcanics and sediments of the Sicker Group which are unconformably overlapped by Cretaceous sediments of the Nanaimo Group on the north and east claim margins. Intrusive sill-like bodies of gabbro-diorite are found throughout the sequence. Pyrite, chalcopyrite and sphalerite occur in shear zones at the contact between gabbro-diorite and Sicker Group rhyodacite flows.

Numerous pits, trenches, shafts and adits dating from the turn of the century are found on the property. These workings usually contain high percentages of pyrite (30-40%) with minor chalcopyrite and sphalerite.

DRILL PROGRAMME

Drill Logs for Diamond Drill holes W84-1 (127.41m) and W84-2 (200.25m) are enclosed. One Longyear LY 38 drill was employed with Longyear Canada as the Contractor. Both holes were drilled from the o o same set-up at 45 (W84-1) and 60 (W84-2). The drill holes are located on the West 2 claim.

All core is stored at Falconbridge's office in Delta, B.C.

Assaying was done by CDN Resources Lab, Delta, B.C. using standard acid digestion/A.A. techniques for Cu, Zn and fire assays for Au and Ag.

Drill holes were located on the basis of a ground EM survey, geochemical soil sampling and geological mapping. Small (25 and 60 cm) zones of semi-massive magnetite with trace pyrrhotite were intersected in both holes. Further drilling is planned for 1985 to test soil geochemical and geophysical anomalies in other areas of the property.

STATEMENT OF COSTS

DIRECT DRILLING CHARGES:

Longyear Canada, 327.36 metres
Invoiced costs inclusive of mob, demob.,
interhole moves, casing, core boxes.
Total costs: \$26,589.51 or \$81.22/metre.

D.D.H. W84~1: 127.41 metres \$ 10,799.61 D.D.H. W84~2: 200.25 metres \$ 15,789.90

TOTAL DRILLING \$ 26,589.51

HEAVY EQUIPMENT FOR DRILL MOVES

ASSAYS

Drillcore Assays:

FOTAL ASSAYS \$ 1,275.00

SALARIES:

IIILE	WORK ACTIVITY	DAYS <u>ai iask</u>	\$RATE/ Day	TOTAL SALARY <u>Charges</u>
Project Geol. (TEC)	Contract negotiations, drill sites. Selection of Programme. Supervisi & direction.		\$200.00	\$600.00
Geol. (Party Chief) (SL)	Drill site selection Drill core logging. Supervision of drill programme.	10	\$100.00	\$1,000.00
Jr. Geol. (MH)	Drill core logging Core sampling	11	\$85.00	\$ 935.00

TOTAL SALARIES \$ 2,535.00

STATEMENT OF COSTS (CONT)

BOARD/LODGING

House rental, Chemainus, \$ 160.00 August 23 - September 2

Food and Sundries \$ 108.89

SUB TOTAL \$ 268.89

TOTAL EXPENDITURES \$32.108.40

FALCONBRIDGE LIMITED



6415 - 64th Street, Delta, B.C., Canada V4K 4E2

Telex 04-357583

Expl. 612/85 September 12, 1985

Chief Gold Commissioner
Ministry of Energy, Mines
& Petroleum Resources
Parliament Buildings
Victoria, B.C.
V8V 1x4

STATEMENT OF QUALIFICATIONS

Dear Sir:

This is to state that I have obtained a B.Sc. (Hons.) 1975 in Geology from Carleton University, Ottawa, Ontario, and have worked as a geologist for Falconbridge Limited since 1976.

Shelley Lear, Project Supervisor, worked under my supervision. She obtained a B.Sc. in Geology from the University of British Columbia in 1981 and has had work experience as a geologist since 1981.

Yours truly, FALCONBRIDGE LIMITED

T.E. Chandler

TEC:mm

APPENDIX A

DIAMOND DRILL LOGS

FALCONBRIDGE LIMITED

Instinction Begins PROPERTY West Claims Length 127.41m HOLE No. N 84-1 Pagess

College 145 175 Location Crofton, B.C. Hor. Comp. / Vert Comp. Sheet 1 of 4

15.72m 150 177 Elevation Bearing 125° Located by M. Hiltz

Coordingtes 0+00N N BeanAug. 26/84 / Completed Nug. 28/5 (Samaled by M. Hiltz

LN 19+00E E Core size NO/BO/Recovery 94 % Driller Longyear Fly 38

					LN 19+00E	E Core si		NO/	BQ/R	COVECY	94 %	Deille	Long	year	Ely 38			
DE D	TUI	metras)	REC	OV'Y	DESCRIPTION	INTERSECTION	G	RAPI	HIC		SAMPL	ES		Ì	A:	SSAYS		1
From	,	To	ROD	Core		ANGLE	1	1:50	ю	Number	From	To	Length	Cu%	Zn %	Pb %	An 9/	MT _{Au}
0	7	. 45			Casing			T										-12
9.45	2	2.83	57	94	Grey-green, porphyritic to fragmental fg-mg volcanic; med. to highly silicified; 20-30% white irregular to lath-shaped phenocrysts or fragments (fs?) to 2mm; 5% chloritized hbl xtals to 2mm; qtz 10-20% as anhedral blebs ∠1mm; ep occurs as blebs or knots (2-30mm). Qtz stringer (∠2mm wide) can be found cross-cutting long axis of ep. Knots mod. fractured fractures chlorite and py coated; Py ∠1% as fg dissem. or along selvages of qtz fracture-filling veinlets, which are enveloped by chlorite; weak ep. alteration; weak foliation. 10.48 - 15.07m: gchistose subunit; foliation defined by chloritic (30-40%) and silic. volc. (70-60%) layers highly fractured; ep as blebs or augen-like shapes (≪ 2cm) Py: 1-2% 17.83 - 22.83: Ep knots which can have pyritic cores	Foliation 45° subunit upper CTC 30° Foliation 40-45°				4103 4104 4162 4105	9.45 11.45 13.45 15.45 17.45 19.45 21.45	15.45 17.45 19.45 21.45	2.00 2.00 2.00 2.00	.01 .02 .01 .03			L.5 L.5	L.05 L.05 .10
22.8		7.72	32	96	Grey-green fg volc. with porphyritic, subhedral to anhedral, hbl stals up to 4mm, average 1-2mm; 60-70% of unit has conspicuous 10-15% hbl phenocrysts; mod. to highly silicified; fragmental texture can be seen when not obscured by alteration of mainly as blebs (<2mm) which can give a speckled green appearance to unit; occ. ep knots > 2cm; weak pervasive carbonate alteration over 20% of unit; carbonate can occur as veinlets and fracture coatings; fractures of low density and coincident with weak foliation, py fg 1-2% dissem. and fracture veinlets. 23.48 - 25.78: strong cp/qtx flooding massive alteration; 3% epidotized hbl carb on fractures; subunit texture can be breccia-like; py 1-2% 25.28 - 36.30: med. chloritic alteration 31.05: 8cm irregular zone of 50-60% white qtz, 10-20% ep, 10-15% chlorite, 5% carbonate Reduce from NQ to BQ	fracture/ foliation 35-45				4109 4110 4111 4112 4113	22.83 24.83 26.93 28.83 30.83 32.83 34.83 36.83	26.83 28.83 30.83 32.83 34.83 36.83	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.50 89	.02 .01 L.01 .02 .01 .01 .01			L.5 L.5 L.5 L.5	L.05 L.05 L.05 L.05 L.05 L.05 L.05
37.7	2 4 5	5.37	78	97	Grey-green to mottled whitish green, fg to aphanitic volc.? mod. to highly silicified; ms to weakly foliated; 10% of unit fra;mental; can be cherty with white spots. Mod. to highly fractured some irregular; fracture fillings qtz > chlorite = ep>py = carb. Weak ep, alter. as blebs 4lmm, knots 4 lcm; less silicic zone have weak carbonate alter; 2-4% fg py xtals dissem. and along fractures.	foliation 40° fractures 40° irregular fracture 30°, 10- 20%				4116 4117	37.72 39.72 41.72 43.72	41.72 43.72	2.00 2.00 2.00 1.65	L.01 .01			L.5 L.5 .5 L.5	L.05 L.05

FALCONBRIDGE LIMITED

HOLE No: PROPERTY Length Poge # Hor, Comp / Vert Comp Sheet 2 Location M. Hiltz Bearing Logged by Elevation Coordinates N Bean E Core size /Completed /Recovery Sompled by % Driller

			Core si			SCONGEN		S Drille	L	1				
EPTH (metres) PE	cov'Y	DESCRIPTION	INTERSECTION ANGLE	1	APHIC	1	SAMP			1		SSAYS	Q.	MT.
From To RC)DCere		ANGLE	 '	:500	Number	From	15	Length	Cu%	Zn %	<u>РЬ %</u>	Ag 7	Au
7.78 45.37 201	n	39.00 - 40.10m: chaotic shear zone, chl 20-25%, ep 10-15%, qtz (silica) 50-60%; qtz/carb veins 5-10%, py: 1% 41.24 - 41.59m: 10-15% py dominantly along fracture fillings veins to lcm wide 43.54 - 43.89m: porphyritic hbl to 4mm (aver. 2mm) = 10%, py: <1% 45.50 - 45.75m: whitish green matrix, hbl partly chloritized py: 5-15% more abdt at top	foliation - 40°										,	
5.37 96.42 59	95	Translucent green to green brown or blue-grey-green, aphanitic to fg volc.(?) highly silicified; ellipsoidal atz eves (augen) to 7mm (aver. 3mm) elongate along foliation; irregular and lath-like white spots, 1-3mm, 5-15% (fs?); fracture density low but high in sericitic zones, fractures dominantly 35-45° but can be irregular and subparallel to C.A. Py: 1% dissem., fractures, grain aggregates to lcm; carb. on some fractures. Unit = qtz-feldspar porphyry QFP (Eastwood 1978-1979) or meta rhyodacite flow/tuff? (Vancouver Petrographic 1984)	fracture = 35-60			4119 4120 4121 4122 4123 4124 4125 4126	47.37 49.37 51.37 53.37 55.37	47.37 49.37 51.37 53.37 55.37 57.37 59.37 61.06	2.00 2.00 2.00 2.00 2.00 2.00	L.01 L.01 L.01 L.01 L.01			L.5 L.5 L.5 L.5 L.5 L.5	L. L. L. L. L.
5.37 69.17 72	95	Mg cherty variety with conspicuous white spots, qtz eyes difficult to see because of cherty character 61.06 - 52.79m: porphyritic hbl silic volc. as 22.83 - 37.72; 5% hbl which are often difficult to see: Py; 1-2% mod. ep, py alter below 62.19 63.95 - 66.26m: similar to 61.00 - 62.79 silic volc. but no hbl seen; intercalated bands of ms cherty QFP at 65.11 (lcm), 65.56 (4cm), 65.86 (3cm) 66.10 (4cm) Py: 3%			>	4130 4131 4132 4133 4134	62.74 64.74 66.74 68.74 70.74 72.74	62.74 64.74 66.74 68.74 70.74 72.74 74.74 78.74	2.00 2.00 2.00 2.00 2.00 2.00 2.00	L.01 L.01 L.01 L.01 L.01			L.5 L.5 L.5 4.0 L.5 L.5 L.5	L L L L
9.17 79.02 60	96	Highly fractured, strongly sericitic, mod. silicified weak carbonate and chlorite on some fractures; weak ep stretched out along foliation. Py 1%; qtz eyes seen												
9.02 96.42 69	96	defined by sericite; gtz eyes conspicuous 81.85 - 82.30m: mod. to highly chloritic sheared zone 82.30 - 82.60m: highly chloritic shear zone with semi-ms fg	foliation = 40° mineraliz- ation 45° vein = 5- 10°			4139 4140 4141 4142 4143 4144	80.79 81.85 82.65 84.65 86.65 88.65 90.65	80.79 81.85 82.65 84.65 86.65 88.65 90.65 92.65 94.65	2.00 .80 2.00 2.00 2.00 2.00 2.00 2.00	L.01 L.01 L.01 L.01	.01		L.5 L.5 L.5 L.5 L.5 L.5 L.5	L. L. L. L. L.

FALCONBRIDGE LIMITED

Inclination Boaring PROPERTY Langth HOLE No: W 84-1 Pagest

Coller Location Har. Comp. / Veri Comp. Sheet 3 of 4

Elevation Bearing Logard by M. Hiltz

Coordinates N Brain /Completed Sampled by

E Core size /Recovery % Driller

		Core si		CONGLA	% Dril	ę,				
DEPTH (metres RECOV'Y	DESCRIPTION	INTERSECTION ANGLE		ļ	SAMPLES				SAYS	/MT
From To RODCere		ARULE	1:500	•	From 15	Length		Zn %	PD % Ag	Au
96.42 105.72 50 96	Blue-grey to green grey, mod. to highly silicified, fg weakly foliated (70% of unit) to non-foliated volc. Can be mottled whitish green; faint relict or ghost-like hbl xtals can occ. be seen aligned along foliation; qtz grains (.5mm) up to 15%; occ. zones 430cm of foliated porphyritic (conspicuous) hbl volc., hbl aver. 1.5mm, 10-15%, fs laths to 2mm can be seen in the hbl zones; fracture low density coincident with foliation; fractures are rarely subparallel to C.A.; fractures filled with chlorite, sericite or qtz with fg py or rarely carb; carbonate usually cross-cuts foliation and not associated with py; 5-10% of unit is slightly darker bands of non-foliated volc.; carbonate enveloped by chlorite. Py 2% as fracture fillings up to 4-5cm wide with qtz; 102.82 - 103.33m: black to dark brown, highly chloritic shear zone with irregular white carb veinlets: 25cm zone of vfg mg 10-20%, Py 10%, mineralized zone is in middle of subunit. 104.74 - 105.00m: cataclastic breccia (fault?) clasts are of main unit; matrix of 70% chlorite, 20-25% qtz, carb 5%, ep 1%, trace py	fracture/ folistion 35°-40°		4147 4148 4149	96.65 98.6 98.65 100. 100.65102. 102.82103. 103.22105.	55 2.00 82 2.00	.01		L.5 L.5 L.5	L.O
105.72110.45 53 82	Green-brown, weakly foliated, highly silicified cherty fg yolc. with occ. white splotches which resembles portions of QFP (45.37 - 69.17m) without conspicuous qtz eyes; Py 2-3% 106.32 - 106.92m: grey-green cg norphyritic hbl volc. (breccis?) euhedral hbl phenocrysts aver. 3mm (largest 7mm) 10-15%; subhedral white fs aver. 2mm (largest 5mm) 20%; py 1%; weak foliation 107.35 - 107.55: 10-15% fg py fracture filling veins up to 1cm wide; fractures are "networked" produces a cell-like texture; cells elongat to 1cm long 110.00 - 110.30: subparallel to C.A. 3-5mm wide vein of 60-70% chl; 20-30% ep; 10% qtz; 3% py trace carb. host rk is whitish green, silicic volc. with dark green spots hbl?	foliation 40°		152	105.22106.9 106.92108.9	2 2.00	.01 L.01 L.01		L.5 L.5	L.05
110.45127.41 66 92	Blue-grey to green-grey, mod. to highly silicified. fg weakly foliated volc. Same as 96.42 - 105.72m. 112.20 - 112.40: cataclastic breecia similar to 104.74 - 105.00m; qtz/carb vein 3mm wide; 15cm			1156	112.92112.9 112.92114.9 114.92116.9	2 2.00	.01 .01 .01		L.5 L.5 L.5	.20 L.05 L.05
	long 115.63 - 120.30: non-foliated, slightly darker zone 118.40 - 118.65: <u>qtz/carb veins</u> , 5mm wide 15cm long, qt 10% 5-10mm wide, 15cm long at 20°; veins 80% qtz, 10% carb, 10% chl., trace py; host			i	118.92120.	i	.01		L.5	L.05
	rk same as for 110.00 - 110.30m 121.00 - 121.49: cataclastic breccia with mod. to highly siliceous matrix; irregular carb. fillings	carb. filling 20 - 30°		1159	120.92122.	2.00	.01		L.5	L.05
<u> </u>	and diffuse.	l		L						Щ

FALCONBRIDGE LIMITED

Langth HOLE No: W 84-1 PROPERTY Poor # Hor. Comp / Vert Comp. Sheet 4 of 4 Location M. Hiltz Elevation Logged by Bearing Coordingtes Bean /Completed Sompled by

0,10,11002 21111120		Coording:es	Core siz		Recovery	•/_	Dritte	·				
		L	INTERSECTION	GRAPHIC		SAMPL		-		۶۵	SAYS	
DEPTH (metres RECOV'Y From To RODCere	DESCRIPTION		ANGLE	1:500				Length	Cu%	Zn %	Pb %	g/MT
110.45127.41 con't	121.49 - 124.20: cataclastic brecchighly chloritic; wide Py: ∠1% 124.40 - 125.27: rubbly, broken ±0	wisps of carb 3-5mm p	hear lirection 20 - 35°		4160	122.9	2124.9	2.00	L.01		I	5 L.
	7cm long 125.27 - 127.41: unit becomes incr weakly foliated c cherty zone has h hairline fracture	easingly <u>silicic</u> downwards; herty volc. below 126.50; igh density of irregular s but core is not broken; race dissem. py; carb.			4161	124.9	127.4	2.00	L.01		1	5 L.
	E.O.H. 127.41m											
		,										
				7								
		•										
]				1	1			- [ļ

FALCONBRIDGE LIMITED

				Line 19E	E Core si	NO/B	0 /R	SCOAGLA	93 %	Drille	e Long	year	Fly 38			
		Loca	201	DESCRIPTION	INTERSECTION			T	SAMPL			1		SSAYS		
DE.PTH	To	BO)C		ANGLE	1:5	00	Number	From	_ To	Length	Cu%	Zn %	Pb %	_Ag 9/	MT Au.
o T	6.40			Casing												
6.40	24.46	53	88	For to more med. green volcanics. Subhedral, 1 to 2mm long feldspar (?) phenocrysts in places. Occ 2-3mm long subhedral hornblende crystals. Highly silicified in places; moderately to highly chloritic in more broken zones. Minor Epidote alteration, py as disseminations and veinlets, often with calcite. Overall py: 1-2%					·							
6.40	6.52	45	32	Moderately silicified hornblende volcanics			1									
6.52	7.09	45	32	Fg gray-green volcanics with 2mm to 12mm wide calcite-chlorite-quartz veinlets	veinlets = 20 ~ 30°											
7.09	9.02	55	88	Me hornblende volcanics: mod. silicified in places Epidote alteration as patches up to 9cm wide ± calcite and as 1mm wide blebs. Py as disseminate blebs (1-3mm) and veinlets with chlorite, epidote and calcite gangue. Lower contact is chlorite parting at 30° to C.A. Py: 1%	veinlets = 35°, 55° contact @ 9.02m = 30°											
9.02	18.42	53	91	Fg med. to <u>dark green volcanics</u> . Mod. to <u>high chlorite alteration</u> . Upper contact has a 5cm wide band of calcite. Approx. 40% of section is closely fractured with chlorite, calcite and euhedral py coating fractures. Fine veinlets of py with chl., calcite and minor epidote gangue.												
8.42	24.46	53	32	Fg med. green volcanics. Mod. to highly silicified, small (1mm long) subangular quartz fragments throughout section. Moderate (10% overall) epidote alteration as patches and disseminated blebs (1 to 3mm long). Chlorite on fractures in broken zones and as gangue in pyrite veinlets. Veinlets are wavey, at 0 - 20° to C.A. Py also as disseminated, 1 to 5mm wide blebs. Py: 3% Reduced to BQ at 24.38m	veinlets = 0 - 20°		-									
24.46	155.64	56	94	Med. green hornblende volcanics. Minor epidote alteration. Sections of intense chloritization or silicification. Py: 2 - 3%.												
24.46	36.26	58	39	veinlets with calcite and chlorite gangue. Overall Py: 2 - 3% 24.46 - 30.05: Highly chloritic volc. fg dark green closely fractured	veinlets = 30 - 350 = 33.12m = contact @			4165	35.46	37.46	2	.08			.5	L .0
				35.32 - 35.76: <u>Highly silicified volc</u> . Closely fractured with chlorite on fracture surfaces. Py in veinlets with chlorite/calite gangue. Py: 17												
36.26	38.51	64	92	Gray-ereen massive chert after volcanics (?) Upper 1.27m has disseminated, 1 to 2mm long epidote blebs forming 5% of rock. Py as disseminated blebs and veinlets. Chlorite on fracture surfaces. Lower contact is broken. Py: 5%	veinlets = 600											
								1			<u> </u>					

FALCONBRIDGE LIMITED

Inclination Basins PROPERTY Langth HOLE No. 84-2 Pagess

Collier Location Hor. Comp / Vert Comp Sheet 2 of 5

Elevation Bearing Logard by

Coordinates N. Brain / Completed Sampled by

E Core size / Recovery % Dritter

					E Core si:	Į •	/R	COVETY	•4	Deilte						
DEPTH	(matras	REC	OV'Y	DESCRIPTION	INTERSECTION	GRA	PHIC		SAMPL	.ES]	A	SSAYS		
From	To	RO	Cere		ANGLE	1:	500	Number		_ Tb_	Length	Cu%	Zn %	_Pb%	_ Ag ^g	MT Au
				The state of the s				4166	37,46	39.76	2,3	.02			L.5	L.05
38.51	39.24	46	92	Highly chloritic fg volcanics. Disseminated Py: 2%	1	1 1		4167	39.76	42.56	2.8	.02			L.5	L.05
39.24	42.70	33	94	Lt. gray-green highly silicified fg volcanics (?) Closely fractured over most of section. Abundant chlorite and calcite alteration especially on fractures. Py as disseminations and veinlets- Py: 2%	Py veinlets											1.03
42.70	44.20	68	98	Fig. dark green highly chloritic volcanics. Calcite veinlets. Section is weakly magnetic; possibly due to finely disseminated magnetite/ilmenite. Disseminated Py < 17	veinlets = 20-30° C.A.			4168	42.56	44.20	1.64	.02			L.5	L.05
4.20	52.84	43	77	Mod. to highly silicified volcanics. Abundant calcite and chlorite alteration especially over upper 1.6m. Py content increases towards bottom of section. 44.20 - 45.80: 1 - 27 Py				4169 4170 4171 4172	44.20 46.20 48.20 50.20	46.20 48.20 50.20 52.20	2 2	L.01 L.01 L.01 L.01			L.5 L.5 L.5 L.5	L.05 L.05 L.05 L.05
				45.80 - 52.84: 10 - 15% Py as fg disseminations and patches. Lower contact is irregular	contact @ 52.84= 20°											
52.84	56.62	61	82	Fg to mg hornblende volcanics as $24.46-36.26m$. Mod. to highly silicified. Closely fractured from 54.07 to $55.29m$. Py as disseminations and fine veinlets	Py veinlets 15-20°			4173 4174	52.20 54.20	54.20 56.20		L.01 L.01			L.5 L.5	1.05 .10
56.62	59.56	88	97	Mg hornblende volcanics with abundant (20%) epidote alteration. Disseminated Py: 5%				4175 4176	56.20 57.65	57.65 59.56		.02			L.5 L.5	L.05
9.56	84.43	78	98	Mod, to highly silicified hornblende volcanics. Zones of mod. intense (approx. 10%) epidote alteration as listed below. Fracture density is moderate (6-8/m) Py occurs as disseminations (mainly in epidote zones) and as fine veinlets with chlorite, epidote and minor calcite gangue. Trace Po as fine veinlets and disseminations with py. Po appears to be later than py. Overall Py: 2% Po: ∠ 0.5% Zones of epidote alteration: 68.39 - 69.00m 79.45 - 81.20m 77.04 - 77.84m 81.82 - 84.11m Lower contact is gradational.	fractures: 40°, 70°			4177	65.93	67.93	2	.02			L.5	L.05
-43	92.69	87	99	Altered hornblende volcanics. Faint hbl phenocrysts are visible but most are obscured by intense silicification, epidote or minor chlorite alteration comprising 8 - 10% of rock and chlorite 2%. Minor calcite in two 10 - 20mm wide qtz-calcite veins at 45 - 50° C.A. Py in qtz-calcite-chlorite veinlets at 35° C.A. Py: < 1%	veins = 450 50° veinlets:35°											
92.69	94.44	91	100	Highly silicified hornblende volcanics				}								
4.44	98.34	75	92	<u>Hornblende volcanica</u> with moderate chlorite alteration. Minor silicification and epidote alteration in places. Chlorite as fracture coatings. Closely fractured from 96.50 - 97.02m py as disseminations and veinlets with chlorite and calcite gangue. Py: 10%	fractures; 350								:			

FALCONBRIDGE LIMITED

Inclination Begring PROPERTY Length HOLE No. 84-2 Page#

Coller Location Hor. Comp / Vert Camp Sheet 3 of 5

Elevation Bearing Logard by

Coordinates N Beam /Completed Sampled by

E Core size / Recovery % Driller

	metres To	REC	<u>নে'ৰ</u>	05560103-0	E Core si			/R	ecovery	•	6 Drill	er				
From -	metres To	REC	·~·v	AFRED AT . T					***							
From -	To		.~ 4	DESCRIPTION	INTERSECTION		RAPI		1	SAMP	LES				SSAYS	
8.34		RQ	Dome		ANGLE	4	1:50	<u> </u>	Numbe	From	<u> 15</u>	Length	Cu%	Zn %	Pb %	Ag
	103.14	75	98	Altered hornblende volcanics (?): fg light green, highly silicified. Small (lmm) hornblende phenocrysts visible in places. Chlorite veinlets at 0° to 10° C.A. Py as disseminations and veinlets: Py: 5 - 8% 102.39 - 103.14: Minor epidote alteration as 3 to 15mm long blebs, 2mm wide irregular calcite/siderite veinlet at 0 - 5° C.A. Lower contact is tectonic breccia with offset epidote veinlets, calcite - py veinlets, and fragments of light gray-brown original volcanics (?)	einleta: 0° - 10°											
103.14	107.10	41	91	Fg med. green volcanics. Small (lmm) hornblende phenocrysts discernable over top 50cm. Veinlets of py, calcite and chlorite at 20 - 30° C.A. Chlorite ani py coating fracture surfaces. Rock is very broken from 105.27 to 107.10. Py: 1 - 2% Lower contact is sharp at 15° and is marked by a thin chlorite band	veinlets: 20 - 30° contact @ 107.10m - 15°											
107.10	118.04	65	97	Mg hornhlende volcanics. Moderately to highly silicified. Minor epidote alteration as patches and veinlets offset by later (?) irregular qtz-calcite-chlorite veinlets, closely fractured in places with calcite and chlorite on fracture surfaces. Weak foliation of hornblende crystals at 35°. Py occurs as veinlets with calcite-chlorite gangue and as trails of disseminated blebs at 20° to 30°. Py also as fracture coatings. Lower contact is very irregular with intermixing of adjacent units. Overall Py: 5%	foliation =											
118.04	123.44	45	96	Fg light gray-green fragmental volcanics. Moderately to highly silicified Some hornblende crystals observed over upper 60cm. Minor epidote alteration associated with patches and veinlets of py, chlorite and calcite-siderite. Veinlets at 25 - 30°. Core is closely fractured from 119.07 to 120.00m. Chlorite, calcite and fg pyrite as fracture coatings. Py: 1 - 2%	veinlets = 25 to 30°		,									
123.44	124.28	74	95	Fg, med. to dark green highly chloritic volcanics. Irregular shaped patches of py with calcite and epidote. Overall Py: 2% 123.98 - 124.98m: Shear zone. Platey fragments (0.5 to 3cm long), costed with chlorite, calcite and pyrite.												
124.28	130.37	74	97	Mo hornblende volcanics. Mod. silicified. Py-calcite-chlorite veinlets at 10 - 20°. Py: 2%	veinlets = 10 + 200											
130.37	155.64	65	97	Me hornblende volcanics. Mod. to highly silicified weak alignment of hornblende crystals at 20° C.A. Minor epidote alteration. Py-calcite-chlorite veinlets at 0 to 20° closely fractured over lower 15 metres with chlorite, pyrite and calcite on fracture surfaces. Overall Py: 5%	foliation = 20° veinlets = 0 - 20°											
155.64 1	183.23	66	94	Fe dark green volcanics. Alternating chloritic and silicified units. Py: 2 - 3% Po: tr.												

FALCONBRIDGE LIMITED

Inclination Braing PROPERTY
Length HOLE No: 84-2 Pagest

Collect Comp / Verl Comp Sheet 4 of 5

Elevation Bearing Logged by

Coordinates N Beam /Completed Sampled by

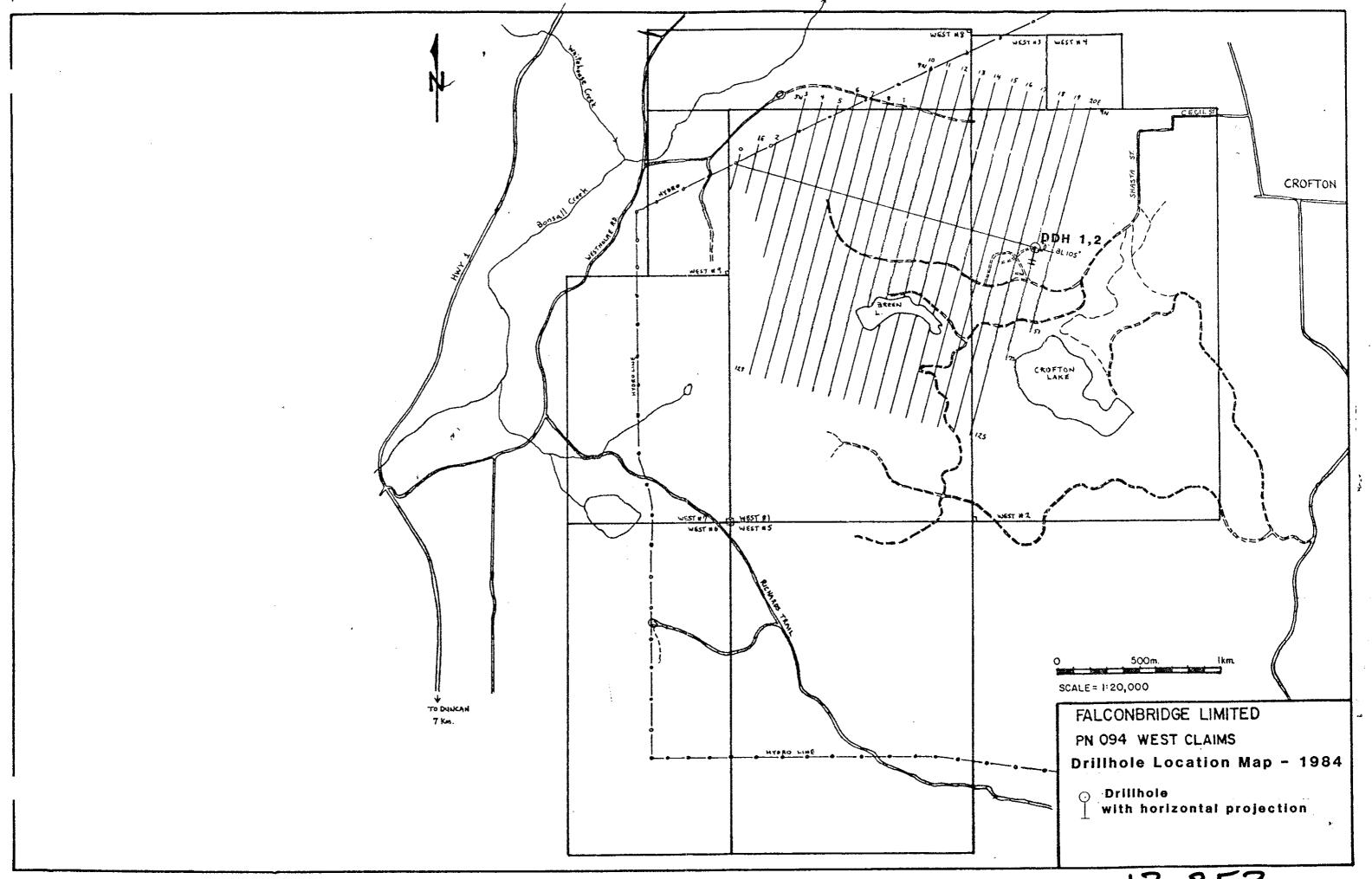
E Core size / Recovery % Dritter

NEWINGE LIMITED	Coordingtes	Brown		<u>moiet 84</u>		Samo	ED DY					
		Core siz	e /R	COVELY .	<u> </u>	Drille	<u></u>					
	DESCRIPTION	INTERSECTION	GRAPHIC	1	SAMPL	FS		1	A	SSAYS		
DEPTH (metres RECOV'Y	DESCRIPTION	ANGLE	1:500	Number		To	Length	C9/	Zn %		Aq 9/	/MT Au
From To RODGE		***************************************		(40) (10) (4)	From	 'Y	Length	- Cu /o	1 - L'11 70	F0 -76	Ac	H Au
155.64 159.31 77 100	For med. to jark green volcanics; moderately chloritized throughout. Upper contact is broken. Calcite veinlets and trains of fg py blebs at 10° C.A. Irregular lower contact at 10°. Py: 2%	veinlets = 10°										
159.31 169.26 76 99	Light grav-green highly silicified volcanics. Cherty appearance in places. Veinlets of calcite with discrete blebs (1 to 2mm long) of py aligned at 10 - 20°. Minor epidote alteration associated with calcite/py veinlets and patches. Py: 5 - 8%	veinlets = 10 ~ 20 ⁰		 								
169.26 171.34 77 99	Dark green highly chloritic unit with 10% calcite. Calcite occurs as irregular patches and as wavey veins at 0° - 5° and 35° C.A. Tr. py as discontinuous veinlets with calcite. Lower .12cm is very broken and sheared. Tr. po, tr. py.											
171.34 174.45 54 100	Light gray-green moderately silicified volcanics. Py occurs as dis- seminated blebs with occasional calcite gangue. Chlorite and minor py on fractures. Lower contact is sharp at 35°. Py: 1%	contact = 35°			;							
174.45 178.21 48 89	Fg dark green highly chloritic unit with abundant calcite alteration as 169.26 - 171.34m, weak banding of chloritic and calcitic layers at 25 - 35°. Closely fractured in places with sheared chlorite and calcite on fractures. Py as 1 to 2mm long disseminated blebs. Py: < 1%	banding = 25 - 35°										
178.21 182.18 71 97	Fg med. green highly silicified volcanics with fragmental texture. Py as disseminated blebs and discontinuous veinlets. Py: 1%			4178	181.20	183.3	2.1	L.01	L.01		L.5	L.05
182.18 183.23 70 96	Aphanitic, light brown coloured unit. Hardness: 6 - 7 possibly original rhyolite (?), cut by veinlets of quartz at 0° and 40°. Minor chlorite alteration towards base of unit. Gradational lower contact.			4179	183.3	184.22	.92	.01	.01		L.5	L.05
183.23 187.94 53 95	Dark green, aphanitic highly chloritic zone with abundant magnetite and lesser amounts of po, cpy and py. Occ. calcite veinlets at 0° to 25°. Overall: Magnetite: 10%, Po: 1%, Py: tr., Cpy: tr.,											
183.23 184.22 46 98	Mod. chloritic rock with bands of calcite-po-cpy at 50° C.A. Tr. py as subhedral crystals partially replaced by calcite. Closely fractured from 183.91 to 184.22m. Po: 5% Cpy: tr. Py: tr.	banding = 500										
184.22 184.81 60 94	Abundant magnetite as irregular-shaped patches with calcite gangue in highly chloritic host rock. Magnetite: 30% Po: tr. Py: tr.			4180	184.22	185.72	1.5	.04	L.01		L.S	L.05
184.81 187.17 61 95	Highly chloritic unit. Po occurs on the outer margins of magnetite-rich patches. Py occurs on the selvages of po stringers and in later (?) calcite veinlets. Diagenesis: Hagnetite-Po-Py. Magnetite: 15% Po: 2% Py: tr.			4181	185.72	187.3	1.62	.02	.01		L. 5	1.05
187.17 187.94 33 91	Moderately chloritic unit with rounded (1 to 2mm long) quartz fragments (?) Tr. py. Gradational lower contact											
				4182	187.3	189.3	2	L.01	.01		L.5	L.05

DRILL HOLE RECORD FALCONBRIDGE LIMITED

HOLE No. PROPERTY Length Hor. Comp / Vert Comp. Sheet 5 Location Elevation Logged by Bearing Coordingles N Beam /Completed Someted by

	E CIMI		•	Coordingles	E Core si	z .		/Re	COVERA	*/	Drille	f					
DEPTH	(metres	RE	cov'Y	DESCRIPTION	INTERSECTION ANGLE	GF	ІНЧА	C		SAMPL	.E\$			A	SSAYS Pb%	9/1	MT
EPTH From	To	RÇ	Ocore		ANGLE	├-	500		Number	From	T5	Length	Cu%	Zn %	P6 %	Ag	A
87.94	200.25	70	94	Fg light gray-green, highly silicified unit with occasional quartz eyes. Weak foliation of quartz eyes at 25° - 30° C.A. Rounded (1 to 2mm long) fragments of quartz throughout. Occ. veins (1cm wide) of discrete Py blebs with minor calcite at 30° to 60°. Py: ∠1%	foliation = 25 - 30° veins = 30 - 60°	1											
				E.O.H. 200.25m													
				•		, , , , , , , , , , , , , , , , , , ,			-	=							
							,										
				••													



13,853

